This work is an excellent example of a type of land system mapping and interpretation of aerial photographs in a fascinating and varied environment. The atlas is a continuation of the work that started in Uganda and later extended to Swaziland. The area covered in western Kenya includes 200,000 sq km, extending west and south from Lake Rudolf to Lake Victoria and including the area around Nairobi, Mount Kenya, and the Rift Valley. The atlas provides both a rational subdivision of the area, as a guide to regional planning, and the framework for the systematic collection and indexing of information on the natural resources.

The atlas consists mostly of assembled strips of aerial photographs prepared for stereoscopic viewing, and excellent block diagrams illustrating the major landscape units. For each landscape unit, information on climate, geology, landform, soils, vegetation, relief, altitude, hydrology, and land use is provided in tabular form. The basic units of the classification are the land facets, which is a recognizable part of the landscape (usually with simple form) with a combination of a particular rock, soil, and water regime that is either uniform over the whole area of the facet or varies in a simple and predictable way. Land facets are grouped into land systems of recurrent patterns of landscape, where there are different sets of land facets—the land system units are those delineated on the map at 1:500,000 scale. Land facets are not mapped for the whole area, but are shown on selected strips of aerial photographs to illustrate and describe the variations within the land systems.

In some cases a subsidiary classification is used to give additional information into the land classification system as defined by the smallest unit of land likely to be of interest (part of a land facet). Thus a plateau facet may have a flat crest and a convex margin; a slope facet may be divided into upper and lower elements. Wherever possible, the land elements recognized are land use by lower case letters (following facet numbers) on the stereograms and block diagrams. Variants of land facets are also included to indicate local conditions not predictable from surface appearance or from the position of the facets in the land system. Variants are commonly significant to engineering uses, like gravel lenses buried beneath a river flood plain which are not distinguishable from the surface or from aerial photographs.

The area mapped shows considerable effects of rift faulting and volcanic activity and ranges in rainfall from less than 120 to 2,000 mm per year. Altitude ranges from 375 to 5,200 and affects temperatures as follows:

- Annual mean maximum Centigrade temperature: 36° (0.055 × altitude in meters).
- Annual mean minimum Centigrade temperature: 23° (0.069 × altitude in meters).

The folded atlas with aerial photographs for stereoscopic viewing will provide excellent materials for teaching aerial photographic interpretation. Pages 50–53, for example, give excellent pictures of the Silali land system, with volcanic craters and recent lava flows. The Amuria land system (pages 158–159) is incised, interfluvies cut into the hard volcanic crust, with dark clay and papyrus swamps. One facet of the Kombewa land system (pages 174–175) has numerous upstanding rock pillars and blocks, up to 40 m across and 10 m high. Stereograms of Mount Kenya (pages 179–181) illustrate glaciers, crags, rock outcrops, rocky slopes, moraines, scree, smooth slopes, valley sides, valley floors, tarns, swamps, and other features. Even small features show up remarkably clear in places; Facet 1 of the Embakasi land system (pages 212–215) gives very good patterns of termite mounds up to 1 m high on low gradient plains between 2 to 4 km wide and generally about 15 km long. Patterns of land use, like the villages and cultivated plots of the Ahero land system (pages 320–321) in a meander plain, stand out clearly in the photographs.

Atlas of the Land Systems of Swaziland


This atlas is a continuation of the work begun in Uganda and Kenya. Swaziland occupies about 17,500 sq km between the 25th and 28th parallels of south latitude. The country is divided into the western Highveld (mean elevation 1,200 m), Middleveld (mean elevation 600 m), Lowveld (mean elevation about 270 m), and the Limpopo Range along the east frontier with elevations ranging from 800 m on plateau remnants to less than 40 m where the Usutu River leaves Swaziland.

In the report, the basic landscape unit mapped is the land facet. Recurring assemblages of facets constitute land systems. Several related land systems form a land region. Land elements (parts of facets) are identified as the most intensive level of inspection of terrain. Variants of land systems were mapped in a few places due to the consistent presence or absence of an important land facet, or a consistent difference in climate, parent material, soil, or vegetation, with other land attributes unchanged. Swaziland has 21 land systems and 4 variants. Page 8–9 describe the Wagontree land system (delineated on 1:300,000 color map). Page 9 has a series of aerial photographs in strips for stereoscopic viewing. One of the photo strips has six numbered land facets with inked boundaries. Page 10 identifies the land facets as crestal smooth slopes, irregular slopes, rock outcrops, foot-slopes, tributary valleys, and the main river. Landform, soils, hydrology, and land cover (vegetative) are briefly described in tabular form for each land facet. Page 11 also has a block diagram to illustrate the land system, and tabular information on climate, rock, landscape, hydrology, soil, vegetation, agriculture, relief, and altitude for the Wagontree land system. In similar fashion each land system and variant is described. This small scale land system atlas provides a framework for systematic storage of information on the agroforestry and engineering resources of the area.

KWIC Index to the Commonwealth Bureau of Soils

Annotated Bibliographies on Soils and Fertilizers—1956–1972


Users of the Commonwealth Bureau of Soils Annotated Bibliographic materials on Soils and Fertilizers. The annotated bibliographies on soils and fertilizers is the second largest of a series of annotated bibliographies on 13 disciplines. Prepared by subject specialists, these bibliographies depending upon the amount of literature on the subject normally contain 20 to 100 citations with helpful annotations in English and cover a time span of 5 to 15 years. Bibliography number 1, "Oxidation-Reduction Potential in Soils," contains 82 references and covers a period from 1930 to 1955. Number 1553, "Some References to Lysimeters and Lysimetric Studies," contains 59 references for the period 1965 to 1972.

Individuals interested in obtaining more information on the annotated bibliographies may write the Commonwealth Agricultural Bureau, Farnham House, Farnham Royal, Slough, SL23BN, England. Those interested in obtaining the KWIC Index should contact the Kansas State University Library—O. W. Biddel, Dep. of Agronomy, Kansas State Univ., Manhattan, Kansas.