

THIN ON THE GROUND



SOIL SCIENCE IN THE TROPICS
SECOND EDITION

ANTHONY YOUNG

THIN ON THE GROUND SOIL SCIENCE IN THE TROPICS

Second Edition

Anthony Young

BOOK DESCRIPTION

World population is increasing by some 80 million a year, largely in developing countries. Can the food requirements of this growing population be met? How can the limited resources of available land be sustainably managed? Where are the worst areas of land degradation to be found? Why are soils a major element of the environment?

Thin on the Ground seeks to answer these questions by reviewing the successive stages of tropical soils research: soil survey, land evaluation, land use planning, and the evolution of earlier attempts to check soil erosion into the current approach of conservation agriculture. Priorities for today should be soil health monitoring, and linking modern methods of conservation with agricultural advisory services. The author's contention that population policy should be an integral part of agricultural development will not pass unchallenged. The book includes 38 photographs, many of historical importance.

From reviews of the First Edition: "A well-documented, lively and informative description.....The author has a magnificent capacity to synthesize large amounts of information from different disciplines.....Gives a strong sense of excitement....**A remarkable and valuable book for anyone concerned with third world development.**"

FROM THE PREFACE TO THE 2ND EDITION

The objectives of the Second Edition remain similar: to give an account of how the major advances in knowledge of tropical land resources and their management were accomplished, and to examine the legacy of these achievements for soil science today. In this revised edition the focus is on how the experience gained in the past has lessons for the study of soils in the field today.

The account of soil conservation has been rewritten and expanded. What began as concern for soil erosion, and the failure of attempts to impose protection by coercion, evolved into a broader appreciation that conservation comprised retaining the soil's physical, organic and chemical properties, and thereby its sustained productivity. Erosion control became, successively, soil conservation in this wider sense, then land husbandry and conservation agriculture.

Also added is an account of attempts to assess relative degrees of soil and land degradation, initially on a controlled subjective basis and subsequently based on quantitative but indirect methods. Since the 1990s, monitoring of changes in soil conditions, sometimes called soil health, has become a leading concern.

The final chapter is new. It is clear that, by comparison with the past, very few soil surveys are being conducted today. A high proportion of soils research is based on laboratory studies. This leaves the author with a feeling of unease. So what should be the role today of the study of soils in the field? Two aspects are identified: monitoring of soil health based not only on sampling and analysis but on

interacting with the experience of farmers; and the value of soil scientists as specialist support to agricultural advisory services.

The history of soil survey given in the First Edition could not be written today. I gained much from the personal recollections, dating back in some cases more than 60 years. Similarly, in describing of how conservation agriculture evolved I have been fortunate to meet many in those who took leading parts. I hope that by setting out the achievements of the past, as well as the mistakes made, this account can contribute to the role of field study of soils today.

ANTHONY YOUNG PROFILE

Amazon author page:

<https://www.amazon.co.uk/Anthony-Young/e/B000APJNGM>

Anthony Young has over 40 years of experience of all aspects of tropical soils, extending from survey and evaluation to conservation and management. His career was divided between university-based research and practical contributions to the development of land resources, through work with FAO, the World Bank, international research institutions and consultant companies.

He was a founding member of the School of Environmental Sciences at the University of East Anglia, UK, and subsequently Principal Scientist at the World Agroforestry Centre (formerly ICRAF), Nairobi, where he established the potential of agroforestry for sustainable soil management. He has published 150 scientific papers and 15 books, notably the comprehensive review, *Land Resources: Now and for the Future*, and was awarded doctorates by the Universities of Sheffield and East Anglia. A light-hearted account of his life can be found in the autobiography, *Semper Juvenis: Always Young*.