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DEVELOPMENT PLANNING IN THE SUDAN

With 2 figures

EL-SAYED EL-BUSHRA

With an area of 2.5 million km², the Sudan is the largest country in Africa, but ranks fourth in the continent in terms of population (21.5 million inhabitants according to the 1983 Census)¹⁾. However, for a country of this size the existing network of transportation is rather poor and is considered to be detrimental to socio-economic development. In this vast territory there are only about 5,000 km of railroads, 2,000 km of paved roads, and 2,000 km of navigable rivers. River transport, however, contributes no more than 2% of the total volume of traffic.

Although the Sudan has considerable potentialities for development, it is still one of the least developed countries of the world. In fact, the UNO has classified the Sudan within the 25 least developed countries of the world. The Sudanese economy is predominantly agricultural, and the bulk of the

population (60%) is engaged in traditional subsistence farming. Being aware of the difficult economic situation, attempts to plan development in the Sudan were made as early as 1946. But the first detailed development plan began with the ten-year plan for economic and social development (1961/62-1970/71). The ten-year plan was followed by a five-year plan (1970/71-1974/75) which was later extended to 1976/77. The long-term plan for economic and social development (1976/77-1994/95) was made up of three short-term development plans, each of six years. Although all plans have emphasized the development of the agricultural and industrial sectors together with transportation network and community services, they have not been entirely successful²⁾.

¹⁾ *Unpublished Reports, Sudan's Third Population Census, 1983.*

²⁾ O. I. EL-SAYED: *The Sudanese Economy* (Arabic). Riyadh 1981, pp. 183-218.

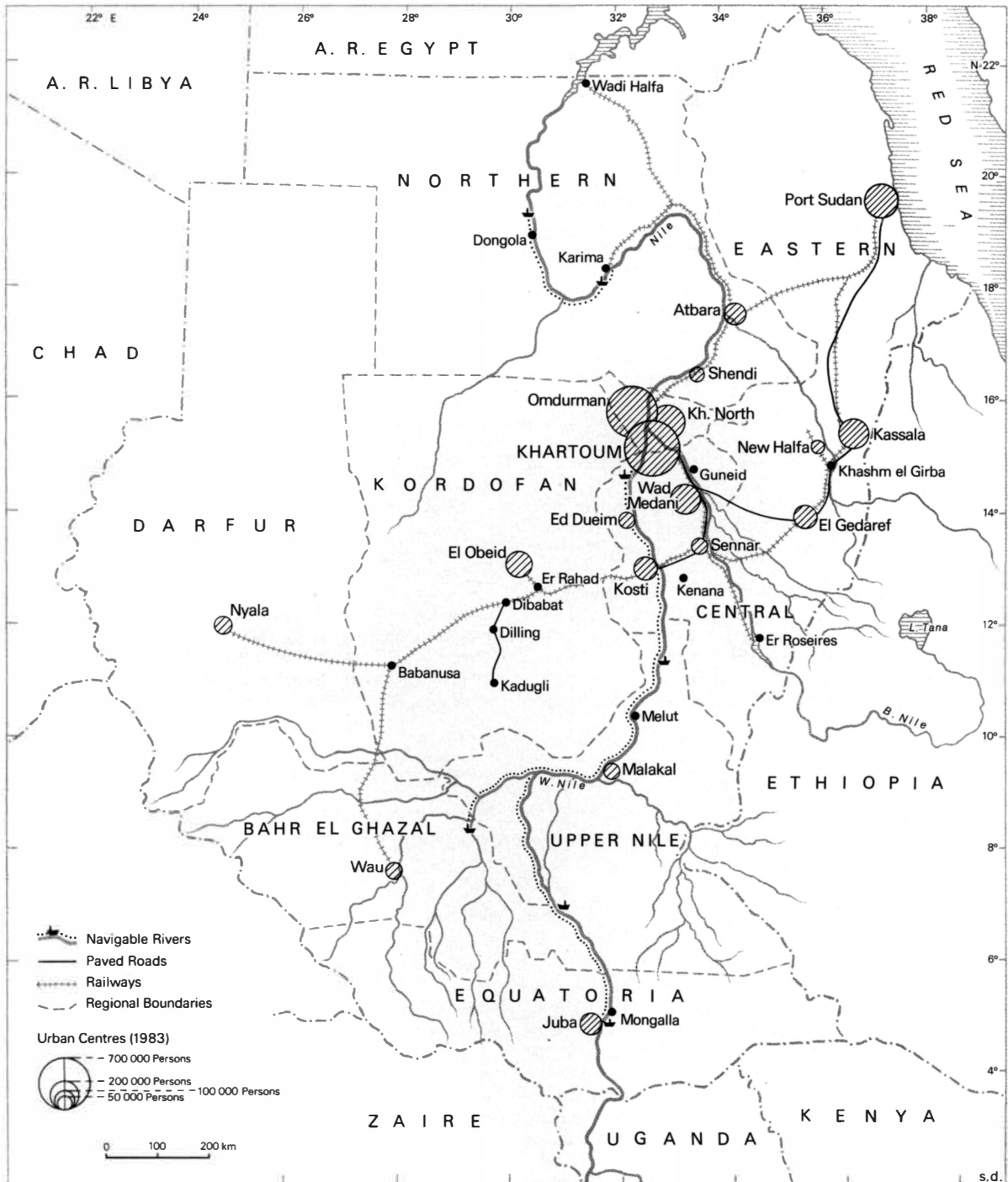


Fig. 1: Sudan: Urban centres and transportation network

In the Sudan, like in most developing countries, modernization and development is concentrated in certain localities which are super-imposed on a traditional background of subsistence economy. The foci of socio-economic growth include areas of commercialized farming such as the Gezira

and Managil schemes, the Mechanized Crop Production schemes of the Gedaref District, and Khashm el-Girba scheme, together with major urban centres (Figs. 1, 2). These centres of socio-economic advance act as magnets in attracting people, particularly from depressed regions in the

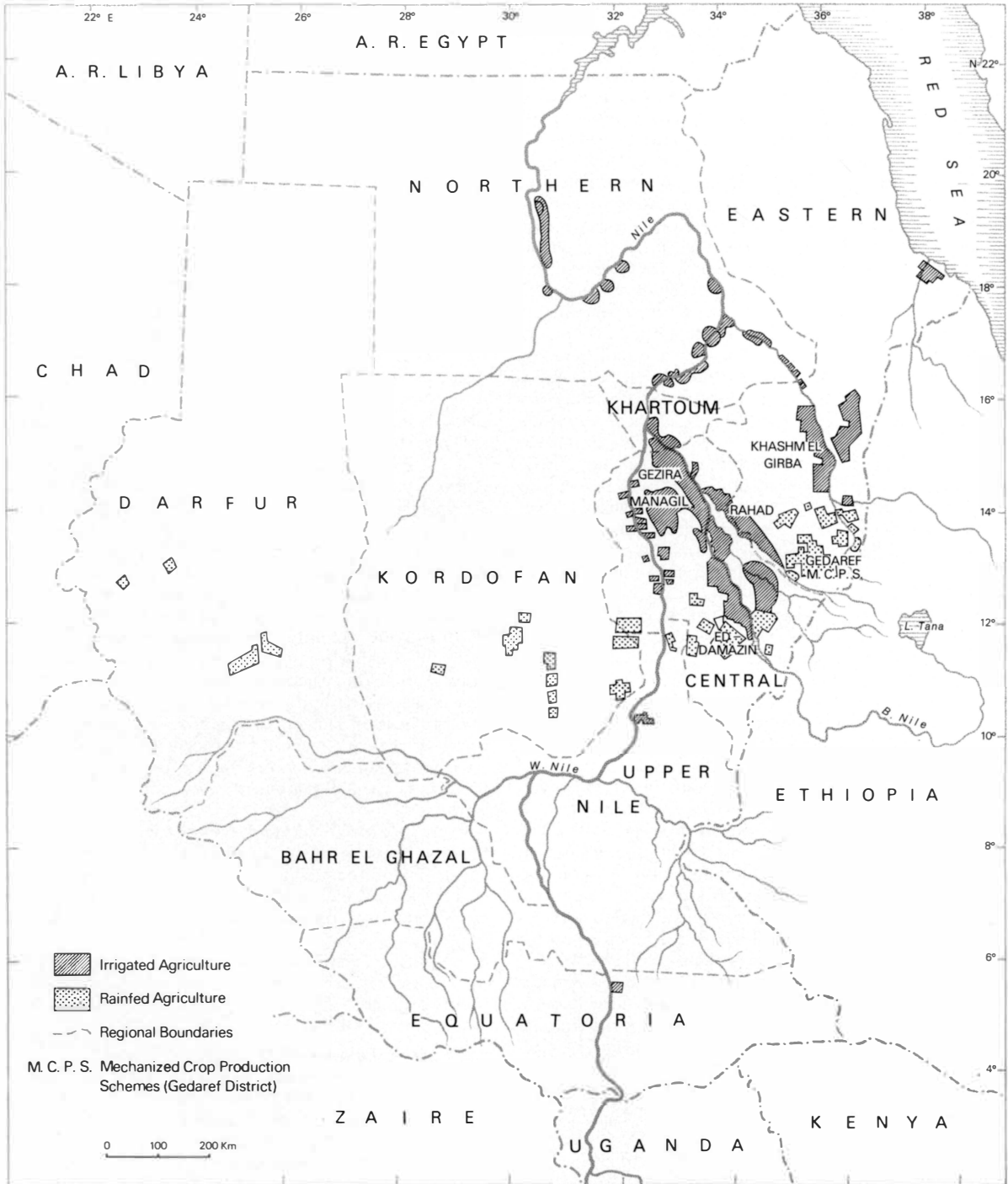


Fig. 2: Sudan: Modern agriculture, 1984

north, west and south. In fact, one of the main causes of rural-urban migration in the Sudan is the existing social and economic imbalance³⁾. While most towns share in schemes of modernization and development, extensive areas in the countryside are still dominated by subsistence economies.

As towns and cities form the main centres of commercial, industrial and infrastructural development, they may be

³⁾ R. A. HENIN: Economic Development and Internal Migration in the Sudan. Sudan Notes and Records, Vol. 44, 1963, pp. 100-119.

used as spearheads of modernization and development, particularly as Sudan's limited resources do not allow a nationwide scheme of development.

In a sense, the large concentration of migrants in Sudan's principal towns should be looked upon as an asset rather than a liability. So although the immediate effects of rapid urbanization may be disastrous at least in the recipient cities, the long-term effects may prove to be of considerable socio-economic advantage. Those planning the development of the country will find in these concentrations a pool of skilled and unskilled labour for various projects, both agricultural and industrial. A large concentration of people in urban centres also makes it possible for the authorities to provide social services for a wider spectrum of the inhabitants. Already the existing level of infrastructural facilities in these major cities is capable of attracting more investment, particularly if the government is willing to offer incentives. The introduction of modern agricultural schemes requires the existence of towns providing the necessary manpower to ensure the success of such projects. Schemes of commercialized farming, formed on the basis of the Gezira model, have to depend on the efficiency of their administrative and professional departments. A labour force of this quality and magnitude can only be found in towns. Furthermore, as the Sudan is embarking on a large-scale scheme of agricultural industrialization, concentration of population in urban centres will be of fundamental importance to industrial development. The efforts made by the government to develop the rural areas will accelerate the urbanization process as the machinery for agricultural and industrial development is urban-oriented.

Although at present about 75 percent of the industrial establishments are concentrated in the Khartoum conurbation, most of the proposed schemes are distributed on regional basis. Thus, several industrial projects which are now under construction are located in the Gezira and in the southern, northern, eastern and western Sudan. However, in order to achieve a balanced growth the authorities have to improve the standard of the infrastructural facilities at the provincial and district centres. First priority should be given to the improvement of the communication network and power supply. The government, being aware of the existing regional inequalities, is now diverting its efforts to development at the regional level. Although the Seven-year Plan (1970/71-1976/77) and the Six-year Plan (1977/78-1982/83) of Economic and Social Development have not provided a nationwide scheme of modernization and development, they have emphasized sectoral development at the regional level, particularly in depressed areas. This policy of "selective concentration" or of "concentrated decentralization" favours the creation of new poles of development on a regional basis. Although the plans do not specify the new poles of development, the main idea is to underline the role of provincial and district headquarters vis-à-vis the triple capital. Accordingly, it may be suggested that these centres of development should include such cities as Shendi, Atbara and Dongola in the north; Gedaref, Kassala, New Halfa and Port Sudan in the east; Wad Medani, Sennar, Roseires, Kosti and Dueim in the centre; El-Obeid, Babanusa, Nyala and Kadugli in the west; and Juba, Malakal and Wau in the south (Fig. 1). All these former centres have the basic infrastructural services to attract production projects, and at the same time they are located in regions of agricultural diversification. These new cores of development are expected to act as

disseminators of new technologies and innovations throughout the countryside, thereby promoting the social and economic modernization of the rural areas⁴⁾. The various agricultural, industrial and infrastructural schemes which are being constructed in the different parts of the country indicate that the existing process of urbanization could be utilized to assist the development planning.

The new development plan which was launched in July, 1977 anticipated per capita income, presently estimated at US. \$290, to triple by 1995. It is anticipated that by the end of the long-range development plan in 1995 the economy will be launched into self-sustained growth. This long-range plan of eighteen years is broken into three short-term development plans each of six years. The first of these short-term plans (1977/78-1982/83) puts total investment during the six-year period at about US. \$5 billion of which 52% are to be provided by the public sector and 48% by the private sector. The plan also envisages that the contribution of foreign sources to total investment will be higher than that of local sources. The bulk of foreign investment, both public and private, is provided by the oil-rich Arab countries. The most important of these sources is the Special Arab Authority for Development and Agricultural Investment, set up in the Sudan in July 1977 by the Arab Fund for Economic and Social Development. The Arab Fund has drawn up a plan of US. \$6.5 billion, involving more than one hundred projects, the purpose of which is to meet two fifths of the food needs of the Arab countries by 1985⁵⁾.

The main objective of the Six-year Plan (1977/78-1982/83) is to increase the rate of economic growth, presently maintained at 5% per year, to 7% by increasing domestic production. While the plan underlines the importance of agriculture to the Sudanese economy, serious efforts are made to develop industry and improve infrastructural and social services. Although the authorities aim at increasing rural and urban production projects, their main concern is to accelerate the development of economically depressed areas.

In the field of agriculture the aim of the plan is to expand the modern sector by building new projects, together with embarking on the modernization and development of the traditional sector. The plan suggests the introduction of cash crops such as tea, coffee and rice which have been successful in experimental farms in the southern Sudan. Agricultural development is viewed both horizontally and vertically. Of the 200 million acres of good agricultural land the Sudan is utilizing no more than 10% at present. Being the backbone

⁴⁾ EL-SAYED EL-BUSHRA (ed.): *Urbanization in the Sudan*. Proceedings of the 17th. Annual Conference of the Philosophical Society of the Sudan, 2-4th. August. Khartoum 1972, pp. 56-71; EL-SAYED EL-BUSHRA: *Regional Inequalities in the Sudan*. Focus Vol. 26, No. 1, Sept.-Oct. 1975, pp. 1-8; EL-SAYED EL-BUSHRA: *Population Growth and Economic Development in the Sudan*. Bulletin of Arab Research and Studies Vol. 5, June 1974, pp. 3-11; EL-SAYED EL-BUSHRA: *Urbanization in the Sudan*. Bulletin de la Société de Géographie d'Égypte Vols. 47-48, 1974-1975, pp. 95-103; *United Nations, Department of Economic and Social Affairs: An Urbanization Policy for Economic and Social Development*, Ekistics, Vol. 27, No. 161, April 1969, pp. 211-212; W. ALONSO: *Urban and Regional Imbalances in Economic Development*. Ekistics, Vol. 27, No. 162, May 1969, pp. 351-354.

⁵⁾ J. GRIMOND: *A Review of Sudan*. The Economist, March 18, 1978, p. 4.

of the Sudanese economy, agriculture contributes 39% of the gross domestic product, while other sectors such as transport (6%) and industry (10%) are growing at a fast rate.

In the industrial sector the plan is committed to large-scale agricultural industrialization for which the Sudan is best suited. Industries which are based on agricultural raw materials, together with the production of fertilizers and insecticides will be greatly encouraged. Sugar crushing industries have already been built at Guneid, Khashm el-Girba, Kenana, Sennar and Assalaya and some are planned for Melut and Mongalla in southern Sudan. It has now become firmly established that the Sudan will be an important exporter of sugar by the late 1980's⁶⁾. Furthermore, textile mills have been built or are being constructed at various places in the cotton producing area of the Gezira and the Nuba Mountains of Kordofan.

In the transport and communication sector the plan concentrates on the construction of major highways and feeders that connect production areas with internal markets and the port. The plan witnessed the completion of the main highway connecting Khartoum with Port Sudan (1,400 km) on the Red Sea littoral as well as the modernization of major airports. In the service sector the six-year plan concentrates on the spread of education and raising the literacy level, increasing health facilities together with improving the housing situation and the supply of water and electricity⁷⁾. According to the plan all these vital projects have to be evenly spread throughout the country to promote total development.

By shifting emphasis from the urban-dominated Khartoum Province, it is hoped that more development projects will be introduced in other areas, thereby achieving balanced economic growth and curbing the rural exodus. As economic development at the regional level will act in favour of smaller towns, they will be more capable of performing their new functions thereby contributing effectively to the

⁶⁾ Ibid. p. 9.

⁷⁾ *The Democratic Republic of the Sudan, Ministry of Finance, Planning and National Economy: The Six-Year Plan of Economic and Social Development (1977/78-1982/83)* (Arabic). Khartoum, July 1976, pp. 1-138.

social and economic transformation of the countryside. The objective of the regional development programme is to bridge the gap between developed and under-developed areas so as to achieve equality and social justice.

As the process of urbanization involves the migration of people from rural into urban areas, it becomes necessary to plan to avoid economic imbalance. As mentioned earlier, although the concentration of people in towns and cities is considered essential for the socio-economic development of the urban sector, excessive migration from the rural areas is bound to have negative effects on agricultural production. Thus, the long-term solution to these problems of economic and social development seems to be vested in comprehensive planning, where modernization and development are considered simultaneously at both the rural and urban milieus. In this way, sectoral development which concentrates on the modernization of selected urban and rural centres in the Sudan forms the prelude to a more comprehensive development programme for the nation.

In conclusion, it may be said that this policy of "selective concentration" advocated by the United Nations is commendable in the case of the Sudan given the existing level of economic and technological development. Concentration seems to be typical of the take-off period of social and economic development, and as the economy becomes more advanced there is a tendency towards equalization and more balanced growth⁸⁾. The provision of a high standard of infrastructural facilities in regional centres will not only reduce the existing polarization of socio-economic activities at the national capital, but will also divert some of the migrants from the triple capital to their regional centres. This will relieve the existing pressure on the Three Towns conurbation, as well as bringing about the necessary social and economic transformation of the rural areas. In this way, the process of urbanization could be redirected and re-oriented towards the regional centres where it may be used as an effective tool in development planning in this vast developing country.

⁸⁾ W. ALONSO: *Urban and Regional Imbalances in Economic Development*, *Ekistics*, Vol. 27, No. 162, May 1969, pp. 353-354.

3. INTERNATIONALER WORKSHOP DER IUFRO-PROJEKT-GRUPPE „ECOLOGY OF SUBALPINE ZONES“¹⁾

FRIEDRICH-KARL HOLTMEIER

Vom 2. bis 12. September 1984 fand der 3. Internationale Workshop der IUFRO-Projektgruppe²⁾ „Ecology of Subalpine Zones“ in der Schweiz statt. Er stand unter dem Thema „Aufforstung und Pflege subalpiner Wälder: Forschung und Bewirtschaftung“. Eingeladen hatte die Eid-

¹⁾ Der erste Workshop fand 1979 in Christchurch (Neuseeland) statt, der zweite 1982 in Corvallis (Oregon).

²⁾ IUFRO = International Union of Forestry Research Organizations.

genössische Anstalt für das forstliche Versuchswesen (EAFV) in Birmensdorf/Zürich. Planung und Leitung lagen in den Händen des Leiters der IUFRO-Projektgruppe Dr. HANS TURNER und seiner Mitarbeiter (alle EAFV), die mit großem persönlichen Einsatz für den reibungslosen Ablauf der Veranstaltung sorgten. An dem Workshop nahmen 39 Wissenschaftler aus 9 verschiedenen Nationen teil (Schweiz 12, USA 6, Kanada und Österreich je 5, Japan und Bundesrepublik je 4, Neuseeland 2, Italien 1). Der Workshop begann im Naturschutzzentrum Aletschwald auf der Rieder-