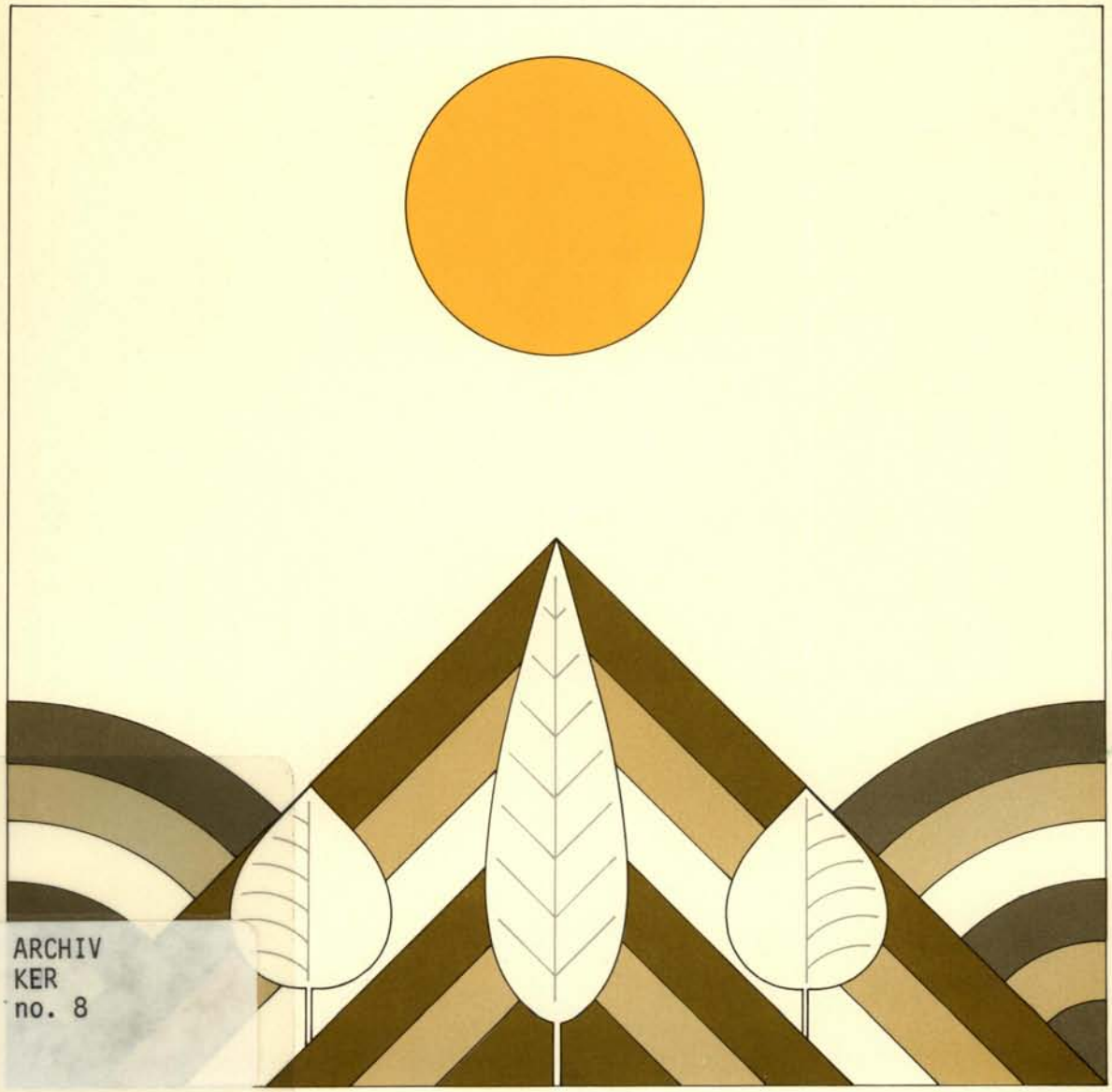
INTERCROPPING
in semi-arid areas

Report of a symposium held at the
Faculty of Agriculture, Forestry
and Veterinary Science,
University of Dar es Salaam,
Morogoro, Tanzania,
10-12 May 1976

Editors:
J.H. Monyo, A.D.R. Ker,
and Marilyn Campbell

IDRC-076e



Postal Address: Box 8500, Ottawa, Canada K1G 3H9
Head Office: 60 Queen Street, Ottawa

Monyo, J. H.
Ker, A. D. R.
Campbell, M.
IDRC
Intercropping in semi-arid areas: report of a symposium held at the Faculty of Agriculture, Forestry and Veterinary Science, University of Dar es Salaam, Morogoro, Tanzania, 10–12 May 1976. Ottawa, IDRC, 1976. 72p.

/IDRC pub CRDI/. Report of a symposium on /intercropping/ in semi/arid zone/s in the /tropical zone/, with an examination of /agricultural research/ activities — examines the effects of intercropping on /crop/ /plant production/; includes /research result/s, /list of participants/, /bibliography/c notes.

UDC: 631.584(213) ISBN: 0-88936-107-X

Microfiche Edition $1

IDRC-076e

Intercropping in Semi-Arid Areas

Report of a symposium held at the Faculty of Agriculture, Forestry and Veterinary Science, University of Dar es Salaam, Morogoro, Tanzania, 10–12 May 1976

Editors: J. H. Monyo, A. D. R. Ker, and Marilyn Campbell

Farmer's field near Ibadan, Nigeria, showing intercrop of cowpea under maiz

Contents

(con't.)

Contents *(concluded)*

Cropping Systems Research: the Scope and Strategy for Research in Crop Combinations Based on Experience of Previous and Current Studies

B. N. Okigbo

International Institute of Tropical Agriculture, Ibadan, Nigeria

Recently there has been a resurgence of interest in the study of intercropping in Africa because of (1) a realization that research aimed at improving the existing cropping systems must be based on the understanding of the mechanics, economics, advantages, and disadvantages of the traditional systems that we desire to change and improve; (2) the disappointing response of most African farmers to improved technology of food crop production systems based on sole cropping transplanted from temperate largescale cropping practices with its attendant high energy and capital requirements and risks; (3) the impact or the potentialities of multiple and relay cropping systems work at the International Rice Research Institute based on modifications and improvement of current intensive traditional cropping systems in Taiwan and Indonesia, which significantly increased yield per unit area; (4) the recently recognized fragility of agroecosystems of single varieties of crops grown in sole culture over wide areas of land either with respect to the dramatic buildup of pests and diseases in the "green revolution" areas of Southeast Asia or the widespread devastating epidemic of southern corn blight in the United States where 90% of the corn crop carried a common source of cytoplasm; and finally (5) the recent general concern about the environment and interest in integrated pest management pioneered by ecologists who maintain that mixtures in traditional cropping systems constitute ecologically more stable production systems than large areas of single uniform varieties grown in pure culture. This paper reviewed past and recent studies in intercropping in tropical Africa as a basis for the consideration of the scope, strategy, and methodology in research on cropping combinations and sequences.