



ETHIOPIA - FRANCE COOPERATIVE PROGRAM
WABI SHEBELLE SURVEY

IN COLLABORATION WITH
 NATIONAL WATER RESOURCES COMMISSION
 BCEOM, ORSTOM, EDF
 IG_N_B DPA

V
SOILS MAP - CARTE DES SOLS
Lower Valley - Basse Vallée
MUSTAHIL WEST

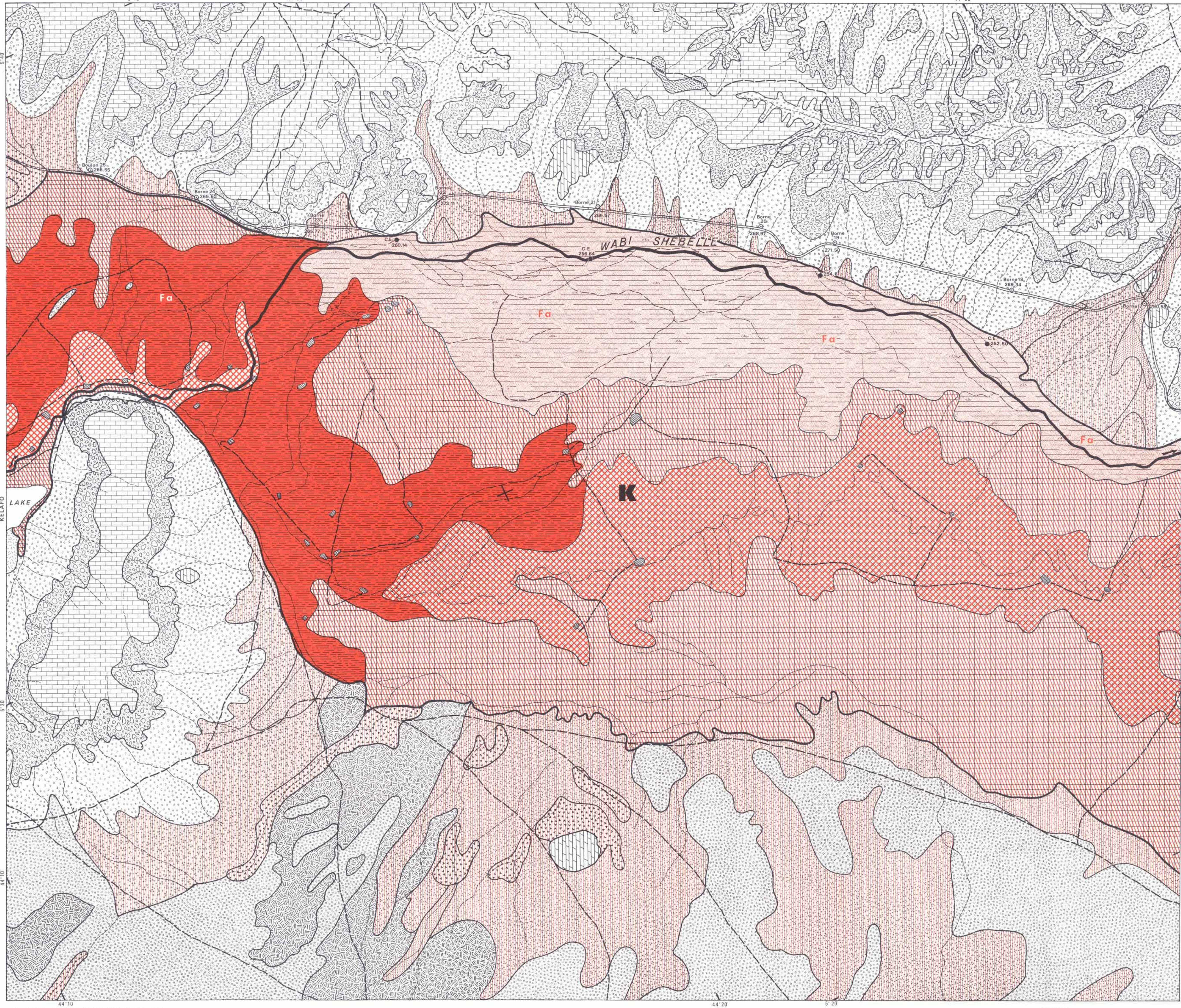
JANUARY 1973
 MAP N° 3

SOILS FEATURES FAVORING IRRIGATION
APTITUDES DES SOLS A L'IRRIGATION

- 1ST CLASS - VERY SUITABLE SOILS FOR IRRIGATION**
CLASSE I - SOLS TRES FAVORABLES A L'IRRIGATION
 IA - for all tropical crops in arid zone.
 pour toutes cultures tropicales de zone aride.
- | | | | | |
|--------|----|----|----|----|
| IA d s | 24 | 25 | 26 | 27 |
| IA D S | 23 | 27 | 28 | 29 |
- IB - for tropical fruit-trees, citrus, pine-apples, tomatoes (juice) vegetables, maize, sorghum, wheat, groundnuts, other oilseeds, forages (graminae).
 pour arbres fruitiers tropicaux, agrumes, ananas, tomates (jus), cultures légumières, maïs, sorgho, blé, arachide, autres oléagineux, graminées fourragères.
- | | | | | |
|--------|----|----|----|----|
| IB d s | 30 | 32 | 33 | 34 |
| IB D S | 31 | | | |
- IC - for sugar-cane, cotton, artificial pastures, maize, sorghum, wheat, textile fiber plants, oilseeds.
 pour canne à sucre, coton, pâturages artificiels, maïs, sorgho, blé, plantes à fibres, plantes à huile.
- | | | | | | |
|----------|----|----|----|----|----|
| IC D s m | 9 | 10 | 12 | 13 | 14 |
| | 15 | 17 | 39 | 40 | 42 |
- IDA - for sugar-cane, cotton, hill rice.
 pour canne à sucre, coton, riz pluvial.
- | | | | | |
|-----------|----|----|----|----|
| IDA D s m | 11 | 16 | 48 | 49 |
|-----------|----|----|----|----|
- 2ND CLASS - LOW SUITABILITY FOR IRRIGATION**
CLASSE II - SOLS PEU FAVORABLES A L'IRRIGATION
 II B - possible crops : tropical fruit-trees, citrus, pine-apples, tomatoes (juice) vegetables, maize, sorghum, wheat, groundnuts, other oilseeds.
 cultures possibles : arbres fruitiers tropicaux, agrumes, ananas, tomates (jus), cultures légumières, maïs, sorgho, blé, arachide, autres oléagineux.
- | | | | |
|----------|----|----|----|
| II B d m | 36 | 37 | 38 |
|----------|----|----|----|
- II C - possible crops : sugar-cane, cotton, artificial pastures, maize, sorghum, wheat, textile fiber plants.
 cultures possibles : canne à sucre, coton, pâturages artificiels, maïs, sorgho, blé, plantes à fibres textiles.
- | | | | |
|--------------|----|----|----|
| II C D s m | 41 | 47 | |
| II C D S G M | 44 | 45 | 46 |
| II C D S P | 50 | | |
- 3RD CLASS - UNSUITABLE FOR IRRIGATION**
CLASSE III - SOLS NON IRRIGABLES
 III Y
 III RU
 III RT
 III U
 III W

EXPLANATION OF THE SYMBOLS
SIGNIFICATION DES SYMBOLES

- Factors changing the quality of the soils suitable for irrigation.
 Facteurs altérant les qualités des sols irrigables.
- d Slight drainage necessary
 - D Drainage necessary on a large scale
 - S High salinity in the depth
 - S High salinity affecting the whole soil
 - G Free non clayey texture unsuitable for irrigation
 - M Slightly broken structure requiring only slight leveling
 - m Broken structure requiring a great deal of leveling
 - P Moderate soil infestation
 - R Almost sterile elements
 - T Deep tines
 - U Superficial limestone or gypsum flags
 - W Dotted calcareous or gypsum nodules
 - Y Depth of soil less than 10 cm



Planimetric sketch executed from the mosaics of 1964-67 aerial photos.
 Esquisse planimétrique exécutée d'après les mosaïques photographiques de 1964-67.

INDEX SHEET

IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10
WEST	WEST	EAST	EAST	MADISO	GODE WEST	GODE EAST	GODE EAST	KELAFO	MUSTAHIL WEST

Abbreviations:
 L. Ligne
 S.S. Solonchale
 C.E. Cote d'eau
 B. Benchmark
 G. Gorge

Scale 1:50000 approximate

Legend:
 Fa Flooded area (highly) Zone fortement inondable
 C.E. Water level Cote d'eau
 B. Benchmark
 G. Gorge

LEGEND OF THE SOILS MAP
LEGENDE DE LA CARTE PEDOLOGIQUE

WEAKLY DEVELOPED SOILS SOLS PEU EVOLUES
KEROSOLS X. / OUES

1 Yellowish-grey soil with nodules...
2 Yellowish-grey soil with nodules...
3 Yellowish-grey soil with nodules...
4 Yellowish-grey soil with nodules...
5 Yellowish-grey soil with nodules...
6 Yellowish-grey soil with nodules...
7 Yellowish-grey soil with nodules...
8 Yellowish-grey soil with nodules...

NON CLIMATIC SOILS NON CLIMATIQUES
9 Lithic eroded soils with nodules...
10 Lithic eroded soils with nodules...
11 Lithic eroded soils with nodules...
12 Lithic eroded soils with nodules...
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49 Lithic eroded soils with nodules...
50 Lithic eroded soils with nodules...

SOILS WITH CALCREOUS DIFFERENTIATION
SOLS A DIFFERENCIATION CALCAIRE
 WITHOUT MELANIC HORIZON SANS HORIZON MELANIQUE
 WITH POWDERY LIME MODAL A CALCAIRE DIFFUS / MODAUX
 COLLUVIA derived from limestone COLLUVIONS issues des calcaires

WITH NODULES A AMAS ET NODULES
 Derived from limestone faeces des calcaires

SOILS WITH GYPSEOUS DIFFERENTIATION
SOLS A DIFFERENCIATION GYPSEUSE
 WITH POWDERY GYPSUM MODAL A GYPSE DIFFUS / MODAUX
 ON BROWN ALLUVIA of the Wabi Shebelle
 Sur ALLUVIONS BRUNES du Wabi Shebelle

WITH GYPSEOUS CRUST MODAL ENCRUTES / MODAUX
 FROM COLLUVIA derived from basaltic Sur COLLUVIONS ROUGES issues des basaltes

HYDROMORPHIC SOILS SOLS HYDROMORPHES
 MEDIUM ORGANIC MOUILLURES ORGANIQUES
 HUMIC GLEY WITH POWDERY LIME HUMIQUES A GLEY A CALCAIRE DIFFUS
 SHEBELLE plain series Série de la plaine de SHEBELLE

SODIC SOILS SOLS SODIQUES
 WITH NON DEGRADED STRUCTURE A STRUCTURE NON DEGRADEE
 SALINE SOILS WITH SALT EFFLORESCENCES SOLS SALINS A EFFLORESCENCES SALINES
 ON RED BROWN ALLUVIA Sur ALLUVIONS ROUGES d'ouest