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Regional Planning in Czechoslovakia

By Miloš Červený

REASONABLE AND EFFECTIVE development of industrial enterprises is impossible without a careful study of the possible use of land considered from the point of view of profit for the entrepreneur and from that of benefits to the general public. Large profits from individual enterprises should not be the goal but rather the best use of land for the development of the national economy as a whole.

An unwise selection of a location by an industrial enterprise can usually be seen immediately by the economic results; mistakes made in the development of an area, however, become apparent in many cases only later when improvement is either impossible or costly.

It is of great importance, therefore, for developing countries to study ways to make the most beneficial use of their land early in the process of industrialization. Such studies will help countries to achieve a more efficient development of their economy and avoid many of the common pitfalls.



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After completing his studies in Saratov, Mr. Červený returned to Prague, where he worked with the State Planning Commission until 1964, when he became one of the chief specialists with Terplan—the Czechoslovak Institute for Regional Planning. Mr. Červený is an external member of the division for Economics of Industry at the Economic University in Prague, a candidate of the Committee of the Czechoslovak Economic Association at the Czechoslovak Academy of Science and a member of the Scientific Council of the Research Institute for Regional Planning in Bratislava. He attended the session on urban planning at the Salzburg Seminar on American Studies in 1969. He has published a number of articles in various scientific journals on regional planning, location of industry, development of regions within Czechoslovakia and determination of the country's administrative units.

A land survey of Czechoslovakia was carried out several years ago with a view to the comprehensive planning of regional development. The study was based on three areas of consideration:

(a) Physical conditions of the country including geology, water resources, climatology, air and water pollution, and soil conditions;

(b) Population size and living, working and recreational conditions. Under this heading data on the following were collected:

- Growth of population;
- Employment (current statistics);
- Network of settlements;
- Location of industrial enterprises and their use of local resources;
- Housing conditions and future needs;
- Public services, schools and sanitation and recreational facilities.

Population statistics were based on a census that covered not only the current year of the census but increments of past development and a forecast of the natural growth of the population for the next twenty years showing migratory tendencies by region and district. Future manpower resources were similarly estimated.

Where master plans of towns or general plans of development of large factories existed, estimates were made for future land requirements.

(c) Economic infrastructure, including:

- Transport (railways, highways, airports, ports);
- Water supply and sewerage;
- Energy supply (electricity, fuel, gas) generating plants and main centres of distribution.

Estimates were given for the cost of increasing public utility services in different parts of the country. The survey text was supported by graphs, maps, figures and tables. The maps were divided into two main groups:

(a) Each area of consideration of the survey was indicated on a set of maps drawn to an appropriate scale for the whole country. This complete set of maps was used by the central planning authorities (figure 1).

(b) The salient factors of the survey were indicated on one detailed map. The whole territorial area was

covered by several hundred detailed maps. The detailed maps can be used by local authorities when issuing building licences (figure 2).

To carry out the survey, was required a team of specialists including architects, economists, geographers, transport engineers, waterworks engineers, engineers for power stations, specialists for providing social facilities in urban settlements, demographers, biologists, geologists and climatologists.

The Czechoslovak Institute for Regional Planning (TERPLAN) which formed the nucleus of the survey team, collaborated with many other boards and institutes. The survey took eighteen months to complete.

The data produced by such a comprehensive survey were used immediately for planning purposes. Building prospects for factories were examined in the light of the information. In some cases it became apparent that the construction of a new factory for example, would require public investment of a cost higher than that of the new factory. In other

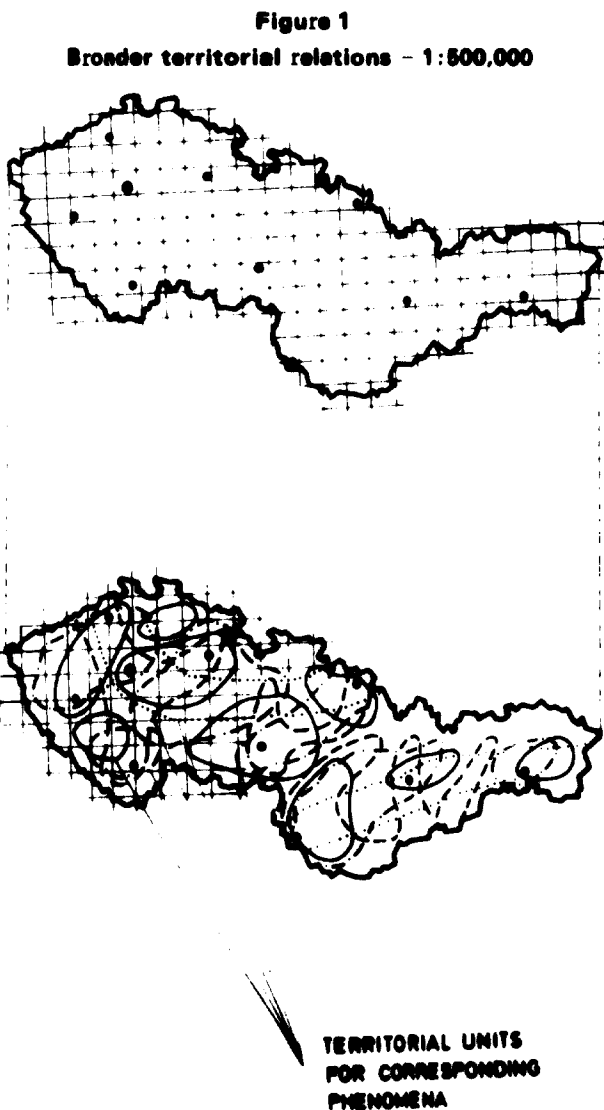
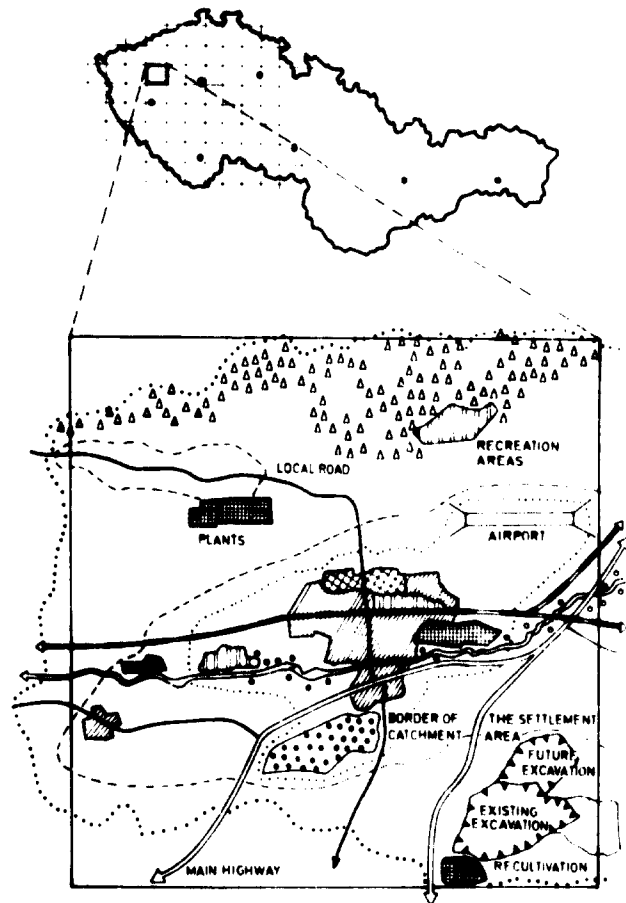


Figure 2
Complex territorial evaluation - 1:50,000



areas new dams had to be built to improve transport facilities and housing provided for the additional manpower.

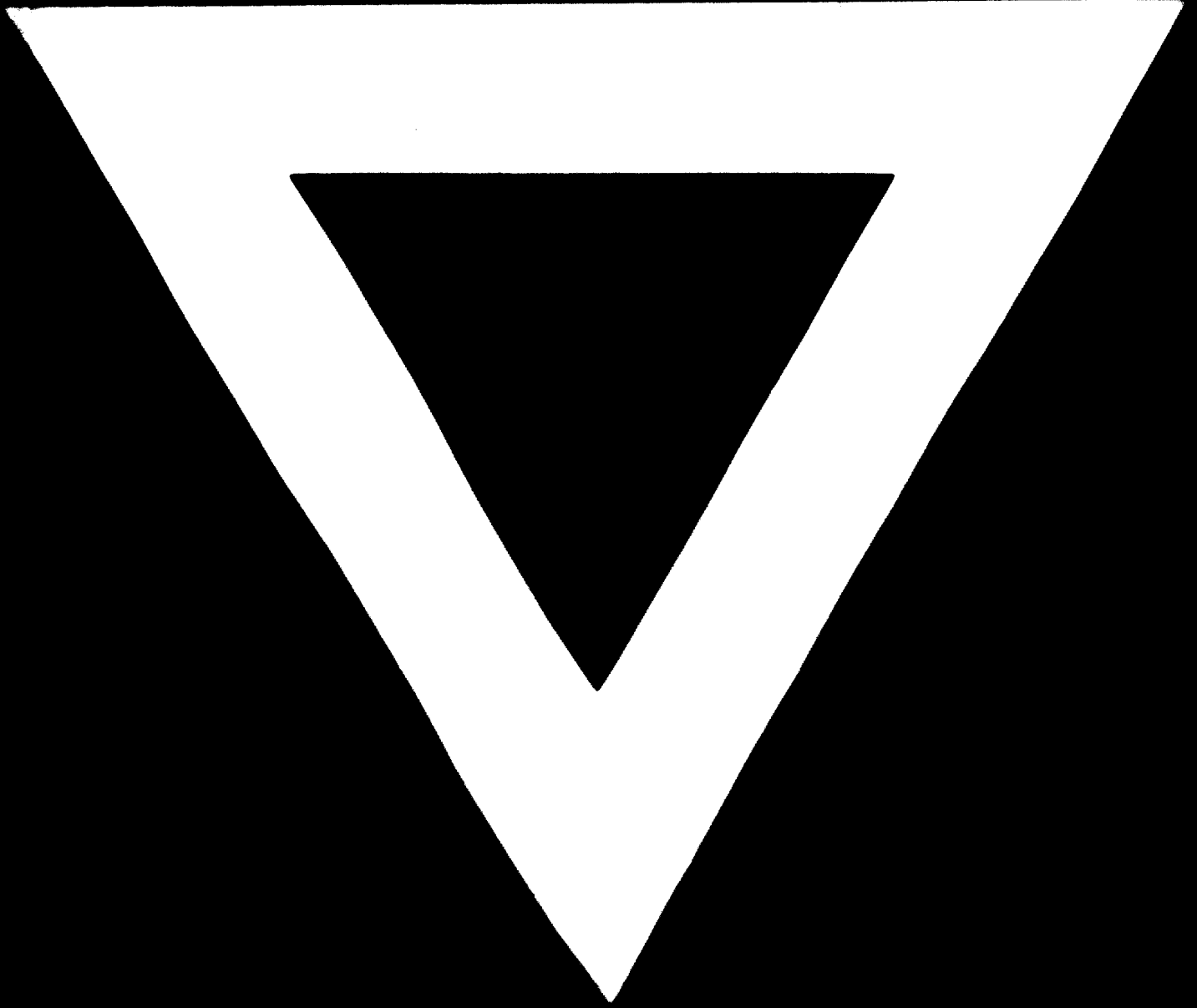
During the collection of the data, it became apparent that the frequency of change in various categories differed considerably. Work has been started, therefore, to keep the data updated by various methods and at different periods according to the nature of each category. Updating by traditional methods, however, was considered impractical. To extract the amount of data required from a variety of tables and maps, for example, is a time consuming process.

How to keep the information acquired up-to-date was the problem and the solution arrived at was to establish a data bank for all important information on territorial conditions.

Relevant data are transferred from maps to a computer and are kept up-to-date by close collaboration with census authorities and those supplying information on special regional characteristics and the like. The location of these characteristics on the map can be indicated either by code numbers or by co-ordinates.

A data bank has been proposed for all of Czechoslovakia and for several of the largest cities.

By the use of a computer data from the land survey can be classified, evaluated, analyzed and presented in a modern statistical method.



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