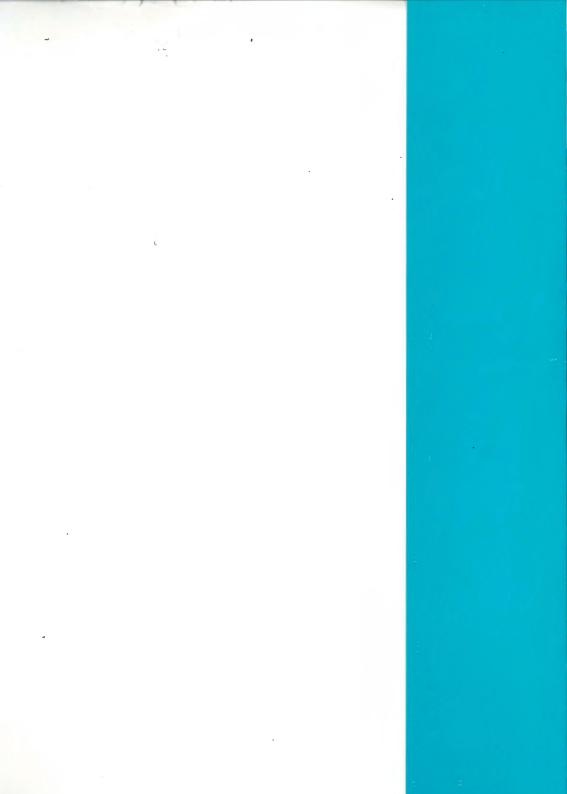
POLISH ACADEMY OF SCIENCES SYSTEMS RESEARCH INSTITUTE



A. STRASZAK AND J.W.OWSIŃSKI EDITORS

PART I

**WARSAW 1985** 



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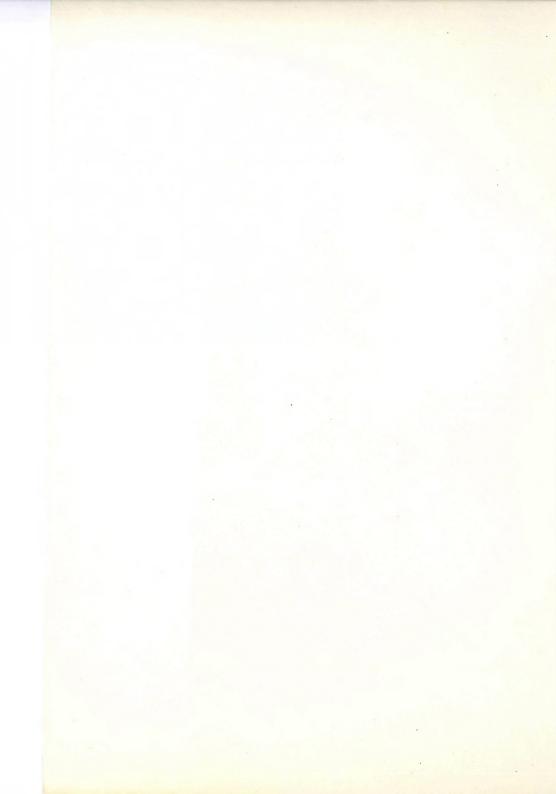
### STRATEGIC REGIONAL POLICY

Paradigms, Methods, Issues and Case Studies

# A. Straszak and J.W. Owsiński editors

Documentation of the workshop on "Strategic Regional Policy", December 10 - 14, 1984, Warsaw, organized by the Systems Research Institute, Polish Academy of Sciences and the International Institute 2or Applied Systems Analysis

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This volume contains papers and discussion summaries from the workshop on Strategic Regional Policy held in Warsaw on December 10-14, 1984, as well as some post-workshop material. The workshop was organized by the Systems Research Institute of the Polish Academy of Sciences, Newelska 6, 01-447 Warszawa, Poland, together with the International Institute for Applied Systems Analysis (IIASA), A-2361 Laxenburg, Austria, within the framework of cooperation, whose rules and contents are defined by the Contracted Study Agreement, signed by IIASA and the Polish Academy of Sciences in 1984. This Contracted Study Agreement, REG/POL/1, on "Concepts and Tools for Strategic Regional Socio-economic Change Policy" stipulated organization of the workshop whose documentation is here presented.

The presented volume constitutes a portion of the final report from the Contracted Study Agreement REG/POL/1.

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Systems Research Institute of the Polish Academy of Sciences for the International Institute for Applied Systems Analysis

#### PREFACE

In the nearest time period, the time scale being defined by the internal dynamics of own development processes, almost all regions in almost all countries of the world shall face the necessity of economic and structural restructuration.

This fact results from two processes having world-wide importance: globalization of economic processes and generation shift in technology.

Even nowadays many regions in numerous countries of the world constitute essential elements of the world's economy, mainly through output directed not only towards own needs, but also for satisfaction of the world economy's demand.

Even nowaday many production technologies and products are related to a new generation which in principle did not appear in previous decades. Flexible manufacturing systems and the CAD/CAM systems are becoming realities in many regions of - as yet only - most developed countries, but shall soon become necessary in almost all regions of almost all countries of the world.

Introduction of electronics, application of microprocessors in an increasing number of production processes, far-reaching informatization-computerization - of services is also an easily deservable phenomenon.

Globalization of economy and new technologies make new issues and new problems appear, new challenges start facing almost every region in almost every country, irrespective of the applied institutional mechanisms of economic life.

If in the '70s, as a result of several years of international research conducted at IIASA, largely founded on the "case study" approach, the concept of integrated regional development was forwarded, it was to an important degree based upon the need of internal, intra-regional rationalization of the development processes and it was not just by incidence that questions related to natural environment played an important role in this concept, while questions of economy and technological change, although taken into consideration, did not yet have the decisive importance.

When taking up again the international studies on the key questions of regional development in the middle of '80s, one differently sees the basic development questions facing nowadays or in the near future individual regions.

In the paper by Professor A. Kochetkov from IIASA, who has undertaken the hard job of organizing a new phase of international systems studies in the domain of regional development problems, the first place is occupied by the question of "Competitiveness" of a region as compared to other regions, and also by the need of implementation of CAD/CAM systems in the regional practice. In regional circumstances CAD/CAM should be understood as computer aided design of the development strategies for a given region, while computer aided manufacturing in a region, when region is treated as a unit producing for satisfaction of needs of other regions and thereby becoming an economic unit, a firm with its all, or at least with the most important of its features.

Documentation presented in this publication consists of papers and summaries of discussions from the first international workshop held within the framework of the new IIASA task related to contemporary regional questions. In addition, there are some materials meant for the workshop, but which could not be presented there.

Organization of this volume follows, to a large extent, the course of the workshop. Thus, 27 papers are presented, out of which 2 are post-workshop additions and 1 is a workshop lecture transcription. Headings of sections speak for themselves; so that only a couple of remarks are perhaps due. Note first that the domain of technological innovations knowledge - information got the best coverage in the volume, which is a fair representation of the situation at the workshop. In fact, the region/firm theme. was from the conceptual (A. Kochetkov), optimum portfolio (R. Bolton) and Beer's cybernetic paradigm (R. Espejo) viewpoints, while technology -knowledge-information considerations appear not only in section III (S. Dresch, A. Mouwen, K. Polenske - who treats coefficient changes in model matrices, T. Vasko and R. Funck), but also in papers from other sections (e.g. T. Kawashima in section IV or M. Steiner in section VI).

Another omnipresent thread is related to the capacities and role of modelling. To some extent undertaken in section II (R. Domański, K. Cichocki), it reappears in many other sections (III: K. Polenske, IV: K. Moller, V: S. Ikeda as well as Holnicki and Żochowski, VI: D. Boekemann and R. Kulikowski, J. Kacprzyk and A. Straszak, VII: A. Umnov, L. Kruś and J. Sosnowski).

Another aspect emerging out of the papers presented is that of increasing emphasis on integration within the set of regional problems, methods and functions. While some authors indicate special areas of main interest, it seems obvious that in times of changing structures the allpervading suggestion puts forward integration. The question is: what should be the shape of this integration ?

Some papers try to give, at least partially, an answer to this question (e.g. managerially - R. Espejo, epistemologically -A. Straszak, spatially - R. Domański, but also S. Dresch and A. Mouwen). Another part of the answer may be contained in studies made on particular regional or supraregional entities (section IV: K. Moller, G. Bianchi, J. Owsiński and K. Hołubowicz, as well as T. Kawashima). Certainly, the more comprehensive the case and the study, the more one can learn on integration.

Lessons from the workshop and its follow-up activities indicate the paths to be taken in working on the IIASA task. Further results shall show the paths actually taken and followed.

A. Straszak J.W. Owsiński The Editors - 8 -

## EDITORS' NOTE

Papers contained in this volume are grouped into chapters corresponding for the most part to sessions of the Workshop. Thus, chronological order of presentations is preserved with only few exceptions. Thereby, reports from workshop discussions, which were usually held after a group of papers, could also be left in their chronological places.

\_Most papers are presented here as they were delivered by their authors, including minor post-workshop corrections and modifications. Whenever an explicit editorial intervention was made, this fact is appropriately indicated in the text.

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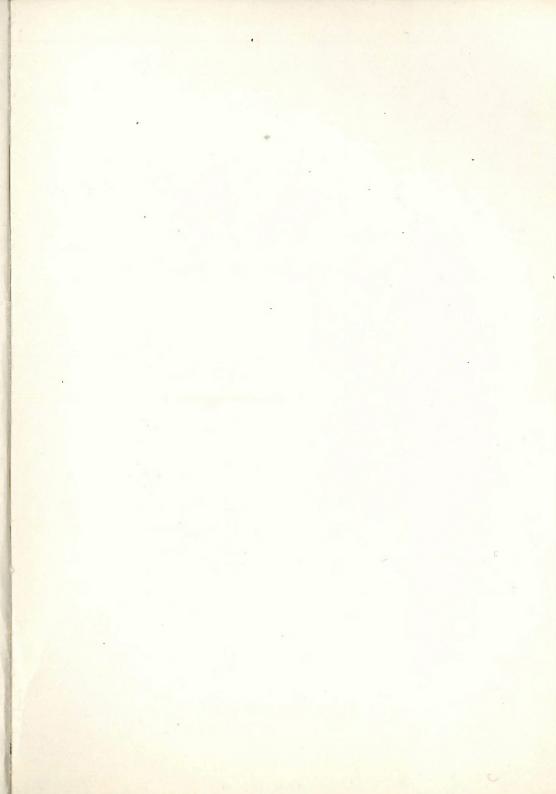
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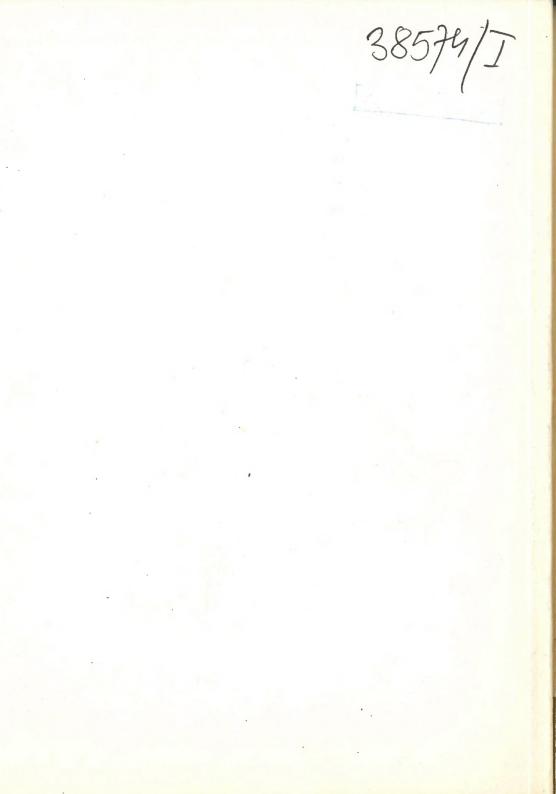
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