



ETHIOPIA - FRANCE COOPERATIVE PROGRAM
WABI SHEBELLE SURVEY

IN COLLABORATION WITH
 FRENCH MINISTRY OF FOREIGN AFFAIRS
 NATIONAL WATER RESOURCES COMMISSION
 BCEOM. ORSTOM. EDF
 IGN_B DPA

IV
GEOLOGICAL MAP OF OGA DEN

DEGAHBOUR

APRIL 1974
 MAP N°1



QUATERNARY
QUATÉNAIRE

TERTIARY
TERTIAIRE

SECONDAIRE
SECONDAIRE

Upper Cretaceous
Crétacé supérieur

Lower Cretaceous
Crétacé inférieur

Upper Jurassic
Jurassique supérieur

Miocène

Senonian

Turonien

Cenomanian

Barremian
Albien

Neocomian

Kimmeridgian
Portlandien

Recent local deposits: alluvial, colluvial and steep deposits: sands, silts, clay.
 Dépôts locaux récents: alluviaux, colluviaux, dépôt de pentes, sables, limons, argiles.

Alluvial deposits of great rivers (WABI-SHEBELLE, FAFER, JERER): gravels, sands, silts.
 Alluvions des grands cours d'eau (WABI-SHEBELLE, FAFER, JERER) graviers, sables, limons.

Intrusive olivine basalts
 Basaltes intrusifs à olivine

GESDMA series: sandstones and red quartzites
 Séries de GESDMA: grès et quartzites rouges

BELET-UDEN series: sandstones and argillaceous limestones
 Séries de BELET-UDEN: grès et calcaires argileux

FERFER series: gypsum, limestones, marly limestones dolomite
 Séries de FERFER: gypse, calcaires, calcaires marneux, dolomites

MUSTARIL series: marly and chalky limestones, dolomitic limestones
 Séries de MUSTARIL: calcaires marneux et craieux, calcaires dolomitiques

Main gypsum formation: gypsum, marl, clay, dolomites, halites
 Formation gypseuse principale: gypse, marne, argiles, dolomites, halites

KEBRI-DAHAR series: lithographic limestones, marl, marly limestones, gypsum
 Séries de KEBRI-DAHAR: calcaires lithographiques, marne, calcaires marneux, gypse

Geological contact line
 Contour géologique

Fault
 Faille

Uncertain fault
 Faille hypothétique

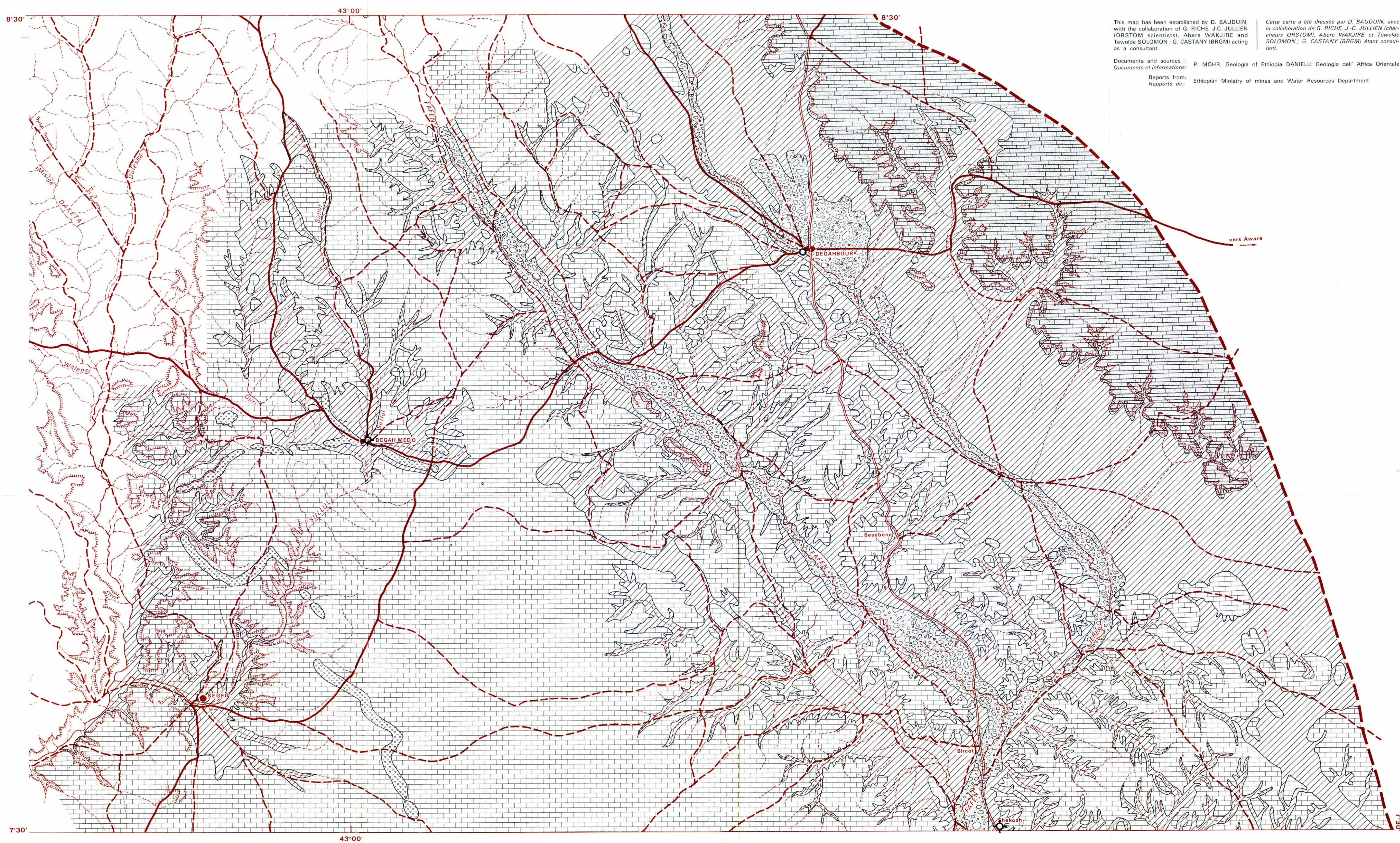
Axis of syncline
 Axe de synclinal

Axis of anticline
 Axe d'anticlinal

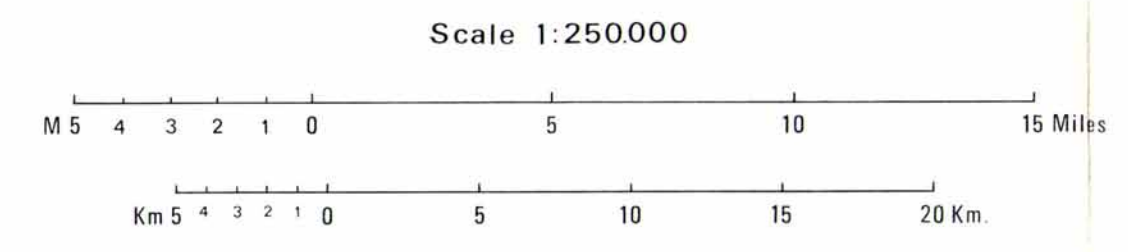
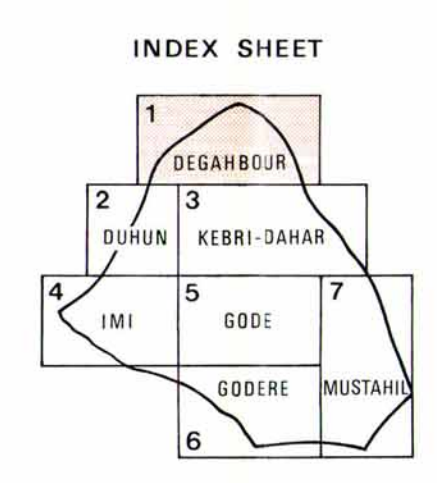
Strike and dip
 Direction et pendage

Dug well
 Puits creusé

Drilled well
 Puits foré



Planimetric map based on the provisional sketches at approximately 1:100000 and using the map at 1:500000 established by the WAR OFFICE (EAST AFRICA, 1946)
 Drafted in 1969 by the NATIONAL WATER RESOURCES COMMISSION WABI SHEBELLE SURVEY.
 Fond planimétrique établi d'après les esquisses provisoires au 1:100000 environ appuyées sur la carte au 1:500000 du WAR OFFICE EAST AFRICA (1946).
 Exécuté en 1969 au NATIONAL WATER RESOURCES COMMISSION - ETUDE DU WABI SHEBELLE.



Town, important village, administrative center
 Ville, village important, centre administratif

Small village
 Petit village

Main road or trail
 Route ou piste principale

Secondary trail
 Piste secondaire

Foot trail, trail
 Piste à pied, sentier

Limit of study zone
 Limite de l'étude

Permanent river
 Rivière permanente

Temporary river, thalweg, flow trace
 Rivière temporaire, thalweg, trace d'écoulement

Lake, water plane
 Lac plan d'eau

Important hill summit
 Sommet important

Small isolated hill summit
 Petit sommet isolé

Cliff, rocky escarpment, plateau boundary
 Falaise, escarpement rocheux, limite de plateau

This map has been established by D. BAUDUIN, with the collaboration of G. RICHE, J.C. JULLIEN (ORSTOM scientists), Abere WAKJIRE and Tevelde SOLOMON; G. CASTANY (BRGM) acting as a consultant.
 Cette carte a été dressée par D. BAUDUIN, avec la collaboration de G. RICHE, J.C. JULLIEN (chercheurs ORSTOM), Abere WAKJIRE et Tevelde SOLOMON; G. CASTANY (BRGM) étant consultant.

Documents and sources: P. MOHR, Geologia of Ethiopia DANIELLI Geologia dell' Africa Orientale
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Reports from: Ethiopian Ministry of mines and Water Resources Department
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