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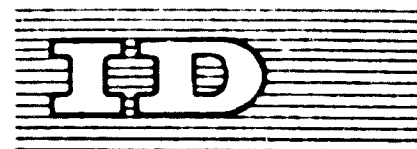
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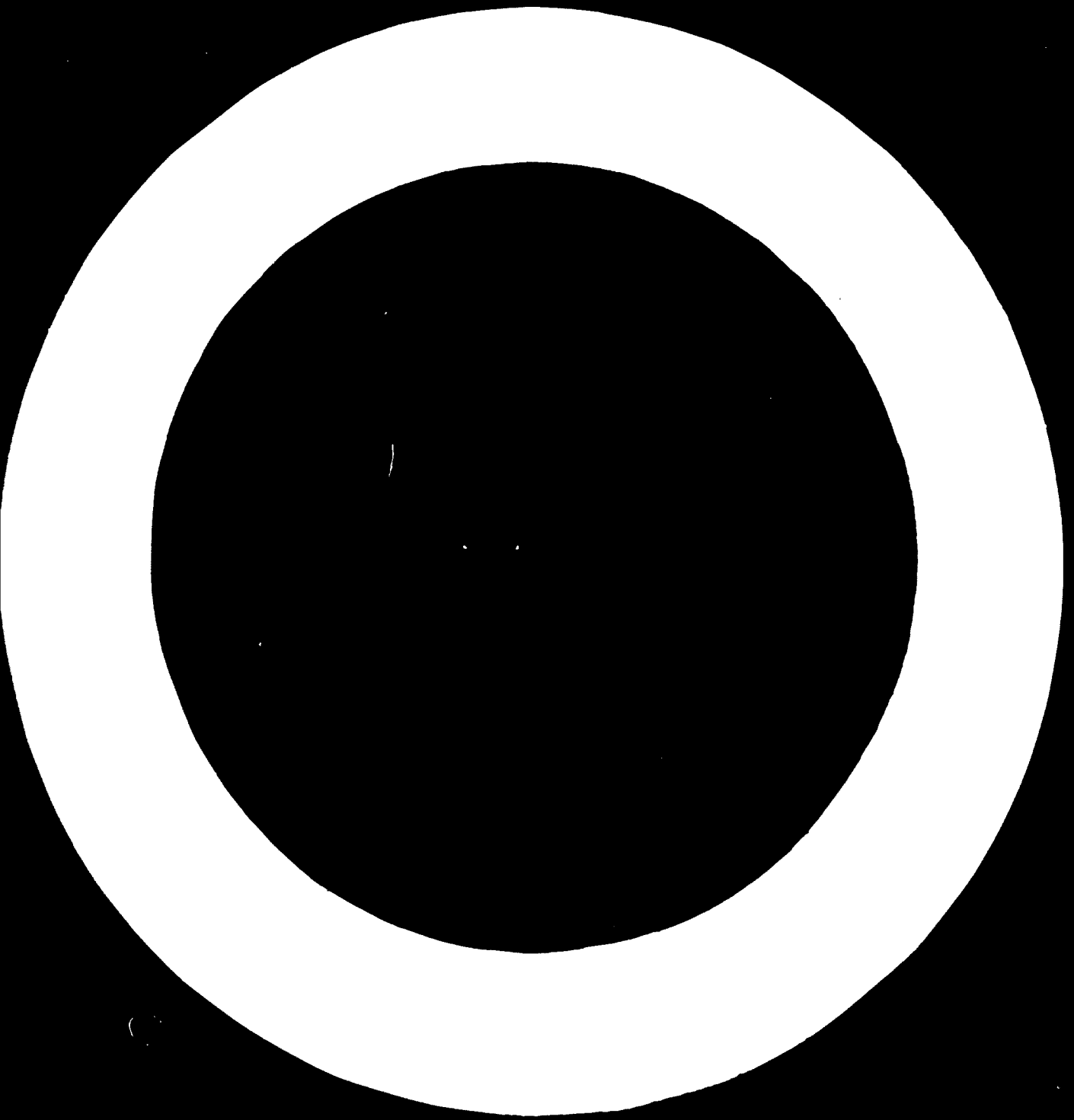
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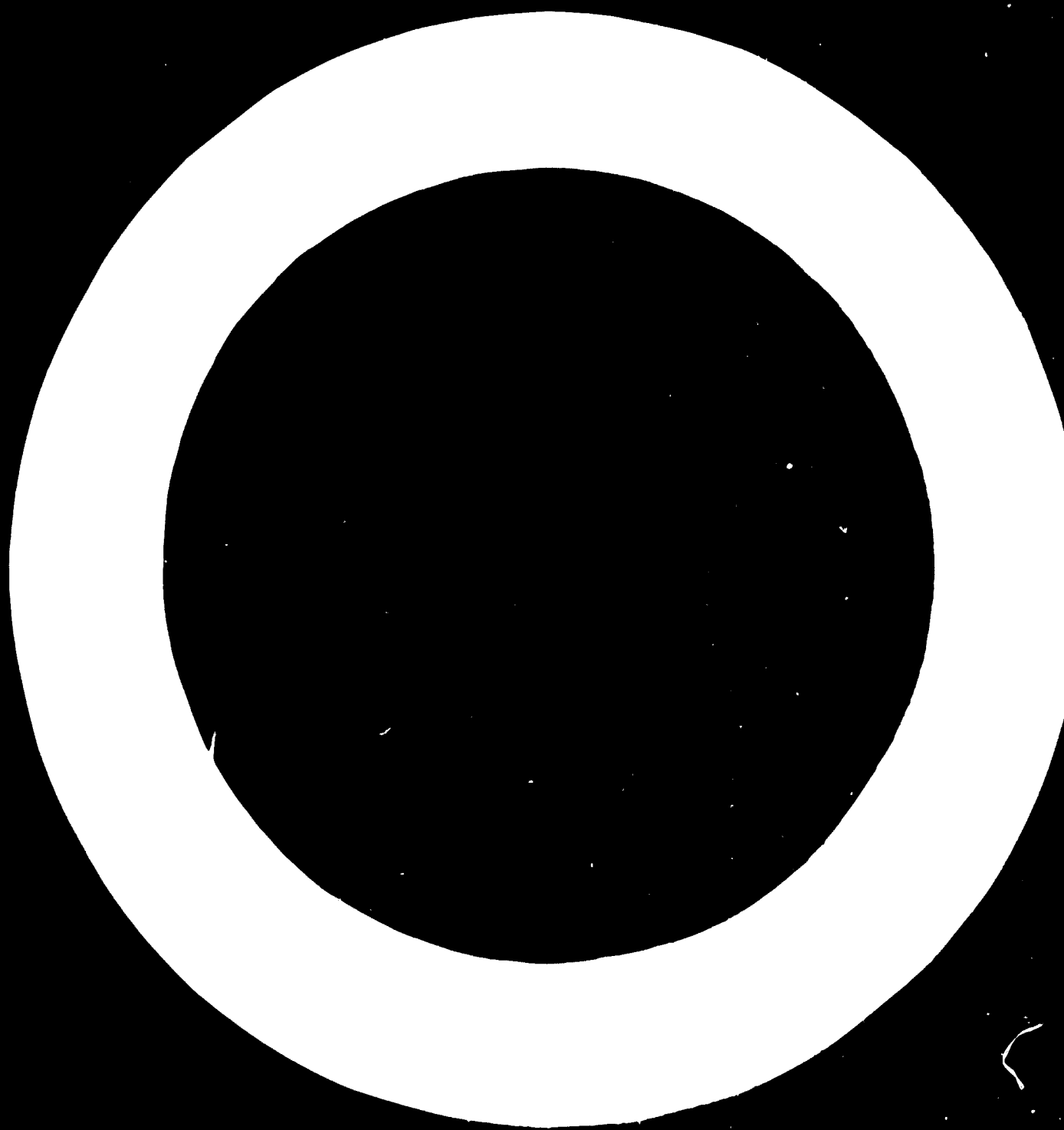
Expert Group Meeting on Agricultural Machinery
Industry in Developing Countries

Vienna, 13 - 22 August 1969

ACTIVITIES OF THE INDUSTRY DIVISION OF THE
ECONOMIC COMMISSION FOR EUROPE
IN THE FIELD OF ENGINEERING

id.69-4260





The general responsibility for the EC's activities in the field of engineering is entrusted to the Industry Division. These activities can be summarized as follows:

- selected sectors of the industry and the general state of supply and demand for engineering products are kept under review;
- the main emphasis is on the economic aspects of the engineering industry.

In order to provide easily available material for an analysis of the trade aspects of the engineering industry, the "Bulletin of Statistics on World Trade in Engineering Products" is published annually (CE/ECB/ENG.2, 3,4,5 and 6). The data given in the Bulletin cover, in terms of value, the exports of twenty-eight countries, representing approximately 99 per cent of world exports in engineering products, which are broken down into eighty product groups and 120 destinations, including also twelve regional sub-totals.

An example of the information provided by the Bulletin can be illustrated by the following. In 1967 world exports of agricultural machinery amounted to 2,250 million US dollars, an equivalent of 4 per cent of total world trade in engineering products. Of this sum 40 per cent represented agricultural machinery for cultivating soil and 51 per cent represented tractors. The four major exporters of agricultural machinery for the year 1967 were: the USA (27%), the United Kingdom (15%), the Federal Republic of Germany (11%) and the USSR (10%). The major importing areas were: Western Europe absorbing 33%, the socialist countries

of eastern Europe 5, and North America 13. The developing countries of the world imported 27% of total imports of agricultural machinery, namely, Africa 4, Asia 11 and Latin America 9.

Apart from the statistical work in the field of engineering products, the UNCTAD Industry Division publishes studies analysing trends of production, demand and trade in engineering products. For instance, in 1953, a study on "Production and Trade in Mechanical and Electrical Engineering Goods" (E.I.I./Tia.19) provides a detailed analysis for the period 1934-1950 of the position of mechanical and electrical engineering industries in the modern economy. Production and imports of machinery in non-European countries, as well as world trade, products pattern and general distribution of machinery, were also analyzed.

At the request of UNICE the Industry Division of the Economic Commission for Europe prepared for the United Nations International Symposium on Industrial Development a study entitled "The Engineering Industry and Industrialization" (E.I.I./Tia.21). The study deals with a wide and varied range of engineering products. For instance, it analyses the role and place of machinery and the engineering industry in the economy and the economic aspects of some sectors of the engineering industry in the industrial market-economy countries and in the USSR.

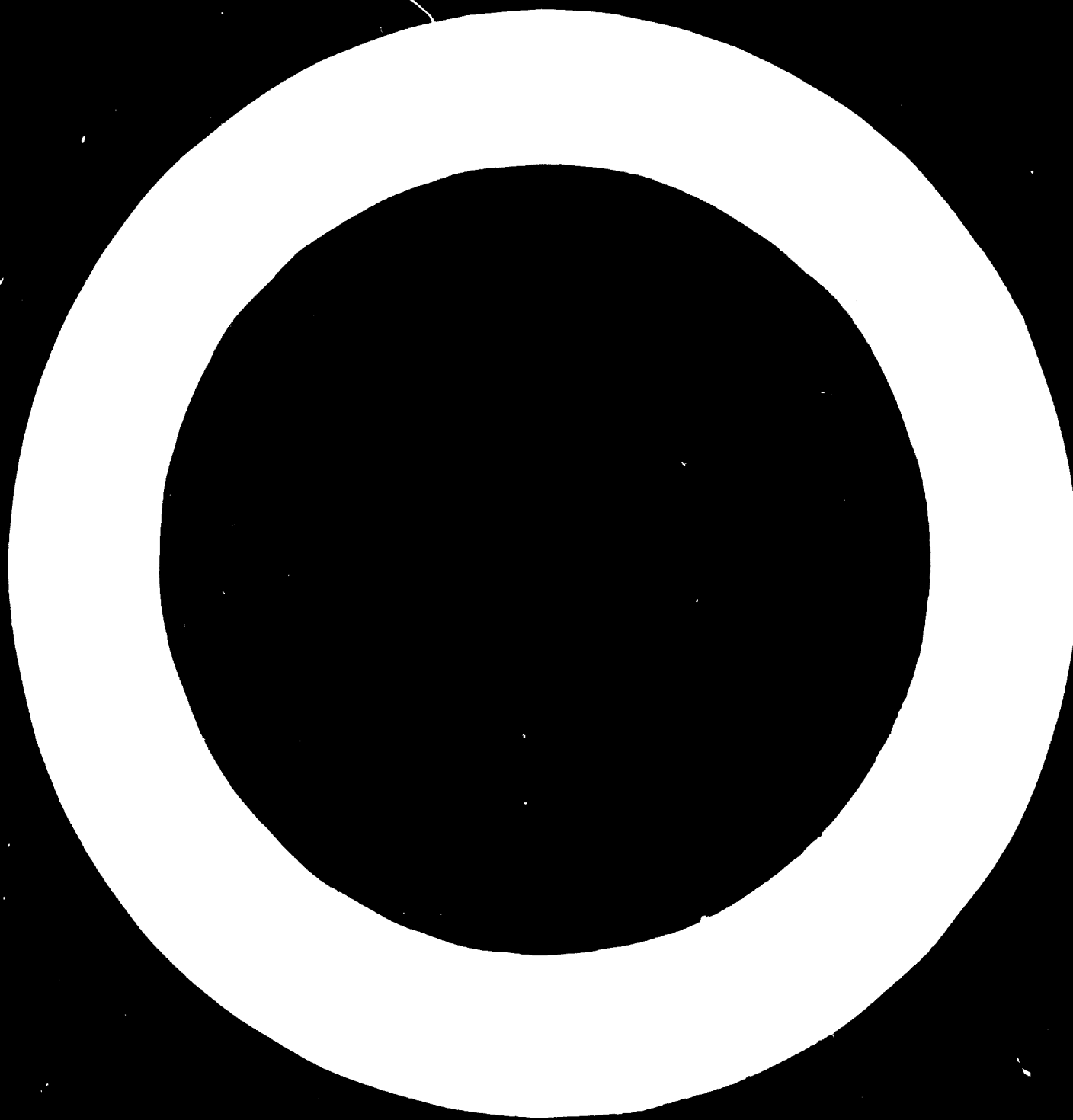
This study describes also the complementarity and the interrelations between sectors of engineering industries, analysing the sequence in which the different engineering branches can be established. Interesting aspects are the description of cost aspects and investments in a number of engineering sectors. It may be interesting to note that agricultural machinery is classified among those with the highest ratio of investment

to turnover and that their minimum profitable size of enterprise places them in the medium range. Here precise data covering agricultural machinery can be found in the above mentioned study.

Another study of interest was published in 1969 under the title "Requirements in Engineering Products of the European Countries in the Process of Industrialization (69.II.E/Him.9.). This study covers those European countries whose own engineering industry cannot yet meet the bulk of their domestic requirements of machinery necessary for intensive industrialization. Some projections, covering the period 1968-1972, were also elaborated.

A meeting will take place on 17-18 November 1969, when an ad hoc Group of Experts on the Engineering Industries will meet in order to assist the Secretariat in the revision and bringing up to date of the study on "Production and Exports of Mechanical and Electrical Engineering Goods". Detailed discussion on the contents of this new study should give an opportunity to review the most important groups of products of the engineering industry which call for a further analysis. Agricultural machinery may be included in this review.

Thus, the work accomplished by the ECE's Industry Division and their future work in this field should harmoniously complete the work being undertaken by UNIDO's Group of Experts in the engineering field.

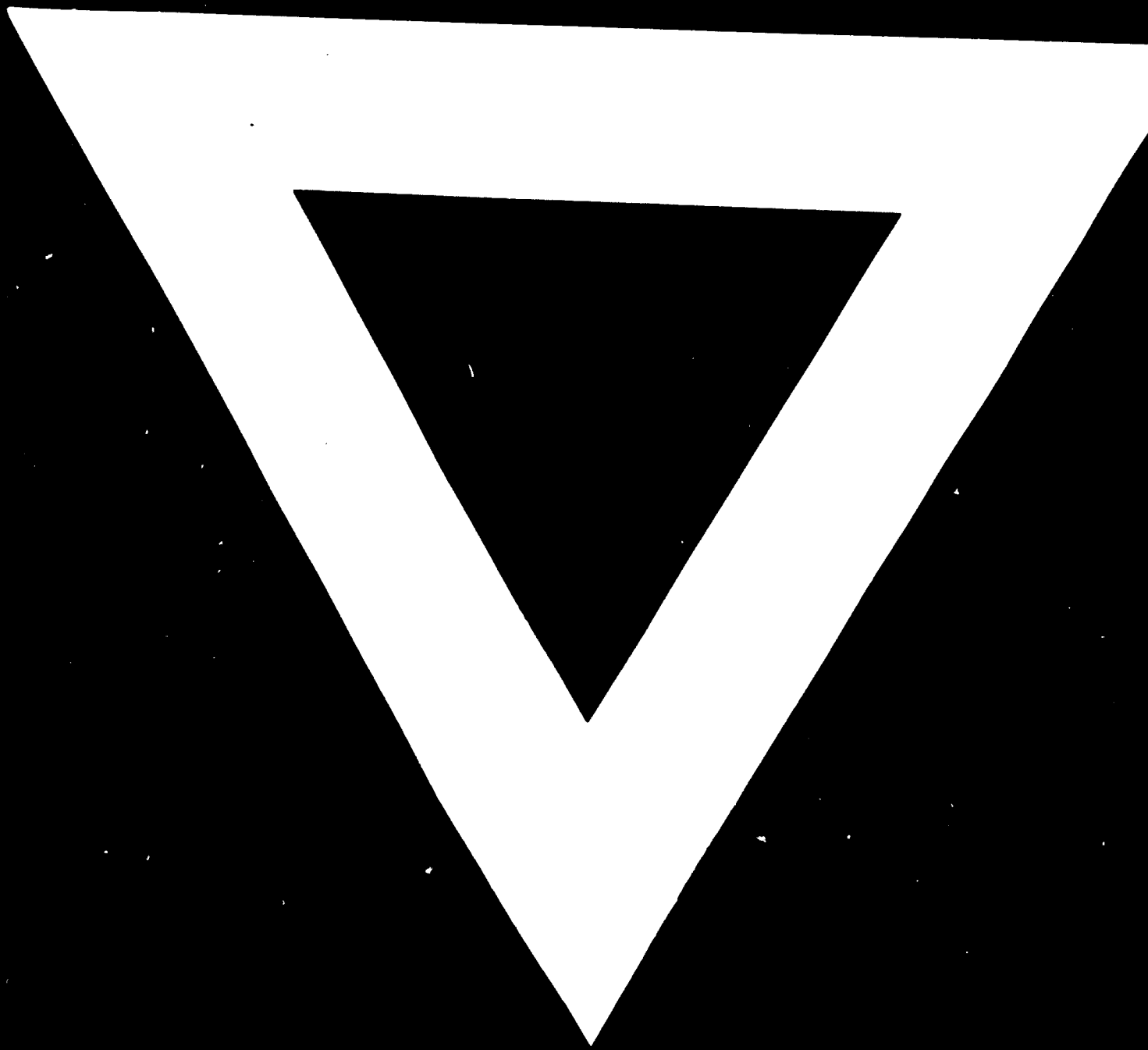


ANNEX

WORLD FAMILY OF
MECHANIZATION OF AGRICULTURE

June 1956	AGRI/MECH/1	E.F.R.	Methods of Green Fodder Conservation
Sept. 1956	" Corr.1	E. only	
June 1956	AGRI/MECH/2	E.F.R.	Harvesting and Conservation of Maize Stalks for Forage.
June 1956	AGRI/MECH/3	"	The Yield and Parlour System in Milk Production in the U.K.
June 1956	AGRI/MECH/4	"	Rice Harvesting.
March 1957	AGRI/MECH/5	"	Mechanization of Dairy Farms.
March 1957	AGRI/MECH/6	"	Harvesting and Storage of the More Common Cereals.
May 1957	" Corr.1	E.F.	Corrigendum.
Oct. 1957	AGRI/MECH/7	E.F.R.	Harvesting Transport and Storage of Green Fodder in Mountainous Regions.
1958	AGRI/MECH/8	"	Harvesting and Conservation of Green Fodder in Dry Regions. (Stepanov)
1958	AGRI/MECH/9	"	Effects of Farm Mechanization on Horse Numbers in European Countries.
1958	AGRI/MECH/10	"	Harvesting and storage of grain maize.
1958	AGRI/MECH/11	"	Milking Methods and Milking Machines.
1959	AGRI/MECH/12	"	Mechanization of the Cultivation and Harvesting of Sugar Beet.
1959	AGRI/MECH/13	"	The Cleaning and Sorting of Grain.
1959	AGRI/MECH/14 (and Add.1)	"	The General Problem of Transport on the Farm.
1960	AGRI/MECH/15	"	Potato Harvesting (West)
1960	AGRI/MECH/16	"	Mechanization of the Application of Chemical Fertilizers in the Form of Liquid.
1961	AGRI/MECH/17	"	Modern Methods of Cultivating and Harvesting of Main Vegetables in Field Prod.
1961	AGRI/MECH/18	"	Mechanical Equipment for Field Drainage and Ditching. (Culpin)
1961	AGRI/MECH/19	"	Modern Methods of Cultivation and Harvesting of the Main Vegetables under Glass. (Shipway)
1962	AGRI/MECH/20	"	Tractor Needs for Large-scale Farming. (Ukrainian S.S.R. Delegation)
1963	AGRI/MECH/21	"	Irrigation by Canals and Sprinklers. (Carlo Santini-Italy)

1963	AGRI/MECH/22	E.F.R.	Mechanization of Land Clearance
1963	AGRI/MECH/23	E.F.R.	Tandem Tractors
1963	AGRI/MECH/24	"	Seed drills (Kauscher) + Corr.1 (F.only)
1963	AGRI/MECH/25	"	Automation in Agriculture
1964	AGRI/MECH/26	"	Mechanization of Poultry Keeping
1964	AGRI/MECH/27	"	Equipment and Methods used to Control Soil Erosion
1965	AGRI/MECH/28	"	Self-Propelled Chassis
1965	AGRI/MECH/29	"	Mechanization of the cultivation of Peas
1966	" " 30	"	Haling High Dry Silage from Grass and Leguminous Crops
1967	" " 31	"	Mechanisation of Fruit Harvesting
1968	" " 32	"	Basic concepts in connection with the economics of mech. of agriculture
1968	" " 33	"	Methods of seed and Pest Control
1968	" " 34	"	Methods and Equipment for the application of fertilizers and Lime
1968	" " 35	"	Methods and Equipment for Drying of Green Feed (see AGRI/IF.2/83/Rev.1)
1968	" " 36	"	Mechanization of Loading, unloading and transport operations in agriculture (see AGRI/IF.2/100)
1968	" " 37	"	Mechanization of maize harvesting for grain (see AGRI/IF.2/94)
1969	" " 38	"	Air-tight storage of high-moisture Grain (see AGRI/IF.2/95)
1969	" " 39	"	PTO Driven Machines for Rotary cultivation of the soil
1969	" " 40	"	Frost Damages and its prevention (see AGRI/IF.2/110)
1969	" " 41	"	The consumption of mechanical energy in crop production (see AGRI/IF.2/Working Paper No. 49)
1969	" " 42	"	Economic aspects of the Mechanization of Dairy Farms (see AGRI/IF.2/108)



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