



**TOGETHER**  
*for a sustainable future*

## OCCASION

This publication has been made available to the public on the occasion of the 50<sup>th</sup> anniversary of the United Nations Industrial Development Organisation.



**TOGETHER**  
*for a sustainable future*

## DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

## FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

## CONTACT

Please contact [publications@unido.org](mailto:publications@unido.org) for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at [www.unido.org](http://www.unido.org)

mb



05140



Distribution  
LIMITED

ID/WG.166/14  
9 November 1973

Original: ENGLISH

United Nations Industrial Development Organization

Fourth Training Programme in Plastics Technology  
Vienna, Austria, 10 September - 9 November 1973

THE DEVELOPMENT OF THE PLASTICS INDUSTRY  
IN TANZANIA<sup>1/</sup>

by

Charles NANJIYA

<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 document has been reproduced without formal editing.  
ID.73-8025

**We regret that some of the pages in the microfiche copy of this report may not be up to the proper legibility standards, even though the best possible copy was used for preparing the master fiche.**

The Tanzanian plastics industry employs some 600 people on direct processing. These industries, though not large by many standards, play a very important role in the economy and development of Tanzania.

Current consumption is approximately 4,000 tons of PVC, 2000 ton polyethylene and 200 tons polystyrene, flexible polyurethane foam for mattresses and cushions. Rigid polyurethane for chair shells are also processed. Output figures of these materials can only be estimated at 25 tons flexible polyurethane and 5 tons rigid polyurethane.

PVC is by far the most important material of which more than 50% of the total tonnage being utilized for water pipes, both pressure and non pressure classes. Present size limit is 225mm. This will shortly be increased to 400mm and an increase in capacity of 2,000 tons per year.

PVC is followed by Polyethylene both high density and low density. High Density consumption is 900 tons per year with 700 tons being utilized in the manufacture of water pipes. The balance of high density and low density is used mainly for packaging in the form of film and bottles.

Polystyrene is mainly used for packaging of pharmaceuticals and food products.

The main aim of the plastics industry is to improve and develop Tanzania. The expansion programme in hand are aimed to meet the requirements of the country, in particular the supply of fresh water and irrigation systems. To give some idea of the rate of expansion in this field the output of pipes since 1968 have increased as follows:

UPVC PIPES

1968	500 tons	1972	2,200 tons	1974	4,200 tons
------	----------	------	------------	------	------------

HDPE PIPES

1968	180 tons	1972	650 tons	1974	800 tons
------	----------	------	----------	------	----------

The increased output has been achieved by the installation of new equipment and by the introduction of new methods and existing equipment. Prior to 1971 only granulated uPVC could be used. Since this time compounding equipment and multi extruders have been installed to enable the use of dry blends. This has created savings for both Tanzania and the industry plus an increase in technical know how.

The field of low density polyethylene has expanded from 450 tons in 1968 to 1,100 tons in 1972 and by 1974 should have reached 1,500 tons. The increase is mainly due to the increased usage of L.D.P.E. film for agricultural and building uses. The packaging of fertilizers being one product which is in development plus increasing the present lay flat film width from 3.6 meters to 5.2 meters for both agricultural and building purposes.

It should be noted that a great deal of what has been achieved has been with the assistance of UNIDO and ILO personnel. Their assistance in the fields of technical assistance, market research feasibility studies and training programmes, both locally and overseas, has been of great assistance and a great deal of time has been saved due to the efforts of personnel from these offices.

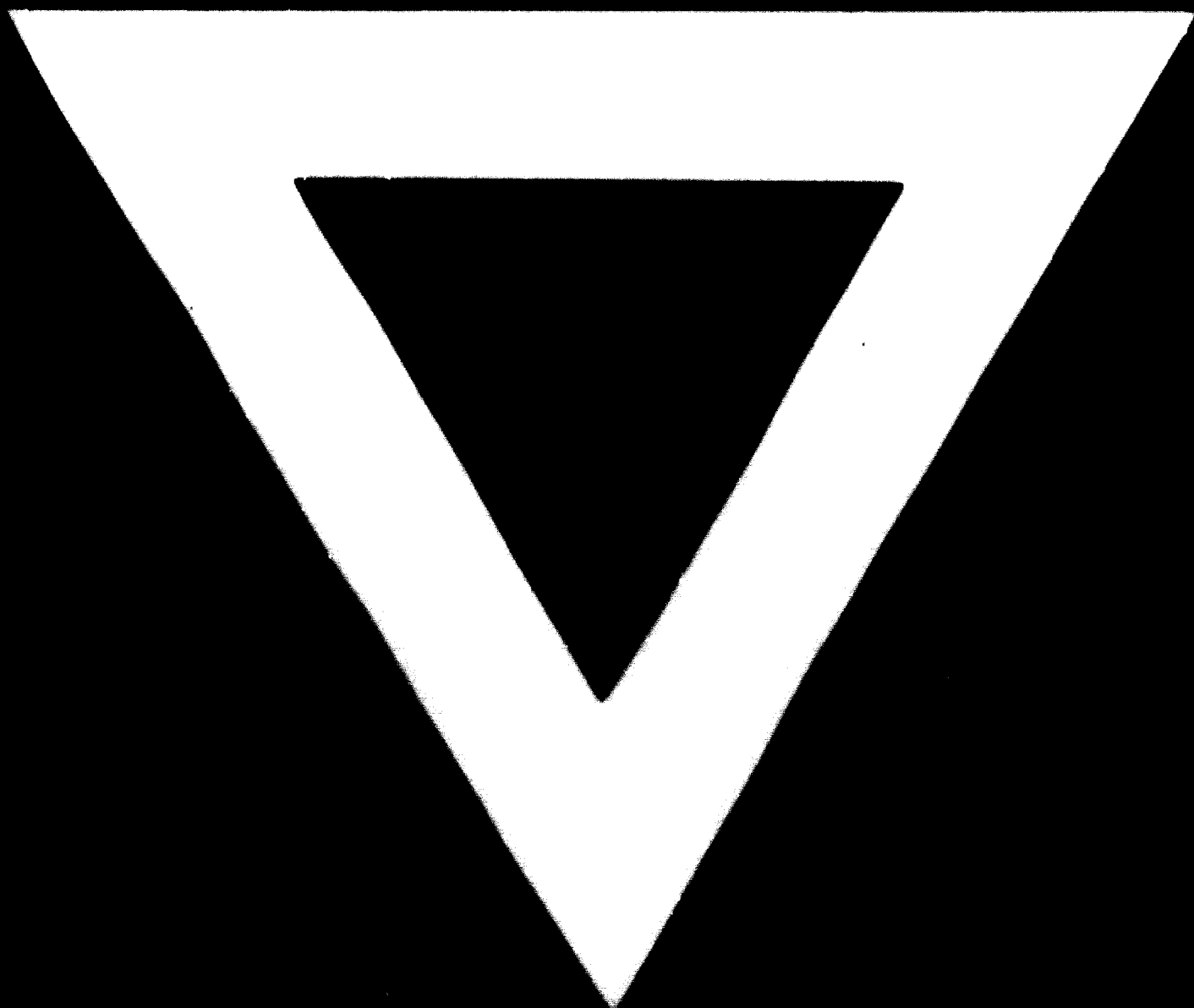
At present UNIDO are working on a plan to rationalise the plastics industry in Tanzania. This is being carried out by personnel from Indcentre. Much of the ground work has been carried out, but due to the rather complex problems and effects upon other industries this will still take some time.

Much of the present tooling used in Tanzania - dies and moulds has been manufactured locally, only the larger and more complex moulds are purchased from overseas. Efforts are at present being made to improve the capacity in both output and dimension.

Companies in Tanzania and their product lines:

1. Tegry Plastics: Extrusion of pipes, film, sheet, blow moulding of bottles
2. Simba Plastics: Injection moulding, extrusion of pipes, film and sheets, blow moulding bottles
3. Amboni " : Injection moulding of crates
4. National " : Injection moulding, blow moulding
5. Tanzania " Industries : Injection moulding of plasticised PVC polyurethane (mainly footwear injection moulding)
6. Tanzania Shoe Co. Ltd. : Injection moulding - footwear
7. Tanfoam : Flexible polyurethane
8. Banco Products: Flexible polyurethane





**2 . 9 . 7 4**