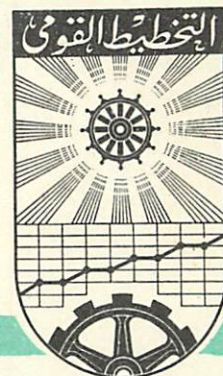


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SOME IDEAS CONCERNING
AIMS, TASKS AND PRINCIPLES
OF ORGANIZATION OF SPATIAL
PLANNING

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COME IDEAS CONCERNING
AIMS TASKS AND PRINCIPLES
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Foreword

This is a working paper. It was drafted during the early months of 1973 to outline roughly some basic problems, arising when territorial planning is developed as part and parcel of overall national planning. It was mainly intended to set some guidelines for the ongoing research of the author, but may be useful also, to provide a skeleton for a discussion about the subject among interested scientists and government officials. That is the main reason, why it is published, although some of the ideas laid down in the **Memo** are still in an embryonal stage and need a thorough check in the light of practicability under the prevailing conditions.

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Some IDEAS Concerning

Aims, Tasks and Principles of Organization of Spatial Planning

1. Aims, tasks and principles of organization of spatial planning are part and parcel of the socialist state's economic policy. Therefore they can't exist independently, but only within the framework of overall national planning as an integral part of the state planning system. To stress this relationship means, simultaneously, that spatial planning is an indispensable part of economic policy and planning, that plays a decisive role as an instrument in social and economic development.

Spatial planning becomes extraordinary important in the following cases- which to a certain degree matches the A.R.E.'s conditions:-

- a- considerable differences in the level of social economic development between the country's parts,
- b- considerable differences in the spatial distribution of natural resources,
- c- space, suitable for social use being a rather scarce factor,
- d- large countries (or economically integrated groups of countries) where the effects of distance (transport costs) itself have a relatively heavy impact on the development of the country (or the group of countries) as an economic unit.

Therefore spatial planning is deemed highly essential.

2. There are two relevant foundations that have to be explored in order to derive aims, tasks, and principles of organization of spatial planning:

- the objective laws, ruling social and economic development and consequently exercising their influence on the spatial structure; and
- the very special natural, technological, economic and socio-political conditions prevailing in the country and their spatial differentiation, i.e. the conditions under which the objective laws operate.

This points, already, to the fact that spatial planning can't be looked upon as an economic matter, in the narrow sense of cost-profit-relations, but only in the wider scope of planning social life, involving to a large extent non-economic factors.

3. In a society determined to achieve socialism the main aim of spatial planning, which is an integral part of national planning, has to be the creation and the permanent improvement of a spatial structure providing the conditions for the highest possible degree of meeting the ever growing individual and social needs in all parts of the country and for the most effective utilization

of the resources available.

That means:

- a- to diminish and in the long run, to overcome unjustified differences in the living conditions of the people between backward and advanced regions, especially between rural and urban areas. This regards housing and service facilities (social and technical infrastructure) as well as working conditions and a sound distribution of working places.
- b- Choice of a location policy for the productive forces which allows
 - to exploit the advantages of inter- and intraregional labour division and of economies of scale.
 - to use most economically the different conditions (natural resources, soil conditions, climate, quality of population, historically grown economic structure, ample capacity in infrastructure etc.) prevailing in the different regions,
 - to arrange production sites in a way, that they form local complexes with housing and service facilities, to ensure short commuting distances (times); if this is not convenient for technical or other reasons then cheap and efficient passenger transport has to be provided

- c- Protection of environment against negative effects of human activities (air and water pollution, soil erosion etc.), this includes improvement of its condition, where such effects are already existing, and to develop the natural surroundings into a state more suitable for human life than in its original shape.
- d- Choice of a territorial structure which keeps the country well prepared against any aggression from outside.

4. These aims provide only a general guideline. Therefore, to set the definite planning targets, the country's conditions have to be analyzed, i.e. prerequisites for a successful spatial policy as well as problems to be met.

Some of the most important features of Egypt's economy upon which spatial planning can rely on are:

- a) A nationalized sector, comprising more or less all important industries, and therefore offering the opportunity to put the most dynamic section of the economy right under the control of the people and their representatives. Thus creating a sound basis for economic policy and planning (including a strategy of spatial development).
- b) The public character of the overwhelming part of national investment, enabling the country to spend it on the entire

people's interest, rather than on the interest of a small class of profiteers. This widens the potential foundations of socialist development.

These two interrelated factors can be a strong backing to turn the people's wants and needs into reality, i.e. in our case to implement a well-balanced spatial development policy. Beside these features, some further properties of the economic structure should be considered in this context. These are:

- c) An industrial base which is already relatively manifold and can rely on a considerably strong and fast growing heavy-industry and power basis. Especially, the power-generating capacity of the High-Dam-Power-station, opens up a broad scale of development opportunities for Aswan region as well as for the country as a whole.
- d) The Valley's and Delta's fertile soil and favourable climate for different perennial and annual crops and therefore high yields per hectare and top quality of several agricultural products.
- e) A fair quantity of natural resources (oil, ores etc) until now only partly exploited and therefore still offering to open up new economic activities in different parts of the country.

- f) Favourable conditions to employ tourism as a basic activity in several regions and localities, thanks to historic monuments as well as to natural conditions (climate, beaches etc.) and above all to the hospitality of the Egyptian people.

Some Serious problems that Spatial Planning in Egypt has to meet:-

- a) More than 90% of the country's territory is due to the natural conditions, a space which can be made suitable for human life only at the price of heavy investment. This checks the utilization of the nations territory, although there are quite promising potentialities, especially in the form of oil and mineral resources in the desert regions.
- b) Population was growing fast during recent years (now growth seems to slow down) and a low activity rate of the population prevails, partly as a reflection of the age-structure and possibly of traditional barriers in the case of females, but to a considerable extent due to the fact, that the growth of potential labour force out-numbered the development of working places.
- c) The above mentioned natural conditions and the high rate of population growth lead to a high population density on the inhabited land on the one hand, and by far a larger

space with practically no population at all on the other.

- d- Striking differences in the level of economic development exist between different parts of the country as a result, there are great differences in the living conditions and employment opportunities between urban and rural regions, as well as between different rural regions, different towns and cities, and even within the cities between different quarters.
- e) Stemming (at least partly) from this, large uncontrolled migration flows occur, leading to heavy pressure on a few centers especially Cairo and to a certain degree Alexandria.
- f) The neighbourhood of the aggressor Israel forces the country to be permanently on a state of alert. This limits the resources available for peaceful development, and gives strategic points a high priority thus influencing spatial development to a great extent, especially in the eastern part of the country.

Besides this, a part of Egypt's territory is still under the control of the aggressor and it has to be expected that after liberation the development of these regions becomes a very urgent matter in order to overcome the effects of the occupation in the shortest possible time.

5. It's surely a hazardous attempt to derive the tasks of spatial planning in a given country prior to a thorough field research, just proceeding from a general framework as sketched above. Nevertheless, some provisional ideas are put forward here to get the discussion moving.

The prevailing situation reveals clearly, that the gradual equalization of the level of living conditions between the different regions on the one hand and adopting a location-policy which helps to increase the growth-rate of national income on the other hand, should be the main features of spatial planning.

A planning policy for that purpose should take into account:

Since agricultural land is scarce it should be safeguarded against reduction caused by the extension of other activities. That means, that development of non-agricultural sites (industries, housing and services) should preferably take place on land not suitable for agricultural purposes. Hence, it becomes necessary to break the borders set by Valley and Delta and to extend gradually the economically used space.

There are two ways to do this:

- The first is the utilization of the desert regions that are directly on the outskirts of Valley and Delta for nonagricultural sites developing in spatial connection with the already

inhabited space and are closely interrelated with existing centers and (at least partly) relying on the facilities available in the "old" areas.

- For the second the development of new centers in frontier regions based on the exploitation of mineral and oil resources and, proceeding from this, the creation of interrelated complexes of economic activities has to be considered.

The first, that is, to proceed from the economic basis available in the valley and in the Delta and to extend and supplement this basis by means of increasing the scale of activities already sited in the region and by adding new activities, preferably such, which cooperate with the old ones, plays an important part in the gradual equalization of economic and life conditions between the regions.

The second, i.e. opening up new regions, promises to be economically especially in areas with deposits of natural resources, which are exploitable at relatively low production costs, thus justifying-at least in the long run-the rather high investment in social overhead costs, which normally appears in such cases.

Therefore it is deemed essential to elaborate a well-balanced strategy concerning optimum proportions between both ways, and high priority should be given to this task in the on going research.

But at least for a certain time to come the first way of development still seems to be the main road. There are several reasons for:

- The development potential of the existing agglomerations (probably with the exception of Cairo and Alexandria) is not yet exhausted, thus offering the opportunities to make certain regions more productive as well as more attractive to a much lower price than developing new regions remote from the now inhabited space.
- The development of new regions requires a relatively large amount of investment diversified among different activities (basis and supply industries, social services and housing facilities, public utilities etc.) which has to be timely concentrated as far as possible in order to use it efficiently as soon, and as much as possible, by means of shortening the gestation period and exploiting all kinds of agglomeration economies and in order to create in time all necessary facilities for human life in this area.

Thus the opening up of new regions heavily strains in the initial stage the accumulation power of the nation. Consequently it calls for concentration on only one or a few areas at one time. The more scarce investment funds are the more this principle has to be observed. Because the investment-ratio per inhabitant is according to experience high in such areas, where all necessary conditions for human life have

to be created and the natural surroundings are in a certain sense even hostile to it, only high productivity can justify the development of new economic regions in the desert zone. Hence labour-saving technologies are compulsory there and immigration has to be controlled, in order to avoid a large share of economic inactive or low productive population (considering only the people in working age) putting heavy burdens on the demand for social services and public utilities. But on the other hand, one has to consider agglomeration economies which call for a certain minimum of population to run all necessary activities on an economic scale. Size and structure of such emerging self-sustaining regional-economic complexes are therefore another topic of pre-eminent importance for spatial planning.

Nevertheless it becomes quite obvious that these new growing areas, although of high importance with regard to the development of productivity, national income and as nuclei for turning Egypt's economy into one which can cope with the scientific-technological progress in the world and therefore of high importance for the national economy as a whole will directly involve a rather small share of the entire population and cover during the on going Ten-Year-Plan only a few, well selected areas. This leads to the conclusion that the necessity to improve the working and living conditions of the overwhelming part of the people can't be met if one relies on this way only. On the contrary, to over-emphasize this course of development would rather mean to widen the gap between backward and advanced regions, than to close it.

- Beside the other reasons the necessity to calm down the internal migration or at least to turn it into other directions than Cairo and Alexandria is demanding a regional development policy for the "old" areas. One obvious point for such a policy is that it has to provide a more equal distribution of social and technical infrastructure throughout the existing settlement system in order to narrow the gaps between and within regions. But, because infrastructure has to be organized in a more or less hierarchical pattern, this development calls already for the planning of the hierarchy of settlements and for standards determining the equipment of settlements with basic service facilities according to their size and functional structure.

However, decisions concerning the place of the different settlements within this hierarchy can't be made proceeding from infrastructure only.

This leads to the necessity of a more complex view, taking into account all essential activities determining the development of settlements, the development of the settlement system and consequently the overall development of the regions.

Though, to guarantee everywhere a basic standard of social services and public utilities is a very important target of regional planning which has to be taken up sometimes before other activities are

developed in a proper way. there is only one permanent solution to regional problems - a proportional, balanced development of all economic and social activities.

Choosing the course of development and the timing, one has to consider:

- national-economic factors as
 - . necessary structural policy according to sectors
 - . volume and material structure of national income and its division into accumulation and consumption.
 - . development of internal and external demand (market situation),
 - . balance of payments;
- site-orientations of the branches and sectors, which should be developed under national-economic points of view (earth-bound branches as mining or agriculture, material oriented branches, as special sub-items in this group, power and water oriented branches should be mentioned, labour force oriented branches, which applies very often to branches regarded as more or less "footless" but calling for highly specialized, well experienced and skilled manpower like certain branches of electronics, machine-building etc., market or consumer oriented branches);
- regional condition as
 - . natural resources and degree of their utilization,

- prevailing economic structure of the region,
 - availability and quality of labour force and their spatial distribution,
 - level of social and technical infrastructure,
 - sites, available for future development grouped according to site conditions,
 - market potential of the region and accessibility of extra-regional markets,
 - development of settlement-system and centers which could serve as growth poles;
- non-economic factors as
- political conditions,
 - military points of view,
 - traditions and similar factors.

6. To make spatial planning really efficient one has to care for its proper organization. The proposals put forward below describe the outlines of a planning system in an advanced stage of development.

To achieve this stage may need several successive steps which are also related to the development of overall national economic planning as a whole and sector planning.

6.1 As already stated, spatial planning has to be considered as an integrated part of national planning, and therefore it has to be looked upon as an activity on all levels of government.

All planning and management organs have to observe the spatial consequences of their decisions and actions and to bear full responsibility for them, especially:

- the Ministry of Planning:

- . for the gradual equalization of the living standard between the regions, and
- . for the optimum distribution of productive forces;

- The ministries responsible for certain sectors and branches and the management organizations subordinated to them.

- . for the optimum spatial distribution of their sectors or branches and
- . for the coordination of their location requirements with the regional institutions concerned;

- the regional authorities

- . for the horizontal coordination of all economic activities, taking place in the region, with the development of the local conditions,
- . for the development of living conditions in the region,
- . for the mobilization and rational utilization of the regional resources (incl. protection of environment);

- the enterprises
 - for the rational utilization of regional resources, and
 - for close cooperation with the regional authorities with regard to the development of working and living conditions and environment protection.

6.2 Planning could be based on the following types of spatial units:

- Comprehensive planning regions (CPR)

This means a small number of relatively large spatial units, covering the entire territory of the state and set up mainly considering the requirements of long-term planning (10 - 20 years).

Serving as spatial units of central planning, comprehensive planning regions are not necessarily established as administrative units. Nevertheless, their creation as aggregates of administrative units is desirable because this simplifies planning work to a great extent (data - collecting, transformation of plan targets from CPR to the administrative units, responsible for their implementation, cooperation of regional authorities in long term planning etc.). Hence, when dividing the country into CPR one has to consider also the possibility and expediency of changing the administrative boundaries. Such changes are economically justified if they are based on

factors valid for a considerable time in future development, if they create prerequisites to qualify planning and management on central level as well as in the governorates concerned and if the expenditure caused by this reorganization can be held in reasonable limits. Beside these economic points of view socio-political and other non-economic factors play their part in any decision of this kind.

- Sector regions (SR)

The division into SR means the regionalization of the country in accordance with the requirements of particular sectors (branches). SR are considered as a tool of the long range planning in the ministries concerned, supplementing the division into CPR.

In sectors (branches), where spatial aspects are of high importance e.g. in certain branches of infrastructure SR can form the framework of the management system of the branch. While establishing CPR already existing SR (e.g. the five agricultural zones) can be applied as one criterion in the delimitation process.

- Special planning regions (SPR)

These are selected regions of different types and sizes, which for reason of their importance for the national economy as a whole or for other reasons are planned in detail under direct control of the central government e.g. development of the most

important cities and their surrounding regions.

The application of SPR may be a useful tool in particular in the early stages of territorial planning, when the planning organization is still relatively weak and has therefore to confine its activities on certain selected tasks. But even then one has always to bear in mind that those SPR's are only parts of the entire national territory. Consequently the main directions of their development have to be decided upon in the light of the development of the country as a whole.

- Administrative regions, (governorates)

The administrative regions represent a different type of spatial units than the aforementioned kinds of regions. Unlike the CPR and SPR they are not only spatial planning units, but a certain level of the state with rights and duties by far exceeding the function of the spatial organization of the economy. Beside their political, ideological, cultural and other functions the regional authorities are held responsible in the economic field for the management of certain enterprises and institutions being under their direct control. That means the governorate's authorities are spatial as well as branch planning and managing bodies.

For comprehensive spatial planning the existence of regional authorities offers the opportunity;

- to delegate certain planning functions from central to regional level,
- to mobilize on a broad scale the working people's creative powers when drafting the plans as well as during their implementation,
- to coordinate spatial and sector development right on the spot thus ensuring proportional development and efficient utilization of regional resources.

Therefore it has to be emphasized that the efficiency of spatial planning depends to a large extent on the quality of work, done in the governorates and a scientifically based determination of the range of responsibility of the governorate's authorities.

- 6.3 To plan and maintain spatial proportionality and to perform the necessary spatial coordination should be the task of specialized planning organs.

Such Planning organs could be

- On the central level the department of spatial planning in the Ministry of Planning and
- On the regional level the planning departments of the governorates.

To meet their responsibilities the spatial planning organs have to establish a close cooperation with the respective organs on the subordinated level, with the organs and institutions responsible for the planning and management of the sectors and branches on the same level and with scientific institutions. For regions of high importance (CPR, SPR) regional planning institutes could be set up either as subordinated institutions to the department of spatial planning in the Ministry of Planning or to the planning department of the governorate. These institutes could be held responsible for a scientific exploration of the potential of their respective regions and the preparation of development programmes (with several variants) as a foundation for decisions of the authorities concerned. They should form an integrated part of the planning machinery and work according to the orders of the head of the spatial planning department of the Ministry of Planning or of the head of the planning department of the governorate.

The spatial planning organs should be obliged to apply various forms of popular cooperation in order to qualify the plans, to propagandize them and to organize their implementation.

- 6.4 The department of spatial planning in the Ministry of Planning should be held responsible to deal with the principal matters of the national economy's spatial structure. Therefore it should have the following main tasks:

- Elaboration and continuous improvement of the long-term concept of the spatial distribution of productive forces (incl. the settlement system) based on
 - . the given spatial structure of the economy;
 - . the regional distribution of natural resources,
 - . tendencies and economic applicability of scientific and technological progress,
 - . the long-term social aims, set for the improvement of the people's wellbeing and the development of the socialist society.
- Spatial coordination of national plans (long-, medium-, short-term) with regard to
 - . gradual equalization of working and living conditions between the regions,
 - . Optimum utilization of the various regions different potentialities,
 - . protection and improvement of environment,
 - . minimization of labour-expenses by means of efficient regional specialization and interregional labour division.
- Guidance and control of the planning departments in the governorates and of the regional planning institutes subordinated to the Ministry.
- Preparation of Cabinet decisions and orders issued by the Minister of Planning concerning especially:

- the main tasks of economic and social development of the governorates during the respective planning period,
 - the regulations for the spatial distribution of investment (site-approval-procedure) and the preparation of location decisions as far as they - according to the aforementioned regulations-have to be made on central level,
 - methodology, time-table and responsibility for the elaboration and control of spatial planning within the framework of overall national planning,
 - other legal regulations with considerable impact on the development of the spatial structure.
- Cooperation with ministries and other central authorities concerning planning problems with importance for spatial development.

6.5 The planning departments of the governorates should be held responsible for an efficient shaping of the respective governorate's spatial structure, ensuring a steady increase in living standard and an optimum contribution of the governorate to national income. That means:

- Cooperation with the Ministry of Planning in the elaboration of the long-term concept of the spatial distribution of productive forces (incl. the development of the settlement system) by means of

- . analysis and prognosis of the governorate's resource potential, its present degree of utilization and the reserves for future development,
 - . analysis of the regional economic and settlement structure, their possible direction and speed of development, existing disproportions and proposals to overcome them,
 - . Conclusions, concerning proposals for new basic economic activities or the extension of existing ones in the governorate.
- Coordination of the regional conditions with the development of sectors and branches especially with regard to the:
- . optimum allocation and utilization of limited regional resources,
 - . protection and improvement of environment,
 - . proportional development of the regional infrastructure bearing in mind the demand of population as well as that of the various economic sectors,
 - . development of an efficient intraregional labour division.
- Preparation of site approvals for investment under central management and of site-decisions of the investment under the responsibility of the governorate.

- Elaboration of the governorate's comprehensive plans, including the detailed planning of that part of the economy which is under the governorate's direct management.¹⁾
- Cooperation with the authorities concerned in all planning problems with importance for regional development.

1) This shows, that the planning departments in the governorates are not only dealing with spatial planning in the narrow sense of the term, but have to play their part in sector/branch planning too, due to the position, given to the governorates within the framework of state authorities. But on the other hand, to have direct control over certain sectors/branches gives a strong backing for the regional development policy of the governorate's authorities. Therefore it should be regarded not as an additional burden, but as a valuable precondition for proportional regional development. Nevertheless, it has to be admitted that according to experience this double function of the regional authorities brings about quite a lot of complicated problems.

Appendix

Preliminary List of Data Required:

To provide a sound foundation for spatial planning it would be desirable to have the following information:

- Natural conditions and resources

Here the results of geological, hydrological, hydrobiological, climatological and similar surveys and their economic evaluation should be made available. In all cases the economic evaluation should include:

- * present degree of utilization of the resources,
- * intended degree of utilization already decided upon (incl. time-schedule),
- * capital and labour-force allocated resp. required in the project,
- * technical and economic feasibility of increasing the degree of utilization and the technical and economic preconditions to do so,
- * suitability of the resource in question to form the basis for a multisided interrelated complex including several stages of production.

- Demographic resources

- * regional distribution of population according to sexes, age-groups, rates of natural and actual population growth;
- * main flows of migration and commutation;
- * working people according to sexes, age-groups and sectors;

- * evaluation of factors influencing population growth, regional distribution and redistribution in recent years and in the foreseeable future including expected new factors, which might change the trends.

- Settlement system

- * Distribution of settlements according to size and type (type of settlement should be described in terms of the economic activities prevailing there and in terms of their zone of influence as service-centers and their attractive power to commuters and immigrants) - hierarchy of settlements;
- * quality of settlements with regard to housing and service conditions;
- * development potential of settlements in terms of resources available there (ample capacity in infrastructure, specialized labour-force, land suitable for land reclamation, water-resources etc.) which could be employed for increasing production and productivity;
- * bottlenecks, jeopardizing the further development of the settlement and ways to overcome them,
- * suitable sites for the extension of the settlement system beyond the borders of valley and delta based on the feasibility of economic activities there;
- * decisions, already made concerning the further development of the settlement-system e.g. village development program.

- Distribution of production

- * regional distribution of production capacities according to branch, degree of concentration, level of technology (degree of mechanization, fixed assets per unit labour-force labour productivity and similar indicators);
- * intra-and interregional production- links according to branches (or products) and regions, evaluation of their efficiency under a national economic point of view;
- * grouping of branches into regional, national and international sectors according to their present importance and analysis concerning possible changes in this grouping in the future on the basis of the development of demand, development of productive forces in the branches concerned as well as in transportation, resources available and suitability of the branches concerned, as nuclei for economic complexes;
- * decisions already made for sites of new capacities and extension of existing ones- necessary development of the regions concerned in order to make the new or extended capacities efficient (necessary regional and site conditions).

- Distribution of economic infrastructure

- * Networks of main-roads,
railways,
water-ways

power supply,

oil pipelines,

water supply,

capacity of these systems and degree of utilization;

- * spatial distribution of generating plants for water supply and energy supply (capacities available, degree of utilization, operating costs, state of technology);
- * decisions already made concerning the further development of economic infrastructure.

- Regional differences in standard of living

Beside the information already mentioned under demography and settlement system:

- * income per capita, per family (household) and distribution among income groups and sources of income according to regions;
- * consumption patterns according to regions and income groups;
- * health conditions (distribution of endemic and epidemic diseases, nutrition, diseases connected with certain areas or occupations);
- * regional differences in the standards of education.

