

DEVELOPMENT AS A HISTORICAL PROCESS IN THE NUBA MOUNTAINS REGION IN SUDAN¹

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Introduction:

The Nuba Mountains (NMs) region referred to in this paper embraces the area situated between the latitudes 10-13 degree North and the longitudes 29-31 degree East, within the boundary of the Republic of Sudan. It covers approximately an area of 138000 km². Administratively, it is considered to be the whole area presently known officially as the South Kordofan State. This state was divided into five provinces (now governorates) namely Delling, Kadugli, Abu-Gebeha, Rashad and Talodi. According to the 1993 census, the total population of the region was 1003560 with rural population of 824000 representing 82% of the total population. The sedentary population counted 970198, which represents 97% of the total population, while the nomadic group counted about 33362 representing 3% of the total population of the region. In terms of ethnic composition, the NMs region is dominated by two major ethnic groups, the Nuba and the Baggara Arab group. The Nuba claim to be the original inhabitants of the NMs, despite the fact that they are not living in isolation from the Arabic tribes (Bello, 1998). Agriculture and the livestock production are the main economic activities practiced in the region. Livestock production is performed by both sedentary and the nomadic cattle keepers.

The region had experienced civil war since 1983 resulting in loss of lives, resources, property, damage of social services, displacement inside and refuge of citizens outside the State and in other countries, and loss of confidence between the two main groups of the region. Thus, it ends with adverse impacts on the environment, agriculture and animal production. The Cease-Fire Agreement signed by the Government of Sudan and the Sudan Peoples' Liberation Movement (SPLM) in 2002 paved the way for various interventions by the State, NGOs, Community Based Organizations (CBOs), and UNs agencies in the region to enhance the process of rehabilitation and development on a sustainable manner. The aim of this paper is to trace the evolution of development process in the NMs region in historical perspectives during the period from 1924 to the late 1990s. It also draws attention to the challenges facing the development efforts in the periods during and after the civil. The paper is organized into three main parts following this introduction. Part one gives background information of the colonial administration policies towards the region and their impacts on the area and the inhabitants. Part two reviews the experience of the development efforts introduced in the region and their impacts in the past and present situation. Part three is the concluding remarks and repercussions.

1. General Background:

The Nuba Mountains (NMs) region is thought to be one of the underdeveloped parts of the country, despite the fact that it is potentially better suited to balance development than any other part of the country, except those closer to the Nile. The region has long been neglected on the part of the colonial administration and the post-independence development plans. Its backwardness may be viewed as a good example of conditioning situation surrounding, and made the traditional communities of the Third World poor and in a dependent position.

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¹ - Part of Ph.D. Thesis (Sociology and Social Anthropology) submitted by the author to the University of Khartoum.

Moreover, the conditions shaping the status of development in the NMs can not be adequately traced and understood without reference to the colonial administration policies towards the region and its inhabitants as an attempt to create Nuba nationalism or Nubaness. Yet, it is worth mentioning that during the British colonial rule (1898-1947) Sudan experienced two distinct administrative policies applied simultaneously in the northern and the southern parts of the country. These policies aimed at creating barriers between the two parts of the country and came to be known in the Sudanese colonial administration literature as 'the Northern Policy' and 'the Southern Policy', respectively. They were mainly based on distinct cultural differences between the Northern and the Southern regions of the country. Thus, it remains problematic for the Nuba Mountains, which lies as a frontier for the Muslim-Arab culture, as will be discussed the following sub-sections.

In the application of the policy, the former Nuba Mountains Province was declared by the colonial administration a closed area in the 1913, in accordance with the Closed Area Ordinance of the 1902. As a colonial politico-administrative device, the Ordinance aimed at screening the non-Arabic and the non-Muslims (i.e. Pagans and/or Christians) groups of the Sudan from any Arabic or Islamic influence in order to preserve their 'authentic' cultures, or at least to help them evolve on Christian path.

The Closed Area or District Act had specified by law the areas that included the former Nuba Mountains Province, the old three Southern Provinces (Bahr-El Ghazal, Upper Nile, and Mongola Province), the southern parts of the former Kassala Province, and parts of the Funj District. In turn, according to the Ordinance, no Muslim was allowed to enter a closed area; at the same time, no native was allowed to leave those areas without obtaining an exit or entry visa. In case of the NMS region, even the Baggara Arab nomads, who have been living among the Nuba for a long time, were classified as aliens (El Bashir, 1991). Thus, only after complain and petition, the provincial authorities responded to their request and changed their status into nationalized natives. Moreover, the application of the Closed District Policy to the Nuba was faced with many socio-cultural barriers. For A.J. Gillian, (the Governor of Kordofan Region 1931), the Nuba problem was two fold: The existence of different Nuba 'Stocks', stages of civilization, multiplicity of dialects and cultures on the one hand, and the contiguity between these Nuba stocks and the Arabs on the other. Having defined the Nuba problem in such terms, A. J. Billon raised some questions, as he comments:

Can we evolve a structure or a series of structures to fit all these cultures and stages of civilization? Can we at the same time preserve all that is best in the Nuba side by side with an Arab civilization?... Can the Nuba... maintain his traditions and culture in the face of these new conditions, and what steps can the government take to help him (In: Adam 1989:74).

In an attempt to get through (to attain the objectives of the policy), the idea of fostering schooling modeled as close as possible upon Christian establishment was adopted. That attempt did not succeed, mainly because the closeness between the Nuba and the Arab was one of the bottlenecks in respect to Christianization becoming a sustainable feature. It was so because it is argued that acculturation of the Nuba in respect of Arab material culture would necessarily imply their conversion into Islam.

Moreover, for the Nuba educational policy to achieve its aim of protecting the Nuba culture and tradition intact from Arabic-Islamic influence, the Arabic Language had to be excluded from being the principal medium of instruction (Nassr 1971). It was mainly because the selection of Arabic Language as medium of instruction was believed to allow the Nuba pupils to have access to the Arabic literature, and consequently greater Islamization. To overcome such a problem, a policy of separating Arabs from Nuba pupils was adopted. However, Arab pupils could also receive missionary education (as the Nuba pupils).

In 1930, the government discovered that the four governmental schools or *Kuttab* (i.e. Muslims elementary schools) located in Kadugli, Delling, Talodi, and Rashad towns were teaching Islam to Nuba pupils. In turn, as indicated by Nassr (1971), the schools were becoming centres of propaganda for Islam. Accordingly, a decree was then issued to stop instructing Nuba pagans and Christians Arabic and Islam, but again it was unsuccessful.

Moreover, as quoted in Balamoan (1976), the Closed Districts Order, as amended up to the 31st December 1932, read as follows:

1. The districts set forth in the schedule hereto shall be closed districts to the extent that no person other than a native of the Sudan shall enter or remain therein unless he is the holder of a permit obtained on this behalf to be from the Civil Secretary or from the Governor of the Province in which the closed district is situated and that any native of the Sudan may be forbidden to enter or remain in the said districts by the Civil Secretary or the Governor of such Province.
2. This order shall not apply to officials of the Sudan Government and Officers of the Sudan Defense Force entering or remaining in the districts closed hereunder in the performance of their official duties nor to any person holding a permit to trade in such districts under the Passports and Permits Ordinance 1922, nor save as regards persons traveling by steamer in transit on the Sobat River in the district number (vi) in the schedule hereto nor to any person traveling by steamer in transit through any such district.

The Schedule

- i) Darfur Province
- ii) The Bahr El Ghazal Province
- iii) Mongalla Province
- iv) The parts of Halfa and Dongola Provinces lying west of a distance of 30 miles from the river between Wadi Halfa and Debba ... the southern boundary of the Province.
- v) The Upper Nile Province.
- vi) The parts of Kassala Province lying within 10 miles of the Abussinian frontier.
- vii) The whole of Kordofan Province except the Central District and the Eastern District (excluding the two Omodias of Jebel Daier which will continue to be closed).
- viii) The whole of the sub-district of Kurmuk and those parts of the Northern and Southern Districts of the Fung Province which lie South and East of a line running from a point on the Western boundary of the Province to the Rahad River. (Balamoan 1976:177).

The Closed Districts Policy has had its direct negative impacts on the development of the restricted areas. This is mainly because it not only restricted the movements of the Muslim Arab in the closed regions, but, in fact, it also enforced the natives to stay where they are, and not to visit other provinces to trade, hunt or for any other purpose except under permits, which were usually not granted. Map (1) shows the closed districts in 1932¹. Furthermore, the impacts of the colonial policies towards the Nuba and its problematic implications on the region and the inhabitants can be discussed here in relation to the following sub-sections, as follows:

¹- For more information on the closed Districts Ordinance and its impacts, see M. Adam. (1989), and Blamoan (1976: pp. 176 – 180).

1.1 Nuba Migration and Rearrangements of Ethnic Structure

In the NMs:-

The main objective of the Nuba Policy of gradual evolution of Nubanness requires an introduction of two distinct administrative systems in the NMs region, specified by the powers of Nomad Sheikhs Ordinance of 1922. According to that Ordinance, a native administration system based on *Mekship* was established for the Nuba, and on *Nazirate - Umdaship* for the Arab tribes residing in the region (i.e. Hawazma, Kenana, Awlad Himaid ... etc). Thus, according to the powers of the Nomad Sheikhs Ordinance (1922) and the Village Courts Ordinance (1926), two *Meks* (Paramount chief) were appointed in Kadugli and Tegale to run the Nuba affairs (i.e. were entitled to run native courts), while the rest of the Nuba were left under informal courts. Within the Arab tribes, powers were only delegated to the tribes of Hawazma (with only three sections:- Abdal-Al, Halafa, and Rawawga), Awlad Himaid, Kenana, Kawahla and Bideriya (El Bashir 1991).

In 1927, the power of *Sheikhs* Ordinance was passed by the Civil Secretary, succeeding the earlier Nomads *Sheikhs* Ordinance (1922), which was mainly concerned with the administrative arrangements, rather than the tribes as such. It reads as follows:

The technical meaning of tribe and Sheikh was widened to give more space of jurisdiction: The new concept of tribe included a section of a tribe and Sheikh comes to indicate any tribal or territorial chief vested with authority over the whole or part of any tribe or district (Ibid. 1991: 7).

The change and the broadening of the meaning of 'tribe' and 'Sheikh' along or in relation to geographical location had ultimately resulted in revitalization of ethnicity and ethnic groups (i.e. Nuba and Arabs), which, in turn, implied planned ethnic fission and fusion, for the two major groups living close together in the NMS region for the long time in the history of the region - the Hawazma and the Nuba. Moreover, according to the new policy based on the Sheikhs Ordinance (1927), each specific group was allotted specific geographical locality. This was mainly in order to have more and easy control through curbing of migration (i.e. of the Nuba).

Furthermore, to attain the objective of planned disintegration policy or the separation of the Nuba and the Hawazma Arabs, the colonial administration suggested the amalgamation of the Hawazma three scattered Hawazma sub-sections, as mentioned before, in order to revitalize tribalism (i.e. Hawazmaness, and Hawazma nationalism in the face of promoted Nubanness or Nuba nationalism). That was to be achieved through the establishment of tribal *dars* (i.e. home land). It was hoped this would screen the Nuba from the Arabs cultural influence.

The policy objective can be read in the Governor of Kordofan's letter (1933) to the district commissioners at Delling and Kadugli in that regard as follows:

I investigated as far as I could during a short tour the chances and feasibility of an amalgamation of the three Hawazma nazirates. My conclusions were that it was an attractive ideal but not feasible at the present time, partly because of sectional pride, partly because of the poor state of tribe discipline, and partly because of ... (Ibid. 1991: 8).

In 1940 the three Hawazma sections were organized under *Nazir Umum* (paramount chief). It is argued that the real objective of the colonial administration policy was not the Hawazma amalgamation in itself, but it was mainly to have more control over the tribe through its resettlement and redistribution. Accordingly, a homeland tribal (*dar*) was designated for each of the three Hawazma sections (i.e. Abdal-Al, Rawawga, and Halafa section). By the same time, the Nuba were organized in federal system, where six Nuba federations were established. For sake of federation, the Nuba were divided into authentic Nuba and Arabized Nuba. The Niymang, Koalib, Heiban and Messakin were classified as examples of the former, while the Tegali, Tira, Talodi, Al-Liri, Kadugli and Ghulfan represented the latter. It is stated

that the establishment of some of these Nuba federations had, in fact, necessitated the evacuation of Arabs from among the Nuba, as well as the annexation of some Nuba groups to form Arab administrations. However, the policy can be judged as not only a process of drawing of district ethno-geographical boundaries, but, more or less, of forced removal of some groups and amalgamation of others for more control in the region. As indicated earlier, the aim of this policy was mainly to restrain the Nuba migration and/or to curb the Arabic-Islamic influence in the NMs, especially within the boundaries of the Nuba federations.

1.2 Nuba Emigration and Counter Measures:

The introduction of cotton as a cash crop in the NMs was essentially geared towards meeting the Nuba need for cash to pay the poll tax, and to buy the consumer goods at home without emigration outside the region.

It was hoped that the introduction of cotton production would fulfill the dual objectives of the colonial administration (i.e. revenue extraction through taxation and cotton production for exports), as well as for curbing the Nuba migration to the central Sudan or/and the northern parts of the country. In other words, the aim was to screen the Nuba from any Muslim-Arab cultural influence. But, in fact, it is argued that the Nuba were found the least interested in cotton production compared to the other groups of the NMs (i.e. the *Baggara*, *Jellaba*, *Fellata* ... etc). Therefore, the movement of large number of the Nuba from their traditional villages to the urban centres was justified by the growing recognition on the part of migrants of having good paid jobs in the urban areas (i.e. to work as soldiers, policemen, or to work in the industrial sector). This is, mainly due to their high expectations of wealth being a criterion of social status.

Various studies conducted on the experience of the rural-urban migration of the NMs concluded that the Nuba migrants and the urban-based soldiers occasionally send remittance to their relatives or return to home villages and continue to display concern on their villages' development and welfare (Balamoun 1976 and Adam 1989). Moreover, despite its positive consequences on the NMs communities, the Nuba emigration to work for army services or as seasonal labourers in the big cities in the northern regions (i.e. Khartoum, Kosti, Wad Medani, Port Sudan etc) as well as to the local towns was strongly opposed by the colonial administration. It was mainly because such migration was considered more harmful to the objectives of the Nuba administration policy. Thus, in his letter to the Civil Secretary, A. J. Gillan outlined the progress achieved by the Nuba policy on the region with further suggestions for the Nuba migrants repatriation from the Northern Sudanese urban centers, as follows :-

It is our policy here, with which you are generally in agreement to build up on Nuba cultural lines. I am convinced that the authentic Nuba has a future before him, while the detribalized is in general neither a credit to his stock or to the government.... Various steps have been, and are being taken, with most encouraging results, to inculcate a spirit of Nuba pride in their race, and to keep them at home. Army recruitment outside the area had been practically stopped. The native administrators are using their increasing influence to keep the young men at home, and local cotton growing and other industries are giving them a local economic future.... The migratory Nuba, for instance perform a useful economic function in the Gezira, and I believe a sanitary one in Khartoum.... I do not ask for a 'comb out' of all Nubas outside the area ... I would therefore ask: First, that government departments would recruit no more Nuba and to replace those already employed when opportunities arose. Secondly, that northern government would endeavor to round up and repatriate out of work Nubas (In: El Bashir 1991:12).

As a result a special policy for the Nuba repatriation was decided and strictly implemented by the northern provincial governors and head departments.

2. Some Development Efforts in the NMs Region:-

2.1 Preamble:

The introduction of the rainfed cotton schemes during the 1920s is considered a turning point in encouraging development in the area by the colonial administration with regard of enhancing the Nuba mental capacity to make development a self-sustained process.

In 1924 the Nuba Mountains Corporation was established and assigned the responsibilities of ginning and marketing of cotton, as well as the promotion of cotton cultivation. In turn, eight ginning factories were erected in the 1930s at Abu-Gebeha, Delling, Kadugli, Kalogi, Lagawa, Rashad, Talodi, and Umbrembita, which enhanced the urban growth of these administrative centres. Thus, new roads were opened linking various villages and branch cotton markets, as well as new economic and administrative centres with the railways stations (i.e. El-Semeh, Rashad, and Debebat). This process, as indicated by El Bashir (1991), in fact not only aided the Nuba administration, but also revived trade activities and attracted migrants from northern Sudan (the *Jellaba*) and the Nuba from Jebels (mountains) country side looking for jobs.

The expansion of cotton cultivation and trade were spearheaded by the *Jellaba* merchants and enhanced real changes in the structure of the local economy (i.e. wage labour phenomenon and new consumption patterns).

It is argued that during the World War II, the production of cotton showed continuous decline, and reached its lowest estimated production target in 1956. The reason behind this fact was related mainly to the cultivation of dura, which came to be more important as a result of rising food prices during that period.

During the 1960s, special attention was paid to the introduction of changes in the traditional sector. Therefore, serious attempts of introducing modern cotton production and mechanized agriculture were made as an attempt of promoting modernization in the region. In turn, two main development projects were established: the Nuba Mountains Agricultural Corporation (NMAC), and the Mechanized Farming Corporation (MFC). Other attempts of promoting rural development were launched during the 1970s and the 1980s, which were considered as good efforts of enhancing a real development in the region. These attempts will be introduced in the following sections.

2.2 Nuba Mountains Agricultural Corporation (NMAC)

The NMAC was established in the 1967 as state-sponsored organization, and was made responsible of promoting agricultural modernization in the region. Its major function was the provision of tractors and related services to groups of farmers, who carried out the initial agricultural operations by manual labour. It was believed that the NMAC with its modernization projects created employment opportunities for the local inhabitants (i.e. wage labour), who could combine traditional cultivation with hiring out their surplus labour in cotton farms and other mechanized schemes. This argument could be seen in G. Bauman (1987) as follow:

Wage labour on large-scale schemes in some areas, earning from small-scale cash-cropping in others, and income remittances from labour migration have combined to introduce cash transactions into even remoter parts of the Nuba Mountains (Bauman, 1987: 8).

In 1970 the NMAC was changed into the Nuba Mountains Agricultural Production Corporation (NMAPC) and made responsible of the introduction of modernization programme for cotton production on semi-Gezira model, aiming at the following objectives:

- i) Administration and supervision of agricultural production by gathering scattered small farmers.
- ii) Encouragement of modernization of traditional small holders by introducing mechanization and other technology to encourage and promote a sound development in the area.

According to Abusin (1987), the introduction of tractors in the region by the NMAPC in the 1970s together with cotton production and associated other services (improved seeds, pests control, and working facilities) are considered a real break through to modernize the traditional farming system in the area, but it failed to create real development in the NMs region. Many studies conducted on the experience of the failed modernization attempts of the NMs during the 1970s (cf. Adam 1989, Abusin 1987, and Thimm 1979) had attributed the failure of those programmes to the following reasons :

- i) Poor administrative and organization system, and shortage of skilled manpower adversely, which affected the programme policies and its operational efficiency.
- ii) Being biased towards the production of cotton as main cash crop, with only little attention given to food crops, and
- iii) Frequent failure of management to secure spare parts and fuel in due time results in delays in agricultural operations, which made farmers resolve to work in their traditional plots instead of sowing a late cotton crop.

These arguments were summarized in Thimm (1979) in the following:

From outset of the scheme, progress was erratic for a number of reasons. The original programme to acquire 60 new tractors per year could not be met, and as a result of lack of workshop facilities, spare parts, and fuel shortages, the areas to be modernized fell drastically. This situation was compounded by the lack of technical personnel, adequate housing, and transport, which meant that the supervision of the scheme was impossible. In specific locations problems of domestic resources ... soil exhaustion resulting from monocropped cotton, and difficulties with farmers who owned and migrated with livestock delayed progress. (Thimm 1979:32).

As indicated by Adam (1989), the cotton production schemes introduced in the NMs region since 1924 and rehabilitated during the 1960s and the 1970 were and still are ill-adapted to bring about a total transformation on regional economy. In turn, it shows the failure of the modernization approach to create development in the Third World countries. He concluded that, the need to foster food production in the area has led the government to invoke large-scale mechanization as appropriate means towards achieving self-reliance.

2.3 Mechanized Farming Corporation (MFC):-

The development of large-scale modernized rainfed agricultural production was started in the 1968 at Habila area in the NMs region. The Habila scheme which is a large-scale state sponsored mechanized scheme was established there in the early 1970, and extended later in 1975/76 with the objectives of getting rural development underway. The scheme is considered an attempt based on the "Transformation Approach" in development planning. It advocates radical changes in both method of production and state intervention (introducing new land tenure system). The scheme was an attempt to revolutionize the overall structure of the traditional sector in the Savannah belt. The first tenants' farm was established in 1970, when a total area of 18,700 feddan was put under cultivation. Expansion has continued gradually, and by 1979/80 season 250 large farms at Habila comprising 306,700 feddan had been allocated.

It is argued that, the policy towards mechanization of the Savannah belt in the NMs, particularly in Habila, had the following components: Firstly, to put, *inter-alia*, the uncultivated land resources under cultivation. This was justified by the fact that population pressure over land is minimal and the land itself not claimed by the community. This uncultivated land was traditionally named the *ghifar* or no-man's-land, and the government therefore had good cause to make possession of it under their provision of the Unregistered Land Act of 1970. Secondly, it is believed that the machinery is more efficient as opposed to labour intensive operations in the clay-plains of the NMs. According to O'Brien (1978), the traditional system of cultivation there was considered to be incapable of making efficient use of land since it is based on shifting cultivation. Under this system a farmer should at any time have access to "like five times as much land as he needs to cultivate, for it takes a number of years for the natural vegetation to grow up again and improve the soil of abandoned plots" (O'Brein 1978:2). However, another argument raised by O'Brein stated that the traditional agriculture is associated with the low production relative to mechanized farming. The third argument for advocating mechanization policy related to the tendency of production of dura and sesame for self-sufficiency of local population as part of the objective of improving people's standard of living in general. The fourth component of modernization is the state emphasis on production of cash crop to promote foreign exchange (Ibid).

Generally speaking, the mechanized schemes of Habila area can be divided into three main types. The first is the private sector dominated by private investors; namely, investors from the northern Sudan (the *Jellaba*), who are provided with tractors and credit assistance from the Agricultural Bank of the Sudan (ABS). The government allotted the land mainly to the private sector on a 25-year lease. Eligibility to the lease land and the loans was subject to the condition that applicants should be Sudanese, and should necessarily be resident in the schemes' area. However, no applicant should have more than one holding of the standard 1500 feddan. According to Saeed (1982), these conditions have never been satisfied, and most of the landholders' leases were in fact absentee landlords (*Jellaba* from northern Sudan). This fact was confirmed by Abusin (1989) who indicated that all private schemes are concentrated in the hands of minority wealthy merchants, usually exogenous to the area and who contributed little to the development of the area. It is argued that income generated from dura cultivation in the area was not reinvested to promote development in the area of production; it was either spent on luxury goods and/or private consumption.

The second type of schemes' ownership is the supervised schemes, which were also held by private farmers and financed by the World Bank in collaboration with ABS. This category includes the cooperative farms, which operated under direct supervision of the MFC. The cooperative farms basically consist of several individual farmers pooling their land for the purpose of economy of scale; they were encouraged in doing this by the government, which provides extension services and credit for the participants.

The third types of the schemes are the state farms, whose main function is to undertake experimentation and demonstration. These farms were run by agricultural officials in an attempt to show the benefits and lessons to be derived from farming in such way so as to attract and promote future participation.

The facilities offered to the investors in Habila schemes include easy interest of approximately 8-9 per cent on loan from the ABS. However, under the provisions of the promotion of Agricultural Investment Act 1979, encouragement was made in the form of partial tax exemption and exemption from customs duties for imported machinery (Adam 1989). According to Saeed (1982), private farming enterprises, state farms and cooperative farms share these characteristics: Firstly, most of the agricultural operations (land preparation, sowing, and harvesting) are carried out mechanically (i.e. discs, planters, harvesters ... etc). Secondly, all the three types of farms depend on hired labour, both permanent and seasonal

labour. These included permanent labour such as tractors drivers and their assistance, *ghafirs* (guards), and *wakils* or agents. The *wakils* are managers in the scheme(s) who carry the managerial functions on behalf of the absentee landlord(s), and are not necessary to be from the scheme's area. Seasonal labour is used for carrying out *kadeb* (second weeding), and some harvesting operations. Thirdly, the standard farm size ranges between 1000-1500 feddan. Dura and sesame occupy (in theory) 1000 feddan in 1500 type of farms and the remaining part left fallow, as prescribed by the MFC. Fourthly, cooperative farms and individual private schemes are entirely unaffected by extension services which are exclusively devoted to state's farms (Saeed 1982).

According to Abusin (1989), the adoption of machinery in Habila area has led to expansion in the cultivated land, which in turn resulted in:

- i) Diminishing of pastures' land due to the horizontal expansion leading to deterioration in grazing land and the emergence of new type of grass harmful to the livestock such as *sheleni* (*Zorria Glochidiata*);
- ii) Acute conflicts between farmers, and pastorals for the dislocated animal routes; and
- iii) Misuse of land and unplanned areas and absence of crops and fallow rotation, which contribute to rapid soil deterioration, destruction of vegetation, and speed up of desertification in the area (especially around Habila and Kurtala villages).

In conclusion, what can be argued here is that the land use system in the mechanized farming in the NMs (especially in Habila area) has ignored the human element, which reflects its adhoc planning and implementation. It imposed a new relation of production in the traditional sector of the region, and fails to promote regional development there. Therefore, it failed to promote development at regional level. I do believe that good utilization of land and other resources require careful balance between land, man, animal and environment. This balance could be attainable through adaptation of a sound integrated rural development plans aiming at introducing development projects based on appropriate technology suitable with the environment of the localities of the region. Such attempts were launched there in the last two decades (through the Nuba Mountains Rural Development Project, and The Southern Kordofan Agricultural Development Project), which are introduced in the following sub-sections.

2.4 The Nuba Mountains Rural Development Project (NMRDP):-

The NMRDP is argued to be the most important and successful attempt among all development efforts made in the country since the 1970s. The basic objective of this project is to increase the cultivated area and agricultural production through the adoption of sounding techniques (mainly, animal traction), associated with provision of farm inputs to the traditional farmers in the project's area. This is in order to improve the standard of living there and to make the process of their development self-sustained. The project was established in 1979 and was terminated in 1995. Studies conducted on the experience of the NMRDP indicated that the project had achieved considerable environmental and socio-economic impacts in the project area. These consequences include increase in agricultural production, which resulted in sustained food base (security), and surplus for cash reflected in changes of the consumption patterns of the beneficiaries, as well as their savings and investment practices. In this way, it effectively enhanced sustainable development (Bello 1998, Abusin 1987, Fadeel 1993, and Hayati 1989).

2.5 Southern Kordofan Agricultural Development Project (SKADP):-

The SKADAP was established in 1986 within the context of the national strategy that focuses on development of rainfed agricultural sub-sector. The main objective of this project is to improve the standard of living of the traditional farmers and livestock owners; viz., to increase food and livestock production. This has to be achieved through provision of improved

farm inputs, agricultural services, and appropriate technology, as well as provision of veterinary services, which have to be carried out in sustainable and environmentally sound system of development.

The project's activities covered all South Kordofan State, and other three provinces in the West Kordofan State; namely, Lagawa, Elsalam, and Abyie.

2.6 Rural Water Supplies:-

Provision of safe drinking water is crucial for development programmes to improve the quality of life of the inhabitants. Thus, it is observed that attempts have been made in the NMs for a long time through the efforts of the International Bank for Reconstruction and Development, and UNICEF, in collaboration with the National Water Administration Programme. Such efforts aimed at improving both urban and rural water supplies in the region. These attempts are ranging from developing, opening, and repairing of *hafirs* (water reservoirs), drilling boreholes, and installing hand pumps. The latter programme has to date been the most successful part of rural water projects, mainly at existing hills foot slope villages.

2.7 Social Services:-

a) Education:

The level of education in the region is very low. The survey conducted by the Nuba Mountains Rural Development Project's monitoring and evaluation division in 1989 indicated that only 18% of the rural population surveyed in the area was able to read and write. Schools are available only in towns and village centres, which are now in deteriorating conditions due to the effect of the civil war in the NMs.

As indicated in the South Kordofan State handbook 1996, the total number of basic level and secondary schools are 511 and 41 for both sexes, respectively. There is only one University in the region (University of Delling) established in 1993 within the Higher Education Revolution ushered by the present regime.

b. Health Services:-

Medical services are very poor in the NMs region. Hospitals and clinics are available only in towns and big villages, which are closer to the towns. People of rural areas usually have to travel on foot or by animals for distance of at least 2-3 hours to reach a hospital or a clinic. Moreover, it is observed that in hospitals often only the medical prescriptions can be served. No medicine is available in most cases, even in the market. When available, they are sold at high prices, which are not affordable by the masses. People in the surveyed villages are suffering from very poor health conditions during the rainy season, because of mosquitoes causing malaria.

3- Conclusion and Repercussions:

The NMs region had received considerable development efforts during the period 1924-1998 that generated remarkable socio-economic transformation of the people and the area.

The region had experienced civil war that lasted for ca. 20 years (1983-2002) resulting in loss of lives, property, displacement, and other negative socio-economic and environmental impacts.

The Cease-Fire Agreement signed by the Government of Sudan and the SPLM in 2002 paved the way for various interventions by the State, NGOs, CBOs and UNs agencies in the region to assist in socio-economic recovery and the process of development. The Agreement is at present facing serious challenges which hinder it from attaining its prescribed objectives. As indicated by Sayda (2005), the efforts to overcome problems of this

war succeeded in promoting social services and economic rehabilitation but could not yet appease the effects of its important negative impacts, such as ‘culture of war’. Therefore, we can conclude that in order to restore peace in NMs region and mobilize its people to participate effectively in the process of development, there is need for new development models that lead to economic recovery and meet social and political needs.

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