NOTES ON URBAN RESEARCH IN THE U.S.S.R.

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Foreword

I am taking the unusual step of circulating as a Working Paper some notes of discussions with Soviet colleagues held here over the last two weeks. The reasons for so doing are (a) the new light Prof. Avdotjin threw on the process of investment in urban research in the U.S.S.R., and (b) keeping my colleagues updated on research plans of the IIASA Urban Project.

On the first point, the "Soviet Urban Council" mentioned in paragraph (3) and elsewhere is formally called "Council for the Problem, 'Control of Development and Functioning of Towns and Conurbations.'" Prof. Avdotjin's comments should be read as amplifying his earlier paper (in CP-75-3) and that of Dr. Kudinov (WP-74-69, rev. eds. in SR-75-1 and CP-75-3).

Prof. Avdotjin is Deputy Director of the Central Research and Design Institute for Town Planning, Moscow, which is attached to GOSGRAJDANSTROY, the State Committee for Civil Construction and Architecture. The Chairman of that latter body is the Prof. Gennadi N. Fomin, who is mentioned in paragraph (3); he also heads the Soviet committee which, through the Soviet Academy of Sciences, advises IIASA on the development of its research program in regional systems. Dr. Vladimir V. Kulba, of the Academy's Institute of Control Sciences, is Scientific Secretary to the Soviet Council.

ATDE-MEMOIRE

Notes of discussions during the visit of Prof. L.N. Avdotjin and Dr. V.V. Kulba to TIASA, June 9-17, 1975. Participating for TTASA were Dr. V. Sokolov, Dr. O.V. Kudinov, and Dr. H. S. Swain.

- (1) Dr. Swain began the meetings by outlining recent developments in project plans: the application for \$40,000 from UNEP for research programs planning in the area of resource conserving urban design, and the \$150,000 from Ford for the comparative urban regional study. He went into some detail on the collaborative requirements of such a study.
- (2) Dr. Swain also brought up for later discussion his communication problems with Moscow and his recruitment requirements an update of his unanswered letter to Prof. Gvishiani of January 23rd, 1975.
- (3) Prof. Avdotjin began by describing the activity of the Soviet Urban Council. It combines, under the chairmanship of Prof. G.N. Fomin, 14 institutions design, managerial, as well as academic with 32 council members. Its object is coordination of urban research in the Soviet Union. Since its members are mostly at the level of institute directors, the council neither plans nor performs research: its concern is with the coordination of plans proposed from below. Its instrument of coordination is not directly budgetary, but rather advice to the State Committee for Science and Technology. It would appear to be the single major source of such advice. Thus, for example, the programs of urban research institutions for the next five-year Plan are discussed in this Council. In addition, it is a source of advice on current (annual) plans.
- (4) There are two basic directions of urban research in the Soviet Union, though the definition is due more to

managerial convenience in intellectual substance: the management of urban development and the management of urban operations. The first issue, management of urban development, is mostly undertaken by research-oriented institutions, while the latter topic is given over to applied and operational organizations.

- Major problems in the management of urban development include: the design of data banks for urban management; computer-aided design of urban fabric; and a variety of methodological concerns which are mostly undertaken by academic institutions. They are interested in generalizing from experience as an aid to further design. They consider the urban region as a problem in "plant management," with all that that implies about investment planning. concerned with problems of good functional structure for cities, a problem that seems to incorporate land use planning, infrastructural investment decisions, and problems of physical coordination in time and urban space. Prof. Avdotjin saw their concerns as being more design oriented, ours more analytical. He regarded most favourably IIASA's forthcoming initiatives on integrated regional development.
- (6) Some results of work in this first direction include the general scheme of population distribution of the U.S.S.R. The principles for this scheme were worked out by 1975 and approved by GOSPLAN, GOSTROY, AND GOSGRAJDANSTROY. Detailed planning of the general scheme, which has a time horizon of the turn of the century, will be completed during the five-year Plan which begins next year. Parallel effects are being undertaken regionally. A pilot project of "local" scale was undertaken in 1975 in the Central Region the fourteen oblasts around Moscow, comprising 480 towns and fourteen million people. They are concerned with this distribution problem at all scales down to the level of urban master plans, which latter in fact require sixty percent of total budget.

- (7) The second major direction essentially deals with intra-city operations. Examples are optimal distribution of housing, planning of urban transport systems, urban emergency services, and other sorts of infrastructural investment and operational management decisions. The research interests in this area are poorly represented in the Council so far research is just beginning in a major way on these topics.
- (8) The Council meets six times a year. Its authority and importance is apparently in the ascendant. Prof. Fomin will be in America and on vacation this summer but will visit IIASA in September just before that month's Council Meeting. He may propose to us at that time a discussion of urban research policy in IIASA countries. He would be very interested in learning of the institutional arrangements and decision processes for urban research investment. We agreed that it would be desirable if four members of this project, including N. Hansen, M. Cordey-Hayes, and H. Swain, were to join Prof. Fomin subsequently in Moscow to present our work and our plans to the Council. Dr. Kulba will notify us by telex or telephone as soon as dates can be set.
- Prof. Avdotjin then commented on my presentation of the comparative urban region study. He felt that the idea of an urban data bank was interesting and deserving of support, but that many (especially organizational) details would need attention. The Soviet Urban Council would be very interested in a data bank that built on some of the successful national examples. One consideration we ought to keep in mind, however, in making a formal proposal to National Member Organizations, is that data are usually collected for control or management purposes; here the design of the data base should be different. No connection to management would be appropriate; instead the goal is exchange of national experience and the furthering of scientific re-If that cast or colouring could be given to the proposal he thought it would receive strong support from the U.S.S.R. He thought that the further planning and work on

this proposal would make an excellent topic for discussion in Moscow in September.

- (10) The integration of the Urban project's work with that of other IIASA projects was of interest to Prof. Avdotjin, and he expressed satisfaction with practical examples mentioned by Dr. Swain, including the proposed workship for Polish planners and managers on the Lublin coal basin, an applied activity that would draw on the skills of Ecology, Energy, Urban, and possibly Water and Large Organizations as well.
- (11) Dr. Kulba and Prof. Avdotjin both mentioned that their Council would appreciate review and survey materials on the application of advanced systems analytic techniques in urban and regional development, a point which Dr. Swain agreed to keep in mind and bring forward in the next annual planning sessions.
- We again took up the key question of recruitment. (12)We agreed, on reviewing the prospective activities of the Urban project, that the priorities for hiring were (a) a senior mathematical economist or econometrician with experience in urban analysis; (b) an information system specialist -probably a younger person, who would work with Prof. Hansen on the design and management of the data bank mentioned in (9); and (c) a physical planner, or planner-architect, with experience of mathematical modelling, especially as applications to integrated regional development get underway in the next year or two. It was also agreed that informal opportunities for meeting potential scientific recruits should be sought before long-term commitments were entered into; in that respect Dr. Swain expressed his willingness to travel to the U.S.S.R. or to welcome Soviet scientists here on short assignments.
- (13) The undersigned agree that the above is a reason-ably faithful record of the major points of their discussions.

Harry Swai**N**

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