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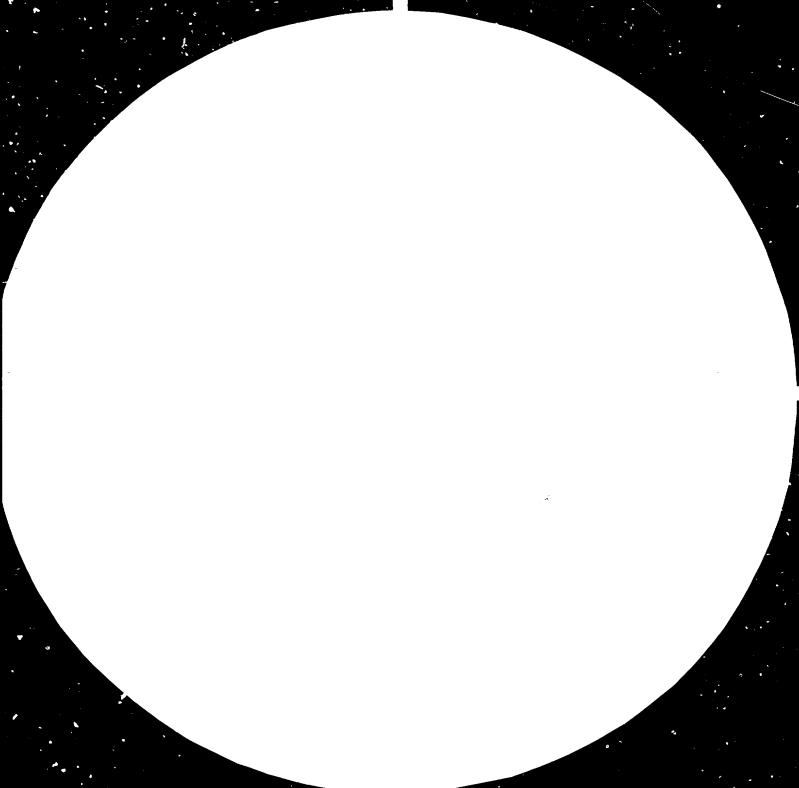
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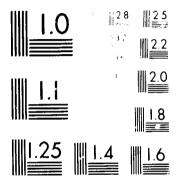
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# UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

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REPORT OF THE

EXPERT GROUP MEETING TO REVIEW THE UNITAD MODEL \* .

17-19 June 1981, Vienna - Austria

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The Expert Group Meeting to Review the UNITAD Model was convened by 1. UNIDO in Vienna on 17-19 June 1981. The meeting was chaired by Mr. F. Carré, Deputy Executive Director of UNIDO. One session was chaired by Mr. J. Pronk, Deputy Secretary General of UNCTAD. The following experts participated: Mr. Ismail Sabri Abdalla, Vice President, Centre for Arab Development Studies and Consultancy, Cairo; Ms. Maria Augustinovics, Head, Department of Macro-Economics, Budapest; Mr. Odd Aukrust, Director of the Research Department, Central Bureau of Statistics, Oslo; Mr. Manuel Balboa, Senior Advisor, ECLA, Santiago; Mr. H.C. Bos, Professor, Erasmus University, Rotterdam; Mr. Paul Dubois, Directeur des Synthèses, INSEE, Paris; Mr. Emilio Fontela, Director, Department of Econometrics, Geneva University, Geneva; Mr. Ghazi Hidouci, Director, Planning Ministry, Algiers; Mr. Alfred Maizels, Research Fellow, University College, London; Mr. Kirit Parikh, Agriculture Programe, IIASA, The following UN agencies were represented: Department of Laxenburg. International Economic and Social Affairs (UN Headquarters), UNCTAD and ILO.

2. The terms of reference of the UNITAD system of models, as recalled at the outset of the meeting can be summarized as follows:

- (i) On the industrialization side, the model was expected to illustrate technology and policy choices consistent with the Lima objectives. This implied a capacity of the model to picture changes in technology sectors and to generate new industrial and other sectoral structures resulting from technology policy choices and final demand characteristics.
- (ii) On the trade side, the model was expected to illustrate the impact of trade policies, both at the regional level and in the international trade network on development issues. Taking these first two objectives together, the model was to generate consistent industrial patterns and trade configurations and to explore the feasibility of a new system of international relations.
- (iii) Other important policies for consideration by the model, as mentioned in the UN declarations and resolutions on the New International Economic Order included:

- the achievement of the objectives of the ECDC;

- the balance to be achieved between industry and primary resources, and in particular, the choice of technology conducive to a mutually supportive agricultural and industrial development, and to a balanced growth of rural-urban markets;
- the social impact of broad development strategies, and in particular, their employment effects and their possible effect on the reduction of poverty.

3. In the presentation of the UNITAD model - including an exploratory study on the consistency of targets of the Third Development Decade - it was stressed that explicit choices has been made in its design, in order to address the above objectives. The model size was meant to give a concise picture of the world system, while illustrating a number of complex inter-relationships among components. Its open character allowed flexible simulation of strategic policy options. The comparative-static nature of the Ex.del was directed towards the examination of sharp divergences from existing structures.

4. In evaluating the system, a distinction was made between exploratory models such as the UNITAD model and forecasting models rooted in past and present structures. The former type was more suited to testing the consistency of long-term targets and of structural changes.

5. The methodological issues discussed included the time treatment in the economic dynamics of the UNITAD model, the nature and role of prices, the equilibrium mechansim between the savings-investment and payment gaps, the treatment of technology and the import functions. It was recognize...nat flexible time paths should be introduced in the system.

6. Other key issues referred to the operation of the model, which so far had been used by fixing growth targets and policy assumptions and tracing their implications for the trade and payment gaps, the labour gap and the land gap. Other possible uses or the system were disucssed, in particular the possibility of fixing the payment gap and allowing the system to generate the potential growth, or assigning both a growth rate and a trade (or payment) gap and allowing the system to suggest technologies and trade policies compatible with these.

7. Additional issues for future consideration were suggested by some experts such as: the economic influence of Transnational Corporations (TNCs) the impact of disarmament policies, and the environmental implications of new world industrial structures.

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#### Views on Future Utilization of the Model

8. Following the discussion of the results of the new scenaric on the consistency of targets and instruments of the International Development Strategy, a consensus was reached on the usefulness of continuing work based on the UNITAD model. It was recognized, in particular, that this kind of a model was an efficient tool for exploring institutional and structural transformations associated with the concept of the New International Economic Order and alternative development strategies.

- 9. Various opinions were expressed on the nature and timing of future work:
  - (i) a consensus was reached on the need to carry out, at an early stage, systematic "analytical variants" meant to show the sensitivity of the model to changes in various policy parameters. This would not only be a valuable tool for the model operators in further utilization of the system but would also assist in making it more "transparent" to users.
  - (ii) some experts felt that technical improvements should be made in the near future. While a continuous process of testing and amending the system would take place, priority should be given to the use of the model in exploring the interrelations between growth, energy, industrial and trade policies and financial variables.
  - (iii) other experts, while agreeing on the need for continuous improvement, recommended that the existing system be used to explore new technology policies, and to illustrate new development strategies especially based on economic co-operation among developing countries.
    - (iv) specific views were expressed on potential avenues foremploration by the system:
      - the vulnerability of developing countries to protectionism and the response of TNCs to protection barriers:
      - development processes oriented towards the growth of the internal market, perhaps to be explored with a longer-term horizon than 1990;
      - impact of ECDC on trade within and between developing regions as well as on North-South links;

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- the longer-term interrelation of growth and the energy balance;
- long-term employment strategies and other social objectives mentioned in the Third Development Decade.

10. The meeting unanimously felt that a comprehensive presentation of the UNITAD system should be prepared with a detailed description of the analytical work already done, and the results of the sensitivity analysis yet to be conducted.

11. Two promising possibilities emerged from the discussion on co-operative work based on the UNITAD system:

- the first avenue concerned co-operation within the the UN system. As a starting point, full exchange of information on statistical inputs to the various UN models, particularly between DIESA and UNIDO, could be organized; co-operation should also be extended to the comparison of results from different models in the UN family. As a next stage, some joint exercise could be designed, with possible interfacing with existing UN national, regional and sectoral models.
- another promising possibility was to organize co-operative work on the use of the UNITAD system with research teams working for intergovernmental organizations or groups outside the UN system or academic research teams in individual countries. Experiments of this type could pave the way for wider co-operation.

12. The expert group meeting approved these recommendations and conclusions in their last session on 19 June 1981.

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