

الأوراق العلمية

Session (1)
**Road and Other Means of
Transport in Sudan**

Road Network in Sudan

Eng. Basheir AbElgadir Ahmed El Kadaro

Preface:

Roads and Bridges as one main of the means of transport are very important for development. They almost touch all population activities in trade, agriculture, industry, tourism etc. They are also strategically important for peace requirements. For Sudan, the necessity for roads and bridges is obvious because of its international importance due to its strategic location in Africa surrounded by nine neighbouring countries.

Importance of Roads and Bridges:

- Link production with consumption areas and import and export centers.
- Increase activities with respect to trade, agriculture, industry and tourism.
- Decrease transport cost and hence cost of living.
- Facilitate products movement leading to their availability.
- Reduce vehicle-operating costs.
- Result in development of new residential areas.
- Lead to peace and defence requirements.
- Assist in political and public stability.
- Assist in interactions between local cultures.

Classification of Roads in Sudan:

- National highways which connect Capitals of States with the National Capital and National Port, or connect Sudan with the neighbouring countries, or part of the Trans-African Highway within Sudan. The responsibility of National Highways is shouldered by the National State Government.
- State Roads are those, which lie within the States. They connect the States with the National Highways or other National means of transport. States Roads are the responsibility of state Governments with or without assistance from the National Government.
- Provincial Roads are local roads within the provinces, which shoulder their responsibility.

Road Organisational History:

- a. Roads industry in Sudan came into being during the colonial period when a section for roads was established within the Ministry of works. The road section undertook minor works in its early age.
- b. After independence, the situation remains the same until 1958 when a grant was received from US AID for organizational development and training of staff with

the construction of some asphalted roads in Khartoum North-Geili, Khartoum-Jebl Aulia, Umdurman-Wadi Saidna and part of Khartoum-wad Medani Road.

- c. During May Revolution Regime, the roads section was developed to a department within the newly established Ministry of Transport. In this period many roads including the 1200 kms from Khartoum to Port Sudan were constructed. In 1973 the so-called Roads and Bridges Public Corporation was established within the Ministry of Transport.
- d. On formation of Federal Governments, the Ministry of works was dissolved and its responsibilities were distributed among the State Governments and the Corporation belonged to Ministry of Transport.
- e. As recommended by the 10-years National Strategy, a new Ministry called the Ministry of Roads and Communications was formed.
- f. In order to increase the capability of the road organization, the ministry of Roads and Communications formed to separate bodies.

The first one is the National Highway Authority responsible for planning, studying, designing and construction supervision.

The second body is the National Road Construction Company to take the responsibility of road construction. The National Road construction company entered into many joint ventures.

Responsibilities of the Authority and Company:

- To study the country needs for roads and make plans and programmes to meet those needs.
- To prepare feasibility and detailed engineering studies for new roads.
- To construct roads and bridges directly or by contractors.
- To study road maintenance requirements and execute all maintenance and rehabilitation works.
- To undertake research works with respect to roads and bridges.
- To prepare all specifications and measures to be taken for use on the road networks.
- Recommendation and collection of tolls which form a main source of income to meet the routine maintenance.
- Undertake traffic counts and transport planning for use on road studies, construction and rehabilitation.

National Road Networks:**a- Constructed Roads:**

No.	Roads	Length kms	In year
1	Khartoum North – Geili	42	1968
2	Khartoum – Gebel Awlia	35	1967
3	Umdurman – Wadi Saidna	25	1967
4	Khartoum – Wad Medani	186	1970
5	Debeibat – Kadogli	187	1976
6	Wad Medani – Gedaref	227	1977
7	Gedaref – Kassala	217	1977
8	Hayia – Port Sudan	206	1979
9	Kassala – Hayia	350	1980
10	Wad Medani – Sennar	110	1980
11	Gebel Aulia – Ed Dueim	158	1982
12	Sennar – Singa	70	1982
13	Sennar – Kosti	110	1983
14	Nyala – Kass – Zalingi	210	1983
15	Nyala – El Fasher (Gravel)	213	1984
16	Ed Dueim – Rabak	110	1985
17	Kosti – Tendalti	116	1991
18	Kasgail – Ed Debeibat (Gravel)	50	1989
19	El Obeid – Kasgail	53	1991
20	Tendalti – El Obeid	191	1992
21	Geili Shendi	130	1994
22	Singa – Damazin	167	1995
23	Um Durman – Gos Abu Dulo	70	1995
24	Atbara – Berber	36	1978
25	Bor – Juba (Gravel)	200	1986
26	Juba – Torit (Gravel)	135	1986
27	Torit – Kappoita (Gravel)	140	1986
28	Juba – Yei Laso (Gravel)	219	1986
29	Juba – Meridi – Yambio (Gravel)	429	1987
30	El Fasher – Kabkabia (Party Gravel)	160	1985
31	Kordufan Feeder Roads (Party Gravel)	460	1988

b- Constructed Bridges:

No.	Bridge	Town
1	Jour	Wau Town
2	Wad Medani – Hantoub	Medani
3	New Kosti	Kosti
4	Botana	Atbara River
5	Gash	Kassala
6	Khiyari	River Rahad
7	Abu-Habil	Dilling
8	Khor Nyala	Nyala
9	Tendelti	Tendalti
10	Mairno	Singa – Damazin Road
11	Gezira – Managil Canals	Sennar
12	Khor Shambat	Umdurman
13	Singa	Singa

c- Roads Under Construction:

No.	Roads	Length kms
1	Wad Medani – Managil	93
2	Khashm El Girba – Halfa	96
3	Shendi – Atbera	140
4	Gos Ubu Dulo – Dongola	530
5	Rebeck – Jebelein – Renk	166

d- Designed Roads:

No.	Roads	Length kms
1	Gedaref – Doka – Galabat	155
2	Wad El Hori – Semsem	77
3	Diling – Habila	46
4	Khartoum North – Abu Haraz	210
5	Hasahisa – Tabet	27
6	Swakin – Tokar	110
7	Ed Dueim – El Sufi	60
8	El Obeid – El Khuwi – En Nuhoud (Contract Awarded)	206
9	El Obeid – Bara	60
10	Wad El Nayal – El Garabin	56
11	New Atbara Bridge (River Aatbara)	
12	Um Rawaba – Abasiya – Abu Jibaiha	460
13	Atbara - Haiya	275

e- Roads Under Design:

No.	Roads	Length kms
1	Zalingi – Geneina	205
2	Singa – Suki – Gedaref	200
3	Halfa – Dongola – Merawi – Atbara	1200
4	En Nuhoud – Ed Deim – Nyala	450
5	Renk - Malakal	342

f- Feasibility Study Completed:

1	El Fadlab – Bawga – Mograd	200 km
2	Damazin – Ingasana	90 km
3	Dongola – Seleim Bridge	
4	Rufaa – Hasahisa Bridge	
5	New Sennar Bridge	

i- Roads proposed for study:

1	Malakal – Bor	400
2	Talodi – El Lirei – Malakal	246
3	Gedaref – Um Brakit	110
4	Port Sudan – Halaib – Bernis	624
5	Damazin – Sireio	110
6	Medani – El Hosh	110
7	El Maban – Renk – Kormok	190
8	Umdurman – Jebeil El Tina	40
9	Port Sudan – Abu Hamad	850
10	Singa Rosairis – Yarda	297
11	Kassala – Sebdrat – Tesineci	60
12	El Fasher – El Geneina	328
13	Singa – Dinder – Khiyari	328
14	Nyala – Buram	153
15	El Fasher – Uwainat – El Kufra	990
16	Agig – Gurora	150
17	Khartoum North – Kassala	400
18	Managil – Ed Dueim	40
19	El Fasher – Mileit – Malha	200
20	Um El Tiyou Bridge	
21	Shendi – Matama Bridge (Nile)	
22	Abu Hibeira Bridge	

Right of way Act:

Due to the fact that some citizens established buildings or other ownerships within the right of way, a new act for the right of way was issued in 1993 incorporating mainly the following:

- Responsibility of Road organization.
- Marking the road right of way.
- Prevention of some deeds and removal of existing ownerships against compensation.
- Limitations for axle loads to pass over the road network.
- The road authority started arrangements for establishing axle load control systems and constructed some weigh bridge stations on Khartoum – Port Sudan Road.

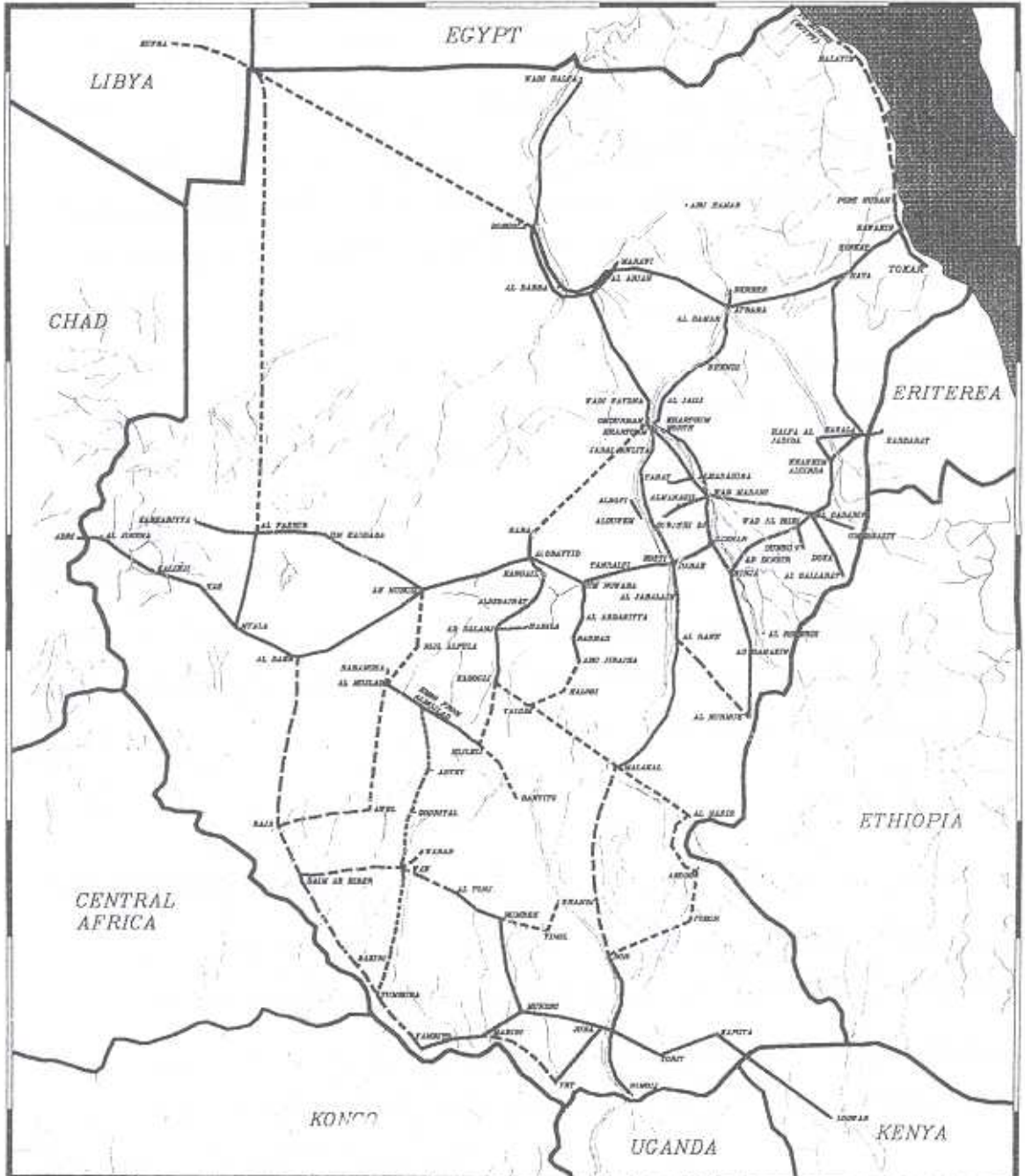
Road Users Safety

Due to the increase of traffic, many accidents took place over the asphalted roads. The concerned authorities such as the traffic police, the vehicles owners and others were very impressed by these accidents and tried to find out the reasons. Some of the authorities believed that the accidents resulted from bad condition of the vehicle. Others attributed it to drivers or road condition or probably all three factors.

As a result, a National Committee was formed to look into the different reasons for road accidents and take all measures and recommendations for road users' safety.

REPUBLIC OF THE SUDAN
 MINISTRY OF ROADS & COMMUNICATIONS
 NATIONAL HIGHWAYS AUTHORITY
NATIONAL HIGHWAYS NETWORK

OCTOBER 2001



	CONSTRUCTED ASPHALT ROADS
	ROADS UNDER REHABILITATION AND ASPHALT APPLICATION
	CONSTRUCTED GRAVEL ROADS

	ROADS UNDER CONSTRUCTION
	COMPLETED DESIGN ROADS
	ROADS UNDER DESIGN

	COMPLETED FEASIBILITY STUDY ROADS
	ROADS SUGGESTED FOR FEASIBILITY STUDIES

Scale
 1:100,000
 1:200,000
 1:400,000

Logo of the National Highways Authority of Sudan