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SUMMARY

A NEW FIELD OF PLASTICS APPLICATION IN ROMANIA<sup>1/</sup>  
IRRIGATION OF AGRICULTURAL AREAS

by

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In the Southern part of Romania, two projects are under way of implementation, one of which is partially completed. In these projects, more than 125,000 hectares of land is to be allocated to agriculture in the immediate future. At present this is unsuitable for cereals and vegetable crops.

These projects have been developed by the Research and Design Institute for Land Reclamation and Water Management within the Ministry of Agriculture in Romania in co-operation with the English companies Taylor Woodrow Ltd. and George Wimpey Ltd.

A brief description of these projects is given in order to stimulate interest among the representatives of the Latin American countries.

Water is supplied to the agricultural areas from the river Danube. Pumping stations delivering 60 m<sup>3</sup>/sec. each irrigating 32,000 hectares. The water is delivered from the source to the distributing points through main channels crossing sandy areas.

<sup>1/</sup> The views and opinions expressed in this paper are those of the author and do not necessarily reflect the views of the secretariat of UNIDO. This paper has been reproduced without formal editing.

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The channels are made impermeable by coating with 0.25 mm low density polyethylene films compounded with carbon black. Hexagonal slabs composed of furnace ash, dune sand and cement compressed at about 140 atm are placed on the film.

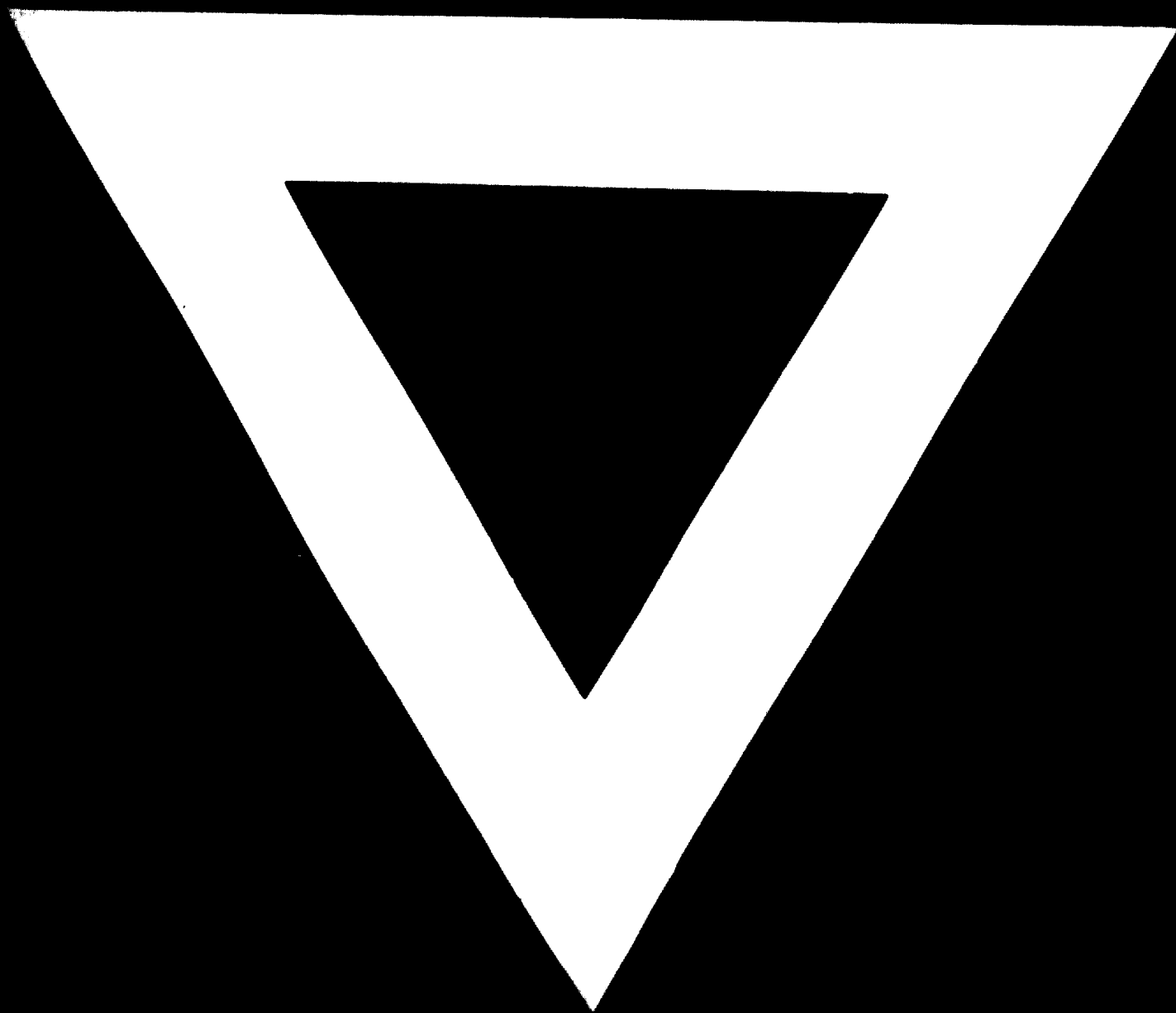
From the distribution point, the water is pumped into an underground network of polyvinyl chloride pipes of diameters ranging from 125 to 380 mm. The working pressure within the pipe network is 12.5 atm. The pipes and rubber gasket joints are tested at 15 atm.

Underground hydrants are located at 100 m intervals throughout the network. These hydrants incorporate tubular aluminium "rain wings" connected by quick coupling. The operation of the whole system is performed by a common equipment system.

The two projects involve the following plastics materials:

- PVC pipes (B.S.-C-class) 125 - 380 mm diameter	2,145 km	19,800 tons
- Low density polyethylene films compounded with carbon black ( 0.25 mm)	3,000,000 m <sup>2</sup>	620 tons





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