Sudan's farmers achieve grain surplus, send food relief abroad

Dr. Abdalla Ahmed Abdalla is ambassador to the United States from the Republic of Sudan. He has served as professor on the agriculture faculty, and also as dean of students, at the University of Khartoum. From 1974 to 1977, he was vice chancellor of the university, and since has served as chairman of the university's council (regents.) He served as minister of agriculture, food and natural resources in Sudan from 1977 to 1980. From 1980 to 1985, he was the first governor of the Northern region in Sudan. He is a graduate of the University of Khartoum, and earned a master's and doctoral degrees in plant physiology from the University of California at Davis. He completed his studies there in 1963.

After the government of President Omar Hassan El Bashir commenced in Sudan in June 1989, Dr. Abdallah was appointed ambassador to the United States. He was interviewed by Marcia Merry on Jan. 14 in Washington, D.C. We present Part 1 of a two-part interview.

EIR: After its food supply problems of 1990, Sudan is now providing food relief to several nations.

Abdalla: Sudan's harvest of grain for 1992 was estimated at 5.5 million tons, creating a surplus of 1.5 million tons. Sudan is now sending grain for food relief to points of need on three continents: to Bosnia; to Somalia, Zambia, Zimbabwe; and to Afghanistan. Food has been sent to the Gaza Strip, and to Egypt, after the earthquake. This year, Sudan is pledging 100,000 metric tons of grain (sorghum, wheat, and corn) to the World Food Program, for distribution to those in need in southern Sudan.

EIR: What have been the agriculture developments in Sudan over the past three years, since your government adopted its "Economic Salvation Program" in 1990?

Abdalla: Changes in strategies and policies have been designed primarily to create an environment conducive to growth and development. The Economic Salvation Program was designed also to redress economic ills, and to redirect resources particularly to the productive sectors, and particularly to the agriculture sector. The program considers the agriculture sector as the engine of the economic growth of the Sudan. Therefore, any developments that have taken place in the agricultural sector in the last two years should be related to the overall economic policy environment that has been introduced.

As a result of this new policy environment, there have been certain major policy actions taken, the central of which are:

1) The privatization of several of the Agricultural Public Corporations (APCs) was implemented, and other actions taken to foster the private sector.

2) Certain changes were made in the laws and regulations affecting economic activities in the areas of customs and taxation, with a bias toward production and development.

3) Liberalization of input and product prices was done, through the abolition of subsidies and reduction of taxes.

4) There has been a revision of the Investment Encouragement Act to provide more incentives, particularly in the agriculture sector, such as tax holidays and guarantees.

5) There has been a reform of credit policy. This is to increase the flow of resources into the agriculture sector.

6) There was also legislation mandating that a certain percentage of land in the irrigated schemes, and in the mechanized schemes, be put to forests. This is a new orientation toward caring for environment.

EIR: How does the credit to agriculture work?

Abdalla: A number of actions were taken:

1) A consortium of commercial banks was formed to finance APCs and individuals. In the past they were financed by the central bank with very low interest. This has now become completely privatized. There is a consortium of banks that is extending financing to some APCs until they are privatized completely. Some APCs will be privatized gradually, such as the Gezira, Rahad, and New Halfa.

2) There was also a very substantial increase of the capital of the agricultural Bank of Sudan, with a marked increase in its branches in towns and rural areas. More lines of credit to farmers were established. The Bank of Sudan also increased the credit ceiling to 50% for agriculture, which will be reviewed periodically.

3) There was the establishment of Livestock, Farmers, and Livestock Raisers Banks—new, private banks. The

farmers themselves bought a government bank, and now they run the Farmers Bank. These are three specialized, private banks, directed toward the private sector, fostered and supported by the sector, and serving mainly to support the traditional agriculture sector.

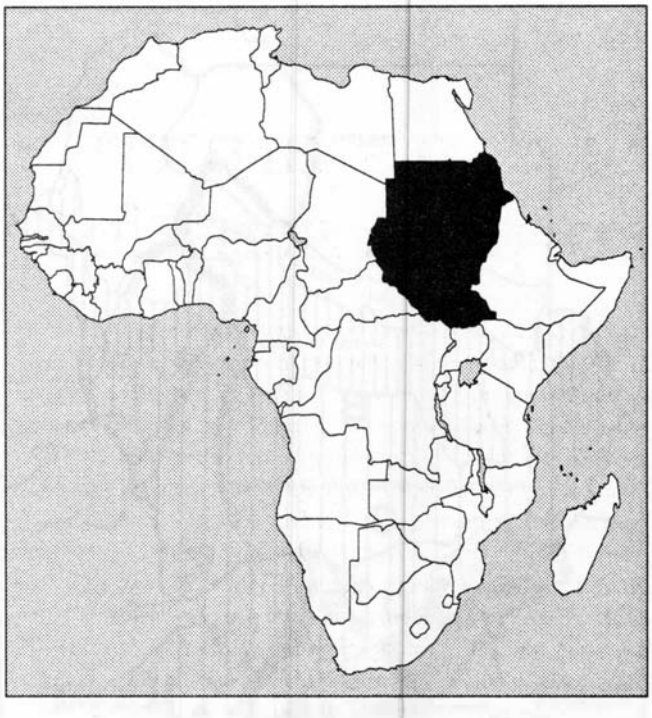
There are many details which I have not given you, which have been put in place to enable the agriculture sector, whether it is still in the public corporation state, or in transition, or private, to make use of and respond to the new policy environment of macroeconomic measures that have been taken.

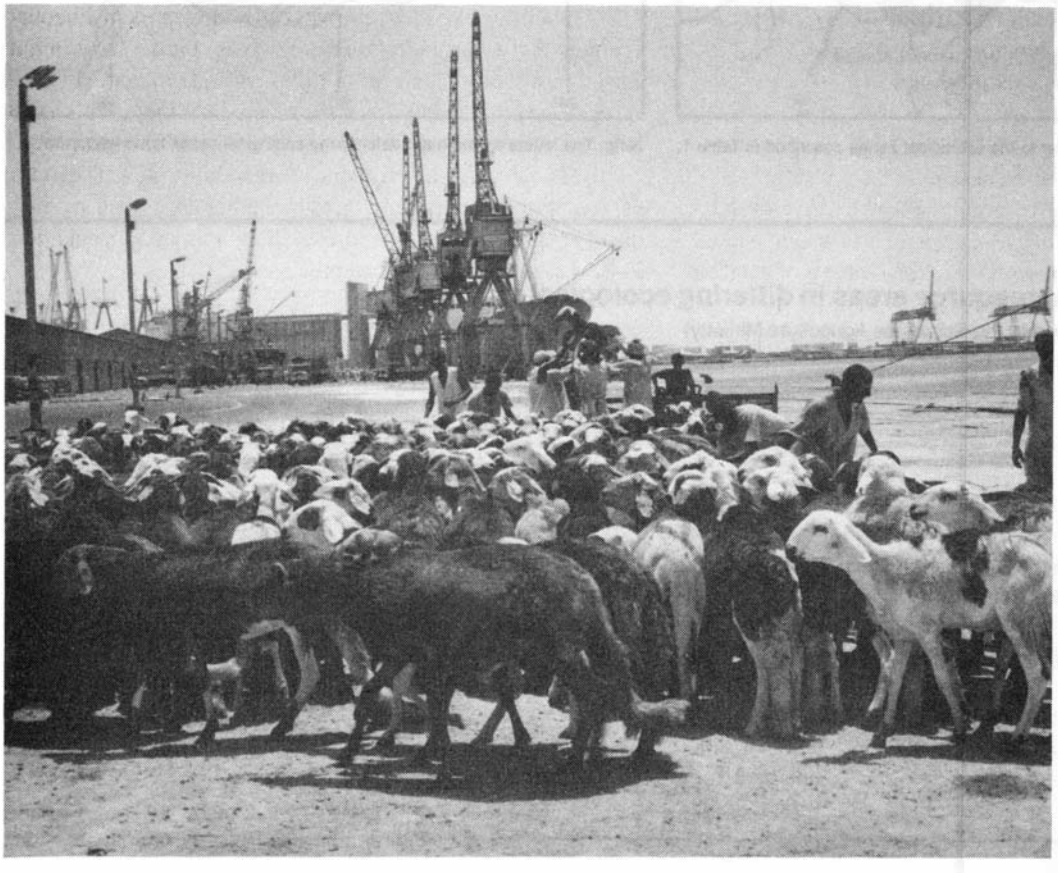
EIR: What has been the impact of these policy changes?
Abdalla: The agriculture sector responded markedly to the policies during the past two years.

1) The agriculture sector recorded a growth rate of 30% during 1991-92. This is the highest over the last decade. There was nothing like a 30% growth rate. And this 30% growth rate in the agriculture sector contributed to the overall growth rate of the economy of 11.8%. These figures have also been agreed to by the World Bank and the International Monetary Fund.

2) The total grain production increased from 2.7 million tons in 1989-90, to 4.8 million tons in 1991-92. This immediately resulted in self-sufficiency, and a little surplus

FIGURE 1
Sudan in the African continent

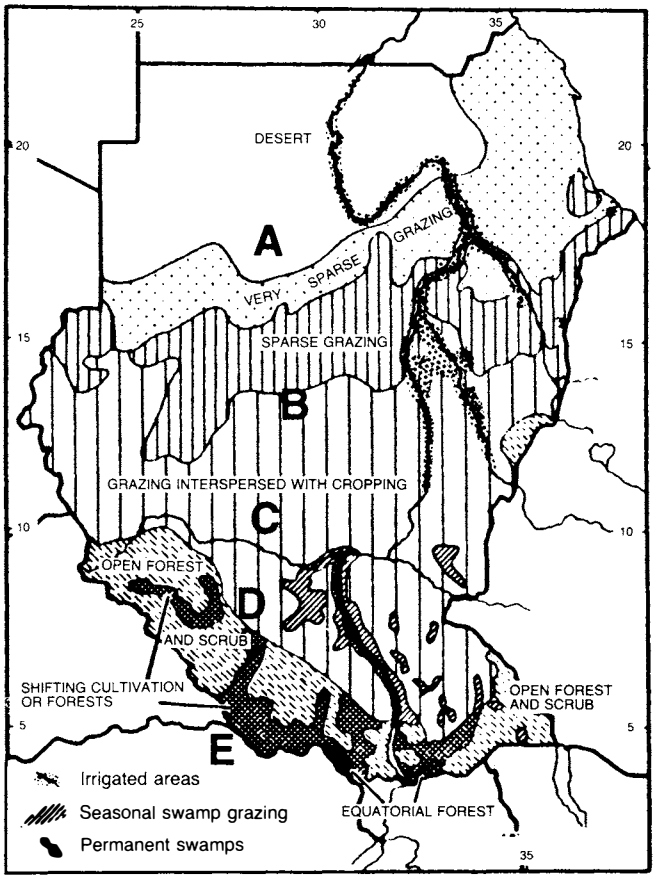




A scene at Port Sudan. Sudan ships livestock to Saudi Arabia, Egypt, Libya, and Jordan. The agriculture sector overall achieved a 30% growth rate last year.

FIGURE 2

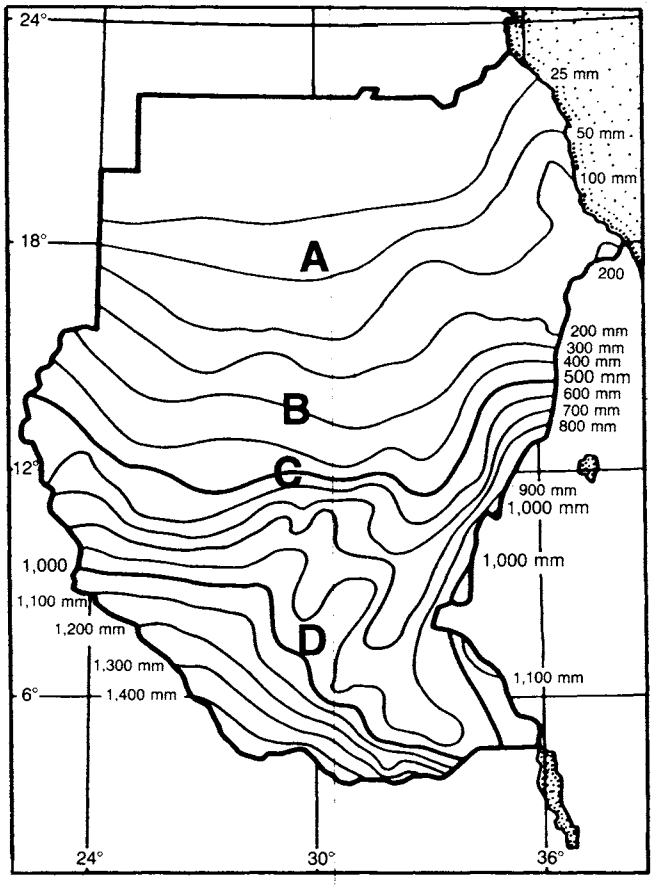
Sudan's diverse agro-ecology: land use zones



Note: The letters on the maps refer to the ecological zones described in Table 1.

FIGURE 3

Sudan's average annual rainfall



Note: The letters on the maps refer to the ecological zones described in Table 1.

TABLE 1

Sudan's agricultural resource areas in differing ecological zones

(millions of hectares; estimated by the Sudanese Agriculture Ministry)

	Total area	Pasture area	Cultivated area	Total area available for agriculture	Forested
Ecological zone					
A. Desert	71.9	—	—	—	
Semidesert	48.6	9.7	—	—	
B. Savanna (sandy, low rainfall: 300-400 millimeters)	32.4	28.6	3.8	—	
C. Savanna (higher rainfall: 400-800 mm)	35.9	31.9	4	32	
Subtotal—Northern Sudan:	188.8	70.2	7.8	32	
D. Savanna (high rainfall: 800-1,300 mm)	34	22.7	—	11.4	
E. Flood area	24.2	—	—	—	
Mountainous	.6	—	—	—	
Forested					24.2
Subtotal—Southern Sudan:	58.8	22.7	N.A.	11.4	24.2
Total Sudan:	**247.6**	**92.8**	**7.8**	**43.4**	**24.2**

FIGURE 4

Sudan: annual output of all grains by farm sector, 1983-92

(sorghum, wheat, millet, corn)

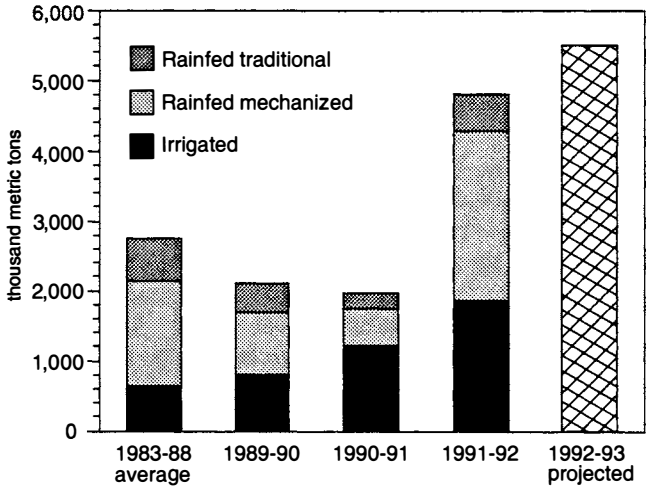
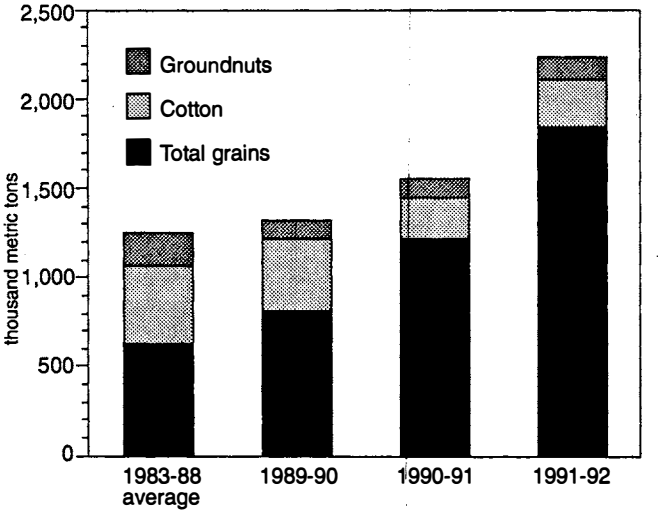


FIGURE 5

Sudan: annual output of food crops rises, cash crops falls, in irrigated sector, 1983-92



(**Figure 4**).

This year, which is 1992-93, the harvest is still going on. The estimate of the harvest, by the U.N. Food and Agriculture Organization [FAO] assessment team, which now comes annually to make an assessment of grain production in the Sudan, is between 5 and 5.5 million tons, giving us a surplus of 1.5 million tons of sorghum. President El Bashir announced recently that the harvest may reach 7 million tons.

The FAO was in Sudan in November and December 1992, and at that time, the figure quoted by the minister of agriculture as an assessment, was 5.5 million tons.

This is the record highest harvest in Sudan. There has never been 1.5 million tons of surplus, never in the history of Sudan. This occurred from the combined output of the mechanized, the traditional [non-mechanized], and the irrigated sectors.

Wheat production increased from an average of 200,000 tons in the late 1980s, to 895,000 tons in 1991-92. It used to oscillate between 150,000 and 200,000 tons in the late 1980s. As for 1992-93, of course, the crop is still in the field.

These increases resulted from not only an increase in the cropped area, but an increase in yield, i.e., increased productivity. Some people think that increases have been obtained only through horizontal expansion of area. Not so. It is both: horizontal expansion and vertical expansion—that is, productivity per unit area, resulting from the new policies introduced.

The higher yields reflect the removal of certain constraints, the application of some technology in terms of research, better farming methods, better management, better resources for fertilizer, and timely application of inputs.

3) Integration of livestock in the irrigated subsector. This has been going on for a long time; what is new is that credit facilities have been made for the farmers and the tenants to purchase livestock. The fodder is now an integral part of the rotation in the Gezira scheme, and other schemes (**Table 2**).

TABLE 2

Estimated numbers of livestock in Sudan, 1985-92

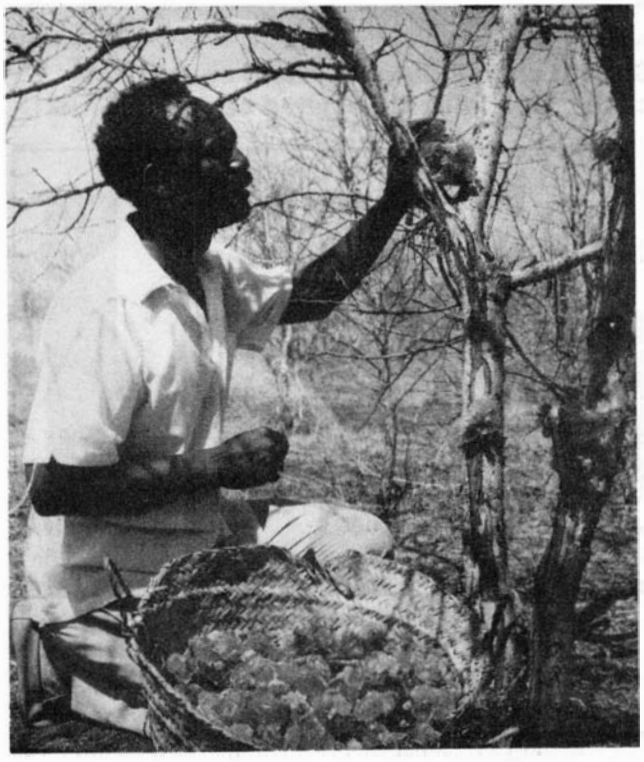
(thousands of head)

Year	Cattle	Goats	Sheep	Camels
1985-86	19,632	13,799	18,690	2,712
1986-87	19,739	13,942	18,801	2,705
1987-88	19,858	14,196	19,207	2,722
1988-89	20,167	14,482	19,668	2,732
1989-90	20,593	14,854	20,168	2,742
1990-91	21,028	15,278	20,701	2,752
1991-92	21,504	15,592	21,288	2,775

4) There has been an increase in the area for export crops—sesame, ground nuts, safflower—which was a reaction by the farmers to the liberalization policies and prices.

Exports in the last two years have gone mainly to Europe, and now to the Far East—Malaysia, Indonesia, China. We used to have some exports of cotton to India, but they are terminating, because India is now more or less self-sufficient in cotton. Livestock goes to the Middle East, mainly to Saudi Arabia, and also to Egypt, Libya, Jordan.

Sesame goes mainly to Europe, but there are now new



Harvesting of gum arabic, used in manufacture of adhesives, confections, and pharmaceuticals.

markets in Southeast Asia. This year's harvest is about three times as much as last year. The government estimate is about 350,000 tons of sesame. The farmers and the merchants estimate is 500,000 tons. In contrast, the last year's harvest—the one before the most recent—was 100,000 tons.

Gum arabic is very good this year. Last year it was very bad, because the winter was very severe. This year there is a good harvest.

EIR: Are there new technology and education programs?
Abdalla: There are many prerequisites and determinants for sustained agriculture growth. One of them is technology, and by that I mean research, education, and extension.

In our vision for agriculture in the future—to increase our exports, to guarantee our food security, and to make a base for agriculture industry—promotional policies and technology become very important, along with the private sector. It is very important that we emphasize agriculture education, research, and extension. This is now being done through, mainly, supporting the agriculture research system that is already there.

We are strengthening the capabilities of the different experimental stations in the different regions of the Sudan, because the capabilities of agriculture research in the Sudan have been declining. They have declined particularly in terms of operational budget for research, equipment, supplies, partly some brain drain—losing some of our good agriculture research workers to other countries; partly because of certain structural deficits in the system itself; and partly because of lack of strong linkage between agriculture research and extension, because each is in a separate structural area.

Agriculture Research Cooperation is directly under the Minister of Agriculture, and has very little to do, if anything, with extension. Extension is in the Ministry of Agriculture, but very isolated from agriculture research and education. Agriculture education is totally under higher education, and has very little to do with agriculture research, which is targetted toward solving the problems of agriculture in the Sudan. It is rather academic research and so on, and very little cooperation and coordination exist.

However, these problems are now being addressed, with the objectives of bringing together as much as possible agriculture education, agriculture research, and agriculture extension. New faculties of agriculture have been created in the new universities.

There is a new faculty of agriculture in the new University of Wadi Al-Nil in the north (that's the Nile Valley University,) primarily addressing irrigated horticulture, because that's an area of horticulture, known for its high-value crops. They will focus on arid agriculture, utilizing underground water. Already we get water from the Nile.

There is another new faculty in Kordofan, and that faculty of agriculture is going to address more the problems of natural resources—land degradation, soil/water relationships, environmental degradation of forests, better land use management, and so on. It will also address livestock, because Kordofan is the livestock region. It will address productive farming systems that will integrate soil and livestock crops altogether, also caring for the environment. It will emphasize the new concept—which is not new, but emerging: the concept of sustainable agriculture.

There is another agriculture faculty in Darfur. And in the south, there is a college of agriculture at the Upper Nile University in Malakal. There is also a college of agriculture at the University of Gezira, which is now 15 years old. It addresses the problems of the irrigated sector of the Gezira and rainfed agriculture.

EIR: How many students are enrolled now?
Abdalla: There has been a revolution in higher education in Sudan. The number of students accepted has jumped at least five times in the last two years. This year there were 37,000 new enrollments. Two faculties are stressed at the colleges in the newly emerging universities: education and agriculture. Some of the universities have medicine, engineering, and so on. But there was primary concern for creating these two faculties in each of the new emerging universities. The faculty of education is always there, in all of them. And a faculty of agriculture is always there, in all of them. Apart from that, they differ.

To be continued.