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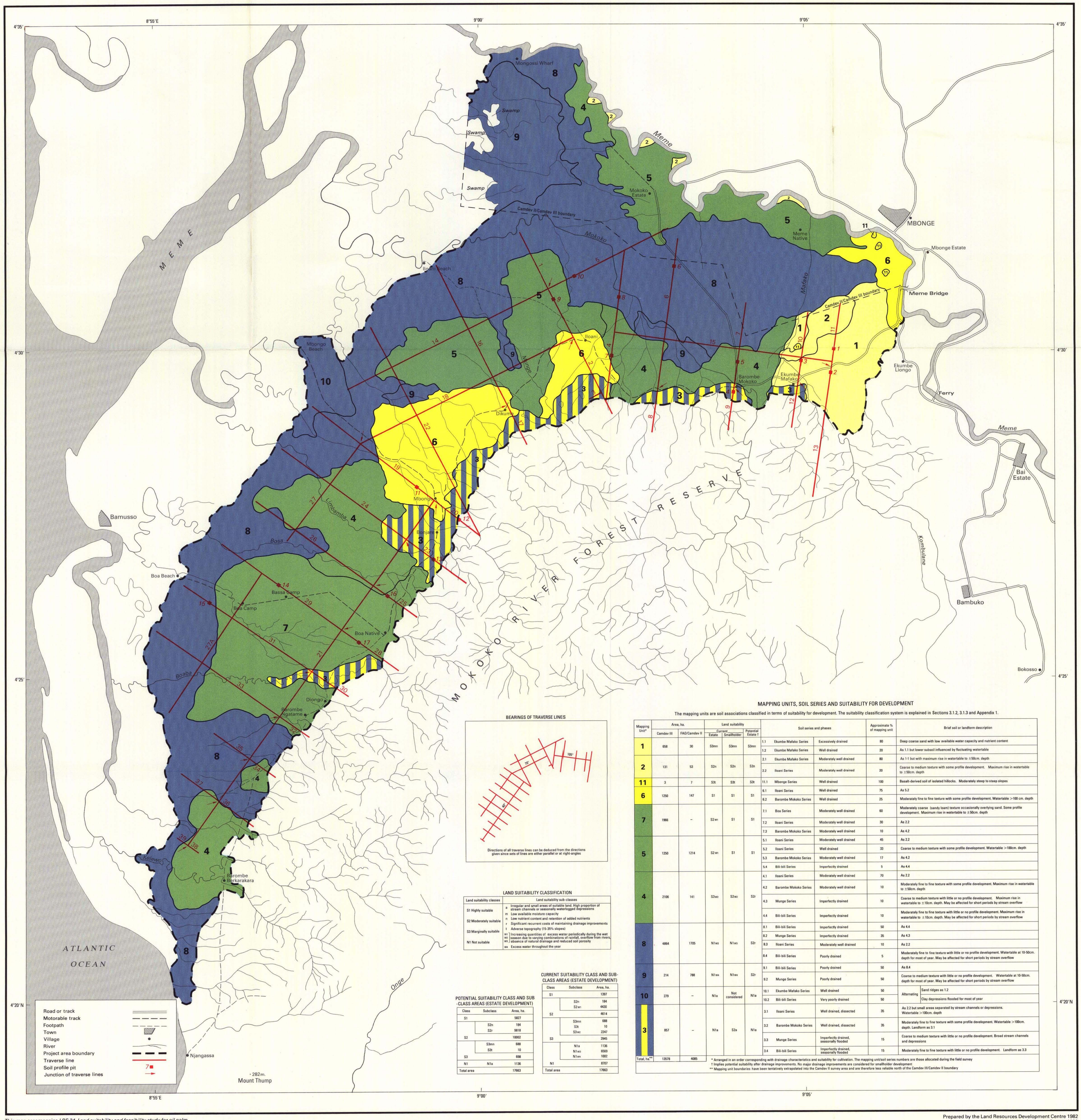
Wageningen, The Netherlands

The Netherlands

CAMEROON 1:50,000

MBONGE-BOA

SOIL ASSOCIATIONS AND LAND SUITABILITY — **MAP 1**



BEARINGS OF TRAVERSE LINES

Directions of all traverse lines can be deduced from the directions given since sets of lines are either parallel or at right-angles

LAND SUITABILITY CLASSIFICATION

Land suitability classes	Land suitability sub-classes	
S1 Highly suitable	a	Irregular and small areas of suitable land. High proportion of stream channels or seasonally waterlogged depressions
S2 Moderately suitable	m	Low available moisture capacity
	n	Low nutrient content and retention of added nutrients
S3 Marginally suitable	r	Significant recurrent costs of maintaining drainage improvements
	t	Adverse topography (15-35% slopes)
N1 Not suitable	w_1, w_2, w_3	Increasing quantities of excess water periodically during the wet season due to varying combinations of rainfall, overflow from rivers, absence of natural drainage and reduced soil porosity
	w_4	Excess water throughout the year

POTENTIAL SUITABILITY CLASS AND SUB-CLASS AREAS (ESTATE DEVELOPMENT)

Class	Subclass	Area, ha.
S1		5827
S2	S2n	184
	S2r	9818
		10002
S3	S3mn	688
	S3t	10
		698
N1	N1a	1136
Total area		17663

CURRENT SUITABILITY CLASS AND SUB-CLASS AREAS (ESTATE DEVELOPMENT)

Class	Subclass	Area, ha.
S1		1397
S2	S2n	184
	$S2w_1$	4430
		4614
S3	S3mn	688
	S3t	10
	$S3w_2$	2247
		2945
N1	N1a	1136
	$N1w_3$	6569
	$N1w_4$	1002
		8707
Total area		17663

MAPPING UNITS, SOIL SERIES AND SUITABILITY FOR DEVELOPMENT

The mapping units are soil associations classified in terms of suitability for development. The suitability classification system is explained in Sections 3.1.2, 3.1.3 and Appendix 1.

Mapping Unit*	Area, ha. Camdev III	Area, ha. FAO/Camdev II	Land suitability Current Estate	Land suitability Current Smallholder	Land suitability Potential Estate †	Soil series and phases			Approximate % of mapping unit	Brief soil or landform description
1	658	30	S3mn	S3mn	S3mn	1.1	Ekumbe Mafako Series	Excessively drained	80	Deep coarse sand with low available water capacity and nutrient content
						1.2	Ekumbe Mafako Series	Well drained	20	As 1.1 but lower subsoil influenced by fluctuating watertable
2	131	53	S2n	S2n	S2n	2.1	Ekumbe Mafako Series	Moderately well drained	80	As 1·1 but with maximum rise in watertable to ±50cm. depth
						2.2	Iloani Series	Moderately well drained	20	Coarse to medium texture with some profile development. Maximum rise in watertable to ±50cm. depth
11	3	7	S3t	S3t	S3t	11.1	Mbonge Series	Well drained	100	Basalt-derived soil of isolated hillocks. Moderately steep to steep slopes
6	1250	147	S1	S1	S1	6.1	Iloani Series	Well drained	75	As 5.2
						6.2	Barombe Mokoko Series	Well drained	25	Moderately fine to fine texture with some profile development. Watertable >100 cm. depth
7	1966	–	$S2w_1$	S1	S1	7.1	Boa Series	Moderately well drained	60	Moderately coarse (sandy loam) texture occasionally overlying sand. Some profile development. Maximum rise in watertable to ±50cm. depth
						7.2	Iloani Series	Moderately well drained	30	As 2.2
						7.3	Barombe Mokoko Series	Moderately well drained	10	As 4.2
5	1250	1214	$S2w_1$	S1	S1	5.1	Iloani Series	Moderately well drained	45	As 2.2
						5.2	Iloani Series	Well drained	33	Coarse to medium texture with some profile development. Watertable >100cm. depth
						5.3	Barombe Mokoko Series	Moderately well drained	17	As 4.2
						5.4	Bili-bili Series	Imperfectly drained	5	As 4.4
4	2106	141	$S3w_2$	$S2w_2$	S2r	4.1	Iloani Series	Moderately well drained	70	As 2.2
						4.2	Barombe Mokoko Series	Moderately well drained	10	Moderately fine to fine texture with some profile development. Maximum rise in watertable to ±50cm. depth
						4.3	Munge Series	Imperfectly drained	10	Coarse to medium texture with little or no profile development. Maximum rise in watertable to ±10cm. depth. May be affected for short periods by stream overflow
						4.4	Bili-bili Series	Imperfectly drained	10	Moderately fine to fine texture with little or no profile development. Maximum rise in watertable to ±10cm. depth. May be affected for short periods by stream overflow
8	4864	1705	$N1w_3$	$N1w_3$	S2r	8.1	Bili-bili Series	Imperfectly drained	50	As 4.4
						8.2	Munge Series	Imperfectly drained	35	As 4.3
						8.3	Iloani Series	Moderately well drained	10	As 2.2
						8.4	Bili-bili Series	Poorly drained	5	Moderately fine to fine texture with little or no profile development. Watertable at 10-50cm. depth for most of year. May be affected for short periods by stream overflow
9	214	788	$N1w_4$	$N1w_4$	S2r	9.1	Bili-bili Series	Poorly drained	50	As 8.4
						9.2	Munge Series	Poorly drained	50	Coarse to medium texture with little or no profile development. Watertable at 10-50cm. depth for most of year. May be affected for short periods by stream overflow
10	279	–	N1a	Not considered	N1a	10.1	Ekumbe Mafako Series	Well drained	50	Alternating: Sand ridges as 1.2
						10.2	Bili-bili Series	Very poorly drained	50	Alternating: Clay depressions flooded for most of year
3	857	–	N1a	S2a	N1a	3.1	Iloani Series	Well drained, dissected	35	As 2.2 but small areas separated by stream channels or depressions. Watertable >100cm. depth
						3.2	Barombe Mokoko Series	Well drained, dissected	35	Moderately fine to fine texture with some profile development. Watertable >100cm. depth. Landform as 3.1
						3.3	Munge Series	Imperfectly drained, seasonally flooded	15	Coarse to medium texture with little or no profile development. Broad stream channels and depressions
						3.4	Bili-bili Series	Imperfectly drained, seasonally flooded	15	Moderately fine to fine texture with little or no profile development. Landform as 3.3
Total, ha.**	13578	4085								

* Arranged in an order corresponding with drainage characteristics and suitability for cultivation. The mapping unit/soil series numbers are those allocated during the field survey
† Implies potential suitability after drainage improvements. No major drainage improvements are considered for smallholder development
** Mapping unit boundaries have been tentatively extrapolated into the Camdev II survey area and are therefore less reliable north of the Camdev III/Camdev II boundary

SCALE 1:50,000

m. 1000 500 0 1 2 3 4 5 km.

This map accompanies *LRS 34, Land suitability and feasibility study for oil palm and rubber plantations in south-west Cameroon,* and, together with the report, is published by the Land Resources Development Centre, Overseas Development Administration, Tolworth Tower, Surbiton, Surrey, England KT6 7DY

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