SOM FSAU

SOMALI DEMOCRATIC REPUBLIC

WASAARADDA BEERAHA

MINISTRY OF AGRICULTURE

FOOD EARLY WARNING SYSTEM DEPARTMENT

COMPENDIUM OF

AGRICULTURAL STATISTICS

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FOREWORD

The Food Early Warning Department of the Ministry of Agriculture- collects and processes data about Meteorology, Agriculture and Agroeconomics in Somalia.
The Department is assisted by the Food Early Warning System Project (F.E.W.S.Project), which is financed by the European Development Fund, and executed by TRANSTEC S.A. Brussels.
The present publication recounts the data which is available within the Agricultural Service of the Department.
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INTRODUCTION.

The main intention of this compendium is to provide the user with all available statistics about crop production in Somalia which had been gathered by the Food Early Warning System Project from 1982 onwards. However, all statistics from other sources have been included in order to build a full comprehensive whole. Besides this, as an introductory note and for the convenience of the reader, general information about the country and its agricultural sector, and more detailed information about each region are included, so as to clarify what otherwise would have been a dumb enumeration of figures.

A compendium like this is of course liable to criticism, due to the scarcity or dubious reliability of many data, and is subject to further modifications. In this sense, all comments or all kind of original data sources will be welcome.

The authors wish to acknowledge the financial support of the commission of the European Communities and the support of the Director of the Department, Eng. Ali Abdi Odowa, and the General Manager of the project, Mr. M.Cervesato. We wish to thank Dr. M.A.Nuur, Vice-Minister, Ministry of Agriculture, for his kind comments and observations.

1. THE COUNTRY.

1.1. GENERAL PHYSICAL DESCRIPTION.

Somalia extends over 637657 square kilometers, between the latitudes 12°N and 1°30'S and longitudes 41°E to 51°E. The coastline is about 3300 Km long.

A maritime plain, called the Guban, ('scorched') varies in width between 110 Km in the west to 2 to 3 Km in the northeast. A mountain range, of an average elevation of 2000 m with its peak, Surad Ab, of 2400 m, runs parallel the northern coast along the Gulf of Aden, from the West to Cape Guardafui, the extreme point of the Horn of Africa. The southern slopes of the mountains descend to the "Oogo" plateau, of 1000 m average elevation, a tree-dotted well watered terrain. Together with the "Haud" the depression zone in the Ogaden which during rainfall becomes dotted with ponds and lakes, this area is the preferred habitat of the northern nomads. The eastern part of the Oogo plateau drains towards the Indian Ocean through the Nugaal Valley and is distinguished by an extensive network of seasonal water courses ('dono'), the Darror and the Nugal being the most important. They flow only under heavy rainfall, but contain permanent water in their lower reaches.

Towards the south, the plains of Mudug and Galgadud, without major elevations, slope from 600 m towards 200 m and then touch the Coastal Aeolian sand deposits.

The two perennial rivers, the Shabelle and the Juba, characterize the country's South. Vast sediment areas formed by the rivers constitute the country's most fertile lands.
The country slopes very gently from an average altitude of 500 m near the West towards the Indian Ocean. Almost for their whole length both the Juba and the Shabelle are flowing in canal-like river beds with steep shoulders. The alluvial soils of the ancient rivers sometimes reach a width of 35 Km or more. The present rivers are marginal remants of considerably more important waterstreams of the earth's past.
While clay, black cotton and laterite soils are prominent, huge surfaces of these are characterized by their very thin soil cover over rock.

1.2. GEOLOGY.

Most of the country is part of the African Continental Platform. In the north the zone parallel to the Gulf of Aden has been severely faulted and fractured. The metamorphic and igneous rocks are generally overlain by jurassic limestones, cretaceous sandstones, eocene limestones and gypsum anhydrites, miocene bio-limestones, pleistocene basalts and recent alluvial and aeolian materials.
Further south, the Basement complex rocks are overlain by mesozoic sediments of limestones, marls and sandstones. A distinct scarp (the Baidoa escarpment) indicates the limit of these mesozoic sediments with the basement peneplain made of sediments of the beginning of the tertiary period where the only relief is provided by granite inselbergs known locally as "burs". The southern limit of this peneplain is marked by a major fault zone running parallel to the coast which is probably part of the fault system of the East African coastal area. The coastal zone is characterized by various alluvial, colluvial, marine and aeolian deposits of the quaternary and recent period.

1.3. CLIMATE.

The climate and weather of Somalia is controlled by the north and south movement of the Intertropical Convergence Zone (ITCZ).
This zone is a belt in which the north-easterly and south-easterly trade winds converge. As these winds converge, so air is forced upwards, hence producing rain.
The two wind systems usually contain air of differing characteristics of temperature and humidity, so that the plane where the air masses meet, known as the Intertropical Front (ITF), often represents a transition from one type of weather to another.
The north and south movement of the ITCZ follows an annual cycle, which lags the apparent movement of the sun between the Tropics of Cancer and Capricorn by about one month. Ultimately as a response to variations in solar radiation, the movement of the ITCZ is in response to the variations of the Meteorological situation over a wide area, including the Indian Ocean, the Arabian Peninsula, East Africa and beyond.
By the end of March the ITF is crossing the southern border of Somalia, and by April it has travelled to a line just north of Belet Weyn. The rainfall closely follows the front. By May the ITF lies along a line Hargeisa to Alula, with growing rains covering the country, except for the persistently dry eastern areas. In June and July growing rains are rather isolated being confined to the southern coastal strip and the highlands of the northwest.
As the ITF moves southwards, then the rainfall is in advance to it. This is because the ITCZ becomes more compressed, thus increasing the convergence of the southerly winds, which produce more rain. The ITF crosses the north coast around the beginning of October, and its mean October position is a line Hargeisa - Iskushuban, with extensive rains in the south of the country, centred on the Bay Region. By November the ITF lies across Bay Region and through Mogadishu, and clears the entire country by the end of December, thus ending the rains.
The season names, Gu, Hagai, Der and Jilal refer to times of the year, and only loosely describe rainfall seasons. In the southern and central regions, the Gu season peaks in April or May. There is a marked dry season, and Der rainfalls come in rather suddenly in October. The coastal strip up to Mogadishu experiences a modification of this two - rainfall season regime. At Kismayo, there is virtually only one rainfall season, with maximum rainfall in May and June, and thereafter falling off fairly regularly till January. Further north along the coast, the Der season becomes more distinct, but it is only north of Mogadishu that there is a marked dry season in between Gu and Der. In the north east the annual rainfall is very small, with totals of 50 mm or less on the north east coast. In the north west however, there is relatively extensive rainfall in the highlands. Gu and Der rains are evident, though since the former is late and the latter early, the effect is of one long season, April/May to September, with a small midseason break, rather than two separate seasons.

1.4. HYDROLOGY.

The total length of the Juba is 2000 Km, of which 700 Km flow through Somalian territory. The annual water flow varies between 3.5 billion to 8.5 billion m^3 at Lugh Ganana, with an average flow of approximately 5.25 billion m^3. Floods occur frequently. It has a channel capacity of 700 m^3/sec.
Maximum and minimum flows of the Shabelle (1800 Km total length) are 3.2 billion and 1.1 billion m^3 at Belet Weyn and 2.0 billion and 0.75 billion m3 at Afgoi. The Shabelle river channel capacity is only 400 m^3/sec at Belet Weyn, and even 100 m^3/sec near Jowhar, which makes the valley particularly vulnerable to flooding, two thirds of this occuring upstream of Balad.

Groundwater sources are unevenly distributed. Approximately 13400 water points exist in the rural areas, more than two thirds of which are outside settlements, and more than half of these water points are seasonal. Outside of settlements water points are more frequent in the northwest and much more frequent in the northeast.
Springs and wells, dominate in the inter-riverrine area, while in the Northwest and the Northeast irregularity of groundwater fed sources is very frequent.
Rainwater is caught in traditional water catchments. Most of these are individually owned and managed. A widespread form of rainwater catchment is field bunding, a simple device of storm water storage, serving both as protection against rain storms and conservation of water.

Table: 10 day mean discharges (Cumecs) and cumulative water volumes (MCM) of the river Shebelli at Belet Weyn and the river Jubba at Lugh Ganana.

RIVER SHEBELLI AT BELED WEYN			RIVER JUBBA AT LUGH GANANA		
10 Day period	Normal	Normal	10 Day period	Normal	Normal
JAN I	11	9	JAN I	35	30
II	9	17	II	28	54
III	10	26	III	21	74
FEB I	9	34	FEB I	15	87
II	9	40	II	11	97
III	7	45	III	10	104
MAR I	11	55	MAR I	8	111
II	9	62	II	11	120
III	11	72	III	17	137
APR I	26	94	APR I	34	166
II	54	141	II	128	277
III	76	207	III	142	399
MAY I	74	271	MAY I	166	560
II	111	389	II	259	784
III	104	470	III	274	1044
JUN I	71	532	JUN I	241	1252
II	42	569	II	195	1422
III	33	598	III	154	1555
JUL I	49	632	JUL I	209	1735
II	54	675	II	243	1945
III	63	731	III	219	2153
AUG I	74	799	AUG I	204	2330
II	104	891	II	231	2529
III	109	1006	III	246	2752
SEP I	149	1131	SEP I	286	3029
II	142	1254	II	290	3286
III	127	1372	III	252	3438
OCT I	111	1488	OCT I	210	3766
II	105	1598	II	441	4148
III	89	1043	III	359	4489
NOV I	89	1712	NOV I	283	4734
II	68	1750	II	235	4928
III	51	1777	III	162	5068
DEC I	21	1797	DEC I	98	5148
II	17	1811	II	62	5203
III	12	1823	III	47	5248

(1) Normal is the median for the period 1963-1987

1.5. AGRICULTURE.

The total potential arable land in the country amounts to 8150000 hectares (Somalia Agricultural Sector Survey). Most of this is however marginally suitable for cultivation, due to low or unreliable rainfall, soil deficiencies etc.
It is estimated that 1815000 ha of land could be cultivated with reasonable success, 1445000 ha under rainfed conditions and 370000 ha under irrigated conditions (220000 along the Juba and 150000 along the Shabelle).
Of this 1815000 ha of land, the bulk 68.5% or 1243000 ha are found in the south of the country; 432800 ha are cultivable in the central regions and 139500 ha in the northern regions.

Actually (1987) about 1001500 ha of land, or 55% of the potentially cultivable land, are under cropping cycle. Of this, during Gu seasons about 660000 ha (or 66%) bear crops while the rest is left fallow. During an average Der season about 300000 ha (or30%) are cropped.
The average annual increase of new land put under cultivation has been 1.1% these last 6 years.

The following table give proportionally the importance of the country's northern, central and southern regions:

Region	land actually under cultivation cyle (ha)	%	potential cultivable land (ha)	% actually to potential cultivated land
North	132000	13.2	139500	94.6
Central	121150	12.1	432800	28.0
South	748300	74.7	1243000	60.2
Somalia	1001450	100.0	1815000	55.2

It would thus appear that almost all cultivable land has been occupied in the north, whereas about 350000 ha in the central and 500000 ha in the southern regions are still available for further development. Most of these lands are believed to be located in the districts of Dinsor, Sakow, Brava and Jilib for the south; in El Dhere, Harar Dhere and El Bur for the Center.

The extension of land which is irrigated or irrigable is difficult to establish. If quite clear figures about controlled irrigated land are available, the problem remains for the land cultivated under flood irrigation. Both the Juba and Shabelle river flood their riverbanks quite regularly, but to a very variable extent from year to year. From this, a distinction could be made between "opportunistic cropping" after a flood or the semi-controlled flooding of a depression caused by digging a breach in a dyke. As a consequence "flood cultivation" acreages vary widely from one year to another.

Actual estimations of irrigated areas give a figure of 112950 ha for the whole of the country, 1600 ha being located in the Central Regions (Nugaal mainly), 2000 ha in the Northern Regions and 109350 ha in the south. These figures represent the current irrigated land. Along the Shebelle river, many areas are dotted with irrigation infrastructures which are now in disuse or in rehabilitation phase; these have not been included.

Irrigated acreages (ha)	Flood irrigation	Controlled irrigation	total
Juba	24200	22600	46800
Shabelle	21600	40150	61750
Bay	0	800	800
Center	0	1600	1600
North	0	2000	2000
Total	45800	67150	112950

Other reports estimate the total irrigated area at 92400 ha (RMR Survey) or up to 170000 ha (with a flood irrigated area estimated at 110000 ha).
Additional information is given in the chapter about regions.

The most grown crop in Somalia, in terms of land occupation, is sorghum, which generally occupies between 50% and 60% of the cropped land during the Gu season. Maize is second, with about 25 to 30% of the cropped area. Sesame is a minor crop in the Gu season (about 5 to 7% of the cropped area) but a major crop in the Hagaa and Der seasons (together about 35% of the cropped area).
Other crops are of minor importance in terms of land occupation, with however some regional exceptions, like the cowpeas in the Mudug and Galgadud regions.

There are four seasons:

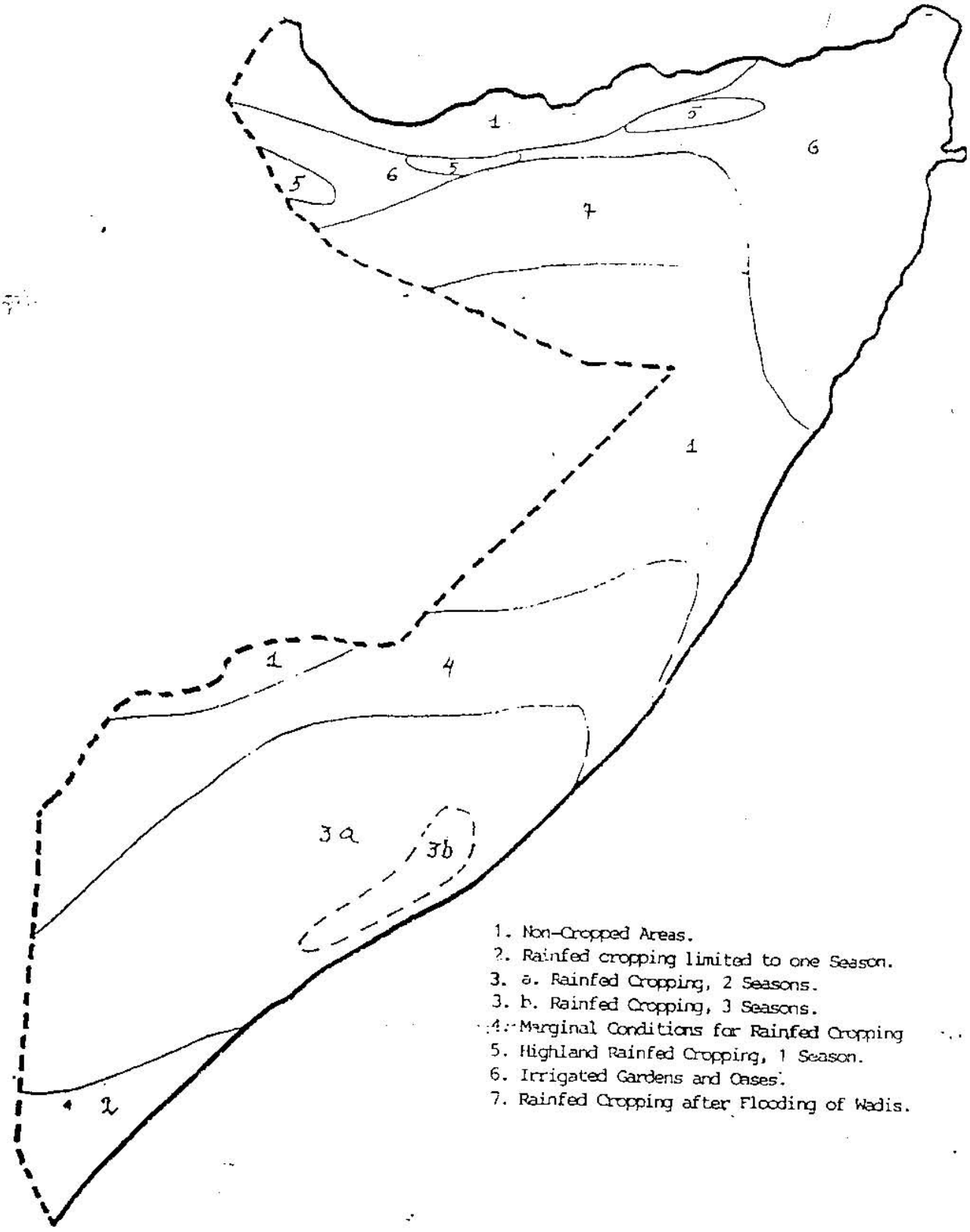
- Gu (April to June) is the main rainy season.
- Hagaa (July to Sept).
- Der (Oct to Dec).
- Jilaal (Jan to March).

In the south, in the regions of Hiran, Bakool, Bay, Gedo, Middle Juba and Middle Shabelle, 2 cropping seasons, a main one (Gu) and a minor one (Der), separated by a dry Hagaa season, are observed. In the Lower Juba, the Gu season is the only cropping season; subsequent rainfall being poor during the Hagaa and Der seasons.
In the Lower Shabelle, 3 cropping seasons are considered, a main Gu (rainfed) season, a secondary Hagaa (rainfed and irrigated) season and secondary Der (irrigated mainly) season. In the central regions, a bimodal pattern prevails (Gu and Der crops). The Nugaal region has poor rainfall and relies on irrigated cropping, when the togs (wadis)

The northern regions do not show a bimodial rainfall pattern, but rather a long regular rain curve starting in April and ending around October. Due to the generally high altitudes the cropping season is longer (150 days in the north-west against 90 days in the south for sorghum). A second crop is sometimes grown late in the season, this is locally known as the "sareen" crop.

Irrigated crops can be grown in any season, depending solely on water availability. In this sense vegetables are grown throughout the year on controlled irrigated perimeters whereas successive plantings of cereals or sesame take place on flood receeding areas, producing hence successively Hagaa, Der and Jilaal crops on the same depression.

SOMALIA: Crop Production Systems Distribution.



1. Non-Cropped Areas.
2. Rainfed cropping limited to one Season.
3. a. Rainfed Cropping, 2 Seasons.
3. b. Rainfed Cropping, 3 Seasons.
4. Marginal Conditions for Rainfed Cropping
5. Highland Rainfed Cropping, 1 Season.
6. Irrigated Gardens and Oases.
7. Rainfed Cropping after Flooding of Wadis.

2. SOILS.

2.1. SOIL SURVEYS.

The country lacks an institution undertaking soil surveys and land classification. However, specific areas have been surveyed under various programmes, which are listed below:

Survey	Location	Area Km2	Map scale
ICA (1961)	Lower Juba Valley	4500	1:650000
Selchozpro-mexport (1965)	Lower and Middle Juba Valley	16000	1:200000
FAO/Lockwood (1967)	South	208500	1: 60000
Technital	Juba Valley	50000	1:200000
HTS(1977)	South	200000	1:500000
HTS(1982)	Bay Region	40500	1:250000
HTS/MMP(1969)	Afgoi Balad	3000 10000	1: 40000 1: 50000
CITACO(1974)	Golweyn	7500	1: 5000 and 1: 25000
MMP (1976)	Jowhar Sugar Estate	1500	1: 20000
Booker Mc-Connell(1976)	Lower Juba Sugar Project	25500	1: 10000 1: 40000
TAMS/FTS (1977)	Mogambo	7000	1: 15000
HTS(1977)	Dujuma	29000	1: 50000
MMP(1978)	Merca district Koryoley	67400 5770	1: 50000 1: 25000
Il Nuovo Castoro(1978)	Sakow District	38600	1: 20000
Romagrimex	Qalimow (District Balad)	5700	1: 25000
SOGREAH(1983)	North West	33500	1:100000

This list is not exhaustive, e.g. studies have been conducted under the British Administration in the Northern part of the country and more recently by the National Range Agency in different range land

2.2. SOIL CLASSIFICATION AND DESCRIPTION.

Extensive soil description is beyond the scope of this report. For southern Somalia the most complete survey was the FAO/Lockwood survey, which classifies the soils into major groups. Physical descriptions and chemical analyses of soils are given in tables. The North West region has been covered by the SOGREAH reports (consulting Engineers of Grenoble).

A short description of the main agricultural soils is given below; nomenclature is from the Lockwood survey:

1. Baidoa Soil.

Deep fine textured, brown to dark brown grumosol, developed in a calcareous mantle of weathered Limestone and/or erosion products of local origin. The soils are fertile, are moderately alkaline and have a low permeability after the first rains. They occur on 238500 ha mainly in the district of Baidoa.

2. Amin Soil.

Deep fine textured, reddish brown grumosol, developed in a calcareous mantle of weathered limestone and erosion products of local origin.
Most fertile, moderately alkaline soils with low permeability after the first rains.
They occur on 103600 ha in the districts of Qansah Dhere and Baidoa.

3. Uiamo Soil.

Deep to moderately deep, fine textured, grey to greyish brown grumosol developed in jurassic and cretaceous limestone. Fertile, moderately to strong alkaline.
They occur on 452800 ha in the districts of Dinsor, and Sakow.

4. Cor Cor Soil.

Deep to moderately deep, fine textured, red to reddish brown calcic soil, developed in jurassic and cretaceous limestone material.
Mildly to moderately alkaline. Occur on 25300 ha in the Cor Cor valley south of the Hoddur-Teyeglow road.

5. Bur Acaba Soil.

Deep, fine textured, dark brown grumosol, developed in jurassic and cretaceous limestone material.
Moderately alkaline, fertile soil.
Occur on 144900 ha in the district of Bur Akaba.

6. Modu Mode Soil.

Deep, fine textured, dark grey to dark greyish brown grumosol, developed in jurassic and cretaceous limestone material.
Fertile, mildly to moderately alkaline.
Occurs on 47200 ha in the district of Bur Akaba.

7. Bardera Soil.

Deep to moderately deep, fine textured, brown to yellowish brown grumosol, developed in jurassic and cretaceous limestone material.
Fertile, moderately alkaline.
Occurs on 194100 ha in the districts of Bardera and Sakow.

8. Oddur Soil.

Deep to moderately deep, fine textured, dark red gypsiferous calcic soil, developed in gypsiferous beds of the cretaceous limestones.
Fertile but marginal rainfall.
Occurs on 64200 ha in a valley north of the Hoddur - Teyeglow road.

9. Bio Addo Soil.

Deep, fine textured, dark red concretionary calcic soils, developed in fine textured older river alluvium.
Fairly fertile, moderately alkaline.
Occurs on 148400 ha in the eastern part of the district of Jowhar.

10. Shebelle Soil.

Deep, fine textured, dark greyish brown to dark brown grumosol, developed in fine textured recent river alluviums.
Fertile, best suited for irrigated cultivation . Occurs on 58600 ha in the districts of Brava, Sablaale and Jilib.

11. Johar Soil.

Deep, fine textured dark brown grumosol, developed in fine textured recent river alluvium.
Fertile, moderately alkaline.
Occurs on 88700 ha in the district of Jowhar.

12. Saruda Soil.

Fine textured dark brown grumosol, developed in fine textured older river alluvium.
Fertile, moderately alkaline, little is cultivated.
Occurs on 151800 ha in the districts of Afgoi, Merca and Koryoley.

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Fertile, moderately alkaline, little is cultivated.
Occurs on 151800 ha in the districts of Afgoi, Merca and Koryoley.

13. Uanle Uen Soil.

Fine textured dark brown to brown grumosol, developed in fine textured older river alluvium.
Fertile, moderately alkaline.
Occurs on 107700 ha in the district of Wanle Weyn and in the eastern part of the district of Jowhar.

14. Goluen Soil.

Deep, fine textured, dark brown to brown grumosol, developed in fine textured recent river alluvium.
Mostly fertile, best suited for irrigated cultivation.
Occurs on 237500 ha in the districts of Balad, Afgoi, Merca and Koryoley.

15. Ganana Soil.

Fine textured very recent alluvial soil. Occurs on 30900 ha on small tracts either sides of the Juba river between Lugh and Jilib.
Frequent flooding.

16. Uebi Soil.

Soil developed in very recent river alluviums, in levee areas flanking the Shabelle river. Occurs on 50000 ha.

17. Haharro Soil.

Hydromorphic soil associated with the Shabelle swamp. Occurs on 5800 ha in the district of Kurtunwarey.

18. Gebiley Soil.

Deep heavy to medium textured, inceptisols or mollisols.
Good suitability for rainfed agriculture.
Occurs on 99000 ha in the Gebiley and Borama plateau area.

19. Tog Wajaale Soil.

Deep, very heavy textured vertisol.
Practically impermeable soil, very calcarous, with a low suitability for rainfed cultivation.
Occurs on 44000 ha in the Tog Wajaale plateau area.

Soils table of Somalia
(Source: Renardi-Santi Company, 1975).

SOIL	% OF TOTAL AREA	APPROX. AREA (Sq.Km)
1. Recent alluvial deposits	1.32	8408
2. Eolian ferruginous sand dune forming sand	11.86	75548
3. Lagoonal and alluvial deposits essentially heavy black soil	8.99	57266
4. Eluvio-alluvial brown calcarous silty clay	4.58	29175
5. Eluvio-alluvial silty sand with local gravel	10.48	66758
6. Red sand on limestone	1.19	7580
7. Red sand clay on gypsiferous limestone	0.33	2102
8. Boulder beds	0.20	1656
9. Shallow lithosols on sandstone	1.49	9491
10. Shallow lithosols on limestone & sandstone	9.62	61279
11. Shallow lithosols on limestone	28.11	179061
12. Shallow lithosols on gypsiferous limestone and sandstone	18.79	119692
13. Basalt flows	0.43	2739
14. Crystalline basement complex with frequent rock outcrops	2.55	16244
	100	637000

3. FARM CHARACTERISTICS.

3.1.. FARM TENANCY LAW OF 1975.

The farm tenancy law No. 73 of 1975 stipulates that all land in Somalia is owned by the state. Concessions for its use for agricultural purposes are granted by the Land and Water Department of the MOA.

Individuals may apply for 50 years leases of up to 30 ha of irrigated land, 60 ha of rainfed land, or 100 ha of plantation land, though no such limit applies to companies, cooperatives and state farms. Application for a lease is made to the district representative of the Department of Land and Water and full details posted in the local police station for 30 days. If no objections have been received by that time the application is passed by the regional office to the department headquarters for issue of the lease. The lease is inheritable, but may not be hired or sold to a third party. However, under exceptional circumstances a lease may be sold in order to pay a bad debt. While the lease is issued free of charge, an annual tax is payable for use of the land.

3.2. FARM TYPES AND SIZES.

3.2.1. TYPES.

In the traditional farming sector, rights to land for cultivation are held by the villages. Land is allocated to village members by the village elders.
The distributed land is used by the family to whom it was allocated and can be passed on to succeeding generations. If the family had no further use for it, control reverted to the village. In 1960 however the Government passed legislation upholding the right of every Somali citizen to live and farm where he should choose independently of his particular clan or lineage affiliation.

Following the legislation of 1975 (law No.73) individuals, cooperatives and companies may apply for concessions, which are valid for 50 years and are registered within the Land and Water Department of the Ministry of Agriculture.
State farms include all project farms, Crash Programme farms, police farms, military farms and prison farms.

3.2.2. SIZES.

Rainfed farming holdings vary from 1 to 100 ha with the average family unit of the order of 15 ha, of which 5 ha are cultivated at one time while the remainder comprise secondary bush or fallow.
In densely populated areas (Bay region, Wanle Weyn) fallows tend to be foreshortened, cultivation cycles are more intensive and there is a general expectation to get 2 crops per year.
In other areas dryland sorghum farming is practiced on a more extensive basis with fallows extending from 3 to 15 years. There localised clearings occur where opportunistic cropping is practised whenever conditions permit.
Sizes of irrigated farms vary widely. Subsistence smallholders farm sizes do not exceed 5 ha, whereas registered large farms, typical for the district of Afgoi, generally exceed 20 ha.

3.3. FARM PRACTICES.

Land preparation is increasingly carried out by hired tractors in the Middle Shabelle, Lower Shabelle and Lower Juba regions. Elsewhere, hand preparation is still the rule.
Planting is generally done by hand. Sesame is mostly broadcast, otherwise pocket or hill planting, at rather large spacings and in a square design is more common.
Row planting is observed only in larger mechanized farms or sometimes with progressive farmers, contacted by the extension service.

Except for the banana plantations, chemical fertilizers are very rarely used, their availability being extremely limited. The same holds for all the phytosanitary equipment. Weeding is generally done by hand.

Before harvest, bird scaring in sorghum and rice fields is often done by children, watching from within the top of Dobera trees, purposely saved and left to grow within the fields..
In Sakow and Bardera, bird scaring by using kites is a common practice.
When high bird populations are recorded, the Bird Control Unit of the Department of Plant Protection takes control measures by using avicides.

Ratoon cropping of sorghum which is a kind of opportunistic cropping, is done whenever the conditions are favourable, this is when early starting Der rains come after a good Gu season which produced a vigorous crop.

The harvest is almost exclusively done by hand. When there are serious bird problems. the sorghum will be harvested early, before full maturity, and piled in stacks which will be left for drying and protected from birds.
The harvest of maize does not present any particular problem.
Cowpeas, beans and cotton balls are picked up at regular intervals, when fruits mature.
Sesame is harvested when the lower pods begin to split and shed. The plants are cut, piled in conal stacks and left for drying. Later on they are threshed.

Traditional storage is done in the so-called "bakars". This are circular pits of 1 to 2 meters diameter and about half a meter deep.
The dried up whole sorghum panicles (of the compact type) are piled in the pit which is afterwards covered with branches, stones, straw and earth to make it almost impervious to rain.
Sorghum stores perfectly this way up to 5 years (up to 15 years in some recorded cases).
The other crops, maize, cowpeas, rice and sesame are generally stored in jute bags, barrels or drums.
Gu crops are harvested for their grain. For hagaa and Der crops however, it often happens that cereals and pulses are harvested green and used as livestock feed. This is a quite common practice in dry years, when there is a shortage of green pastures, and when moisture is not adequate to produce a crop.

3.4. CROPPING PATTERNS

The cropping patterns vary widely from one year to another, from one region to another, between irrigated and rainfed farms and between farm types. The patterns presented here have been assembled according the information we could collect, but do not pretend to be exhaustive. All figures are expressed in percentages.

3.4.1. GEDO REGION.

a. Rainfed.

	Sorghum	Cowpea	Fallow
Gu	69	1	30
Hagaa	0	0	100
Der	20	0	80
Jilaal	0	0	100

b. Pump Irrigated.

	Maize	Sesame	Onions	other	Fallow
Gu	45	24	21	9	0
Hagaa	17	11	52	15	4
Der	52	21	22	1	4
Jilaal	12	6	23	1	58

c. Flood Irrigated.

	Maize	Sesame	Fallow
Gu	75	25	0
Hagaa	0	0	100
Der	25	75	0
Jilaal	0	0	100

1.4.2. MIDDLE JUBA REGION.

. Rainfed.

	Maize	Sorghum	Sesame	Fallow
u	4	56	0	40
agaa	0	0	0	100
r	0	38	2	60
laal	0	0	0	100

Pump Irrigated (Excluding the Sugar and Rice Estates).

	Maize	Sesame	Onions	Tobacco	Fallow
	100	0	0	0	0
aa	0	0	50	50	0
	0	50	0	0	50

c. Flood Irrigated.

	Maize	Sesame + Sorghum	Tobacco	Other	Fallow
Gu	85	15	0	0	0
Hagaa	0	0	3	0	97
Der	40	55	0	5	0
Jilaal	0	0	0	0	100

3.4.3. LOWER JUBA REGION.

a. Rainfed.

	Maize	Cotton	Fallow
Gu	75	25	0
Hagaa	0	25	75
Der	0	25	75
Jilaal	0	0	100

b. Pump Irrigated (Excluding Mogambo Farm).

	Bananas	Maize	Sesame	Groundnuts	Other	Fallow
Gu	77	10	0	0	0	13
Hagaa	77	0	0	0	0	23
Der	77	0	4	2	1	6
Jilaal	77	0	0	0	0	23

c. Flood Irrigated.

	Maize	Sesame	Cotton	Fallow
Gu	80	20	0	0
Hagaa	0	33	3	57
Der	13	54	0	33
Jilaal	0	0	0	100

3.4.4. BAKOOL REGION.

Rainfed.

	Sorghum	Maize	Cowpea+Groundnuts	Sesame	Fallow
Gu	55	2	3	0	40
Hagaa	0	1	0	2	97
Der	50	5	3	2	40
Jilaal	0	0	0	0	100

3.4.5. BAY REGION.

Rainfed.

	Sorghum	Maize	Cowpea	Fallow
Gu	85	2	1	12
Hagaa	0	0	0	100
Der	40	0	0	60
Jilaal	0	0	0	100

3.4.6. LOWER SHABELLE REGION.

a. Rainfed.

	Maize	Sesame	Sorghum	Cotton	Other	Fallow
Gu	60	1	12	0	3	24
Hagaa	0	10	0	3	0	83
Der	9	20	13	3	0	55
Jilaal	0	0	0	0	0	100

b. Irrigated.

	Maize	Sesame	Fruits	Vegetables	Fallow
Gu	40	0	11	0	49
Hagaa	5	18	11	2	64
Der	12	50	11	2	25
Jilaal	0	0	11	1	88

3.4.7. MIDDLE SHABELLE REGION.

a. Rainfed.

	Sorghum	Maize	Sesame	Cowpea	Cotton	Fallow
Gu	12	40	6	5	2	35
Hagaa	0	0	0	0	2	98
Der	15	12	7	6	2	58
Jilaal	0	0	0	0	0	100

b. Irrigated.

	Maize	Sesame	Rice	Sugarcane	Vegetables	Fallow
Gu	51	4	3	7	0	35
Hagaa	3	11	0	7	1	78
Der	0	75	4	7	0	14
Jilaal	0	0	0	7	0	93

3.5. SPECIAL FARMS AND PROJECTS.

A certain numbers of farms are managed by and/or subsidized by the state or external help.
The list is not exhaustive:

1. The Crash Programme farms were established in the seventies as a kind of mechanized demonstration farms to teach nomadic youth modern agriculture. These farms had been successful in providing training but had performed poorly as production units.
During the eighties they were transferred to individual holdings, with the exception of Haway and Togwajaale.
Most of those farms (except Tog Wajaale) are doted with irrigation facilities.

Farm	Cultivated allocated land (hectares).
Belet Weyn	700
Jowhar	340
Genale	650
Shalambod	1500
Jilib	300
Hawaay	1100
Tog Wajaale	8000

2. Settlements farms: These were established to settle destitute nomads after the severe 1973/74 drought

Settlements farms		Allocated land cultivable ha	Cropped land 1984
Kurtunwarey	- irrigated	3000	1500
	- rainfed	3000	250
Sablaale	- irrigated	3000	1200
	- rainfed	3000	250
Dujuma	- irrigated	abandoned	0
	- rainfed	6000	250

3. State farms and project farms.

Farm	allocated land cultivable ha	cropped land 85-87
- Afgoi-Mordinle (LIBSOMA)	3800	1400
- Balad Irrigation Project	2000	1300 (1985)
- Barro Uen (Rice Production)	431	160
- C.A.R.S.Afgoi	400	80
- Fanole (Rice Production)	7750	740
- Sakow Pilot Farm	100	60
- Grapefruit plantation (Goluen)	1845	185
- Grapefruit plantation and nursery (Genale)	230	130
- Jowhar Sugar Estate	8070	1600
- Juba Sugar Project	7719	7600
- Mogambo (rice farm)	2215	1600
- Nursery Projects(42 nurseries)	-	120
- Laba Garas Farm (oilseeds and beans production)	600	200
- Seed production farm (Afgoi)	200	80
- AFMET-Farm	400	300
- Goluen farm(Libsoma)	400	180
- Bonka Research Farm		
- Abuurin Research Farm (North)		
- 100 hectares farm(Baidoa)	100	-
- ADC Farms	500	-
- Other *	8000	-

* Police, Militia, Military, Prison farms etc.

4. Agricultural Development Projects:

- Ministry of Juba Valley Development/USAID/GTZ Project studies on the impact of the planned Bar Dhere dam on agricultural development in the Juba Valley.
- Duduble flood relief channel (16Km).
- Jowhar offstream storage reservoir, stores 205 Mcm on a 11000 ha site.
- BRADP (Bay Region Agricultural Development Project) Integrated regional development.
- NWRADP (Northwest Region Agricultural Development Project) Agricultural Water Management.
- DPP (Date Palm Project) Bari Region.
- Genale-Bulo Mererta Development Project: rehabilitation of the irrigation infrastructure.
- Jowhar small rice farms project (extension) (project terminated in December 1987).
- Seed Production Improvement Project.
- Strengthening of the Agricultural Production Project.
- Semi-mechanized Rainfed Farming Project.
- Rainfed Agriculture Project, Settlement Development Agency.
- Bardhere Experimental Farm.
- Middle Shabelle Agricultural Development Project.
- Grain Storage Warehouse Project.
- Irrigation Development Project, Northwest.
- Strengthening of the Agricultural Planning Project.
- Agricultural Extension and Training Project (AFMET).
- Agricultural Research Project.
- Bird Control Unit.
- Agrometeorology, Early Warning.
- Fertilizer Inputs Project.
- Irrigation Rehabilitation Project.
- Fruit Trees Development Project.
- River Dredging.
- Food Security Project.
- Hydrology Project.

3.6. THE SETTLEMENTS.

The present agricultural settlements were initiated during the 1974/75 drought that severely affected some 250000 people, when the Government moved swiftly to assist the victims by establishing the National Relief Committee. Accordingly, some 90 Relief Centers were opened throughout the country. But after a time, the maintenance of these centers became too costly, which prompted the Government to close them down in 1975. As a practical alternative some 105000 ex-nomads from the relief centers were relocated on a voluntary basis to three agricultural settlements of Dujuma, Sablaale and Kurtunwarey. Another 15000 people were relocated in four fishing communities along the coast at Eil, Adale, Brava and El-Hamud.

The proper selection of settlement sites and organisational and managerial problems handicapped the smooth implementation of the settlement program. In consequence the population in the settlements is declining rapidly. By 1979, only about 56% of the settlers registered in 1976 were still present, large numbers having left to seek their livelihood elsewhere. Job opportunities in the Gulf States were a main incentive for settlers to emigrate. The settlement of Dujuma had to be completely abandoned due to the poor soils around the site.

Nowadays, the settlements of Kurtunwarey and Sablaale have stable or increasing populations and besides the land which is being cultivated under the schemes, important adjacent land areas are being cleared and cropped by new settlers.

3.7.. CROPS GROWN.

A large variety of crops are grown under both rainfed and irrigated conditions which include grains, roots, oilseeds, fibers, fruits, vegetables, stimulant crops and incenses.

The main grain crops are sorghum and maize (which occupy both about 74% of the cropped land), rice and at a smaller scale wheat and millets. The sorghum varieties are of a local, compact head, long stemmed, white or red seeded type. They conserve very well in the underground storage pits (bakar) and their taste is prefered to other foreign varieties. A recognized local variety is the Fud Fudddo.
Most maize grown is also from local origin. Variability is high and no defined type can be recognized. The seeds are generally white but mixed colours occur frequently. Researchers of the CARS in Afgoi selected an open pollinated variety called Somtux, which includes the previously popular Afgoi Composite and a Mexican variety in its parentage. The actual breeding programme leads to the production of composites, populations, hybrid-mixed populations and open-pollinated varieties. The Somtux variety is grown to a certain extent in the Lower Shabelle, Middle Shabelle and Lower Juba regions.
Its purity is however doubtfull, since no breeder's or nucleus seed has been maintained since then.
Wheat has been grown in the Tog Wajaale Crash Programme farm at 1500 m altitude in the North West until 1986. The 1986 crop however completely failed.
Finger Millets are grown on small plots in the central regions, the Hiran and in some coastal areas. Being more water resistant, they are grown in localities which are too marginal for sorghum.

Pulses are grown widely all over the country, generally intercropped within a cereal. Cowpeas (Vigna unguiculata) are by far the most popular pulse. Varieties grown are the local TVU 1502-IC (erect variety) and the local prostrate. It is largely grown intercropped within cereals in the south of the country, or in pure stands mainly in the Mudug and Galgadud regions ("coastal cowpea belt"), in the Bakool, in the district of Aden Yabal and on the red calcic soils east of Jowhar.
Phaseolus beans are grown in the Lower Shabelle. Mung beans are not quite appreciated and are only occasionnally cultivated.

Root crops include cassava, sweet potatoes and Irish potatoes. Cassava is grown mainly in the coastal dune area between Mogadishu and Balad. The crop is used exclusively for cattle feeding. Sweet potatoes are grown on small family plots mainly in the Bari and Lower Juba. Some Irish potatoes are grown in small irrigation schemes in the North-West and Sanaag regions.

The main oilseed crop is sesame. It is grown mainly in the Hagaa (Aug-Oct) and Der (Oct-Dec) seasons, generally on flood receeding soils. This crop does best in sunny and rather dry conditions. Gu season crops (April-June) generally do not set seed well and are often diseased. Several varieties are grown mixed, they are distinguished according the number of locules (4 or 8) and the seed colour (white, reddish brown or black). Sesame matures in 90 days.

Secondary oilseed crops are sunflower and safflower (Carthamus indicus), both of them recently introduced. Sunflower seems to grow relatively well, according the variety, but being very prone to bird damage, it has potential only in bird free areas. Safflower has been grown successfully on an experimental basis in Sablaale, Mogambo and Kurtunwarey.
Cotton is grown in the south, mainly in the Regions of Lower Juba, Lower Shabelle, Middle Shabelle and to a smaller extent, in the Hiran. It is planted in July and harvest starts in November, continueing untill January. Somaltex (the cotton spinning factory in Balad) has an active role in promoting cotton growing by providing seeds, pesticides, and advice. A medium stable variety, called Acala 4-42, is being cultivated. Some cotton oil is extracted from the seeds.
Soybean, groundnuts, cotton and maize have, up to now, not being used for oil extraction in Somalia. Groundnuts are however grown in the south of the country as confectionary nuts. The varieties grown are of bunch type; they are distinguished according to the size of the seeds in large-local and small-local varieties.

Fruits are widely grown over the country both for local consumption as for export.
The banana is, after livestock, the country's second largest export. The banana plantations are located in the Lower Juba (district of Jamame mainly) and Lower Shabelle (district of Merca mainly) regions, and occupy about 6000 hectares. The area cropped under bananas has much varied in the past; the first plantations were established in 1927, when 53 hectares were cropped. This area increased up to 4637 hectares in 1940. Disturbances caused during the second world war period reduced the area to 1300 hectares. Afterwards the planted area increased again up to a peak of 7100 hectares in 1973. Plantings reduced since up to 1982 (2800 ha). Since then however the restructuration of the Somalfruit Company has had beneficial effects on the dynamics of banana growing. The company provides banana growers services like: commercialization, inputs (fertilizers, pesticides, parts for irrigation material and agricultural machines) and loans.
The largest grown banana variety is the Poyo, the export market are Italy, Saudi Arabia and Greece.
Small amounts of grapefruits and watermelons are also exported, but markets are uncertain.
Others fruit grown for local consumption include limes, oranges, mandarines, guava, papaya, mango, pomegranates, melons, dates, coconuts, anonas and grapes. A local edible nut is found in the central regions: the yicib (Cordeauxia edulis).

Vegetables are widely grown in irrigated perimeters. Onion has become the main cash crop in controlled irrigated areas of the districts of Geed Weyn, Lugh, Garba Harey, Bardera and Sakow. The most common variety is Texas Grano. The maturity time is around 120 days.
Tomatoes are intensively grown mainly in the Lower and Middle Shabelle regions. Other vegetables grown include green and hot peppers, squash, cucumbers, ochra, lettuce, cabbage, carrots and several kinds of greens.

Sugarcane is grown in two state estates: the Juba Sugar Project in Mareréy (district of Jilib) and the Jowhar Sugar Estate. In Mareréy, about 8000 hectares are devoted to sugarcane. Irrigation is done by sprinklers. The Jowhar Sugar Estate was established much earlier on a total area of 8070 ha. However, successive croppings induced serious salinity problems and by 1985 most land was left fallow for desalinization. Since then, production has increased again. Mostly the varieties CO 997 and NCO 310 are grown.

Non food crops include tobacco, grown along the Juba mainly, and incense trees which are found in the Bari and Sanaag regions. The latter constitute a non negligible export market.

3.8. SERVICES TO THE AGRICULTURAL SECTOR.

3.8.1. MINISTRY OF AGRICULTURE.

- Department of Land and Water:
  - Land tenure registration.
  - Hydrological data collection.
  - Analysis and control of river water use.
  - Irrigation development planning and coordination.

- Department of Plant Protection:
  - Pest and disease control
  - Bird Control Unit

- Food Early Warning System Department.
  - Meteorological recording network.
  - Data collection service.
  - Food production prognosis unit.
  - Remote sensing unit.
  - Provision of information and advice.

- Department of Planning & Administration.

- Agricultural statistics and planning.
  - Food Policy Group.
  - Agricultural cartography.

- Agricultural Research Services.
  - Afgoi, Central Agricultural Research Station.
  - Substations at: Bonka (Baidoa), Alessandra and Abuurin (Gebiley).

- Department of Production & Extension.
  - Services.

Regional and District Offices:
- Regional Offices:
  Garba Hare, Boale, Kismayo, Hoddur, Baidoa, Belet Weyn, Jowhar, Shalambod, Dusa Mareb Galcaio, Garowe, Qardho, Erigavo, Burao, Hargheisa, and Baki.
- District Offices:
  Geed Weyn, Lugh, Bardera, Sakow, Jilib, Jamame, Afmadu, Wajid, Teyeglow, Dinsor, Qansah Dhere, Bur Akaba, Bulo Burti, Jalalaksi, Aden Yabal, Balad, Afgoi, Wanle Wein, Genale, Koryolay, Kurtunware, Brava, Sablaale, Sheekh, Gebiley, Borama.

3.8.2. PARASTATAL AGENCIES INVOLVED IN THE AGRICULTURAL SECTOR:

- ADC (Agricultural Development Corporation).
  Grain Marketing, creation of National grain reserves,
  input supply to small farmers.

- ENB: (National Banana Board).
  Control, marketing and export of bananas.
  Operation of some estates and packing stations.
  Supplies to banana producers.

- AFMET (Agricultural Farm Management and Extension
  Training Project).
  Extension services with regional networks in southern
  Somalia.

- ONAT (Farm Machinery and Agricultural Service Organization):
  Agricultural Machinery hire services.
  Depots at: Muqdisho, Jowhar, Balad, Afgoi, Shalambod, Koryoley,
  Jamame, Jilib, Boale, Bardere, Baidoa,..

- ACP (Agricultural Crash Programme).

- SDA (Settlement Development Agency).

- NRC (National Refugee Commission): Refugee Settlements.

4.1.4. GARBA HARE.

Garba Hare is mainly a pastoral district, with a broken landscape. There are many seasonal rivers (Togs) drying quickly off.
The cultivated area in this district amounts to 3500 ha. 1600 ha are cultivated afar from the river along the togs. The cultivated area along the Juba stretches over about 1900 hectares, of which 300 ha are pump irrigation and 1600 ha sometimes flood irrigated (Otherwise used as rainfed land).
Rainfed agriculture is localized along alluvial flats in the togs. Eleven areas of about 150 ha each practice rainfed agriculture this way, the most important being at Tuulo Barwaaqo, where 150 farmers cultivate about 500 ha of land.
In the rainfed areas only sorghum is grown. Crop failures are relatively frequent.
Mixed rainfed, falling flood and controlled irrigation takes place along the Juba river, on a narrow area stretching 16 Km south from Burdhubo till 12 Km north, at Milkaahid.
Pump irrigation seems limited in the area between Burdhubo and Suriyo. Onions, maize, sesame, fruits are the main crops. Flood recession irrigation takes places in years when the river floods its banks. Sesame, maize and sorghum are cropped this way.

4.1.5. EL WAQ.

El Waq is a pastoral district with virtually no agriculture. The Adaable gaayo - Kheydarey - Qansahle area has a good potential for agriculture but has not yet started to be exploited.

4.1.6. BARDERA.

Bardera is the main agricultural district of the Gedo region, consisting of 180 villages for which main occupation, for most of them, is rainfed agriculture. The total agricultural area of the district is estimated to be 42400 ha, of which 1550 ha are pump irrigated.
The main rainfed area is on the left bank of the Juba and extends north from Dhoobley (close to the projected dam site) to Tuulo Cadey (7 Km south of Barow Dinle) in the south. Its width stretches from about 15 Km at Baardheere to just 5 Km in the south. More isolated stretches of rainfed cultivation on the left bank are found at Garas Shabay, Kormoog and Reydab.
The right bank has much less cultivation, the main area being opposite Baardhere town. Other stretches are found southwards (Waaba, Qasalow). About 400 ha are cultivated around Fafadun.
The average farm size is 9 hectares (includes cropped, fallow and bushland used by the farmer's livestock). The only rainfed crop is sorghum, sometimes intercropped with cowpeas.
The average farm size of small-scale irrigation schemes amount to 3 ha. The major crops are onions and maize. Other grain crops under irrigation are sesame, tobacco and bananas.

4.2. MIDDLE JUBA REGION.

4.2.1. SAKOW.

The conditions for rainfed cultivation in Sakow are close to those of Bardera in terms of rainfall quantity and distribution.

The total agricultural area of the district is 25200 ha, of which 1800 ha are flood irrigated and 100 ha pump-irrigated.

The rainfed land lies along the river between Buulo Caddey in the north and the town of Sakow in the south. Another area extends along the road from Barka Mumin Dorow to Banada and from there north to the area of Galgalonley. The main area for rainfed agriculture in Saakow however, is that part of the district which lies in the north-east direction from the town of Saakow starting a few kilometers outside the town and extending over more than 40 Km. It covers the areas of Hoodoy, Geed Cajuuso, Labi Buul, Finka Weera, Qurdhuuba, Gadduđey, Golooley, Bagaadey and Goomir.
The average farm size is 10 ha. The only rainfed crop is sorghum, sometimes intercropped with cowpeas.
"Deshek" cultivation, which is cultivation on flood recession depressions along the river is practiced on 1800 ha. The main crop during the Gu season is maize (80%) with some sorghum and sesame. During the Der season about equal amounts of maize, sesame and sorghum are grown. During the Hagaa some tobacco is sometimes grown. Twenty desheks bear regularly crops in the district, whereas 9 are abandoned as their banks are too high for regular flooding or for other reasons. These are listed below:

	Name	Total area (ha)	Cultiv. area (ha)
1	Kuraawo	300	150
2	Dhokay	100	70
3	Hiloamin	200	50
4	Kulmis	100	50
5	Qunjaale	100	50
6	Siigaale	15	10
7	Qataa Gori	250	50
8	Libaaxle	15	10
9	Kaxarow	100	8
10	Hiloari	18	8
11	Lawey to Bari	100	40
12	Buulo Batuulo	60	50
13	Gurmeyso	300	200
14	Biribirs	300	150
15	Groof	80	50
16	Saakow	100	100
17	Arbay	200	150
18	Hakaa	150	50
19	Buurfuule	300	300
20	Lalteley	40	20
	Total	2888	1566

The duration of flooding ranges from one half to 1 month. The levees may be inundated to a depth of 0.5-2 meters. Typical values are 1 year for return period of flooding, a size of 100-300 ha, a cultivation extent of 50-80% and a cultivated area of about 1 ha per farmer.

In 5 desheks, controled irrigation facilities exist. These are at Gurmeyso (43 ha), Kulmis (3 ha) Saakow (17 ha), Berberisso (24 ha) and Saakow Yeri (100 ha) 13 pumps were in operation in September 1984. Grown crops under controlled irrigation are maize in the Jilaal and Gu season, tobacco and onions in the Hagaa season and sesame in the Der season.

4.2.3. BOALE.

The rainfall pattern in Boale is bimodal, the total annual rainfall reaching 500 mm.

The total agricultural area of the district is 7400 ha, of which 1360 ha are rainfed, 100 ha pump irrigated and 5940 ha flood irrigated.

The rainfed fields are concentrated around the town of Boale next to both river banks. Rainfed grown crops are sorghum, maize and cowpeas. Most irrigation schemes are in disuse for the moment, these included the ones of Buguio Wein (70ha). Bidi Dhokaal (50 ha) and Farbiito (20 ha). Two irrigation pumps are operational in Boale, at the Agricultural experimental farm and the range farm, irrigating 2.5 ha. The main agricultural land in the district are the so-called "desheks", which are depressions along the river, bounded by dykes and which are inundated during the river's high floods. Generally, those desheks are cultivated under rainfed conditions, mainly in the Gu season and for those which are flooded only very infrequently. Flooding can be controlled or not, according to the deshek, by opening breaches in the dykes.
Cultivation takes place only when the floods recede, which can take anything from 0.5 to 6 months.
Successive plantings follow which will extend over the Hagaa, Der and Jilaal seasons. The last harvest will be terminated just before the next Gu season start (early April).

About 6000 ha of desheks can be cultivated, but less than half of their surface is cropped.
32 desheks are actually cultivated, they are listed below:

	Name	Total area (ha)	Cultivated area (ha)
1	Korisow	350	175
2	Wareegta	100	40
3	Cilmi	40	25
4	Jabi	250	125
5	Big Sukeyla	100	75
6	Maharis	110	2
7	Gola	80	10
8	Gobatow	400	250
9	Dujuma	500	75
10	Tateey	100	50
11	Maluqe	100	25
12	Osman Yarow	40	25
13	Banta	300	150
14	BuBuule	200	(45)
15	Buurfuule	100	41
16	Quard'hale	40	75
17	Bandar Jidid/C	400	75
18	Kafliuqe	100	50
19	Billi Weyb	100	12
20	Raxoole/Moloolow	150	30
21	Reebaay	300	150
22	Dhujuma	200	75
23	Bug ıios Wein	350	200
24	Quardhaale	350	110
25	Hangoolle	200	40
26	Bidi/Dhokaal	300	160
27	Afgoye/Somba	100	45
28	Kaskeye/Washani	100	40
29	Farbiito	150	100
30	Urufle	250	125
31	Shangani	200	50
32	Manaane	175	90
	Total	6235	1838

Two desheks, Sdeley and Small Sukeyla have been abandoned an account of salinity. The average deshek size is about 200 ha. 8 desheks are smaller than 40 ha. About 95% of the cultivated area is located in 65% of the desheks. Duration and depth of flooding at levees range from half to one month and 0.5-2 m respectively. Typical values are 1 year for return period of flooding, a size of 100-300 ha, and a cultivation extent of 50-80%.
The crops grown in the desheks are mainly maize for the Gu season and sesame+maize for the Der season.
The average farm size is small, in the order of 1 ha, but big differences exist between desheks. In Dujuma mechanical land preparation equipment is available and farm holdings are somewhat larger.

4.2.3. JILIB.

The mean annual rainfall at Alessandra (near Jilib) is 585 mm, whereas at Mareрey JSP it is 764 mm. Most of the rains are received in the Gu season; the Der season is less marked whereas Hagaa showers are not infrequent.

The total agricultural area of the district is 24700 ha, of which 11070 ha are rainfed, 3680 ha flood irrigated and 9950 ha controlled irrigated.

The main rainfed areas are found along the river downstream of Fanole; they are scattered mainly along the right bank of the Juba river, west of the little Juba in the north and inside and around the project area of the Juba Sugar Project in the lower part of the district. About 5500 ha are located in this area.

Another important rainfed cropping is the Homboy area, SE of Jilib, along the lowest portion of the Shabelle riverbed, usually dry. Around 4500 ha are cropped in the area which is experiencing actually a rapid agricultural development.
Other agricultural areas are scattered towards the east: Haramka (550ha), Biliq Tale, Jirfa and Bafley (about 500 ha together).

The main rainfed crop in the Gu season is maize (65%), followed by beans (22%) and sesame (12%).
In the Der season mainly sesame (77%) and maize (22%) are grown.
In the Homboy area, maize (50%), sesame (20%) and cotton (20%) are grown during the Gu; whereas mainly sorghum (80%) and sesame (15%) are grown in the Der seasons.

There are 14 desheks in the district. Duration and depth of flooding on the levees are 1/2 month and 50 cm respectively. Return period of flooding range from 1 to 2 years, the size of the desheks lies between 100 and 400 ha, while the extent of cultivation is between 25% and 75%. The area cultivated by farmer is about 2 ha. Most of those desheks are rainfed cultivated, sometimes flooded by cutting gaps in the bunds during Der seasons.

Around 3700 ha of deshek land (deshek + levee land) is cultivated, details of the 14 desheks are given below:

	Name	total area (ha)	Cultivated area(ha)
1	Malenda	150	100
2	Mayenda	40	25
3	Wagadey	300	200
4	Brwaaqo	200	100
5	Bolboode	100	40
6	Helashid	120	80
7	Xaramka	100	70
8	Balley	400	100
9	Nasiib Bunde	150	100
10	Limoole	150	100
11	Manyagaabo	150	120
12	Qaliyo/Qomole	1000	1000
13	Tawakal	100	50
14	Haraawe	150	75
	Total	3110	2140

The main crop is maize during the Gu season. In the Der season, half of the land is cropped with maize and half with sesame. Watermelons are also an important Der cash crop.

9950 ha of land are cropped under controlled irrigation. The Juba Sugar Project at Marerey irrigates an area of almost 8000 ha of sugarcane. The Fanoole rice farm down Jilib irrigates actually 750 ha (1987). Works are currently underway to increase this. The remaining 600 ha are small-scale irrigation schemes. A cooperative of 35 members irrigating 150 ha is operational at Nasiib Bunde.

4.3. LOWER JUBA REGION.

4.3.1. JAMAME AND KISMAYO.

The average rainfall at Jamame is 604 mm (3 years record). It decreases towards the coast, being 383 mm at Bulo Gudud/Ionte and 350 mm at Kismayo.
The rains fall mainly in the Gu season, with occasional scattered showers in the Hagaa and the Der seasons.

The agricultural areas for Jamame and Kismayo are 20150 ha and 7300 ha respectively, of which 7880 ha are flood irrigated and 9200 ha controlled irrigated in Jamame, whereas 1000 ha are controlled irrigated in Kismayo.

The district of Jamame has about 3070 ha of pure rainfed land. On the right side of the river there are scattered small areas beginning south of the Juba Sugar Project, near the river and around the Mogambo Project down to Buurkay, on the recent alluvial soils of Wirkoi-Zunguni and Calangi Ungumbo. On the left bank of the river there is a rainfed area east of Kamsuma.

The main rainfed area in this district is the area south of Jamame, extending mainly on the grey grumosols of Cebi, the recent alluvial soils of Touta Alessandra and partially over the solonetzic soils of Margherita. Beginning at Bangeeni, the area extends down to Niirey, Jannale and Turdho. In the east and south-east the borders of the area are the sand dunes of Biilaq, Dema, Galad Ley and Naftaa Quur.

7300 ha are rainfed cropped in Kismayo. One area (2000 ha) extends on both sides of the river between Buulo Guduud and Goob Weyn. The country's largest coconut grove is found there. Another area is in the immediate vicinity of Kismayo, mainly towards the west on a solontchak soil (Soia) and towards the north. Other scattered areas of rainfed cultivation are at Qod Qod, Buulo Haji, Canjeel, Gobo Kibir, Yaaq Shiniile, and several small localities along the Baddana river, all situated west or north west from Kismayo, on Terra Rossa soils (together 5300 ha).

The main rainfed crop is maize, followed by cotton and then by sesame, groundnuts and cowpeas. Only Gu season crops are grown. Cotton is however planted relatively late in the season and its growing cycle extends to the subsequent Hagaa and Der seasons. On the Terra Rossa soils only maize is grown.

Kismayo has one deshek, of 100 ha of which 20 are cultivated rainfedwise, at Yuuntoy. There are several desheks in the district of Jamame, the most important one being the Deshek Waamo (area of 1000 ha of which 700 ha are cultivated). Fourteen other desheks are found in the district, all but one cultivated . They are rainfed cropped and floods contribute rather at destroying crops instead of improving their cultivation. Ten desheks have controlled irrigation facilities (pumps and canals) but not all are operational.

In these districts, the return periods for flooding are generally 5-6 years. The distance between river and the desheks, which are much larger than those of the Middle Juba, varies between 3 to 5 Km. Supply of flood water for improved flood recession cultivation would require long inlet canals. In fact, since the construction of flood-protection dykes along the river to protect banana schemes, flooding has become less frequent and farmers have abandoned flood-recession cultivation. Only in years of serious floods, like in June 1987, flooding occured in desheks and some flood cropping was carried out. In most years, those desheks are just rainfed cropped.

Controlled irrigation schemes are a dominant feature for these 2 districts; 9200 ha in Jamame and 1000 ha in Kismayo.
The biggest irrigated farm is the Mogambo farm, which has now about 1000 ha of irrigation infrastructure, the total irrigated area would be over 2200 ha at completion.
Banana farms occupy about 5000 ha of the area, of which 3500 ha are under bananas, the remainder being left fallow for banana rotation. In 1984, 76 banana farms were registered.
About 300 ha of the area are irrigated under other crops, mainly maize in the Gu season and sesame in the Der season, but also some coconut groves and mango trees.

4.3.2. AFMADU AND BADHAADE.

These districts are located in the so-called Trans-Juba marine clay Plains, with an annual rainfall of 500 to 600 mm.

About 6500 ha are currently cropped in the region. The agricultural area, comprising recent and old fallow land, is estimated at 25800 ha.

The soils found in the area are generally solontchaks and solonetzes which have very low levels of permeability and which topsoils are under lain by intensely saline and alkaline sub-surface horizons.

The whole region, particularly the southern portion is used as rangeland. Villages are small, widely scattered and infrequent, cultivation is very localised.

The main agricultural center is Bilis Qooyaani in the district of Afmadu. Centers in Badhaade are Hoosingo, Wadajir & Baadhaade.

Opportunistic cropping by nomads is the main feature in the region. Maize is the main crop, grown during the Gu season.

4.4. BAKOOL REGION.

The region is in a low rainfall area (about 350-400 mm). The rainfall pattern is bimodal. Der season crop failures are common, whereas Gu season failures are not infrequent. There is no irrigated land in the region.

4.4.1.WAJID.

About 2400 ha of land are cultivated in this district.

The main agricultural area of the district stretches in a U shape valley, about 20 Km north from Wajid town, from the village of Guubey to Buur Bakaar, Buur Dhuxunle and up to Buur Caddey. About 1600 ha of land are cultivated, of which 1300 ha are currently cropped in good seasons.
Two other small cultivated areas are located 30 Km SE of Wajid town, at Bakar Weyn and Bakar Yar, where about 800 ha of land is cultivated. These are two small "outcrops" of the Baidoa soil area, laying southwards.
A very small area is cultivated around the village of Aliyow, on the road to Lugh and close to the border with this district.

The main crop is sorghum, sometimes intercropped with cowpeas. Small maize plots are sometimes cultivated close to villages.

4.4.2. HODDUR AND TEYEGLOW.

The agricultural areas of those two districts are two long valleys, situated respectively north and south of the Hoddur-Teyeglow road and stretching each from Hoddur up to 20 Km beyond Teyeglow.

The northern stretch (Oddur soil) has a gypsiferous dark red calcic soil; whereas the southern one (corcor soils) has a concretionary dark red to reddish brown calcic soil.
The total cultivated area amounts to 22600 ha of which 8400 ha are situated in the district of Hoddur and 14200 ha in the district of Teyeglow.
The Oddur soil zone contributes to about 60% of the cultivated area, whereas the Corcor soil zone for the rest.

The main crop is sorghum in both seasons. Pure stands of cowpeas are also frequent. Cowpeas, sesame and groundnuts are occasionally intercropped.
Maize is often grown on the better soils, generally close to the villages.
A feature for this region is the accumulation of rainwater run-off in the valleys depressions, which allows opportunistic Hagaa and Jilaal season cropping of mainly sesame and maize. About 2000 ha are flooded this way in good years.
Other crops grown include tomatoes, mungbeans, watermelons and even wheat (experimental, near Hoddur).

4.4.3. YET AND EL BARDE.

These are pure pastoral districts, and have no cultivable land.

4.5. BAY REGION.

This is the country's main rainfed agricultural region. Rainfall is bimodal and averages 571 mm in Baidoa and 451 mm in Dinsor.

4.5.1. BAIDOA.

Baidoa has an estimated agricultural area of 85200 ha, of which 800 ha are irrigated.
Serious discrepancies exist about estimates of agricultural areas of this district, and as a general rule, of all districts of the Bay Region.
FEWS estimated the area at 32100 ha in 1983. The RMR survey in 1983 estimated the agricultural area of both Baidoa and Qansah Dhere at 147300 ha.
The LRDC survey of 1985 estimated the same area at 120500 ha.
The FEWS in 1987 estimated the agricultural area at 85200 ha for Baidoa and 43050 ha for Qansah Dhere (total 118850 ha).

The main agricultural area is a huge zone stretching north and south on the western side of Baidoa-town, about 80 Km long and 25 Km wide. The whole area stretches over 238500 ha of an excellent brown grumosol (Baidoa soil).
Its southern border (with the Habaalo Barbaar area of the district of Qansah Dhere) is at Qansax Sheb. The northern parts include the isolated land strips of the Galool plain along the Baidoa-Hoddur road.
The percentage of all cropland in this zone is, according the RMR survey, 40% or higher. This includes however long-term fallows of Acacia spp. secondary bushland.
Other stretches of cultivated land of reddish brown grumosol (Amin soil) are located on 3 strips north of Berdaale and one stretch in the Galgal plain, 10 Km south of Berdaale.
The whole district is believed to have about 500 villages of agricultural importance. The rural population density is 31.5 persons per Km^2, the highest in Somalia in pure rainfed areas, which would bring the farming population at about 75000 persons in the district.
The average farm area is probably slightly over 5.5 ha.
Existing irrigated areas are restricted to a few small schemes which draw water from springs issuing from localised perched aquifers on the edge of the escarpment to the north east of Baidoa (Wamay, Areg, Xalimeey..), and to small schemes in the valley of the tog Shiikh Asharow (SE of Baidoa). Water is frequently drawn by hand and most irrigated areas are no bigger than garden plots.

Sorghum is the main crop in both Gu and Der seasons.
Cowpeas are often intercropped with sorghum, generally at low plant populations. Maize is often cropped mainly in the immediate vicinity of the villages. Groundnuts and sesame are not common in the region.

Research on rainfed crops is going on in the Bonka Agricultural Research Farm, 6 Km from Baidoa town, where new varieties of sorghum and beans are tested and where safflower and sunflower are introduced.
A seed multiplication farm exists nearby.

4.5.2. BUR AKABA.

The total agricultural area is estimated at 75800 ha. The FEWS 1983, RMR 1983 and LRDC 1985 data gave respectively 55000 ha, 147300 ha and 120500 ha.
Actually cropped areas show less discrepancies:
42400 ha in 1983 (FEWS), 56300 ha in 1985 (LRDC), 55300 ha in 1986 (FEWS).

The district is located in the basement peneplain characterised by the intrusion of granite inselbergs, the burs.
The districts main agricultural area is a huge deeply dissected tract of land stretching all around Bur Akaba town. It is constituted of a dark brown grumosol (Bur Acaba soil) occupying 144900 ha. The area is dotted with a constellation of villages. The percentage of cropland is between 20 and 40% (RMR), thus less than in the Baidoa area. This area accounts for about 65% of the district's agricultural area (49000 ha). The district's second agricultural area lays mainly south west wards between the villages of Daynuunay and Lugabaro, on the Baidoa-Bur Akaba road. It stretches over 47200 ha of a fertile dark grey to dark greyish brown grumosol (Modu Mode soil), of which 24100 ha are cultivated (or 32% of the district's agricultural area).
The fields are less scattered than in the Bur Akaba area. Small isolated areas of some agricultural importance account for the remaining 2700 ha. These are located at Erjeegle (outcrop of Modu Mode soil), Barow (along the Baidoa escarpment) and several small tracts isolated in the peneplain between Yaaq Brawe and Bur Akaba.
About 214000 rural people inhabit the district (LRDC) which would leave 2.5 ha per farming family. In fact, unlike Baidoa, cropping is considered of minor importance in this district compared to livestock raising, which remains the main source of income for the farming community.
If we except some "flood irrigated" sesame and maize along the tog Urugey, there are no irrigated areas in the district. Potential for small scale irrigation exists however, along the Baidoa escarpment, in the northern part of the district, where 8 spring wells deliver between 50 and 150 liters per second, but this potential is not used due to the remoteness of these places.

The main crop is sorghum, sometimes loosely intercropped with cowpeas. Maize is grown on small plots, generally close to villages. Sesame and grounduts are of minor importance.

4.5.3. QANSAH DHERE.

The agricultural area of Qansah Dhere is estimated to be 43050 ha, all rainfed.

The main area stretches along the Qansah Dhere-Ufurow-Garas Mankey road, which occupies an area of 45600 ha of an excellent reddish brown grumosol (Amin soil), said to be the best in the region which produces the highest sorghum yields, of which 29400 ha are currently under cultivation cycle.
The fields in this area are characterized by their large size, the individual plots being marked by lines of Aloe plants.

A second area which has been more recently cleared for cultivation stretches in a NE-SW direction 20 Km NW from Ufurow (Magle area). It occupies 8800 ha of Amin soils of which 2100 ha are believed to be cultivated.
The area still remains relatively remote, being linked with Ufurow by a track.
A third area, second in importance, is around the town of Habaalo Barbaar, on a NE-SW stretch which constitutes the "tail" of the Baidoa agricultural area. It occupies 23200 ha of grey to greyish brown grumosol (Uiamo soil) of which 11600 ha are under a cultivation cycle. Fields here are much more scattered than around Qansah Dhere-Ufurow.

The main crop is sorghum. Besides some cowpeas and grounduts are grown. Maize and sesame are not grown.

4.5.4. DINSOR.

The agricultural area of the District of Dinsor is estimated to be 30000 ha, all rainfed.

Apart for the area situated north of Dinsor town, the agricultural areas in the district are fairly isolated, without any fair road connections. Unlike in Qansah Dhere, farming is considered to be a secondary activity, animal husbandry being first.
The main agricultural area stretches on a broad area starting east of the Dinsor-Ufurow road up to Xabibayaal, in the west. Four large cultivated areas can be recognized, besides a multitude of scattered fields, at Xafata, Korow, Kurman and north of Dinsor.
The soil is a greyish brown grumosol (Uiamo), occupying about 33600 ha, of which 18000 are cultivated.
A second stretch of cultivated soils is situated at Buulo Guduud and the nearby villages, 40 Km.SW from Dinsor. The area is particularly isolated. Small tracts of cultivated land are also found in the vicinity of the town of Yaaq Braawe, in the southern part of the district.
Large areas of cultivable grumosols are found in the south-western part of the district, along the borderline with Sakow; these have not yet started to be exploited however.

Like in the other districts of the Bay Region, the main crop is sorghum. Besides some cowpeas, maize and groundnuts are grown.

4.6. LOWER SHABELLE REGION.

4.6.1. WANLE WEYN.

The rainfall pattern in this district is bimodal, with a marked Gu season and a less reliable Der season. The total annual rainfall is 565 mm
It is the only district of the region which has no irrigated area.
The agricultural area is estimated at 48150 ha.

The main stretch of agricultural soils, with a relatively high land occupation is formed by the "Uanle Uen" soils, a dark brown to brown grumosol, occupying 107700 ha. This stretch begins at Duhurboode, continues towards the SW to Uanle Uen, curves then south towards Waroos Maal, Tabaragle and finishes at Dharabo village. About 34500 ha of agricultural lands is found in this stretch, this is 72% of the district. Another separate stretch of Uanle Uen soils is found at Jameeco Mukhtaar, this area belongs however to the district of Jowhar.
Another zone of agricultural importance lays south of the Uanle Uen zone, stretching from the Bur Akaba-Jannaale road up to the district border with Jowhar. This zone is characterised by a dark brown to dark greyish brown grumosol, with a heavy surface which is hard to cultivate. The southern part of this soil's zone, from Duduble through Iidow Qudoow up to Cambarow, is moderately cultivated (2900 ha). The rest of this soil's zone bears only little cultivation, with the exception of an area of about 3200 ha around Dan Wadaag, where the Laba Garas farm (600 ha) is situated.
A third agricultural zone stretches from War Mahan towards the NE, on Saruda soils, a dark brown grumosol. Land occupation is high; the War Mahan livestock holding ground is situated within this zone.
The best ecological conditions are found in this Saruda soil zone, and generally the best yields are obtained here. Maize and sorghum are of equal importance during the Gu season. Sorghum and sesame are grown in Der seasons.
In the other zones (Wanle Weyn and War Mahan soils zones) the fields are more dispersed, fallows are longer, yields poorer. Sorghum is the main crop, followed by maize. Cotton, cowpeas and sesame are also quite largely grown. Groundnuts are cultivated at the Laba Garas farm and in small villagers plots. In terms of infrastructure and agricultural inputs, this district is the poorest of the Lower Shabelle Region. Only traditional farming is practiced.

4.6.2. AFGOI.

The annual rainfall at Afgoi amounts to 494 mm with a marked Gu season, important Hagaa showers in coastal areas and a marked, but less reliable, Der season.

There are three cropping seasons:
- The main rainfed cropping season in the Gu:
  Mainly maize.
- A Hagaa cropping season with flood irrigated and rainfed sesame, rainfed cotton and some controlled irrigated maize.
- A Der cropping season, with rainfed sorghum and sesame, and irrigated sesame and maize.

This district has an estimated area of 47350 ha of agricultural land, of which 5100 are controlled irrigated and 10000 ha can be flood irrigated.
Rainfed cultivation is practiced all over the zone of the Goluen soils along the river, a fine textured, dark brown to brown grumosol. This zone being limited by the coastal sand dunes in the south and the Saruda soils zone towards the north.
Areas of intensive cultivation are however localized:
- the Afgoi-Buulallow-Doon Weyne zone with large open fields can be considered as the district's main agricultural rainfed zone.
- All the riverine zone of mixed rainfed-irrigated agriculture between Bariirre and Daarassalaam.
- The zone stretching from Afgoi to Laantabuur.
- A zone around Lambar Kontan, recently claimed.

More scattered fields and a more traditional farming system are located at Alifow & Gaalgube in the NE and several villages (Jeeran, Buulo Risi..) east of Afgoi.
A large zone of very little cultivated land still lies in an area between Laanta Buur-Moordinle-Lambar Kontan and Audegle.
In Gu seasons, maize, often intercropped with cowpeas, is the main crop on rainfed farms. In Hagaa seasons cotton and sesame are grown. In Der seasons sorghum is mainly grown in the Buulallow and Lambar Konton areas, sesame is the main crop in the other areas.

Controlled irrigation schemes are located all in the immediate vicinity of the river starting at Baqdaad (cooperative growing grapefruits) down to Afgoi, where many small farmers and cooperatives operate diesel pumps. The main crops grown in this area are fruit trees (citrus, papaya, bananas), vegetables and maize. The CARS is located in this zone. From Afgoi to Beled Aamin, the irrigation schemes are mainly concentrated on the river's left bank. The Mordinle farm is situated here which at completion should irrigated 3800 ha of land. Actually about 1400 ha are irrigated of which 1200 ha are under annual crop and 200 ha under fruit trees.

The next irrigated zone is at Bariire-Raaxoole, though this is quite limited. It is in this area that the fodder farm irrigation project (GIZA) of Lambar Kontan is at present being built.

Starting from Bariire and up to Audegle, floods can occur, and up to 10000 ha of land can be cultivated under flood irrigation in this area, during high flow periods.
Starting from Audegle, and onwards up to Kurtunwaarey, the river banks have been embanked and floods are controlled.
From here on also, starts the region's main controlled irrigated area.

The main crop grown under controlled irrigation is maize. Irrigation is however given only in cases the maize starts to wilt seriously. Regular irrigation is given in the banana, citrus and papaya plantations, and on the vegetable garden plots.

Flood irrigated land is cropped exclusively with sesame. Rough estimates about perennial crops cultivated in the district are 800 ha of bananas, 1000 ha of citrus and 200 ha of papayas.

Besides the Central Agricultural Research Station, the GIZA project and the Mordinle farm, already cited; the district contains a seed multiplication farm, a dairy farm, a tomato paste and mango juice factory and several police and prison farms.

4.6.3. MERCA AND KORYOLEY.

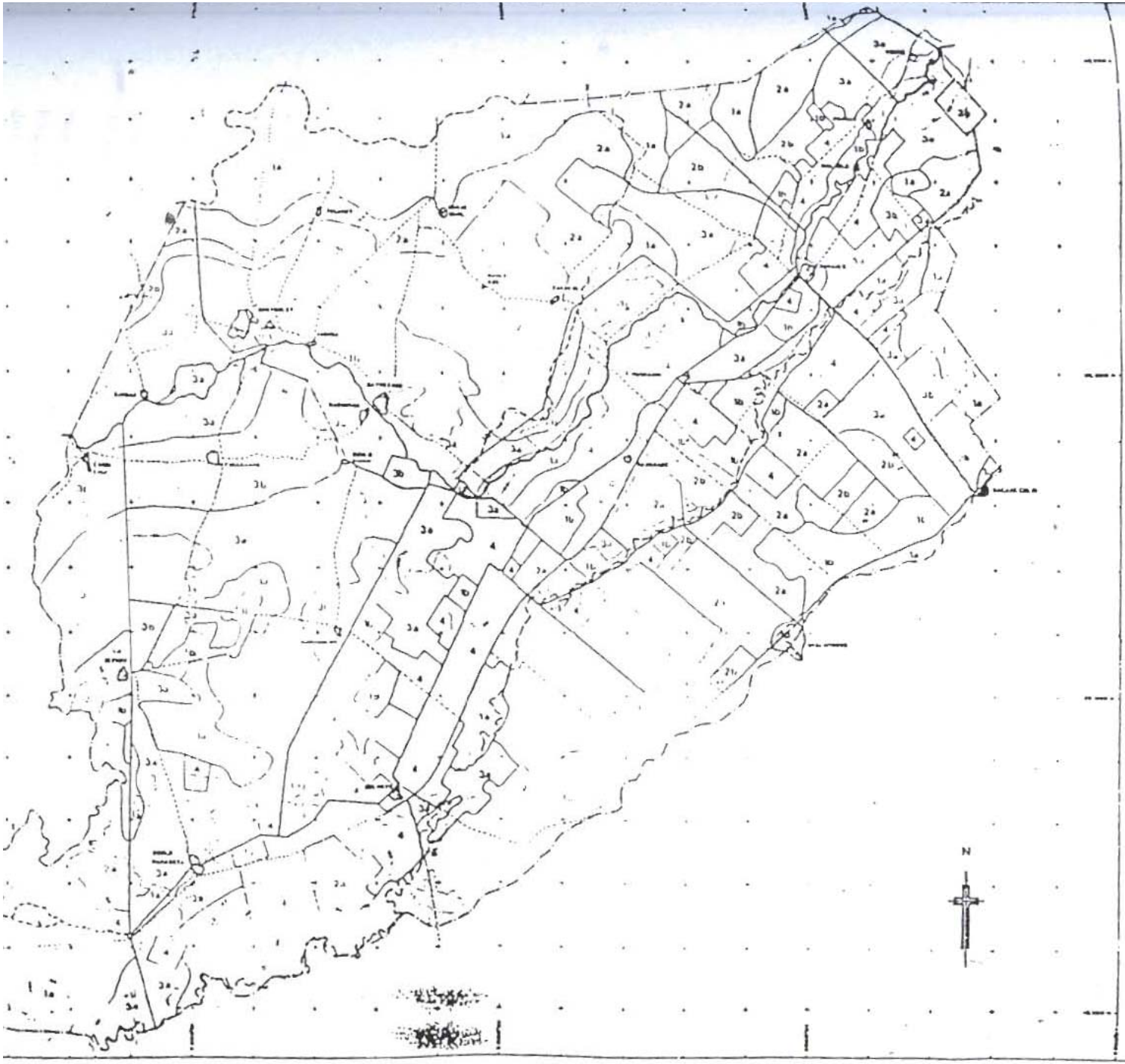
The mean annual rainfall at Genale is 471 mm.
Like in Afgoi, there are 3 cropping seasons Gu, Hagaa and Der.
The Gu rains are the most reliable. Hagaa rains are characterized by local showers whereas the Der rains are generally not too reliable.

Merca is the main agricultural district of the region, with 55300 ha of agricultural land of which 12000 ha are controlled irrigated. Koryoley has 19500 ha of agricultural land, of which 9200 are controlled irrigated.
The districts of Merca & Koryoley have a good irrigation infrastructure, at present being upgraded or rehabilitated by the Genale-Bulo Mererta Project. The river Shabelle, flowing generally above the surrounding countryside, rarely floods due to the embankments and the construction of dykes and barrages.
Barrages are at Genale, Gayweerow, Koryoley and Falkeerow. The irrigation infrastructure for both districts comprise 97 Km of main canals and 34.3 Km of secondary canals, from which a network of irrigation ditches radiates:

Main Canals		Secondary Canals
Siigaale	3.6 Km	
Giddu	6 Km	
Asayle	15.5 Km	
Liibaan	6 Km	
Dhamme Yaasin	15 Km.	No. 1 to 5: 29 Km.
Primo Secondario	32 Km.	
Wadajir	15 Km.	
Bahore	19 Km	Sisab 3.3 Km
		Jeerow 2 Km.

The irrigable area from these canals is 41610 ha, to which must be added 12570 ha directly irrigable from the river. Actually irrigated land is estimated at 21200 ha; many canals and ditches being out of use.
Map No.1 gives land use information from the area. It can be noticed that the main irrigated zones for the district of Koryoley are along the Bokore canal, at Abdi Ali, Farah Xaano and Jeerow. The district of Merca has banana plantations scattered all over the irrigable zone, from Ugunji up to Bulo Mererta, occupying an estimated 4000 ha of land (net) of which 2400 ha are actually cultivated under bananas, the remainder being kept for banana rotation.

Other perennial crops cultivated in the district include citrus (about 800 ha), papaya (100 ha), and coconuts plantations (100 ha), the latter two on small scattered plots.



STUDY AREA LAND USE

LEGEND

UNCULTIVATED LAND

- 1a — MAINLY ACACIA WOODLAND, THICKET AND LOW SCRUB
- 1b — MAINLY ABANDONED LAND AND RIVERINE VEGETATION

MARGINAL ANNUAL CROP PRODUCTION

- 2a — 10–30% LAND USE INTENSITY, INCLUDING RAINFED CROP
- 2b — 40–70% LAND USE INTENSITY, MARGINAL IRRIGATION

IRRIGATED ANNUAL CROP PRODUCTION

- 3a — MAINLY 30–50% LAND USE INTENSITY
- 3b — 60–70% LAND USE INTENSITY

IRRIGATED PERENNIAL CROPS

- 4 — MAINLY BANANA PRODUCTION

TOPOGRAPHICAL LEGEND

NOTE

THIS FIGURE IS ABSTRACTED FROM INFORMATION GIVEN ON MAP IE, PRESENT LAND USE SCALE 1:5000

In the Gu seasons mainly maize is cultivated; rainfall is then generally adequate and the crop is only rarely irrigated. The first river flows are not used as their salinity is high. Relatively high yields, compared with other districts, are however generally achieved. Hagaa sesame is planted in June or July taking advantage of the residual soil moisture, the Hagaa showers and the drier and sunnier conditions which prevail in this season and allow better fertilisation and seed set.
Cotton is planted in August.
In the Der season mainly sesame and maize are planted, these being generally irrigated. One flood irrigation is required for sesame; whereas more is required for a good maize crop, depending on the quantity of the Der rains.

Groundnuts are cultivated mainly towards Koryoley on small plots, cowpeas are cropped all over, generally intercropped within cereals. Other cultivated crops are watermelons and vegetables (onions and tomatoes mainly).

Several projects are active in the districts:
- Citrus trees Nursery Project at Genale.
- The EEC funded Grapefruit plantation at Goluen.
- The Libsoma farm (bananas) at Bulo Mererta.
- The demonstration farm at Doon Dhere (Genale).
- The ENB banana plantations (Beled Amin).
- The Refugee farms Projects (Koryoley).
- The Genale-Bulo Mererta Irrigation Rehabilitation Project.

4.6.4. KURTUNWAREY.

The district has an agricultural area of 7200 ha of which 3650 ha are irrigated, 1650 ha controlled irrigated and 2000 ha flood irrigated.

Agricultural areas within the district are:
- The Arbowoheerow zone, relatively isolated towards the west in a mixed bush/swamp area. 1900 ha are cultivated in this zone, most of it rainfed wise, some supplementary irrigation by induced flood spillage is also practised.
- The Kurtunwarey Settlement Scheme zone, with 3000 ha of cultivated land, of which 1650 ha are controlled irrigated. There is a barrage at Garowle.
- The Idow Guudow zone, south of a swampy area where 1400 ha of land are cultivated rainfedwise.
- The Habaabshe plain zone, on the rivers right bank, from Afgoye Yare to Garoowle. About 5000 ha are under rainfed cultivation in this zone, and part of the area is to be irrigated.
  The canalisation of about 5 Km of river near Uro Urow has reduced flooding problems in the area.

The main soil type for all the zone is a hydromorphic soil, called Haharro. Once drained it is an excellent agricultural soil.

The main Gu season crop is maize. Little cropping is done in the Hagaa season. Sesame, and some maize and safflowers, are cultivated during the Der seasons. Relatively high yields are obtained.

4.6.5. SABLAALE.

The agricultural area is 6700 ha, of which 1400 ha are controlled irrigated.

The district's agricultural area stretches east from Sablaale town, on the left bank of the Shabelle, up to Beer Axmaadow. In this area about 4000 ha are cultivated, of which 1400 ha are irrigated, as part of the Sablaale settlement scheme.
Some salinity problems are encountered within the presently irrigated area.
Further north, from Beer Axmadow up to Baad Faadan, along the river, an area of 2700 ha is cultivated by small farmers. The left bank of the river has been embanked to protect the area from just downstream of Sablaale up to the beginning of the permanent swamp, a total distance of some 26 Km.

The zone's soil type is a hydromorphic soil, called Haharro.

The main Gu crops are maize and sesame. In the Der cowpeas, beans, sesame, watermelons and safflower are grown.

4.6.6. BRAVA.

Brava has an agricultural area of 14100 ha, of which 500 ha are controlled irrigated.

The main agricultural area is on the Gofca soil, a grey grumosol developed in fine textured older river alluvium stretching from Mariam Guuway to Mudun on 43600 ha, along the old Gofca channel (Webi Goof). About 10000 ha are cultivated in this zone, in rather isolated spots concentrated around towns and villages. Sand dune encroachment on cultivated soils is a problem in some areas (Mudun).
Another important agricultural zone which has known a rapid development this last year is situated towards the district boundary with Merca, at Cambarey and Kunyoaw Guure, on the Goluen brown grumosol, where about 200 ha are cultivated.
Other zones with some cultivation are isolated around villages: at Gumarta, Brava Yare, Aysuuce, Qunyo Barrow, Saarey (all together 1000 ha); and Haaway (1100 ha), where a rice Crash Programme farm had been established. A barrage is located there but is in poor condition. The Crash Programme farm irrigated an area of 500 ha.
No more rice has been grown there since 1983.

The main Gu season crop is maize. Cotton and sesame are planted in the Hagaa season. Sesame and beans are cultivated in the Der season. The yields on rainfed land (Gofca soils) are generally rather poor, due to the marginal rainfall.

4.7. MIDDLE SHABELLE REGION.

The rainfall pattern in this region is bimodal, with distinct peaks in the Gu and Der season, and low rainfall in the Hagaa season.
The mean annual rainfall is 468 mm at Balad and 496 mm at Jowhar.

4.7.1. BALAD.

The district has 36300 ha of agricultural land, of which 3550 ha are controlled irrigated and 2600 ha flood irrigated.

The agricultural lands are concentrated in the Shabelle alluvial plain, where at least four old river channels can be distinguished, which is also one cause of the quite high variability in soils observed.

Three main agricultural zones can be distingushed in the district:

1. The riverine area on Jowhar soil, a montmorillonitic chromic vertisol (grumosol); where all the irrigated areas are located.
2. The Xawaal Barrey-Gololey zone, on Saruda soil (3250 ha of cultivated land).
3. The Qalimow-Saarsaray zone, on Goluen soils (9500 ha cultivated land).
4. A zone in the coastal sand dunes, where cassava is cultivated as feed for the Mogadishu dairy cattle population.

The riverine zone is by far the most important, where some 23400 ha are under a cultivation cycle.
Important agricultural areas in the zone, with irrigation facilities are:

- Xawaadley, Shanlow, Dhagaxow, and Shiikh, on the right bank of the river upstream from Balad. About 1500 ha of land has a controlled irrigation infrastructure whereas an additional 2600 ha are sometimes (but rarely) flood irrigated in the area, during high river flows. The bulk of this area (6000 ha) of land is however rainfed.
- Mareerey, north of Balad, where about 850 ha of land are controlled irrigated. There is one banana plantation and a number of small papaya plantations in the area. The area commands about 3000 ha of arable land.
- The Balad Irrigation Project, west of Balad town, occupies an area of 1200 ha. The area is cropped by tenant farmers.
- Rather little cultivation is done downstream of Balad, except at Geedfaqay (rainfed only) and Basra.

The main crops for all this zone are maize in the Gu and sesame and maize in the Der seasons.

The Xawaal-Barrey-Gololey zone is purely rainfed, concentrations of cultivation are around these two villages. Water logging is frequent there due to the soils heavy surface which permits the cultivation of sesame in late seasons. Sorghum remains otherwise the main crop for both seasons. Maize, cowpeas, groundnuts are also grown.
The Qalimow-Saarsaray zone extends in the north-western corner of the district.
This is the district's main rainfed agricultural area, producing chiefly sorghum. Maize, cowpeas, sesame and groundnuts are also grown.

It must be stressed that cultivation is not limited to the above mentioned areas, as most of the district's alluvial soils bear at least some cultivation. Only those areas with high cropping land concentrations have been described.

The cotton ginning factory is located at Balad. Cotton growing is relatively important in the district. Perennial crops (bananas, citrus, papayas) are of little importance, perhaps 300 ha together. The Romsoma livestock fodder farm project was abandoned in 1986.

4.7.2. JOWHAR.

The district has 76300 ha of agricultural land, of which 5750 ha are controlled irrigated and 6000 flood irrigated.

The district's agricultural lands are limited on the (large) Shabelle alluvial plain bounded eastwards by the coastal and interior dunelands and westwards by the interriverine alluvial and colluvial deposits.

The district's main agricultural zone extends along the Shabelle river, where, obviously, all irrigated areas are concentrated. The average width of the zone, which is 56 Km. long, remains about 4 Km. at Dudunle up to Mahaddei Uen but afterwards it widens gradually to 16 Km. at Jowhar. South of the Jowhar Sugar Estate lies the Jowhar offstream storage reservoir (not cultivated), which stretches mainly within the district of Balad.
The irrigation infrastructure is best developed at the Jowhar Sugar Estate (8070 ha developed, but actually only about 1200 ha cropped due to salinity problems), the Barrow Uen farm (140 ha) and the area north and west of Jowhar, along the Kalundi and Buri canals and at Barrey. Small irrigation schemes, using small diesel pump engines, are scattered all along the river area.

Areas susceptible to be flooded include the Duduble flood relief channel, which depression floods an area extending west of the main road, from Dbiingaras to Buur Xaano and occupying about 3000 ha. However, very little land is cultivated on this area. Other areas which can be flooded are mainly located between Dudunle and Mahaddei Uen, along the river banks. Floods are however unusual and are considered as a calamity rather than an opportunity in the district.

The main crop cultivated in this area is maize in the Gu and sesame in the Der season. Mahaddei Uen is a major sesame (Gu and Der crops) growing area. Rice cultivation is located on the Barro Uen farm and in the Kalundi-Bannaaney area, where Agro Action has supported a successful small farmers rice growing project. Some citrus are grown in the Mahaddei Uen area and mangoes are grown all along the river.

All other zones are rainfed, with sorghum as main crop. To the west there is an outcrop of the Uanle Uen soil zone at Jameco Mukhtaar (2000 ha of land). West of Jowhar town is a large zone of Goluen soils, which is quite intensively cropped in the Gololley Jawhar-Moorajiiddo-Baraki area and along the main road to Balad (26250 ha). North west and east of Jowhar stretch two areas of a sandy clayey brown sub arid soil of variable salinity (Mahaddei Uen soil) which is

The district's north western zone bears a brown grumosol (Uar Mahan soil) loosely cultivated except around the villages of Ceel Cad and Dbiingaras (1120 ha).
One of the district's main rainfed cultivation areas is in the east, where a large zone of a concretionary reddish brown calcic soil (Bio Addo soil) occupies 89600 ha, of which 17050 ha are under cultivation cycle. The main crops in the Gu season are cowpeas and sesame, whereas sorghum is cultivated in the Der season.

4.7.3. ADEN YABAL AND ADALE.

These districts are separated from the Shabelle alluvial plains by the interior dunelands. In Adale and Aden Yabal start the so-called "coastal cowpea belt" which also includes the districts of El Dhere and Harar Dhere in the Central Regions. The rainfall is bimodal, and the main crop, in both seasons, is cowpea. Besides, some other crops are grown like sorghum, groundnuts and watermelons.

If the agricultural land, estimated roughly at about 2000 ha for Adale and 20600 ha for Aden Yabal are quite large, the cropped areas are much smaller due to long fallows as well as a tendency for shifting cultivation. The population density is low and land is plentiful, but it is not quite fertile and crop failures are quite common.

The agricultural area of Aden Yabal is a constellation of small agricultural zones in the western part of the district.
The area of Adale, by far much less important, is contiguous, being located in the northern part of the district.

4.8. HIRAAN.

The Hiran Region has a typical bimodal rainfall pattern, the average rainfall at Belet Weyn being only 240 mm. Rainfed crop failures, mainly in Der seasons, are quite common.

4.8.1. JALALAKSI.

The district has 11000 ha of agricultural land, of which 300 ha are controlled irrigated.

The district's main agricultural zone is the immediate vicinity of the river, on alluvial soils, where 4800 ha are under cultivation cycle, of which 300 ha are irrigated (at Jalalaksi and Afgoye Cadde).
All the district's rainfed zones are situated in the Shabelle alluvial plain, 15-20 Kg. wide, limited eastwards by dunelands which north of Jalalaksi reach the river, and in the west with the interriverine alluvial and colluvial deposits.
Different soil types, relatively mixed, are found here:
- The War Mahan brown grumosol in the south, with cultivation at Saangadaale.
- A gypsiferous reddish brown calcic soil west and north of Jalalaksi, extensively cultivated (Bulo Togon soil).
- A solonetzic soil (Bulo Burti) north and south east of Jalalaksi.

Maize and sesame are cropped on the recent alluvial soils along the river, whereas sorghum and cowpeas are cropped further away.

4.8.2. BULO BURTI.

18000 ha are under cultivation cycle in Bulo Burti, of which 200 ha are controlled irrigated and 1000 ha flood irrigated.

Small scale irrigation schemes, using often hired pumps, exist all along the river, mainly at Bulo Burti, Jameco Mubarak and the area in between. Limited irrigation takes place also at Caag Bashir. Maize is generally cultivated in this case but returns are low. Actually 4 major pumps and about 30 small pumps are operating in the district.

Flood irrigation takes place during very high flows in the far Waley depression, on the river's left bank opposite Jameco Mubarak. During high flows, the immediate river banks can be flooded and cultivation can take place there (like in the Hagaa season 1987). Maize and some sesame are invariably grown on flood irrigated parcels.
The rest of the agricultural land is rainfed cropped, mainly with sorghum, occasionally with cowpeas, maize and sesame.
The main agricultural area lies on the river's recent alluvial soils, in the river's immediate vicinity. Cultivation takes place all over, but the concentration is higher towards the north (north of Bulo Burti). 7350 ha of land are estimated to be cultivated in this narrow zone (2 to 5 Km. wide) along the river. Mango trees are often grown along the river banks. Borassus palm trees, typical for Belet Weyn, start to appear here.

The other rainfed agricultural zones are located in a long band, 10 to 16 Km. wide, along the river. Mainly solonetzic soils (Bulo Scevelo and Bulo Burti) are characterizing this zone, which are only extensively cultivated. About 5850 ha are believed to be under cultivation cycle here. One exception however is the immediate vicinity of Bulo Burti town, which is intensively cultivated (1650 ha).

About 4500 ha are estimated to be under cultivation cycle in the Halgen area, north of the district along the Belet Weyn road, where lie recent alluvial soils brought from different "togs" (Tog Ceel Dheer, Tog Kalifar, Tog Cadad Cad..).

Other agricultural areas are small stretches situated outside the Shabelle alluvial foodplain. They are located mainly towards the east (Dhagaxyaale, Gal Gaduud, Jeexin, Caag, Aborey). One characteristic for these areas is the cultivation of finger millets.
Towards the west only two very small areas bear some cultivation, at Buqda Caqable and Wabxo.

4.8.3. BELET WEYN.

The agricultural area of Belet Weyn extends over 15200 ha, of which 500 ha are pump irrigated.

The district's main irrigated area is located between Shinile and Qoqane, 10 Km. north of Belet Weyn, where the previous Crash Programme farm was located, which land is now distributed to tenant farmers.

All the district's rainfed farming land is concentrated in a narrow band (4 to 10 Km wide) along the Shabelle. Intensively cultivated land is located west of Belet Weyn; north of Belet Weyn, from Shinile up to Tawakal; then a narrow band along the river from Belet Weyn southwards up to Jiqley and the vicinity of Keliarro (Nur Fanax).
About 6900 ha of cultivated land are on recent alluvial soils, whereas about 8300 ha are cultivated on a solonetzic soil (Bulo Scevelo soil) mainly on the river's left bank from Belet Weyn to Keliarro and on the area west of Belet Weyn.

The main crop, in rainfed and irrigated areas, is sorghum. Besides some maize (irrigated), cotton, cowpeas and sesame are grown.

The isolated village of Buqda Cosar, 50 Km SW from Belet Weyn on the Teyeglow road, also grows some sorghum, as do other small depressions in this area.

4.9. GALGADUD REGION.

Only two of the region's 5 districts are of some agricultural importance, these are El Bur and El Dhere.
The rainfall is bimodal and quite unreliable, mainly in the Der season. There is no irrigated land in the region.

About 5900 rural households live in the region. The total area of agricultural land is estimated at 47900 ha, 8.10 ha per household. However only about a fifth of the land is being cropped at one time, the rest being left fallow.

4.9.1. EL BUR.

About 13800 ha are cultivated in the district mainly south of El Bur town; at Jacar, Garable, Gal Hareeri and principally towards the Xarar Dhere border. Cowpea is the main crop. Also grown are sorghum and groundnuts.

4.9.2. EL DHERE.

The "coastal cowpea belt" a large cultivation zone of scattered fields in light sandy soils stretching from Adale to Xarar Dhere parallel to the coast, and which main crop is cowpea, passes through the district. An estimated 34100 ha of land are cultivated within this district, in scattered localities from the Aden Yabal border to the Xarar Dhere border, like Budbud, Derri, Galcad, Nooleye. Cowpea is the main crop. Also sorghum, groundnuts and watermelons are cultivated.
Shifting cultivation is not uncommon. Fallows are long and it is hence difficult to separate fallow land from abandoned land.

4.10. MUDUG REGION.

The average rainfall at Galcaio is 157 mm. The pattern is bimodal. The region is dry all over and not suited for crop production, except an area in the districts of Xarar Dhere and Obbia. Some irrigation, on a very limited scale, is found at Galcaio. About 3700 rural households live in the region. The total area of agricultural land is estimated at 29600 ha, or 8 ha per household. However, only a small part (around 18%) of the land is cropped at any one time, the rest being left fallow.

The district of Xarar Dhere has an area under cultivation of about 16300 ha, located towards the west of the district, and characterised by small fields scattered over a wide area. Like in El Dhere, shifting cultivation is quite common and fallows are long.
The main crop grown is cowpea. Also sorghum, groundnuts and water melons are grown.

The district of Obbia has 13300 ha of cultivated land, stretching from the border with Xarar Dhere till the town of Wisil.

4.11. NUGAAL REGION.

The average annual rainfall at Garowe is only 63 mm. The region is dry and no rainfed cultivation takes place. Crops are however planted in the Wadi Nugaal, a seasonal river which flows from the west to the east, when it has flooded. An estimated 1050 ha of cultivated land are believed to be located along this Wadi.
Floods occur irregularly between May and August. Only sorghum and watermelons are cultivated. One date palm plantation is located at Eyl (25 ha).

4.12. SOOL REGION.

Like the Nugaal region, the Sool region is a dry area where no rainfed cultivation takes place. Limited "flood irrigated" cultivation takes place along the Wadi Tog Dheer and the Wadi Nugaal, which flow from west to east.
The area planted this way is unknown, the area not being settled. Nomads plant opportunistically crops (sorghum, watermelons) along the Wadi after the floods.
One date palm plantation is located at Xalin, in the district of Taleex.

4.13. BARI REGION.

The average annual rainfall at Qardho is 99 mm.
The region is a dry area and no rainfed cultivation takes place. However, due to the broken landscape, rainfall is very variable from place to place with minima along the coast and maxima on the mountains and hills, which permits the existence of numerous seasonal wadis (togs). Localised resurgence of underground flows leads to the establishment of oases, which is a typical feature for the Region.
There are about 30 date palm plantations in the Bari, found mainly in the districts of Bosaso (Bosaso and Karin areas), Alula (Alula, Bereda), Candala (Geyseley) and Iskushuban (along the coast many plantations stretch between Seen Weyn and Moqor). Inland there is one plantation at Iskushuban. Geyseley is by far the region's most important plantation, stretching along the coast between Alula and Qandala, (but it is certainly not the best kept).
Almost 400 ha are believed to be planted with date palms in the oases. In some of them, the plantation is associated with small irrigated gardens, producing vegetables (mainly sweet potatoes, but also onions and tomatoes), fruits (papayas, limes and bananas), and some maize. About 150 ha are believed to be cultivated intensively this way. Limited cultivation (less than 50 ha in the Region) of sorghum takes place on terraces along local wadis.

The "Date Palm Project" is active in the Region with the aim to rejuvenate the plantations, to try new varieties and to develope small irrigated garden schemes.

A quite important source of revenues for the region, besides livestock and fishing, is the collection of incense woods, whose produce is mainly smuggled into Djibouti.

An estimated 4200 ha of land is under cultivation cycle in the region. Most of it is rainfed cultivated on the heights south of the escarpment.
Mainly sorghum and maize are cultivated on small scattered fields along the togs running notth and south where sufficient alluvial soil have accumulated.
There are also small irrigated gardens producing vegetables and fruits. Irish potato growing is a very rewarding activity in those gardens.
Three date palm plantations are located along the coast, at Raguda, Gaan and Skuscuba. Their total area does not exceed 1 hectare..
The region is, with the Bari, a significant producer of incense woods.

4.15. TOGDHEER REGION.

The mean annual rainfall at Burao is 199 mm, the rainfall increases however with the altitude and reaches about 400 mm at Sheekh.
The region has a relatively large agricultural area (in 1984 5400 ha of land were registered) with (relative) concentrations of cultivated land on the heights in the district of Sheekh, south of the escarpment. More scattered cultivated areas are found along the Wadis on the plains in the Burao and Odweine districts. An important agricultural area is located at Beer, south east of Burao town, where the tog Dheer silts.
Sorghum, maize, groundnuts and more recently sesame are grown this way with generally only one annual growing season (Gu). Crop failures are frequent.
The region counts also a number of irrigated gardens (101 gardens in 1984 totalling about 200 ha of land) which undergo a quick development. Mainly vegetables, tubers and fruits are produced.

4.16. WEST GALBEED AND AWDAL REGIONS.

The mean annual rainfall at Hargheisa is 417 mm, at Abuurin (Gebiley) it is 449 mm, at Borama 508 mm.
Only one long rainy period can be distinguished, starting in March and ending in September.

The main agricultural area of the region is situated on the high plateau stretching from Arabsiyo, through Gebiley, Kalabaydh, Togwajaale and Borama and continueing in Ethiopia towards Jijiga. Two types of arable soils are found in the area: a typic chromustert and a typic argiustoll. The first type occupies 44000 ha of a clayey very calcarous vertisol (typic chromustert), with a reduced infiltration rate (practically impermeable), stretching around Togwajaale. It is only extensively cultivated (about 12000 ha). The Tog Wajaale crash Programme farm is located in this area. Up to 1986, wheat was cropped there but due to low yields and frequent crop failures, it was

The main agricultural soils zone is a sandy clay to clayey mollisol (typic argiustoll) with a good suitability for cultivation, and stretching over an area of 219000 ha from Arabsiyo to Kalabaydh and patches in the district of Borama. About 58000 ha of this soil is under a cultivation cycle. Cultivation in this region is believed to be a relatively recent phenomenon. Compared to livestock raising, cultivation is still a marginal activity. The two main crops (sorghum and maize) are of traditional, long season varieties, originating from Ethiopia, and maturing in 150 days. Rapid erosion of farming land in this region causes serious concern. Bunding of fields, a method promoted by the North West Region Agricultural Development Project, prevents this.
On this plateau zone, about 8000 farms cultivate a total area of 70000 ha. Farms are small, 56% are less than 5 ha, and only 17% are greater than 16 ha. Less than half of this area is however actually cropped. One characteristic for the region is the use of oxen for ploughing (besides tractors).

The mountainous zone consists primarily of rock, gravel and shallow weakly developed soils.
Deeper soils occur along and adjacent to the main togs. About 175000 ha of typic ustifluvent entisols are theoretically cultivable under irrigation, of these actually 2000 ha are cultivated.
Pockets of deeper soils within the rockland where products of erosion have had a chance to accumulate show evidence of cultivation, often in very isolated places, but these areas are now frequently being destroyed by erosion.
Irrigation is done by pumping or flood spraying.
Citrus fruits are the main crops (about 35% of the irrigated cropped area) followed by cereals, other fruits and vegetables. The farm size is often less than 2 ha.
There are about 900 of these small horticultural gardens in the region.

Date palm plantations are located on the coast, at Bulhar and El Sheekh (district of Berbera) and Takhochi (district of Zeila). Three plantations are found in the district of Berbera: Dubar, Bixinduule and Mujacaseeye. These plantations cover all together about 80 ha.

Potentially 3500 ha of land are fit for irrigated agriculture, of which 2000 ha are now already developed. About 99000 ha are potentially good for rainfed cultivation, of this about 70000 ha are actually under a cultivation cycle.

5. AGRICULTURAL STATISTICS.

5.1. FOREWORD.

Statistics about agriculture are scarce in Somalia, their reliability is often doubtfull and figures from different sources do not always agree (mainly for the 1983-1985 period). Long term data (from 1927 onwards) are available for maize, cotton and bananas only. For sugar cane, figures are available since 1960. For all other crops the data series start in 1970 with district breakdowns starting in 1981.

The emphasis has been put on cropped area, yields and production figures of the main food crops (maize, sorghum, rice, pulses, sesame and groundnuts). Imports, exports, storage etc are not dealt with here.
The source of these statistics is discussed in the next section, as well as the choice made between alternatives of different sources, or the "manipulation" of the statistics which were needed to be reviewed, for the sake of consistency, on the basis of historical rainfall figures.
Such a work is of course subject to many criticisms. Sources of agricultural statistics are not allways easy to come by; any additional information which could complete or revise the present publication is welcome.

5.2. SOURCES.

1.	Maize	1931-1958: G Burgio (1979).
	Maize	1961-1969: FAO production yearbook.
2.	Banana	1927-1967: Ministry of Agriculture.
	Sugarcane	1960-1967: Ministry of Agriculture.
3.	1970-1982:	Agricultural Sector Survey. (World Bank)
4.	1983-1987:	Food Early Warning System Project, Ministry of Agriculture (main food crops)
		Extension Services Department, Ministry of Agriculture(other crops).

5.3. UPDATING.

- From 1927 up to 1981, no modification was made.

- For 1982, regional production figures for only maize, sorghum and sesame are available. Country figures are available for the other crops.

- For 1983, district cropped areas and production figures were available from various reports from the FEWS. These have been copied without modifications.

- For 1984: figures were available from two End-of-season crop estimation reports and one annual recapitulative report (in Somali). Except for maize and rice, most figures agreed. The rice figures of the annual recapitulative report are unlikely (2560 ha of rice in the Lower Shabelle region in the Der 1984 season ?). So were the maize figures (66000 ha of maize in the Lower Shabelle in the Der 1984 season). These have not been accepted; and the information was modified according figures given by the crop estimation reports.

- For 1985: the figures were available from end of season cropping reports but many calculation mistakes had to be corrected.
Problems arose however about the abnormality of some figures:
- A very high maize yield in the Gu season (16.3 qt ha).
- A very high Der season sesame cropped area figure (218700 ha) and a corresponding high production figure (85500 T).
- An abnormally low area cropped under sorghum (371700 ha) and an abnormally high area cropped under pulses (122100 ha).
- A high sorghum yield (6 qt/ha).

Using a regression equation between yield and a crop index established on the basis of figures from 1987, and applying them on the rainfall data of the 1985 Gu season, it resulted that the maize yields had been largely overestimated.
The method estimated the yield at about 12 Qt/ha instead of 16, which resulted in a final total annual production of about 280000 tons instead of 380000 tons.
This figure of 280000 tons being more in agreement with estimations from other sources (extension services and Department of Planning of the Ministry of Agriculture) it has been accepted as such.
The sesame figures for the Der season had been undoubtly seriously overestimated. A serious difference was reflected between the area figures of 85 of the extension service report (92000 ha) and those of the FEWS report (255200 ha). In order to remedy this, the Der area figures of the FEWS have been revised (cfr. Food Outlook No.4 of 24 May 1987).
The high area cropped under pulses (122100 ha against a normal average of 50000 ha) has been attributed to the fact that intercropped cowpeas within sorghum fields were included in the figure.
To compare with other years (where intercrops are included within the main cereal area figure), adjustments were made. This had for effect to increase to normal proportions the sorghum area as well as to modify the average sorghum yields.

- For 1986 figures were made available in the FEWS Food Outlook No.2 (Gu season) and No.4 reports (Der season).
Small modifications were made:
- The groundnuts production was modified in the No. 4 report.
- Calculation mistakes for crop production in the central regions were corrected.

- For 1987: figures were made available in the FEWS Food Outlook No.6 (Gu season) and No.7 (Der season) and were taken as such.

5.4. COMMENTS.

5.4.1. NATIONAL FIGURES.

5.4.1.1. Cropped Areas.

From 1982 onwards land put under cultivation during the Gu seasons increases very regularly by about 1% annually, whereas very variable acreages are cropped during the Der seasons, reflecting the unreliable weather conditions during that period.
Little land was cropped during the poor 1983 and 1986 Der seasons, whereas about the same acreages were cropped during the fair Der seasons in 1982, 1984, 1985 and 1987 (around 330000 ha)

Land cultivated under maize increased regularly from 1982 till 1987 by about 4.4% per annum. The increase takes mainly place during the Gu seasons, maize being increasingly grown under rainfed conditions.

Land cultivated under sorghum varies significantly from one year to another.
During the Gu season, under good weather conditions, about 390000 hectares are liable to be cropped, which happened in 1982 and 1984.
In the other years, localised droughts reduced the cropped areas:
- In 1983: drought over Bay, Hiran, Middle and Lower Shabelle.
- In 1985: drought over Bakool, Hiran, Togdheer.
- In 1986: drought over Bakool, Tog Dheer, northern Gedo.
- In 1987: drought over Sakow, Bardera, Qansah Dhere.

The 1983 Gu season drought over the Bay Region had the most drastic negative effect on sorghum plantings since the 1974/1975 big drought.
For the Der seasons, the droughts of 1983 and 1986 are characterized by low plantings.

The land cultivated under rice show a very regular upward trend since 1983, the increase being on an average 37.7% per annum.
The high acreages cropped under rice from 1977 till 1982 are believed to be Crash Programme farms initiatives.

The area cultivated under beans (mainly cowpeas) vary quite widely. Crop failures in the Central regions (as in 1986) make a difference.

The areas planted under sesame vary between 25000 and 42000 ha in the Gu seasons. The Der seasons figures are more variable, and are in relation with the weather conditions. During the Der droughts of 1983, 1986 only about 46000-56000 ha were planted, whereas in normal years, 60000 to 70000 ha are planted.

5.4.1.2. Crop Yields.

Maize yields remained between the 0.72-1.08 tons/ha limits between 1980 and 1983.
The 1984 yields are high (1.45 T/ha) which is attributed to very favourable growing conditions in the major maize producing areas.
The 1985 Der seasons yields are also high (1.63 T/ha). Possibly the maize was mainly irrigated with little insect damage, a main limiting factor in maize yields in the Der season. During the 1986 Gu season again high yields were achieved (1.50 T/ha) due to the extremely favourable weather conditions this year.

The sorghum yields reflect well the weather conditions:
- Poor yields in the 1976 - 1980 years, as well as in 1983, 1986 and 1987 Der seasons.
- Good yields in favourable seasons: 1982, 1984, 1985, Gu 1986 and Gu 1987.

5.4.1.3. Production.

The production of maize stagnated between 1970 and 1980. Since, the increase in cropped area as well as in yields boosted the production, which doubled in 5 years. The main increase took place between 1982 and 1984. The very poor 1981 and 1982 yields, followed by a reasonable 1983 and a high 1984 yield (double than the one of 1982!), exacerbates the trend, which otherwise would have been smoother, in accordance with the general increase of planted area (+4% annually) and the yield increase trend (from 0.9 to 1.20 tons/ha).

The production of sorghum, except for the drought year 1983, remains quite stable since 1981. 1986 was characterized by an excellent Gu season followed by a disastrous Der season.

Sesame production figures vary greatly from year to year, reflecting the influence of Der seasons on this crop.

The production of beans reflect the influence of poor seasons (Der 1986); since 1983, the production is in increase however.

5.4.2. DISTRICT AND REGIONS FIGURES.

If national level figures are relatively homogenous concerning trends, the same can not be said about district and regional figures. In this case, major differences from one year to another mainly find their cause in errors made by estimators, chiefly in cropped areas. Also fluctuating border delimitations (like the case between Bardera and Sakow; Koryoley and Merca; Koryoley and Kurtunwarey etc.) is a source of variation.

Some abnormalities are:

- The cropped area of the district of Baidoa, estimated at 25000 ha in 1985 and at 95400 ha in 1986, which has probably been largely underestimated in the first case and slightly overestimated in the second.
- The cropped area of the district of Wanle Weyn probably largely underestimated up to 1985.
- The cropped area of the district of Aden Yabal, probably underestimated up to 1988.
- The overestimation of the cropped area in the North West Region, in 1984.
- The probable overestimation of the cropped area of the Nugaal region, in 1984.

SHORT GLOSSARY.

1. Cultivated area, or land under cultivation cycle:
Area actually under crops plus all fallow land (expressed in hectares).

2. Cropped area: Area actually under crops (expressed in hectares).

3. Tilled area = cropped area.

4. Fallow area:
Area which had been cropped in the past and is now left idle. This does not include the abandoned land (expressed in hectares).

5. Cropping pattern:
Gives the percentage proportion of each crop in a given area, for each cropping season (expressed in percentage).

6. Cropping intensity:
Gives percentage-wise the number of crops which have been harvested on one plot in one year time (p.e. a cropping intensity of 300% means that 3 successive crops were harvested on that area in that particular year), (expressed in percentage).

7. Cultivation extent:
Percentage part of a cultivated area which is actually cropped. (Expressed in percentage).

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STATISTICAL ANNEX.

Tables.

A. National Statistics.

B. Regional and District level Statistics (1982-1987).

Figures.

F.E.W.S. PROJECT

Area (ha), production (MT) and yields (q/ha) for maize, bananas and cotton.
Period 1927-1970

	maize			bananas		cotton		
	area	production	yield	area	production (export)	area	production (lint)	yield (lint)
1927				53	5			
1928				53	45	6400	963	1.5
1929				262	212			
1930				607	716			
1931	12127	18258	15.05	1372	1688	9850	1102	1.1
1932	14827	22240	15.00	2130	5648	6142	933	1.4
1933	13900	18900	12.94	2130	8747	5255	945	1.7
1934	15874	15584	10.70	3064	13785	4260	657	1.5
1935	16068	18711	11.64	3998	14233	4797	673	1.4
1936	16214	18650	11.60	4150	18546	3700	410	1.1
1937	26337	26281	9.98	4335	22564	3600	319	0.8
1938	16669	16503	10.12	4500	32000	5000	354	1.4
1939	14000	15103	10.78	4637	"	6000	560	0.9
1940	25000	23050	9.21	4637	"	380	39	1.0
1941	"	"	"	"	"	"	"	"
1942	"	"	"	"	"	200	30	1.5
1943	44206	42660	9.69	"	"	600	100	1.6
1944	48078	45461	9.45	"	"	500	40	0.8
1945	44890	44001	9.00	"	"	400	60	1.5
1946	35000	31817	8.86	1308	"	500	50	1.0
1947	35008	17500	5.00	1400	"	120	18	1.5
1948	"	13008	"	2000	1400	339	47	1.3
1949	23536	17227	7.31	2500	7500	2700	495	1.8
1950	12000	9600	8.00	2800	22065	5500	900	1.6
1951	25800	28000	11.20	4650	25161	20000	1800	0.9
1952	13008	8000	6.15	5352	31400	7000	180	0.2
1953	25800	20000	8.00	6439	30640			
1954	79000	54000	6.83	7591	43365	7270	466	0.7
1955	71600	50600	6.99	8103	48899			
1956	76558	48606	6.34	8400	36515			
1957	66558	46578	6.99	8600	42565			
1958	80000	45000	5.62	8498	55848			
1959	"	"	"	8500	58763			
1960	"	"	"	9100	76954			
1961	115000	105000	9.13	11000	78538	16950	1237	0.7
1962	115000	100000	8.70	12100	75555			
1963	115000	100000	8.70	11000	94512			
1964	120000	105000	8.75	9800	104834	17000	1000	0.7
1965	120000	105000	8.75	10700	99287			
1966	108000	90000	8.33	7452	90961			
1967	122000	103000	8.44	6953	84450	1700	130	0.8
1968	112000	105000	9.38	"	"	1400	140	1.0
1969	122000	110000	9.02	"	"	1600	160	0.6
1970	133000	122100	9.16	4500	"	1250	75	0.6

F.E.W.S. PROJECT

SUGARCANE : area (ha), production (MT) and yield (T\ha)
Period 1960-1970

	area	sugarcane production(T)	sugar production(T)	sugarcane yield (T\ha)
1960	1174	116792	11785	99.48
1961	1390	126642	12511	92.69
1962	1614	117338	11754	72.70
1963	(1100)	90595	8806	(82.36)
1964	1662	149707	15054	90.08
1965	3120	238683	24578	76.50
1966	5490	326662	32359	59.54
1967	6546	276737	28239	42.28
1968	*	*	33235	*
1969	4480	439090	46853	98.01
1970	5037	475290	45953	89.06
1971	3700	475290	50000	128.47

.W.S. PROJECT

Production Of Food Crops Somalia (1970-actual)

	Maize	Sorghum	rice paddy	rice milled	Wheat	Sesame	Beans monocrop	Beans intercrop	Groundnuts	Bananas	Sugar (raw)	Tubers	Vegel.	Grape fruit	Lemon	Orange	Dates	Other fruits	Cotton Seed
1970	122.1	158.1	2.8	2.8	0.7	43.8	10.9		3.8	145.5	58.8	28.8	24.8	6.8	1.6	6.5	2.8	106.8	2.3
71	99.4	128.7	2.3	1.6	0.3	35.8	8.5		2.5	150.8	45.7	29.8	23.4	7.8	1.6	6.7	2.8	106.8	1.5
72	114.1	148.1	3.3	2.3	0.6	41.8	10.3		2.8	150.4	44.3	25.6	23.2	7.8	1.7	6.4	2.8	106.8	2.2
73	98.3	128.4	3.3	2.3	1.8	47.8	4.9		2.5	160.2	37.8	25.1	23.4	7.1	1.7	7.4	2.6	111.8	1.9
74	96.4	125.7	3.8	2.7	1.2	50.8	8.8		2.4	157.5	32.5	30.1	23.8	7.3	1.7	7.1	2.8	114.8	1.8
75	103.4	134.7	4.7	3.3	1.2	37.3	9.4		2.6	106.4	33.3	31.2	24.7	7.5	1.8	7.3	2.8	44.8	2.8
76	107.4	139.9	5.1	3.6	1.2	38.8	9.6		2.7	96.6	36.1	33.2	25.3	7.5	1.6	7.3	2.4	83.8	2.1
77	111.2	145.1	4.8	5.6	1.2	40.6	10.2		2.8	71.7	41.3	31.2	26.9	7.6	1.5	7.5	2.8	46.8	2.2
78	107.7	141.1	11.4	8.0	1.2	40.8	10.3		2.4	69.7	32.6	31.3	26.5	7.7	1.8	7.5	2.8	88.8	2.2
79	108.2	140.8	12.4	8.7	1.2	40.6	8.2		2.6	72.7	26.1	30.3	26.5	3.4	1.5	7.3	2.8	69.8	2.7
80	110.6	144.8	16.3	11.3	1.2	36.4	9.3		3.8	68.4	38.8	35.4	26.5	7.8	2.8	7.8	2.8	58.8	2.7
81	142.8	222.2	19.5	12.7	1.8	53.8	12.6		4.8	59.1	47.5	36.5	27.8	8.8	2.8	8.8	2.8	93.8	2.8
82 qu	113.8	166.1				17.3													
der	36.9	69.8				38.4													
tot	149.9	235.1	15.8	13.3	1.2	57.1	15.8		3.2	74.7	58.8	37.6	28.8	8.8	2.8	8.8	2.8	96.8	3.3
83 qu	161.1	110.6	1.6			16.4			2.5										
der	54.6	9.4	2.5			19.2			0.5										
tot	235.7	120.8	3.9	2.9	1.3	35.6	13.8		3.8	44.9	47.5	31.7	29.8	8.2	2.2	8.2	2.8	38.8	2.7
84 qu	188.2	158.8	1.7			9.6	11.8		2.7										
der	65.9	62.4	2.5			30.1	3.9		1.8										
tot	270.1	221.2	4.2	2.8	1.3	39.7	15.7		4.3	52.2	52.2	35.8	38.4	8.4	2.3	8.3	2.8	160.8	2.7
85 qu	152.5	177.7	6.9			18.7	13.3		3.9										
der	87.5	43.9	5.7			40.8	10.7		1.1										
tot	240.8	221.6	10.6	7.8	1.3	58.7	24.8		5.8	68.8	52.8	40.8	40.8	8.5	2.4	8.5	2.8	106.8	2.7
86 qu	301.5	230.8	6.3			54.3	12.3	17.1	2.2										
der	34.7	5.8	5.8			30.2	8.6	3.3	0.3										
tot	336.2	236.7	11.8	8.3	8.8	84.5	12.7	21.2	2.5	93.8	27.5	41.1	48.3	10.2	2.5	8.5	2.8	113.8	6.6
87 qu	254.3	205.5	5.2			19.4	8.5	15.9	2.8										
der	31.5	38.1	6.8			25.8	7.1	8.8	0.5										
tot	286.2	243.6	12.8	8.4	8.8	45.3	15.6	15.9	3.3	108.8	42.6	42.2	52.5	27.6	6.7	8.5	2.8	125.6	6.8

F.E.W.S. PROJECT

Cropped Areas (1000 ha) Somalia 1970 -Actual

	Arable Land	Irrig Land	Cropped Land	Maize	Sorghum	Rice	Wheat	Beans	Groundnuts	Sesame	Banana	Sugar cane	Non food crops	Grapefruit	Lemon	Orange	Dates	Other fruits	Tuber	Cotton seed	Vege-table
970	1022.0	162.0	571.0	133.0	250.0	5.3	4.9	21.5	3.3	73.0	4.9	3.7	0.2	0.7	0.3	0.9	1.1	7.0	2.6	12.0	5.0
71			500.4	102.0	280.0	5.4	4.6	17.0	2.6	44.0	5.7	3.5	0.2	0.7	0.3	1.0	1.1	7.3	2.7	15.0	4.5
72			634.0	117.0	330.0	5.2	0.0	20.0	3.3	57.6	7.3	3.2	0.2	0.7	0.3	1.0	1.1	7.5	2.7	9.0	5.0
73			591.0	101.0	345.0	5.2	3.5	17.9	2.9	77.0	7.5	3.0	0.2	0.7	0.3	1.0	1.1	7.3	2.7	5.0	4.4
74			580.7	99.0	330.0	5.4	3.5	17.6	2.8	84.0	8.7	3.1	0.2	0.7	0.3	1.0	1.1	7.5	2.8	4.0	4.6
75	1055.0	165.0	641.1	106.0	400.0	5.6	3.5	16.0	3.3	57.0	6.2	3.6	0.2	0.8	0.4	1.0	1.1	8.0	2.9	12.0	4.7
76			733.5	119.0	430.0	5.6	3.5	13.7	3.2	65.0	5.3	4.1	0.3	0.8	0.4	1.0	1.0	8.3	3.0	12.0	4.7
77			764.5	150.6	450.3	4.4	3.5	16.0	2.5	75.0	5.2	3.6	0.3	0.6	0.6	1.5	1.6	8.5	3.0	12.0	4.6
78			730.0	146.3	426.5	5.3	3.5	21.0	1.9	75.0	5.1	3.5	0.3	0.8	0.4	1.1	1.4	8.0	3.0	12.0	3.5
79			765.5	147.5	460.0	4.0	3.5	16.0	2.4	80.0	4.4	3.0	0.3	0.8	0.4	1.1	1.4	8.5	3.1	12.0	3.7
80	1066.0	165.0	720.0	140.0	456.0	5.5	3.5	14.5	2.5	83.0	2.6	6.6	0.3	0.8	0.4	1.1	1.4	9.0	3.2	12.0	3.8
81			836.3	157.0	517.0	5.7	3.5	25.5	2.6	90.0	2.5	4.2	0.3	0.8	0.4	1.1	1.0	9.3	3.4	12.0	4.2
982 gu			614.0	157.5	381.5		3.5			27.3											
der			227.0	51.5	150.5		0.0			42.7											
tot			831.0	209.0	540.0	6.0	3.5	27.0	3.0	70.0	2.0	6.5	0.3	0.8	0.4	1.1	1.0	9.6	3.5	12.0	4.3
983 gu			518.1	163.3	264.2	0.5	3.6		1.0	42.3											
der			197.4	55.3	71.3	0.5	0.0		1.2	56.5											
tot			715.5	218.6	335.5	1.0	3.6	27.0	3.0	54.4	2.0	9.3	0.3	0.8	0.4	1.2	1.0	9.0	3.6	12.0	5.0
984 gu			665.2	150.0	388.7	0.5	3.6	28.0	3.1	31.0											
der			219.5	69.2	156.0	0.0	0.0	9.3	5.6	69.2											
tot			884.7	220.0	544.7	1.3	3.6	38.1	4.7	92.0	3.0	9.0	0.3	0.8	0.5	1.2	1.9	10.0	3.7	12.0	5.6
985 gu			557.0	160.0	345.0	1.2	3.6	26.0	4.0	36.0											
der			251.3	53.5	102.0	1.4	0.0	20.0	3.2	72.4											
tot	1077.0	165.0	809.1	234.3	447.0	2.6	3.6	46.6	5.2	108.2	2.7	9.0	0.3	0.9	0.5	1.2	1.9	10.0	3.7	12.0	6.1
986 gu			653.6	201.7	354.5	1.0	0.0	23.5	2.5	24.0											
der			148.9	43.4	30.5	1.4	0.0	5.0	0.4	56.1											
tot			802.7	245.1	385.0	2.2	0.0	28.0	2.9	81.0	5.1	5.1	1.3	1.1	0.6	1.2	1.9	11.3	3.8	12.0	6.9
987 gu			661.3	215.3	341.5	1.4	0.0	23.5	3.2	28.0											
der			323.1	38.4	174.7	2.2	0.0	21.0	1.0	65.7											
tot			984.4	253.5	516.2	3.6	0.0	44.3	4.2	106.7	6.1	7.9	2.4	3.2	1.2	1.2	0.4	12.6	4.0	15.7	7.5

Table A.

W.S. PROJECT

Crop yields (metric tons/ha) Somalia 1974 -Actual

Maize	Sorghum	Rice	Wheat	Beans	Ground	Sesame	Banana	Sugar cane	Grapefruit	Lemon	Oranges	Dates	Other fruits	Taber	Cotton seed	Vege-table
0.92	0.54	1.54	0.80	0.58	0.85	0.59	25.83	12.51	9.71	5.33	7.22	4.11	6.12	10.27	0.15	5.36
0.97	0.41	1.14	0.50	0.58	0.86	0.75	26.46	13.06	10.30	5.33	6.78	5.10	6.11	10.74	0.13	5.29
0.96	0.34	1.32	0.75	0.43	0.84	0.72	21.24	12.51	10.00	5.67	6.00	5.00	6.14	10.74	0.24	5.44
0.96	0.37	1.32	0.29	0.58	0.88	0.61	23.78	12.33	11.14	5.67	7.00	5.09	6.24	10.74	0.31	5.32
0.84	0.36	1.53	0.34	0.51	0.86	0.59	23.51	10.61	10.43	5.67	7.10	5.05	6.37	10.75	0.47	5.48
0.10	0.34	2.86	0.34	0.54	0.79	0.85	17.89	9.25	9.37	4.50	7.20	5.02	11.00	14.36	0.17	5.25
0.10	0.24	2.00	0.34	45.00	0.84	0.85	18.23	9.00	9.37	4.50	7.20	5.00	14.00	11.07	0.13	5.47
0.74	0.32	1.22	0.74	0.54	1.12	0.54	13.75	11.47	9.51	6.75	6.82	5.01	10.00	11.41	0.18	5.54
0.72	0.34	0.81	0.34	0.46	1.47	0.52	23.40	9.31	9.62	6.75	6.82	5.01	10.00	11.10	0.18	7.36
0.73	0.20	1.47	0.34	0.49	1.17	0.51	22.45	6.78	9.75	6.75	7.80	5.04	10.00	11.06	0.22	7.16
1.01	0.31	1.51	0.34	0.58	1.28	0.45	21.23	6.84	9.25	5.00	7.85	5.04	10.00	11.06	0.22	6.57
0.72	0.43	2.23	0.29	0.13	1.54	0.59	20.35	5.71	10.00	5.40	7.27	5.44	10.10	10.73	0.17	6.43
0.72	0.42					0.63										
0.72	0.42					0.63										
0.72	0.43	2.22	0.34	0.56	1.07	0.62	24.15	5.66	10.00	5.00	7.27	5.00	11.00	10.74	0.22	6.51
1.11	1.42	2.60			1.39	0.38										
0.55	0.12	5.00			0.42	0.34										
1.06	0.36	3.56	0.34	0.48	1.08	0.36	21.75	5.11	10.25	5.50	6.61	5.33	10.00	10.75	0.22	5.60
1.19	0.48	3.48		0.47	1.15	1.20										
1.20	0.42	3.10		0.48	0.62	0.56										
1.23	0.41	3.23	0.36	0.41	1.00	0.43	20.23	5.33	10.50	4.50	6.92	4.55	10.00	10.76	0.22	6.50
1.06	0.52	4.08		0.51	0.84	0.45										
1.64	0.42	4.07		0.51	0.92	0.55										
1.20	0.50	4.04	0.36	0.51	0.36	0.52	22.22	5.21	5.66	4.00	7.01	5.00	10.64	10.81	0.22	6.69
1.45	0.70	3.83		0.51	0.48	0.57										
0.80	0.15	3.60		0.11	0.25	0.51										
1.37	0.62	3.72	0.00	0.44	1.06	0.55	18.61	5.35	9.23	4.83	7.08	5.03	10.00	10.81	0.22	7.00
1.16	0.60	3.71		0.36	0.82	0.50										
0.96	0.22	3.13		0.28	0.54	0.47										
1.10	0.47	3.34	-	0.33	1.24	0.48	17.20	5.33	8.62	5.50	7.08	5.08	5.55	10.55	0.27	7.01

Table B.1.4.

SESAME – Regional repartition of the cropping areas in 100ha

District	1982 gu	1982 der	1982 tot	1983 gu	1983 der	1983 tot	1984 gu	1984 der	1984 tot	1985 gu	1985 der	1985 tot	1986 gu	1986 der	1986 tot	1987 gu	1987 der	1987 tot
GEDO	6.00	15.00	21.00	5.00	33.00	38.00	15.25	10.50	25.75	0.00	0.00	0.00	8.00	19.00	27.00	45.00	0.50	45.50
geed weyn				0.00	0.00								0.00	1.00	1.00	5.00	0.00	5.00
luuq				2.00	1.00								0.00	8.00	8.00	17.00	0.00	17.00
garba hare				3.00	0.00								5.00	8.00	13.00	12.00	0.00	12.00
belet-hawa				0.00	1.00								0.00	0.00	0.00	0.00	0.00	0.00
bardera				0.00	1.00								3.00	2.00	5.00	11.00	0.50	11.50
MIDDLE JUBA	33.00	87.00	120.00	76.00	54.00	84.00	40.00	67.50	107.50	72.00	118.00	[illegible]	7.50	9.00	16.50	80.50	32.00	112.50
sakow				7.00	26.00					20.00			5.00	2.00	7.00	14.00	0.00	14.00
buale				11.00	17.00					22.00			1.00	1.00	2.00	35.00	13.00	48.00
jilib				8.00	15.00					30.00			1.50	6.00	7.50	29.50	19.00	48.50
LOWER JUBA	35.00	93.00	128.00	29.00	32.00	61.00	44.25	98.10	142.35	44.00	125.00	169.00	5.50	44.00	49.50	34.00	86.00	120.00
jamame				23.00	22.00					44.00			5.00	40.00	45.00	31.50	80.00	111.50
kismayo				6.00	10.00					0.00			0.50	4.00	4.50	2.50	6.00	8.50
BAY	0.00	0.00	0.00	49.00	1.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.50	0.00	3.50
bur hakaba				30.00	0.00											3.00		3.00
baidoa				7.00	1.00											0.50		0.50
qansah dhere				3.00	0.00											0.00		0.00
dinsor				9.00	0.00											0.00		0.00
BAKOL	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.00	5.00	19.00
wajid																9.00	0.00	0.00
hudur																6.00	2.00	8.00
tieglow																8.00	3.00	11.00
HIRAN	2.00	45.00	47.00	70.00	23.00	93.00	6.00	26.50	32.50	40.00	50.00	90.00	25.00	12.00	37.00	29.50	40.00	69.50
belet weyn				32.00	10.00					0.00			15.00	3.00	18.00	11.00	3.50	14.50
bulo burti				25.00	6.00					20.00			0.00	3.00	3.00	3.50	8.50	12.00
jalalaksi				8.00	7.00					20.00			10.00	6.00	16.00	15.00	28.00	43.00
MIDDLE SHABELLE	56.00	138.00	194.00	91.00	91.00	182.00	62.50	120.00	182.50	90.00	152.00	242.00	183.00	153.50	336.50	95.50	227.00	322.50
jowhar				54.00	48.00					50.00			167.00	78.00	245.00	71.50	168.00	239.50
adan yabal				0.00	0.00					0.00			0.00	0.50	0.50	1.00	5.00	6.00
balad				37.00	43.00					40.00			16.00	55.00	71.00	23.00	54.00	77.00
LOWER SHABELLE	191.00	299.00	390.00	153.00	323.00	476.00	150.00	279.50	429.50	122.00	279.00	401.00	17.50	323.50	341.00	88.00	265.00	354.00
afgoi				48.00	153.00					37.00			1.00	70.00	71.00	27.00	45.00	72.00
wanla weyn				1.00	0.00					0.00			9.00	0.50	6.50	12.00	12.50	24.50
merca				77.00	125.00					37.00			6.00	79.00	85.00	24.00	67.00	91.00
korioley				19.00	37.00					44.00			2.00	120.00	122.00	0.00	45.00	45.00
brava				16.00	0.00					4.00			1.50	4.00	5.50	24.00	16.00	40.00
sablaale				0.00	0.00					0.00			0.00	10.00	10.00	1.00	27.00	28.00
kurtunwarey				0.00	0.00					0.00			4.00	[illegible]	40.00	0.00	33.50	33.50
AWDAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GALBEED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SANAAG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOGDHEER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOOL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BARI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NUGAAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MUDUG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GALGADUD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOMALIA	273.00	627.00	900.00	473.00	561.00	984.00	318.10	602.00	920.10	348.00	724.00	1072.00	254.50	561.00	809.10	390.00	656.54	1046.54

Table B.1.5

F.E.W.S. PROJECT

RICE - Regional repartition of the cropped areas in 100ha

District	1982 gu	1982 der	1982 tot	1983 gu	1983 der	1983 tot	1984 gu	1984 der	1984 tot	1985 gu	1985 der	1985 tot	1986 gu	1986 der	1986 tot	1987 gu	1987 der	1987 tot
GEDO																0.01	0.10	
ceel waaq																0.00		
luuq																0.10		
garba harre																0.31		
belet-hawa																1.91		
bardera																0.55		
MIDDLE JUBA				7.00			3.55	5.00	0.00	5.00	5.00	10.00	6.20	6.20	12.60	7.00	7.55	
sakow																0.00	0.10	
buale																0.10	0.10	
jilib				7.00			3.00	5.00		5.00	5.00		6.30	6.30		7.00	7.00	
LOWER JUBA										1.00	2.10	3.00	5.00	2.50	7.50	2.10	7.70	
jamame										5.00	5.11		5.00	2.50		2.10	7.70	
kismayo																1.55	0.07	
BAY																1.00	0.45	
bur akaba																1.70		
baidoa																1.10		
qansah dhere																0.01		
dinsor																0.31		
BAKOOL																1.10	1.11	
wajid																1.10		
hudur																0.01		
tieyglow																0.11		
HIRAN																0.00	5.50	
belet weyn																1.00		
bulo burti																0.00		
jalalaksi																0.10		
MIDDLE SHABELLE			5.55	1.43			2.10	3.10	5.90	6.00	6.70	12.70	6.10	5.44	11.44	5.70	5.11	[illegible]
jowhar				1.43			2.00	2.10		5.20	6.70		6.00	5.00		5.20	5.11	[illegible]
adn yabaal																0.55	0.01	
balcad																0.10	0.01	
LOWER SHABELLE				2.52									1.50		0.50	1.10	1.00	
afgoi																0.30		
wanla weyn																1.11		
merca													0.50			0.30		
kurtunwarey																0.11		
brava																0.07		
sablale				2.52												3.30		
kurtunwaare																1.10		
MUDUG																1.11	0.10	[illegible]
GALGADUD																0.01	1.10	[illegible]
SANAAG																0.21	0.10	[illegible]
TOGDHEER																0.11	0.11	[illegible]
SOOL																0.30	1.10	[illegible]
BARI																0.55	0.10	[illegible]
NUGAL																0.30	1.00	[illegible]
AWDAL																0.10	1.00	[illegible]
WOQOOYI GALBEED																1.00	0.50	[illegible]
SOMALIA			61.00	5.55	0.45	10.00	5.00	1.00	11.00	12.90	13.70	25.70	11.10	13.40	11.44	15.35	15.35	[illegible]

F.E.E.S. PROJECT

COWPEAS - Regional repartition of the cropping areas in 100 ha

Table B.1.6

DISTRICT	1982 gu	1982 der	1982 tot	1983 gu	1983 der	1983 tot	1984 gu	1984 der	1984 tot	1985 gu	1985 der	1985 tot	1986 gu	1986 der	1986 tot	1987 gu	1987 der	1987 tot
GEDO							25.00	2.05	27.05	0.00	41.40	41.40	16.00	0.00	16.00	6.50	2.30	8.80
gard weyn							6.00						0.00		0.00	2.50	0.00	2.50
luq							8.00						15.00		15.00	3.00	0.00	3.00
garba harre							0.00						0.00		0.30	0.00	4.30	0.35
belet-hawa							1.00						1.00		1.00	1.00	2.00	3.00
bardera							0.00						0.00		0.30	0.00	0.00	0.00
MIDDLE JUBA							42.00	5.25	47.25	0.00	0.00	0.00	0.00	2.00	2.00	5.00	0.00	5.00
sakow							4.00						0.00	0.30	0.00	1.00		1.00
buale							20.00						0.00	0.00	0.00	2.00		2.00
jilib							18.00						0.00	2.00	0.50	2.00		2.00
LOWER JUBA							1.00	32.50	33.50	27.00	18.00	45.00	0.00	0.00	0.00	0.00	2.00	2.00
jamame							1.00			27.00			0.00			0.00	2.00	2.00
kismayo							0.00			0.00			0.00			0.00	0.00	0.00
BAY							33.00	5.50	38.50	0.00	0.00	0.00	0.00	30.00	30.00	18.00	4.50	22.50
bur akaba							5.00						0.00	5.00	5.00	2.00	0.00	2.00
baidoa							28.00						0.00	15.00	15.00	4.00	8.50	12.50
qansax dhere							0.00						0.00	5.00	5.00	5.00	0.00	5.00
dinsor							0.00						0.00	5.00	5.00	3.00	0.00	3.00
BAKOOL							2.00	4.50	6.50	2.00	2.80	4.80	13.00	0.00	17.00	26.00	5.00	31.00
wajid							0.00			0.00			0.00		4.00	3.00	0.00	3.50
hoddur							1.00			2.00			4.00		4.00	8.50	2.00	10.50
tiyeglow							1.00			5.00			11.00		11.00	14.50	3.00	17.55
HIRAN							18.00	3.25	21.25	0.00	27.10	27.10	0.00	2.00	2.00	8.50	4.55	13.03
belet weyn							2.00						0.00	2.00	2.00	3.00	1.00	4.00
bula burti							15.00						0.00	0.00	2.00	3.50	4.50	8.00
jalalaksi							1.00						0.00	0.00	1.00	2.00	1.00	3.00
MIDDLE SHABELLE							33.00	5.15	38.15	60.00	5.00	65.00	68.00	11.50	79.50	46.00	65.00	111.00
jowhar							0.00			20.00			43.00	8.00	45.00	38.00	21.00	59.00
adan yabal							1.00			10.00			3.00	2.00	5.00	3.00	40.00	43.00
balad							12.00			30.00			2.00	1.50	4.00	5.00	4.00	9.00
LOWER SHABELLE							3.00	18.25	21.25	10.50	24.00	34.50	2.00	8.30	10.30	12.50	20.50	33.00
afgoi							1.00			5.50			2.50	0.00	[illegible]	[illegible]	2.50	5.50
wanle weyn							2.00			0.00			0.00	2.00	1.50	[illegible]	[illegible]	[illegible]
merca							4.00			5.00			0.50	0.00	0.50	2.50	0.00	2.50
qoryoley							0.00			0.00			0.00	0.30	0.50	3.00	0.00	2.00
brava							0.00			0.00			0.00	2.00	0.00	2.00	1.00	5.00
sablale							0.00			0.00			0.00	2.00	0.30	0.00	11.00	11.00
kurtunwarey							0.00			0.00			0.00	2.00	0.00	1.00	4.00	1.00
WOAL										12.00	4.00	11.00		0.00	0.00	3.00	0.30	2.00
WALBEED							10.55	0.00	10.55	23.00	24.00	47.00	100.00	0.00	100.00	10.00	0.00	11.00
SANAAG							5.25	0.00	5.25	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00
TOGDHEER							0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	10.00	0.00	10.00
SOOL							0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00
BARI							2.60	2.65	5.25	0.00	0.00	0.00		0.00	0.00	5.00	0.00	5.00
NUGAAL							44.58	6.00	50.54	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00
MUDUG							37.00	5.00	42.00	60.00	30.00	90.00		0.00	0.00	40.00	20.00	60.00
GALGADUD							41.00	11.50	52.50	60.00	30.00	90.00	30.00	0.00	30.00	50.00	120.00	170.00
SOMALIA			276.06			330.00	283.80	97.60	381.40	259.50	208.30	467.80	235.00	52.80	288.30	235.50	257.10	483.30

SOMALIA - Regional repartition of the cropping areas in 1000ha

District	1982			1983			1984			1985			1986			1987		
	gu	der	tot	gu	der	tot	gu	der	tot	gu	der	tot	gu	der	tot	gu	der	tot
GEDO				1.00	1.00	2.00	0.53	0.12	1.05	0.00	0.00	0.00	1.30	0.00	1.00	5.30	0.00	5.00
bard weyn				3.00	0.00								4.00			7.50		2.50
lugh				0.50	0.30								0.60			2.30		7.50
garba hare				9.90	0.00								0.00			0.30		0.00
el-waq				4.00	0.36								0.00			9.00		7.00
dolow				1.00	4.44								1.00			4.03		9.00
MIDDLE JUBA				2.00	3.00	5.00	3.40	1.23	3.17	0.00	0.00	0.00	0.00	0.00	0.00	1.04	3.00	4.40
jilib				0.00	2.00											0.00	0.00	0.00
bu'ale				2.00	0.00											0.00	0.00	0.00
sakow				0.00	1.00											1.00	3.00	4.00
LOWER JUBA				4.00	1.00	5.00	2.00	0.52	2.52	4.00	0.64	0.64	0.00	0.00	0.00	0.00	0.50	0.50
jamame				0.00	0.20											0.00	0.50	0.50
kismayo				1.00	0.30											0.00	0.00	0.00
BAY				4.90	4.00	3.70	8.30	5.50	13.40	10.30	5.00	15.30	22.00	4.00	22.00	4.51	0.00	4.50
bur akaba				2.90	4.00					0.00			0.00			1.00		1.00
baidoa				2.00	4.00					4.20			14.00			1.00		2.00
qansah dhere				1.00	1.00					4.10			2.00			0.50		0.55
dinsor				0.00	1.00					2.00			5.00			1.00		1.00
BAKOL				0.00	0.30	0.20	1.50	0.00	2.59	2.00	0.00	2.00	0.00	0.00	0.00	4.00	1.00	5.00
hudur					0.00					3.10						0.00	0.00	0.00
tieglo					0.30					9.90						1.50	0.50	2.00
wajid					0.00					4.00						2.50	*0.50	3.00
HIRAN				0.00	1.30	1.30	3.10	1.10	4.20	5.00	5.44	5.44	0.00	0.00	0.00	0.00	0.50	0.50
belet weyn					4.00					1.00						0.00	4.00	0.00
bula burti					3.00					2.00						1.00	0.00	0.00
jalalaksi					0.30					2.00						4.00	0.50	0.50
MIDDLE SHABELLE				1.00	0.00	1.00	3.15	3.15	6.30	4.20	3.50	11.70	1.00	2.50	3.50	6.50	4.50	11.00
jowhar				0.00						4.10			1.00	0.50		3.00	0.54	3.50
adan yabal				0.00						0.60			0.00	0.00		0.50	3.00	3.50
balad				1.00						4.10			0.00	2.00		3.00	1.00	4.00
LOWER SHABELLE				5.00	1.50	6.30	0.00	4.00	11.00	14.50	3.40	18.90	0.50	2.00	2.50	11.00	1.00	12.00
afgoi				1.00	1.50					3.46			0.50	0.00		2.00	0.00	2.00
wanle weyn				2.00	0.00					1.79			0.00	0.00		1.50	1.00	2.50
merca				1.00	0.00					1.20			0.00	1.00		3.50	0.00	3.50
qoryoley				3.00	0.00					1.70			4.00	3.00		3.00	0.00	3.00
brava				1.00	0.00					0.00			4.00	0.00		0.00	0.00	0.00
kurtunwarey				4.00	0.00					1.00			4.00	0.00		4.90	0.00	0.00
sablale				4.00	0.00					4.00			4.00	4.00		1.00	0.00	1.00
MUDUG				0.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	4.00
GALGUDUD				0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NUGAL				0.00	0.00	0.00	0.00	4.00	4.00	0.00	3.30	0.00	0.00	0.00	0.00	0.00	1.00	0.00
SANAAG				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
SOOL				0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
BARI				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.30	0.00	0.00	0.00	0.00	0.00	4.50
AWDAL				0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BAKOL				0.00	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00
W.GALBEED				0.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS			30.00	17.70	12.20	30.00	31.03	16.64	47.89	40.00	12.99	52.00	29.50	4.50	29.00	32.00	10.50	42.50

Table B.2.

[illegible] – Regional repartition of crop production (thousand ton)

F.E.W.S. Project

District	1982 gu	1982 der	1982 tot	1983 gu	1983 der	1983 tot	1984 gu	1984 der	1984 tot	1985 gu	1985 der	1985 tot	1986 gu	1986 der	1986 tot	1987 gu	1987 der	1987 tot
GEDO	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MIDDLE JUBA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
LOWER JUBA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BAY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BAKOOL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HIRAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MIDDLE SHABELLE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
LOWER SHABELLE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GALBEED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SANAAG	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TOGDHEER	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SOOL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BARI	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NUGAAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MUDUG	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GALGADUD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SOMALIA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Table B. 2

24. SORGHUM - Regional composition of crop production
(thousand tons)

District	1982 gu	der	tot	1983 gu	der	tot	1984 gu	der	tot	1985 gu	der	tot	1986 gu	der	tot	1987 gu	der	tot
GEDO	1.00	4.00	5.40	2.38	3.58	5.98	5.00	1.40	8.44	22.71	7.00	10.21	12.00	6.44	51.15	3.37	0.16	3.43
geed weyn										0.10			1.00		1.00	0.35	5.11	0.12
luuq										5.15			3.30		3.10	0.60	3.10	0.45
garbahare										2.20			5.55		6.05	1.04	1.06	0.14
belet-hawo										1.55			0.35		5.35	0.21	0.01	0.31
bardera										11.75			10.30		11.30	2.24	4.35	2.54
MIDDLE JUBA	8.30	4.26	52.19	8.30	3.10	3.30	3.60	3.04	12.10	7.31	2.00	10.26	3.48	9.70	7.50	0.31	3.91	0.11
salow										0.57			7.10	0.10	2.34	4.55	3.30	0.59
buale										1.53			0.30	0.10	0.50	0.04	4.04	4.15
jilib										4.55			0.00	7.00	0.00	3.00	1.01	7.00
LOWER JUBA	1.60	4.39	5.30	1.03	4.10	1.54	0.30	3.50	3.70	4.10	6.10	0.50	6.00	1.00	4.44	5.35	1.20	1.00
jamame							2.00								1.01	2.00	4.00	5.55
kismayo							0.10								1.00	1.00	0.00	1.71
BAY	51.20	24.00	44.20	25.04	0.90	25.44	49.35	31.40	40.16	56.02	15.50	71.43	151.40	0.30	151.54	145.33	15.30	165.77
bur hakaba										23.53			21.00	0.00	21.10	64.41	5.10	55.33
baidoa										2.36			23.50	0.05	23.55	58.30	10.37	66.61
qansa dhere										11.31			25.14	0.45	39.35	14.36	1.00	15.36
dinsor										14.73			17.40	0.10	17.44	55.63	1.40	16.03
BAKOOL	6.20	3.38	3.15	7.10	0.07	7.04	1.07	1.60	4.10	2.25	4.58	3.35	4.10	0.00	4.47	7.10	6.41	11.11
wajid										1.70			5.30		1.71	4.01	0.51	1.33
hudur										0.30			3.10		5.35	2.30	2.36	4.70
tieyeglow										3.35			1.60		1.00	4.94	1.54	1.55
HIIRAN	6.10	4.21	14.30	2.74	2.44	4.35	1.43	4.30	11.70	10.00	5.30	21.31	5.10	2.19	15.10	1.36	2.71	11.06
beled weyn					1.60					3.60			2.10	0.30	4.70	1.33	5.99	3.97
bulo burti					0.77					7.04			4.70	0.00	5.00	1.50	1.21	5.21
jalalaqsi					4.30					5.41			4.44	4.50	3.93	1.65	0.40	2.05
MIDDLE SHABELLE	5.40	3.60	11.20	2.30	1.10	3.71	4.40	1.01	55.64	1.55	2.30	3.65	11.30	1.05	15.15	2.41	5.14	3.55
jowhar										4.10			15.30	0.30	14.22	1.36	3.10	0.74
adan yabal										0.14			1.30	5.50	9.22	1.11	1.11	1.74
balad										7.75			4.00	0.15	4.15	4.45	1.31	7.10
LOWER SHABELLE	16.13	1.22	35.35	4.50	7.17	4.52	17.10	0.21	26.64	35.76	5.00	33.76	4.30	2.30	14.50	7.01	1.25	12.34
afgoi					1.49					1.60			4.14	2.12	3.53	1.00	1.47	2.42
wanle weyn					1.33					3.00			7.44	4.00	7.40	4.65	1.45	3.47
merca					1.51					4.45			4.00	0.13	0.47	1.78	4.00	0.31
korioley					3.31					3.11			4.55	9.18	0.06	0.11	0.09	0.07
brava					1.44					0.16			1.01	0.10	4.41	4.59	3.11	3.10
sablaale					1.09					5.10			1.40	1.00	1.10	0.71	4.41	5.44
kurtunwarey					1.00					4.00			0.00	1.00	0.00	0.11	1.01	0.11
AWDAL	0.17	1.01	0.18	4.01	1.00	0.02	4.94	9.55	0.01	11.20	0.97	12.11	0.13	1.00	0.01	1.56	4.95	1.38
GALBEED	26.38	0.44	36.52	37.14	4.00	57.01	35.66	0.40	35.66	19.50	2.45	34.55	33.10	1.04	77.06	22.40	0.01	22.41
SANAAG	3.73	0.00	3.73	6.00	0.10	4.01	3.74	5.30	3.71	2.30	0.35	1.65	1.40	0.00	0.00	0.25	5.58	5.95
TOGDHEER	16.64	4.44	16.55	9.99	0.11	0.00	10.51	1.00	10.51	5.00	4.50	5.54	5.34	0.00	1.24	2.01	4.70	2.00
SOOL	0.09	0.70	1.46	0.40	1.00	0.06	1.54	4.45	5.09	1.00	0.00	0.00	0.01	0.00	1.00	0.01	1.00	4.45
BARI	0.23	0.10	0.33	5.55	1.30	1.12	1.47	0.01	0.12	0.20	0.02	0.72	4.44	4.10	1.12	0.20	1.60	0.20
NUGAAL	1.37	0.20	2.17	0.10	0.05	2.02	2.10	0.00	2.30	4.55	0.30	0.40	0.50	1.50	0.02	0.00	0.41	1.10
MUDUG	1.51	0.00	1.52	0.40	5.55	5.55	1.75	0.00	1.26	0.01	0.00	1.00	0.21	1.40	5.05	4.55	3.01	0.90
GALGADUD	4.58	1.00	4.60	1.00	4.31	0.09	0.11	0.00	1.40	5.55	5.55	1.00	0.00	4.00	4.90	0.70	1.07	0.77
SOMALIA	166.10	60.01	231.10	118.60	3.40	121.40	150.03	51.36	221.39	177.70	41.13	221.51	230.15	3.02	235.67	205.16	30.11	243.37

Table B.
3

3a. SESAME - Regional repartition of crop production
(thousand tons)

F.E.W.S. Project

district	[illegible] gu	der	tot	[illegible] gu	der	tot	[illegible] gu	der	tot	[illegible] gu	der	tot	[illegible] gu	der	tot	[illegible] gu	der	tot
GEDO	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
luuq					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
garba hare					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
belet-hawo					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
bardera					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MIDDLE JUBA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
sakow					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
bu'ale					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
jilib					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
LOWER JUBA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
jamame					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
kismayo					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BAY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
bur akaba										[illegible]			[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
baidoa										[illegible]			[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
qansa dhere										[illegible]			[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
dinsor										[illegible]			[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
BAKOOL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
wajid										[illegible]			[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
huddur										[illegible]			[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
tieeglow										[illegible]			[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
HIRAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
belet weyn					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
bula burti					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
jalalaksi					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MIDDLE SHABELLE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
jowhar					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
aden yabal					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
balad					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
LOWER SHABELLE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
afgoi					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
wanla wein					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
merca					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
kurtuley					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
brava					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
sablale					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
kurtunwarey					[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AWDAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GALBEED	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SANAAG	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TOGDHEER	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SOOL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BARI	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NUGAAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MUDUG	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GALGADUD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SOMALIA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Table B.2

41. [illegible] - Regional repartition of the crop production in 1000 tons

F.E.W.S. Project

Districts	1982 gu	1982 der	1982 tot	1983 gu	1983 der	1983 tot	1984 gu	1984 der	1984 tot	1985 gu	1985 der	1985 tot	1986 gu	1986 der	1986 tot	1987 gu	1987 der	1987 tot
GEDO				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]																		
[illegible]																		
[illegible]																		
[illegible]																		
[illegible]																		
MIDDLE JUBA				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]				[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]				[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	
Jilib				[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	
LOWER JUBA				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]										[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]										[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	
BAY				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]																		
[illegible]																		
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[illegible]																		
[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]																		
[illegible]																		
[illegible]																		
[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]																		
[illegible]																		
[illegible]																		
MIDDLE SHABELLE				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]				[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]				[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]				[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	
LOWER SHABELLE				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]				[illegible]									[illegible]					
[illegible]				[illegible]									[illegible]					
[illegible]				[illegible]									[illegible]					
[illegible]				[illegible]									[illegible]					
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[illegible]				[illegible]									[illegible]					
[illegible]				[illegible]									[illegible]					
[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SOMALIA			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

SAL CEREALS - Regional distribution of crop production (thousand ton)

F.E.W.S. Project

District	1982 gu	1982 der	1982 tot	1983 gu	1983 der	1983 tot	1984 gu	1984 der	1984 tot	1985 gu	1985 der	1985 tot	1986 gu	1986 der	1986 tot	1987 gu	1987 der	1987 tot
GEDO							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] weyn							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
luuq							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
garba harey							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
belet-hawa							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
bardera							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
MIDDLE JUBA							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
sakow							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
buale							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
jilib							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
LOWER JUBA							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
jamame							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
kismayo							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
BAY							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
bur hakaba							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
baidoa							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
qansah dhere							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
dinsor							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
BAKOOL							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
wajid							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
huddur							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
tieglow							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
HIRAN							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
belet weyn							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
bulo burti							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
jalalaksi							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
MIDDLE SHABELLE							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
jowhar							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
aden yabal							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
balad							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
LOWER SHABELLE							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
afgoi							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
wanle weyn							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
merca							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
kurioley							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
brava							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
sablale							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
kurtunware							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
AWDAL										[illegible]	[illegible]	[illegible]				[illegible]	[illegible]	[illegible]
GALBEED							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SANAAG							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]	[illegible]	[illegible]
TOGDHEER							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]
SOOL							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]
BARI							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]
NUGAL							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]
MUDUG							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]
GALGADUD							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SOMALIA			15.00			13.90	11.77	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Table B.2

5a. COMPEAS - Regional repartition of crop production
(thousand tons)

F.E.W.S. Project

District	1982 pv	der	tot	1983 pv	der	tot	1984 pv	der	tot	1985 pv	der	tot	1986 pv	der	tot	1987 pv	der	tot
GEDO							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
lugh							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
garba hare							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
belet-hawa							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
bardera							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
MIDDLE JUBA							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
sakow							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
buale							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
jilib							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
LOWER JUBA							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
jamame							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
kismayo							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
BAY							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
bur hakaba							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
baidoa							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
qansa dhere							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
dinsor							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
BAKOL							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
wajid							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
huddur							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
tieyglow							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
HIRAN							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
belet weyn							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
bulo burti							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
jalalaqsi							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
MIDDLE SHABELLE							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
jowhar							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
adan yabal							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
balad							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
LOWER SHABELLE							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
afgoi							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
wanle weyn							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
merca							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
kurioley							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
brava							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
sablale							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
kurtunware							[illegible]			[illegible]			[illegible]			[illegible]	[illegible]	[illegible]
[illegible]										[illegible]	[illegible]	[illegible]				[illegible]	[illegible]	[illegible]
[illegible]							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SANAAG							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]	[illegible]	[illegible]
TOGDHEER							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]
SOOL							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]
BARI							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]
[illegible]							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]
MUDUG							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]	[illegible]
GALGUDUD							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SOMALIA			[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

F.E.W.S. Project

Table B.4

6a 1982 production (in 1000 tons)

	maize	sesame	sorghum	rice	cowpea	groundnut
SEED	4.20	0.40	1.00			
ged weyn						
lugh						
garba hare						
belet-hawa						
bardera						
MIDDLE JUBA	12.40	2.10	7.20			
salov						
koale						
jilib						
LOWER JUBA	15.30	2.20	1.80			
jamame						
kismayo						
BAY	0.00	0.00	50.20			
bur akaba						
baidoa						
qansa dhere						
dinsor						
BAKOOL	0.00	0.00	6.20			
wajid						
hoddur						
teyeglow						
HIRAN	15.00	0.10	0.10			
belet weyn						
bulo burti						
jalalaksi						
MIDDLE SHAB	18.10	3.60	9.60			
jowhar						
aden yabal						
balad						
LOWER SHABE	48.80	8.90	16.10			
afgoi						
vanle wein						
merca						
barioley						
brava						
sablale						
kurtunware						
AWDAL	0.00	0.00	0.00			
GALGEED	0.00	0.00	36.99			
SANAAG	0.00	0.00	3.73			
TOGDHEER	0.00	0.00	16.68			
SOOL	0.00	0.00	0.00			
NUGAAL	0.00	0.00	0.22			
MUDUG	0.00	0.00	2.17			
HIRAN	0.00	0.00	1.50			
GALGADUD	0.00	0.00	4.60			

6a 1981 production (in 1000 tons)

	maize	sesame	sorghum	rice	cowpea	groundnut
SEED	9.40	0.30	2.10	0.00		0.10
ged weyn						
lugh						
garba hare						
belet-hawa						
bardera						
MIDDLE JU	7.70	0.90	6.30	0.20		0.20
salov				0.00		0.00
koale				0.00		0.20
jilib				0.20		0.00
LOWER JUB	15.90	1.30	0.80	0.00		0.40
jamame						0.40
kismayo						0.00
BAY	2.10	1.50	25.00	0.00		0.60
bur akaba						0.35
baidoa						0.25
qansa dhere						0.00
dinsor						0.00
BAKOOL	0.00	0.00	1.00	0.00		0.00
wajid						
hoddur						
teyeglow						
HIRAN	7.90	1.50	3.70	0.00		0.00
belet weyn						
bulo burti						
jalalaksi						
MIDDLE SH	61.30	3.60	2.30	0.70		0.10
jowhar				0.70		0.00
aden yabal				0.00		0.00
balad				0.00		0.10
LOWER SHA	76.80	7.30	6.60	0.50		1.00
afgoi				0.00		
vanle wein				0.00		
merca				0.00		
barioley				0.00		
brava				0.00		
sablale				0.50		
kurtunware				0.00		
AWDAL	0.00	0.00	0.00	0.00		
GALGEED	0.00	0.00	57.80	0.00		0.00
SANAAG	0.00	0.00	0.00	0.00		0.00
TOGHDEER	0.00	0.00	0.00	0.00		0.00
SOOL	0.00	0.00	0.00	0.00		0.00
NUGAAL	0.00	0.00	0.00	0.00		0.00
MUDUG	0.00	0.00	0.00	0.00		0.00
GALGADUD	0.00	0.00	0.00	0.00		0.00

Table B.5.3

Table B.5.4

F.E.W.S. PROJECT

1984 der season - Cropped areas (in 100 ha)

District	maize	sorghum	sesame	rice	cowpea	groundnut	tilled
GEDO	32.00	85.00	10.40	0.00	2.05	0.52	133.84
ged weyn							
lugh							
garba hare							
belet-hawa							
bardera							
MIDDLE JU	55.00	75.00	67.50	5.00	5.25	1.27	204.02
sakow				0.00			
boale				0.00			
jilib				5.00			
LOWER JUB	94.00	90.00	98.10	0.00	32.50	0.52	284.52
jamame							
kismayo							
BAY	0.00	760.00	0.00	0.00	5.50	5.50	771.00
bur akaba							
baidoa							
qansa dhere							
dinsor							
BAKOL	0.00	40.00	0.00	0.00	4.50	0.00	45.55
Wajid							
Oddur							
Teyeglow							
HIRAN	66.00	207.50	26.50	0.00	3.25	1.10	304.35
belet weyn							
bulo burti							
jalalaksi							
MIDDLE SH	156.00	95.00	120.00	3.00	5.15	3.15	382.30
jowhar				3.00			
aden yabal				0.00			
balad				0.00			
LOWER SHA	289.00	207.00	279.50	0.00	16.25	4.00	810.00
afgoi							
wanle wein							
merca							
tarioley							
brava							
sablaale							
kurtunware							
AWDAL	0.00		0.00	0.00		0.00	
GALGEED	0.00	0.00	0.00	0.00	0.00	0.00	31.45
SANAAG	0.00	0.00	0.00	0.00	0.00	0.00	2.65
TOGHDEER	0.00	0.00	0.00	0.00	0.00	0.00	1.31
SOOL	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BARI	0.00	0.00	0.00	0.00	2.65	0.00	2.96
NUGAAL	0.00	0.00	0.00	0.00	4.00	0.00	4.20
MUDUG	0.00	0.00	0.00	0.00	5.00	0.00	5.10
GALGADUD	0.00	0.00	0.00	0.00	11.50	0.00	11.76
SOMALIA	692.00	1559.50	602.00	8.00	97.60	16.06	2995.01

1985 der season - Cropped areas (in 100 ha)

District	maize	sorghum	sesame	rice	cowpea	groundnut
GEDO	45.60	127.00	0.00	0.00	41.40	0.00
ged weyn						
lugh						
garba hare						
belet-hawa						
bardera						
MIDDLE JU	24.00	89.00	118.00	5.00	0.00	0.00
sakow				0.00		
boale				0.00		
jilib				5.00		
LOWER JUB	27.00	3.00	125.00	2.00	18.00	0.66
jamame				2.00		
kismayo				0.00		
BAY	15.00	375.00	0.00	0.00	0.00	5.00
bur akaba						
baidoa						
qansa dhere						
dinsor						
BAKOL	2.70	21.00	0.00	0.00	2.80	0.00
Wajid						
Oddur						
Teyeglow						
HIRAN	15.90	59.00	50.00	0.00	27.10	0.44
belet weyn						
bulo burti						
jalalaksi						
MIDDLE SH	113.10	79.00	152.00	6.70	5.00	3.50
jowhar				6.70		
aden yabal				0.00		
balad				0.00		
LOWER SHA	288.00	190.00	279.00	0.00	24.00	2.40
afgoi						
wanle wein						
merca						
tarioley						
brava						
sablaale						
kurtunware						
AWDAL	1.00	16.50	0.00	0.00	6.00	0.00
GALGEED	2.50	44.50	0.00	0.00	24.00	0.00
SANAAG	0.00	2.70	0.00	0.00	0.00	0.00
TOGHDEER	0.00	9.10	0.00	0.00	0.00	0.00
SOOL	0.00	0.00	0.00	0.00	0.00	0.00
BARI	0.00	0.40	0.00	0.00	0.00	0.00
NUGAAL	0.00	0.00	0.00	0.00	0.00	0.00
MUDUG	0.00	2.00	0.00	0.00	30.00	0.00
GALGADUD	0.00	2.00	0.00	0.00	30.00	0.00
SOMALIA	535.40	1020.20	724.00	13.70	206.30	12.00

Table B.6.5

Table B.6.6

F.E.W.S. PROJECT

der 1986 production (in 1000 tons)

	maize	sesame	sorghum	rice	cowpea	groundnut
GEDO	1.16	0.84	0.00	0.00	0.10	0.00
ged weyn	0.08	0.04				
lugh	0.64	0.40				
garba har	0.20	0.00				
belet-haw	0.00	0.32				
bardera	0.24	0.08				
MIDDLE JU	0.32	0.27	0.10	2.65	0.40	0.00
salow	0.08	0.06	0.10	0.00		
boale	0.08	0.03	0.00	0.00		
jilib	0.16	0.18	0.00	2.65		
LOWER JUB	2.60	2.20	0.00	0.63	0.30	0.00
jazaa	2.30	2.00		0.63		
kisaayo	0.30	0.20		0.00		
BAY	0.00	0.00	0.10	0.00	0.30	0.00
bur akaba			0.00			
baidoa			0.05			
qansa dhere			0.05			
dinsor			0.00			
BAKOOL	0.00	0.00	0.00	0.00	0.00	0.00
wajid						
hoddur						
teyeglow						
HIRAN	1.04	0.51	2.20	0.00	0.20	0.00
belet wey	0.48	0.06	0.90			
wilo burt	0.16	0.15	0.80			
jalalaksi	0.40	0.30	0.50			
MIDDLE SH	8.15	8.20	1.05	1.70	1.10	0.15
jowhar	6.60	4.90	0.90	1.70		0.03
aden yaba	0.00	0.00	0.00	0.00		0.00
balad	1.55	3.30	0.15	0.00		0.12
LOWER SHA	20.42	18.14	2.38	0.00	2.10	0.12
afgoi	9.90	3.50	2.37			0.00
wanle wei	0.00	0.00	0.00			0.00
merca	5.10	4.74	0.01			0.06
barioley	5.00	7.20	0.00			0.06
brava	0.00	0.20	0.00			0.00
sablaale	0.36	0.50	0.00			0.00
kurtunwar	0.06	2.00	0.00			0.00
AVDAL	0.00	0.00	0.00	0.00		0.00
GALGEED	0.00	0.00	0.00	0.00	0.00	0.00
SANAAG	0.00	0.00	0.00	0.00		0.00
TOGDHEER	0.00	0.00	0.00	0.00	0.00	0.00
SOOL	0.00	0.00	0.00	0.00	0.00	0.00
BARI	0.00	0.00	0.00	0.00	0.00	0.00
NUGAAL	0.00	0.00	0.00	0.00	0.00	0.00
MUDUG	0.00	0.00	0.00	0.00	0.00	0.00
GALGADUD	0.00	0.00	0.00	0.00	0.00	0.00

der 1987 production (in 1000 tons)

	maize	sesame	sorghum	rice	cowpea	groundnut	safflove
GEDO	1.64	0.02	0.36	0.00	0.01	0.00	0.00
ged weyn	0.30	0.00	0.00		0.00		
lugh	0.75	0.00	0.00		0.00		
garba har	0.28	0.00	0.06		0.01		
belet-haw	0.00	0.00	0.00		0.00		
bardera	0.31	0.02	0.30		0.00		
MIDDLE JU	0.37	1.41	0.07	2.74	0.00	0.15	0.00
salow	0.30	0.00	0.00	0.00		0.00	
boale	0.70	0.65	0.07	0.00		0.00	
jilib	0.00	0.76	0.00	2.74		0.15	
LOWER JUB	0.25	5.16	0.00	2.23	0.08	0.04	0.02
jazaa	0.25	4.80		2.23	0.08	0.04	0.02
kisaayo	0.00	0.36		0.00	0.00	0.00	0.00
BAY	0.14	0.00	19.00	0.00	0.08	0.00	0.00
bur akaba	0.00		5.29		0.00		
baidoa	0.14		10.31		0.08		
qansa dhe	0.00		1.00		0.00		
dinsor	0.00		2.40		0.00		
BAKOOL	1.44	0.15	6.41	0.00	0.10	0.05	0.00
wajid	0.00	0.00	0.51		0.00	0.00	
hoddur	0.64	0.06	2.36		0.04	0.02	
teyeglow	0.80	0.09	3.54		0.06	0.03	
HIRAN	0.23	0.80	2.70	0.00	0.09	0.03	0.00
belet wey	0.00	0.07	1.09		0.06	0.00	
bulo burt	0.00	0.17	1.21		0.01	0.00	
jalalaksi	0.23	0.56	0.40		0.02	0.03	
MIDDLE SH	11.96	7.32	5.24	1.85	1.95	0.24	0.00
jowhar	5.80	5.04	3.40	1.85	0.63	0.04	
aden yaba	0.00	0.12	0.60	0.00	1.20	0.12	
balad	6.16	2.16	1.24	0.00	0.12	0.08	
LOWER SHA	15.83	11.06	4.25	0.00	0.55	0.01	0.26
afgoi	4.03	1.80	1.42		0.07	0.00	0.00
wanle wei	0.15	0.25	2.80		0.06	0.01	0.00
merca	7.30	3.01	0.30		0.00	0.00	0.00
barioley	4.35	2.93	0.00		0.00	0.00	0.00
brava	0.00	0.48	0.00		0.09	0.00	0.00
sablaale	0.00	1.08	0.00		0.33	0.00	0.24
kurtunwar	0.00	1.51	0.00		0.00	0.00	0.02
AVDAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GALGEED	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SANAAG	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOGDHEER	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOOL	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BARI	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NUGAAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MUDUG	0.00	0.00	0.00	0.00	0.60	0.00	0.00
GALGADUD	0.00	0.00	0.07	0.00	3.60	0.00	0.00

Table B.

Table B.

C.E.R.S. PROJECT

1984 - Cropped areas in 100 ha (gu + der)

District	maize	sorghum	sesame	rice	cowpea	groundnut	tilled
GEDO	111.00	210.00	25.75	0.00	27.05	1.15	366.72
ged weyn							
lugh							
garba hare							
belet-hawa							
bardera							
MIDDLE JU	195.00	315.00	107.50	0.00	47.25	3.57	769.02
sakow							
buale							
jilib							
LOWER JUB	233.00	53.00	142.35	0.00	33.50	2.52	556.52
jamame							
kismayo							
BAY	20.00	1995.00	0.00	0.00	35.56	11.80	2070.60
bur akaba							
baidoa							
qansa dhere							
dinsor							
BAKOOL	1.00	210.10	0.31	0.00	6.50	1.51	211.10
wajid							
oddur							
tieyeglow							
HIRAN	129.10	357.50	32.50	0.00	21.25	4.20	557.55
belet weyn							
bulo burti							
jalalaksi							
MIDDLE SH	403.35	315.09	117.59	5.00	19.15	6.30	1167.30
jowhar							
aden yabal							
balad							
LOWER SHA	1043.09	577.00	455.55	3.33	23.25	12.50	2277.50
afgoi							
waale wein							
merca							
korioley							
brava							
sablaale							
kurtunware							
AWDAL	0.11		0.00	0.00		0.00	
GALBEED	0.00	151.50	0.00	0.00	13.45	2.45	166.90
SANAAG	0.10	34.59	0.00	0.50	5.25	0.00	105.00
TOGHDEER	0.02	252.50	0.00	0.00	0.00	0.10	265.12
SOOL	0.00	0.10	0.00	0.00	0.00	0.00	0.00
BARI	0.00	10.50	0.00	0.00	5.25	0.00	16.27
NUGAAL	0.00	52.50	0.00	0.00	50.56	0.00	103.52
MUDUG	0.00	31.51	0.00	0.00	42.00	0.00	73.76
GALGADUD	0.00	21.00	0.00	0.00	52.50	0.00	73.76
SOMALIA	2200.00	5446.50	924.10	11.00	365.49	47.55	5545.55

1985 — Cropped areas in 100 ha (gu + der)

District	maize	sorghum	sesame	rice	cowpea	groundnut
GEDO	197.60	572.00	0.00	0.00	41.19	4.67
ged weyn						
lugh						
garba hare						
belet-hawa						
bardera						
MIDDLE JU	520.00	294.00	150.00	10.00	0.00	0.03
sakow						
buale						
jilib						
LOWER JUB	104.30	11.00	165.00	3.00	45.00	0.55
jamame						
kismayo						
BAY	65.00	1546.00	0.00	0.00	0.55	15.30
bur akaba						
baidoa						
qansa dhere						
dinsor						
BAKOOL	14.70	33.90	5.00	9.03	5.50	2.09
wajid						
oddur						
tieyeglow						
HIRAN	73.50	217.50	31.00	0.00	27.10	5.44
belet weyn						
bulo burti						
jalalaksi						
MIDDLE SH	557.70	299.16	242.00	12.70	65.80	11.79
jowhar						
aden yabal						
balad						
LOWER SHA	1220.25	534.69	401.02	0.93	24.55	10.85
afgoi						
waale wein						
merca						
korioley						
brava						
sablaale						
kurtunware						
AWDAL	7.10	203.20	0.00	0.01	58.10	0.00
GALBEED	17.40	473.20	0.00	0.10	47.00	1.00
SANAAG	1.60	27.70	0.00	0.10	0.40	0.00
TOGHDEER	0.00	32.10	0.00	0.00	0.01	0.00
SOOL	0.00	0.10	0.00	0.00	0.00	1.09
BARI	0.03	1.40	0.00	0.00	0.94	0.03
NUGAAL	0.00	1.00	0.10	0.00	0.00	0.09
MUDUG	0.40	15.00	0.00	0.10	91.00	0.06
GALGADUD	0.10	15.00	0.00	0.00	50.40	0.05
SOMALIA	2313.40	4470.20	1057.00	25.70	467.00	57.00

F.E.W.S. PROJECT

Table B.7.5

1986 - Cropped areas in 100 ha (gu + der)

District	maize	sorghum	sesame	rice	cowpea	groundnut	tilled
GEDO	71.00	205.00	27.00	0.00	16.00	5.00	418.00
ged weya	1.00		2.00		0.00	0.00	53.00
lugh	43.00		6.00		15.00	6.00	95.00
garba bar	12.00		13.00		0.00	4.00	28.00
belet-kaw	3.00		4.00		0.00	0.00	12.00
bardera	12.00		5.00		0.00	1.00	222.00
MIDDLE JU	140.00	112.00	16.50	12.60	2.00	0.00	412.30
salow	63.00		7.00	0.00	0.00		152.00
baale	14.00		2.00	0.00	0.00		32.00
jilib	79.00		7.50	12.60	2.00		228.30
LOWER JUB	122.50	0.00	41.50	7.50	0.00	0.00	215.50
jamame	110.50		45.00	7.50			257.50
kismayo	13.00		4.50	0.00			26.00
BAY	31.00	2204.00	0.00	0.00	20.00	22.00	2237.00
bur akaba	20.00				5.00	4.00	508.00
baidoa	5.00				15.00	14.00	1324.00
qansa dhe	0.00				5.00	2.00	423.00
dinsor	0.00				5.00	5.00	202.00
BAKOL	0.00	131.00	0.00	0.00	19.00	0.00	350.00
wajid					0.00		24.00
Oddur					8.00		119.30
feyeglow					11.00		207.00
HIRAN	57.00	211.00	37.00	0.00	2.00	0.00	329.00
belet wey	12.00		16.00		2.00		175.00
bula burt	15.00		3.00		0.00		115.00
jalalaksi	33.00		16.00		0.00		82.00
MIDDLE SH	653.00	215.00	335.50	11.00	79.50	3.50	1342.50
jowhar	312.00		265.00		71.00	1.50	884.50
adan yabo	0.00		0.50		5.00	0.00	10.50
balad	341.00		71.00		3.50	2.00	423.50
LOWER SHA	1295.50	240.50	343.00	0.15	10.30	2.50	2135.75
afgoi	474.50		78.00		1.50	0.50	756.00
wanle wei	41.50		8.50		2.00	0.00	292.50
merca	350.00		45.00		0.50	1.00	575.70
kurioley	163.00		122.00		3.00	1.00	301.50
brava	220.00		7.50		2.00	0.00	110.00
sablaale	7.00		10.00		2.00	0.00	76.00
kurtunwar	0.50		69.00		2.00	0.00	30.00
AFOOL			0.00	0.00	0.00	0.00	
GALGEED	100.00	211.00	0.00	0.00	100.00	0.00	503.00
SANAAG	0.00		0.00	0.00	0.00	0.00	
TOGHDEER	0.00		0.00	0.00	0.00	0.00	60.00
SOOL	0.00		0.00	0.00	0.00	0.00	
BARI	0.00		0.00	0.00	0.00	0.00	
NUGAAL	0.00		0.00	0.00	0.00	0.00	
MUDUG	0.00		0.00	0.00	0.00	0.00	
GALGADUD	0.00		0.00	0.00	30.00	0.00	30.00
SOMALIA	2451.00	3849.50	805.50	31.60	288.80	25.00	6027.00

F.E.W.S. PROJECT

Table B.7.6.

1987 - Cropped areas in 100 ha (gu + der)

District	maize	sorghum	sesame	rice	cowpea	groundnut	tilled
GEDO	60.00	262.50	45.50	0.00	8.00	5.00	427.00
ged weya	23.00	10.20	5.00		2.50	2.50	45.60
lugh	40.00	24.00	17.00		3.00	2.50	100.50
garba bar	5.50	4.50	12.00		0.30	0.00	24.00
belet-kaw	3.00	12.00	0.00		3.00	0.00	10.00
bardera	0.50	216.00	11.50		0.00	0.00	223.50
MIDDLE JU	117.50	83.50	112.50	14.40	5.00	4.00	501.50
salow	5.00	82.00	16.00	0.00	1.00	0.00	103.00
baale	0.00	1.50	46.00	0.00	2.00	0.00	60.50
jilib	56.50	0.00	60.50	14.40	2.00	4.00	329.00
LOWER JUB	134.50	0.00	120.00	5.70	2.00	0.50	347.20
jamame	114.00	0.00	111.50	5.70	2.00	0.50	313.20
kismayo	20.50	0.00	8.50	0.00	0.00	0.00	34.00
BAY	52.50	3000.50	3.50	0.00	22.50	4.50	3087.00
bur akaba	15.00	1030.00	3.00		2.00	1.00	1052.00
baidoa	27.50	1226.50	0.50		12.50	2.00	1242.50
qansa dhe	0.00	426.00	0.00		5.00	0.50	431.50
dinsor	0.00	315.00	0.00		3.00	1.00	319.00
BAKOL	34.50	354.50	19.00	0.00	31.00	5.00	444.00
wajid	1.00	34.00	0.00		3.00	0.00	38.00
Oddur	13.50	110.50	4.00		10.50	2.00	152.50
feyeglow	20.00	202.00	11.00		17.50	3.00	253.50
HIRAN	105.50	355.50	61.50	0.00	13.00	0.50	529.00
belet wey	12.50	107.50	14.50		6.00	0.50	141.00
bula burt	51.50	175.00	32.00		4.00	0.00	264.00
jalalaksi	36.50	53.00	15.00		3.00	0.50	124.00
MIDDLE SH	630.50	254.00	322.50	11.10	111.00	11.00	1639.50
jowhar	351.00	184.00	239.50	11.00	53.00	3.50	886.00
adan yabo	0.00	24.50	6.00	0.00	43.00	3.50	78.00
balad	279.50	45.50	77.00	0.00	5.00	4.00	473.00
LOWER SHA	1352.50	420.00	354.00	0.00	33.00	12.00	2500.50
afgoi	341.50	55.50	77.00		5.50	2.00	576.00
wanle wei	122.00	368.50	24.50		6.00	2.50	525.00
merca	384.50	6.00	91.00		7.50	3.50	629.50
kurioley	159.00	0.00	65.00		2.00	3.00	297.50
brava	147.00	0.00	48.00		5.00	0.00	152.00
sablaale	62.00	0.00	28.00		11.00	0.00	160.00
kurtunwar	95.50	0.00	33.50		0.00	0.00	131.50
AFOOL	6.00	12.00	0.00	0.00	2.00	0.50	40.00
GALGEED	70.00	281.00	0.00	0.00	14.00	0.00	365.00
SANAAG	5.00	15.00	0.00	0.00	0.00	0.00	25.00
TOGHDEER	5.00	20.00	0.00	0.00	10.00	0.00	45.00
SOOL	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BARI	0.00	5.00	0.00	0.00	5.00	0.00	34.00
NUGAAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MUDUG	0.00	0.00	0.00	0.00	50.00	0.00	65.00
GALGADUD	0.00	10.00	0.00	0.00	120.00	0.00	165.00
SOMALIA	2594.50	5162.50	1016.50	35.90	443.30	42.50	10151.00

F.E.W.S. PROJECT

Table B.8.1.

Table B.8.2.

1982 total production (in 1000 tons)

	maize	sesame	sorghum	rice	cowpea	groundnut
GEDO ged weyn lugh garba hare belet-hawa bardera	5.90	1.40	5.00			
MIDDLE JUBA salow boale jilib	14.80	7.60	13.40			
LOWER JUBA jamame kismayo	17.90	8.10	6.10			
BAY bur ataba baidoa qansa dhere dinsor	0.00	0.00	84.20			
BAKOOL wajid hoddur teyeglow	0.00	0.00	7.70			
HIRAN belet weyn bulo burti jalalaksi	18.00	3.00	14.30			
MIDDLE SHAB jowhar aden yabal balad	21.60	12.30	13.20			
LOWER SHABE algoi vanle vein merca kurioley brava sablaale kurtunware	72.20	24.70	25.30			
AWDAL	0.00	0.00	0.00			
GALBEED	0.00	0.00	36.99			
SANAAG	0.00	0.00	3.73			
TOGHDEER	0.00	0.00	16.68			
SOOL	0.00	0.00	0.00			
BARI	0.00	0.00	0.23			
NUGAAL	0.00	0.00	2.17			
MUDUG	0.00	0.00	1.50			
GALGADUD	0.00	0.00	4.60			
SOMALIA	149.90	57.10	235.10	13.30	9.30	3.20

1983 total production (in 1000 tons)

	maize	sesame	sorghum	rice	cowpea	groundnut
GEDO ged weyn lugh garba hare belet-hawa bardera	10.90	1.60	3.60	0.00	1.30	0.20
MIDDLE JU salow boale jilib	9.10	2.70	9.30	2.02	1.90	0.50
LOWER JUB jamame kisaayo	21.90	2.10	0.90	0.00	1.50	0.40
BAY bur ataba baidoa qansa dhere dinsor	2.10	1.50	25.00	0.00	4.60	1.10
BAKOOL wajid hoddur teyeglow	0.00	0.00	7.70	0.00	0.20	0.20
HIRAN belet weyn bulo burti jalalaksi	9.90	2.60	4.70	0.00	1.00	0.10
MIDDLE SH jowhar aden yabal balad	20.10	7.00	3.10	1.38	1.60	0.10
LOWER SHA algoi vanle wein merca korioley brava sablaale kurtunware	112.70	18.10	8.60	0.50	0.10	0.60
AWDAL	0.00	0.00	0.00	0.00	0.00	0.00
GALBEED	0.00	0.00	57.80	0.00	0.26	0.00
SANAAG	0.00	0.00	0.00	0.00	0.04	0.00
TOGHDEER	0.00	0.00	0.00	0.00	0.00	0.00
SOOL	0.00	0.00	0.00	0.00	0.00	0.00
BARI	0.00	0.00	0.00	0.00	0.09	0.00
NUGAAL	0.00	0.00	0.00	0.00	0.09	0.00
MUDUG	0.00	0.00	0.00	0.00	0.26	0.00
GALGADUD	0.00	0.00	0.00	0.00	0.88	0.00
SOMALIA	236.70	35.60	120.70	3.90	20.32	3.00

F.E.W.S. PROJECT

Table B.8.3.

Table B.8.4.

1985 total production (in 1000 tons)

	maize	sesame	sorghum	rice	cowpea	groundnut
GEDO	11.90	0.77	8.40	0.00	0.58	0.08
ged weyn						
lugh						
garba hare						
belet-hawa						
bardera						
MIDDLE JU	21.20	4.73	12.60	2.84	2.31	0.26
salow						
baale						
jilib						
LOWER JUB	33.00	5.82	3.70	0.00	1.35	0.18
jamaame						
kismayo						
BAY	1.40	0.00	79.80	0.00	2.32	1.47
bur akaba						
baidoa						
qansa dhere						
dinsor						
BAKOOL	0.10	0.00	8.40	0.00	0.38	0.07
wajid						
hoddur						
teyeglow						
HIRAN	13.20	1.58	14.70	0.00	0.93	0.30
belet weyn						
bulo burti						
jalalaksi						
MIDDLE SH	48.70	7.88	12.60	1.36	0.81	0.44
jowhar						
aden yabal						
balad						
LOWER SHA	140.60	18.88	26.08	0.00	0.85	0.37
afgoi						
wanle wein						
merca						
kortoley						
brava						
sablaale						
kurtunware						
AWDAL	0.00	0.00	0.00	0.00		
GALGEEG	0.00	0.00	35.86	0.00	0.42	0.14
SANAAG	0.00	0.00	3.78	0.00	0.21	0.00
TOGHDEER	0.00	0.00	10.50	0.00	0.00	0.00
SOOL	0.00	0.00	0.00	0.00	0.00	0.00
BARI	0.00	0.00	0.42	0.00	0.21	0.00
MUDUG	0.00	0.00	2.10	0.00	0.42	0.00
NUGAL	0.00	0.00	1.26	0.00	2.79	0.00
GALGADUD	0.00	0.00	0.84	0.00	2.10	0.00
SOMALIA	270.10	39.66	220.84	4.20	15.68	3.27

1985 total production (in 1000 tons)

	maize	sesame	sorghum	rice	cowpea	groundnut
GEDO	25.24	0.00	30.20	0.00	1.09	0.00
ged weyn						
lugh						
garba hare						
belet-hawa						
bardera						
MIDDLE JU	14.29	9.38	10.38	4.30	2.65	0.00
salow						
baale						
jilib						
LOWER JUB	15.40	7.30	0.50	0.98	1.50	0.40
jamaame						
kismayo						
BAY	4.20	0.00	71.43	0.00	5.95	1.25
bur akaba						
baidoa						
qansa dhere						
dinsor						
BAKOOL	0.73	0.00	3.15	0.00	0.24	0.00
wajid						
hoddur						
teyeglow						
HIRAN	8.80	4.00	21.30	0.00	2.55	0.50
belet weyn						
bulo burti						
jalalaksi						
MIDDLE SH	54.28	12.00	9.65	5.34	5.05	0.95
jowhar						
aden yabal						
balad						
LOWER SHA	156.47	22.00	21.78	0.00	9.10	1.90
afgoi						
wanle wein						
merca						
kortoley						
brava						
sablaale						
kurtunware						
AWDAL	0.85	0.00	12.11	0.00	0.64	0.00
GALGEEG	2.05	0.00	31.95	0.00	2.56	0.00
SANAAG	0.00	0.00	1.65	0.00	0.00	0.00
TOGHDEER	0.00	0.00	5.50	0.00	0.00	0.00
SOOL	0.00	0.00	0.00	0.00	0.00	0.00
BARI	0.00	0.00	0.22	0.00	0.00	0.00
MUDUG	0.00	0.00	0.00	0.00	0.00	0.00
NUGAL	0.00	0.00	0.88	0.00	3.20	0.00
GALGADUD	0.00	0.00	0.88	0.00	3.20	0.00
SOMALIA	280.11	56.68	221.58	10.62	37.73	5.00

F.E.W.S. PROJECT

Table B.8.5

1986 total production (in 1000 tons)

	maize	sesame	sorghum	rice	cowpea	groundnut
GEDO	10.61	1.24	12.00	0.00	1.36	0.58
ged weyn		0.04	0.00			
lugh		0.65	0.05			
garba hare		0.00	0.35			
belet-hawa		0.32	1.30			
bardera		0.23	10.30			
MIDDLE JU	21.32	0.57	7.50	5.15	0.93	0.00
sakow		0.26	7.10			
boale		0.07	0.40			
jilib		0.24	0.00			
LOWER JUB	17.50	2.45	0.00	2.63	0.38	0.00
jamame		2.20				
kismayo		0.25				
BAY	1.80	0.00	151.50	0.00	5.42	1.50
bur alaba			21.60			
baidoa			73.55			
qansa dhere			39.35			
dinsor			17.40			
BAKOOL	0.00	0.00	4.40	0.00	0.20	0.00
wajid			1.20			
hoddur			1.10			
teyeglow			1.60			
HIRAN	4.74	1.76	11.60	0.00	0.27	0.00
belet weyn		0.81	4.70			
bulo burti		0.15	5.00			
jalalaksi		0.80	1.70			
MIDDLE SH	81.65	19.20	15.35	3.90	6.95	0.23
jowhar		14.90	14.90			
aden yabal		0.00	0.30			
balad		4.30	0.15			
LOWER SHA	184.42	19.24	10.58	0.15	6.31	0.16
afgoi		4.05	3.17			
vanle wein		0.00	7.40			
merca		5.04	0.01			
torioley		7.30	0.00			
brava		0.20	0.00			
sablaale		0.60	0.00			
kurtunwarey		2.05	0.00			
AWDAL	0.00	0.00	0.00	0.00		
GALBEED	14.20	0.00	22.00	0.00	0.45	
SANAAG	0.00	0.00	0.00	0.00		
TOGHDEER	0.00	0.00	1.74	0.00		
SOOL	0.00	0.00	0.00	0.00		
BARI	0.00	0.00	0.00	0.00		
NUGAAL	0.00	0.00	0.00	0.00		
MUDUG	0.00	0.00	0.00	0.00		
GALGADUD	0.00	0.00	0.00	0.00		
SOMALIA	336.24	44.46	238.67	11.83	22.27	2.47

Table B.8.6

1987 total production (in 1000 tons)

	maize	sesame	sorghum	rice	cowpea	groundnut
GEDO	8.42	1.98	3.83	0.00	0.68	0.40
ged weyn	2.70	0.20	0.15		0.18	0.20
lugh	3.45	0.83	0.69		0.28	0.20
garba har	0.60	0.49	0.14		0.02	0.00
belet-haw	0.04	0.00	0.30		0.02	0.00
bardera	0.63	0.46	2.64		0.18	0.00
MIDDLE JU	10.06	4.53	0.64	5.54	0.54	0.23
sakow	0.56	0.54	0.56	0.00	0.09	0.00
boale	0.31	1.29	0.08	0.00	0.07	0.00
jilib	8.99	2.19	0.00	5.54	0.38	0.23
LOWER JUB	14.81	6.83	0.00	2.69	0.46	0.04
jamame	12.71	6.37	0.00	2.69	0.40	0.04
kismayo	2.10	0.46	0.00	0.00	0.06	0.00
BAY	3.32	0.17	165.77	0.00	7.40	0.30
bur alaba	1.20	0.15	65.77		2.75	0.09
baidoa	2.12	0.20	68.61		2.93	0.14
qansa dhe	0.00	0.00	15.36		0.76	0.02
dinsor	0.00	0.00	16.03		0.96	0.05
BAKOOL	2.53	0.85	13.50	0.00	1.47	0.29
wajid	0.07	0.00	1.19		0.15	0.00
hoddur	1.00	0.36	4.34		0.49	0.12
teyeglow	1.46	0.49	7.57		0.83	0.17
HIRAN	9.09	2.27	11.07	0.00	1.37	0.02
belet wey	1.48	0.62	3.23		0.43	0.00
bulo burt	4.24	0.34	5.79		0.63	0.00
jalalaksi	2.87	1.31	2.05		0.31	0.02
MIDDLE SH	60.91	12.84	7.64	3.75	5.98	0.75
jowhar	33.65	9.26	4.76	3.75	3.36	0.28
aden yaba	0.00	0.16	0.78	0.00	1.34	1.50
balad	27.26	3.42	2.10	0.00	1.28	0.32
LOWER SHA	166.90	15.83	12.13	0.00	3.82	1.11
afgoi	32.42	3.36	2.42		0.77	0.20
vanle wei	8.79	0.61	9.41		1.13	0.16
merca	53.02	4.52	0.30		0.66	0.35
torioley	27.68	2.92	0.00		0.38	0.30
brava	18.37	1.78	0.00		0.45	0.00
sablaale	10.85	1.13	0.00		0.38	0.00
kurtunwar	15.76	1.51	0.00		0.05	0.10
AWDAL	0.72	0.00	2.50	0.00	0.24	0.00
GALBEED	8.40	0.00	22.40	0.00	1.76	0.00
SANAAG	0.63	0.00	0.75	0.00	0.00	0.00
TOGHDEER	0.40	0.00	2.80	0.00	0.67	0.00
SOOL	0.00	0.00	0.00	0.00	0.00	0.00
BARI	0.00	0.00	0.20	0.00	0.17	0.00
NUGAAL	0.00	0.00	0.00	0.00	0.00	0.00
MUDUG	0.00	0.00	0.00	0.00	1.80	0.00
GALGADUD	0.00	0.00	0.27	0.00	5.10	0.00
SOMALIA	286.19	45.30	242.56	11.98	31.46	3.15

Table B.9.1

F.E.W.S. PROJECT

REGION : GEDO

		CROPPED AREAS (100 ha)						
		SORGH	MAIZE	RICE	SESAM	COWPEA	GROUNDN	TOTAL
1982	gu	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
	der	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
	tot	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
1983	gu	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
	der	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
	tot	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
1984	gu	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	der	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	tot	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1985	gu	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	der	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	tot	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1986	gu	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	der	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	tot	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1987	gu	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	der	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	tot	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CROP PRODUCTION (1000 tons)					
SORGH	MAIZE	RICE	SESAM	COWPEA	GROUNDN
[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Table B.9.2

F.E.W.S. PROJECT

REGION : MIDDLE JUBA

		CROPPED AREAS (100 ha)						
		SORGH	MAIZE	RICE	SESAM	COWPEA	GROUNDN	TOTAL
1982	gu	[illegible]	[illegible]		[illegible]			[illegible]
	der	[illegible]	[illegible]		[illegible]			[illegible]
	tot	[illegible]	[illegible]		[illegible]			[illegible]
1983	gu	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
	der	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]
	tot	[illegible]	[illegible]		[illegible]		[illegible]	[illegible]
1984	gu	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	der	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	tot	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1985	gu	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	der	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	tot	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1986	gu	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	der	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	tot	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1987	gu	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	der	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	tot	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CROP PRODUCTION (1000 tons)					
SORGH	MAIZE	RICE	SESAM	COWPEA	GROUNDN
[illegible]	[illegible]		[illegible]		
[illegible]	[illegible]		[illegible]		
[illegible]	[illegible]		[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Table B.9.3

F.E.W.S. PROJECT

REGION : LOWER JUBA

		CROPPED AREAS (100 ha)						
		SORGH	MAIZE	RICE	SESAM	COWPEA	GROUNDN	TOTAL
1982	gu	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
	der	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
	tot	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]
1983	gu	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
	der	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
	tot	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
1984	gu	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	der	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	tot	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1985	gu	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	der	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	tot	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1986	gu	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	der	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	tot	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1987	gu	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	der	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	tot	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CROP PRODUCTION (1000 tons)					
SORGH	MAIZE	RICE	SESAM	COWPEA	GROUNDN
[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Table B.9.4

F.E.R.S. PROJECT

REGION : HIRAN

		CROPPED AREAS (100 ha)							CROP PRODUCTION (1000 Tons)					
		SORGH	MAIZE	RICE	SESAM	COWPEA	GROUNDN	TOTAL	SORGH	MAIZE	RICE	SESAM	COWPEA	GROUNDN
1982	gu	144.0	213.0	4.4	2.0			364.0	1.14	15.00		0.10		
	der	100.0	42.4	0.6	45.0			188.4	1.24	3.00		2.50		
	tot	324.0	251.4	9.9	47.0			652.0	14.30	18.00		3.00		
1983	gu	11.0	313.3	4.0	74.0		1.1	403.0	2.74	7.30	1.04	1.50		1.00
	der	93.0	32.1	4.0	23.0		5.3	157.3	2.00	2.00	1.09	1.10		1.10
	tot	174.0	351.0	4.0	97.0		5.3	646.3	4.70	3.30	1.06	2.60		1.10
1984	gu	164.0	54.0	5.0	6.4	10.9	1.1	252.2	6.40	4.10	1.40	0.56	1.10	1.22
	der	247.6	55.4	4.4	15.5	3.3	1.1	303.4	1.30	3.20	1.06	5.40	1.13	1.06
	tot	307.6	124.0	0.6	32.5	21.3	6.2	557.6	14.70	13.20	1.06	5.56	1.33	4.30
1985	gu	226.1	56.0	8.1	60.0	4.6	5.4	361.0	16.10	4.70	1.00	1.20	0.50	1.52
	der	53.4	15.3	1.4	50.0	27.3	0.5	152.4	5.30	1.30	1.11	2.40	1.40	1.14
	tot	287.1	73.3	4.4	94.0	27.1	5.5	520.6	21.31	6.40	1.11	4.00	1.60	1.56
1986	gu	171.0	31.8	4.4	25.0	1.0	4.0	227.0	9.64	3.70	4.09	1.25	0.15	0.11
	der	80.0	26.0	4.0	12.0	7.0	1.1	107.0	2.20	1.14	1.00	0.51	1.21	6.10
	tot	231.0	57.0	4.0	37.0	2.4	1.1	329.0	11.60	4.24	1.40	1.76	1.35	1.01
1987	gu	214.5	112.0	0.1	23.5	4.5	1.0	350.5	1.36	4.16	1.40	1.17	1.23	1.16
	der	312.0	4.5	0.4	44.4	4.5	4.5	174.5	2.70	4.22	1.00	1.00	1.40	1.93
	tot	335.5	106.5	0.0	63.5	13.0	1.5	525.0	11.06	9.40	1.00	2.22	1.37	1.33

F.E.R.S. PROJECT

Table B.9.5

REGION : MIDDLE SHABELLE

		CROPPED AREAS (100 ha)							CROP PRODUCTION (1000 Tons)					
		SORGH	MAIZE	RICE	SESAM	COWPEA	GROUNDN	TOTAL	SORGH	MAIZE	RICE	SESAM	COWPEA	GROUNDN
1982	gu	274.0	251.0		55.0			625.0	5.50	16.10	1.00	3.60		
	der	43.0	49.0		134.0			250.0	7.50	3.50	1.00	4.70		
	tot	323.0	301.0	3.1	154.0			515.0	13.20	21.60	1.00	12.30		
1983	gu	40.4	210.0	1.6	93.4		5.5	555.5	2.30	61.37	1.70	3.16		1.30
	der	37.4	45.0		91.0		0.0	281.6	4.20	7.60	1.64	3.40		4.00
	tot	65.0	475.0		182.0		6.0	734.0	3.10	53.10	5.36	7.80		1.73
1984	gu	222.0	247.0	2.0	63.5	13.7	2.2	705.9	6.26	26.20	4.60	1.26	1.10	1.50
	der	95.0	156.0	3.0	124.0	5.7	3.2	307.3	3.40	21.50	1.60	6.00	1.21	4.22
	tot	315.0	403.0	5.0	187.5	30.2	6.3	1167.3	12.60	48.29	1.36	7.00	4.03	4.72
1985	gu	220.0	144.0	6.0	90.0	64.9	0.2	649.0	7.55	37.20	2.26	3.60	2.35	1.06
	der	79.0	313.7	6.7	152.0	5.0	3.5	353.3	2.10	17.19	3.10	0.40	1.00	4.32
	tot	299.0	457.7	12.7	242.0	65.9	11.7	1199.3	5.65	54.29	5.36	12.00	3.75	1.16
1986	gu	371.0	490.9	6.0	181.0	64.0	1.0	911.0	14.30	33.50	2.39	55.43	5.55	9.11
	der	35.0	163.4	5.0	153.5	11.5	2.5	371.5	1.05	4.15	1.70	4.20	1.10	0.15
	tot	255.0	653.4	11.0	336.5	75.5	1.5	1302.5	35.35	41.65	3.99	19.20	7.70	4.23
1987	gu	115.5	103.5	5.2	76.5	46.9	6.5	775.2	2.40	10.35	1.30	5.51	4.03	0.50
	der	170.5	511.0	6.6	127.0	65.0	4.5	655.6	5.24	11.56	1.65	7.32	1.55	1.24
	tot	294.0	630.5	14.0	327.5	111.0	11.0	1631.0	7.64	60.91	3.75	12.33	5.26	1.74

F.E.R.S. PROJECT

Table B.9.6.

REGION LOWER SHABELLE

		CROPPED AREAS (100 ha)							CROP PRODUCTION (1000 Tons)					
		SORGH	MAIZE	RICE	SESAM	COWPEA	GROUNDN	TOTAL	SORGH	MAIZE	RICE	SESAM	COWPEA	GROUNDN
1982	gu	374.0	459.0		561.0			1301.0	15.10	60.10		10.30		
	der	211.0	337.0		241.0			761.0	9.20	24.20		15.00		
	tot	541.0	1006.0		331.0			2662.0	25.30	72.20		25.70		
1983	gu	121.0	405.0	2.5	552.0		5.0	1032.0	6.66	76.10	0.50	7.30		1.00
	der	66.0	344.0		313.0		1.5	764.0	2.00	35.20	1.00	10.30		0.10
	tot	117.0	945.2		476.0		1.5	1776.0	1.60	112.74	0.50	10.10		1.10
1984	gu	374.0	754.0	0.0	150.0	7.0	6.0	1667.6	17.00	107.16	0.00	4.50	0.70	1.20
	der	247.0	283.0	0.0	273.5	16.3	4.0	800.0	4.76	33.50	5.00	14.30	0.65	4.76
	tot	577.0	1041.0	6.6	515.5	23.3	11.5	2211.6	26.00	144.30	9.00	16.66	0.45	1.40
1985	gu	404.6	332.3	0.4	322.0	10.5	16.5	3750.1	16.70	101.54	0.00	6.10	2.27	1.45
	der	134.0	200.0	0.0	273.0	24.0	2.4	763.6	5.00	51.00	0.00	15.40	2.50	0.22
	tot	534.6	1200.3	0.0	403.0	31.5	16.3	2553.7	21.70	156.34	0.00	22.00	1.77	1.71
1986	gu	157.0	1062.4	0.5	93.5	2.0	0.5	1427.4	8.26	161.00	0.35	1.30	0.10	0.06
	der	83.5	203.5	0.0	323.5	0.3	2.0	732.7	2.36	20.62	0.00	18.34	3.16	0.17
	tot	244.5	1265.5	6.5	343.0	10.3	2.5	2135.7	10.50	144.62	0.15	19.24	4.20	0.16
1987	gu	197.5	1163.5	0.0	00.6	12.5	11.0	1627.5	7.41	151.07	0.00	4.77	3.26	1.10
	der	212.3	143.0	6.0	266.0	20.5	1.0	767.4	4.25	15.07	0.00	11.06	0.56	4.01
	tot	428.0	1352.5	0.0	354.0	33.0	17.0	2354.5	12.34	166.01	0.40	15.65	3.63	1.35

Table B.9.

F.E.W.S. PROJECT

REGION : BAF

CROPPED AREAS ('000 ha)

		SORGH	MAIZE	RICE	SESAM	COWPEA	GROUNDN	TOTAL
1982	gu	1154.0	0.0	0.0	0.0			1154.0
	der	761.0	0.0	0.0	0.0			761.0
	tot	1935.0	0.0	0.0	0.0			1915.0
1983	gu	762.0	61.0	0.0	49.0		4.5	945.5
	der	274.0	9.0	0.0	1.0		4.0	309.0
	tot	1060.0	70.0	0.0	50.0		8.5	1254.5
1984	gu	1235.0	29.0	0.0	0.0	33.0	1.0	1299.0
	der	760.0	0.0	0.0	0.0	5.5	5.5	771.0
	tot	1995.0	29.0	0.0	0.0	38.5	13.0	2070.0
1985	gu	1131.0	50.0	0.0	0.0	0.0	10.0	1191.0
	der	375.0	15.0	0.0	0.0	0.0	5.0	395.0
	tot	1506.0	65.0	0.0	0.0	0.0	15.0	1589.0
1986	gu	2089.0	33.0	0.0	9.0	0.0	22.0	2152.0
	der	115.0	0.0	0.0	0.0	20.0	0.0	145.0
	tot	2204.0	33.0	0.0	0.0	20.0	22.0	2297.0
1987	gu	2056.0	40.0	0.0	3.5	14.0	4.5	2127.5
	der	946.5	4.5	0.0	0.0	0.5	0.0	351.5
	tot	3000.5	52.5	0.0	3.5	22.5	4.5	2487.0

CROP PRODUCTION ('000 tons)

		SORGH	MAIZE	RICE	SESAM	COWPEA	GROUNDN
1982	gu	58.20	0.00	0.00	0.00		
	der	36.00	0.00	0.00	0.00		
	tot	94.20	0.00	0.00	0.00		
1983	gu	25.00	2.10	0.00	1.50		0.00
	der	0.00	0.00	0.00	0.00		0.00
	tot	25.00	2.10	0.00	1.50		0.00
1984	gu	63.26	1.40	0.00	0.00	2.10	1.00
	der	30.40	0.00	0.00	0.00	0.22	0.25
	tot	89.16	1.40	0.00	0.00	2.32	1.24
1985	gu	54.33	2.00	0.00	0.00	0.21	1.05
	der	16.50	1.20	0.00	0.00	1.50	0.16
	tot	71.43	4.20	0.00	0.00	1.71	1.51
1986	gu	151.40	1.66	0.00	0.00	5.10	2.00
	der	0.10	0.00	0.00	0.00	0.20	0.00
	tot	151.50	1.00	0.00	0.00	5.20	2.00
1987	gu	146.77	2.10	0.00	0.16	7.21	0.20
	der	19.00	0.12	0.00	0.00	0.00	0.00
	tot	165.77	3.31	0.00	0.16	7.20	0.20

F.E.W.S. PROJECT

Table B.9.8

REGION :BAGOOL

CROPPED AREAS ('000 ha)

		SORGH	MAIZE	RICE	SESAM	COWPEA	GROUNDN	TOTAL
1982	gu	142.0	0.0	0.0	0.0			142.0
	der	24.0	0.0	0.0	0.0			24.0
	tot	176.5	0.0	0.0	0.0			166.0
1983	gu	193.0	0.0	0.0	0.0		0.0	140.0
	der	31.0	0.0	0.0	0.0		0.0	51.0
	tot	224.0	0.0	0.0	0.0		0.0	191.0
1984	gu	170.0	1.0	0.0	0.0	2.0	1.5	175.5
	der	40.0	0.0	0.0	0.0	0.5	0.0	45.6
	tot	210.0	1.0	0.0	0.0	0.5	1.5	221.1
1985	gu	55.0	0.0	0.0	0.0	0.0	0.0	62.0
	der	21.0	2.7	1.0	0.0	2.0	0.0	26.5
	tot	77.0	11.7	0.0	0.0	0.0	0.0	103.5
1986	gu	331.0	0.0	0.0	0.0	15.0	0.0	350.0
	der	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	tot	331.0	0.0	0.0	0.0	15.0	0.0	356.0
1987	gu	177.5	16.5	0.0	14.0	20.0	4.0	230.0
	der	177.0	16.0	0.0	5.0	5.0	1.0	226.0
	tot	354.5	34.5	0.0	19.0	31.0	5.0	464.0

CROP PRODUCTION ('000 tons)

		SORGH	MAIZE	RICE	SESAM	COWPEA	GROUNDN
1982	gu	0.20	0.00	0.00	0.00		
	der	1.50	0.00	0.00	0.00		
	tot	7.70	0.00	0.00	0.00		
1983	gu	7.10	0.40	0.00	0.00		0.00
	der	0.00	0.00	0.00	0.00		0.00
	tot	7.00	0.00	0.00	0.00		0.00
1984	gu	0.00	0.10	0.00	0.00	0.20	0.25
	der	1.60	0.00	0.00	0.00	0.10	0.02
	tot	0.40	0.10	0.00	0.00	0.30	0.20
1985	gu	2.25	0.00	0.00	0.00	0.14	0.00
	der	0.00	0.20	0.00	0.00	0.10	0.06
	tot	3.15	0.20	0.00	0.00	0.21	0.00
1986	gu	4.40	0.00	0.00	0.00	0.10	0.00
	der	0.00	0.00	0.00	0.00	0.00	0.00
	tot	4.40	0.00	0.00	0.00	0.20	0.00
1987	gu	7.10	0.00	0.00	0.20	0.37	0.20
	der	6.41	0.14	0.00	0.15	0.10	0.05
	tot	13.51	0.00	0.00	0.15	0.47	0.20

Table B.10.

tc. MAIZE - Crop yields (t/ha)

F.E.W.S. Project

District	1982			1983			1984			1985			1986			1987		
	ge	der	tot	ge	der	tot	ge	der	tot	ge	der	tot	ge	der	tot	ge	der	tot
GEDO	7.1	7.0	7.1	14.2	4.4	11.2	8.5	14.1	10.0	11.5	16.7	12.0	16.6	8.3	14.9	12.7	6.2	10.5
ged wyn					-		-			-			12.0	8.0		12.0	10.0	11.7
fuqh					8.0		2.9			12.0			17.0	8.0		14.0	5.0	8.6
garba kare					2.3		8.0			12.0			17.0	10.0		9.0	14.0	10.8
belet-hawa					8.0		8.0			-			8.3	-		4.6	8.9	1.3
bardera					16.2		15.2			11.0			17.2	8.0		8.0	7.0	7.5
MIDDLE JU	7.2	7.3	7.2	9.3	10.0	9.4	9.6	14.0	10.9	10.3	15.0	11.2	15.4	8.0	15.2	9.5	3.3	8.9
sakow					10.0		9.5			5.5			16.0	8.0		6.5	6.0	6.2
asale					10.0		9.7			11.0			15.5	8.6		5.1	5.0	6.4
jilib					10.0		9.7			14.3			15.9	8.0		9.0	8.0	9.3
LOWER JUB	7.2	7.0	7.2	14.6	15.0	14.9	9.7	13.9	11.0	15.0	14.1	14.0	14.0	15.0	14.2	11.0	10.0	11.6
jamame					16.0		9.9			15.0			14.0	15.0		11.2	10.0	11.2
kismayo					15.0		9.1			15.0			13.6	15.0		10.2	-	10.2
BAY	-	-	-	3.4	8.0	3.0	7.0	-	7.0	6.0	8.0	6.5	5.5	-	5.5	6.6	3.0	6.3
ber alabi							10.0			6.0			5.0			8.6	-	8.0
baidoa							10.0			6.0			8.0			8.0	3.0	5.6
qansa dhere							-			6.0			-			-	-	-
dinsor							6.2			6.0			-			-	-	-
BAKOOL	-	-	-	-	-	-	10.0	-	10.0	5.0	7.4	6.2	-	-	-	6.6	3.0	7.4
wajid							-			6.0						7.0	-	7.0
hadder							-			6.0						6.6	3.0	7.4
tayeglow							10.0			5.0						6.6	3.0	7.3
BIRSA	7.2	7.1	7.2	2.5	6.2	7.1	7.4	13.5	11.4	6.1	11.5	8.3	13.3	6.0	8.3	8.7	5.0	8.5
belet weyn					7.5		6.7			6.7			-	6.0		8.0	-	6.0
buto barti					7.3		6.2			7.5			13.3	6.0		9.2	-	9.2
jalalaksi					4.6		10.0			8.6			13.3	6.0		8.2	5.0	7.3
MIDDLE SH	7.2	7.1	7.2	15.7	6.0	14.4	10.5	15.6	12.3	10.0	15.0	11.5	15.0	5.0	12.5	10.0	8.5	9.7
jowhar					5.7		11.7			12.0			15.0	5.0		10.6	8.0	9.5
adan yabal					-		10.0			-			-	-		-	-	-
balad					10.3		10.1			10.0			15.0	5.0		10.6	5.0	9.5
LOWER SHA	7.2	7.2	7.2	12.7	10.5	11.9	14.2	11.6	13.5	10.5	10.0	12.2	15.4	10.0	14.6	12.0	8.4	12.3
afgoi					5.7		14.4			7.5			13.0	10.0		10.5	7.0	9.5
wanle weis					-		10.0			5.0			7.0	-		8.0	5.0	7.2
merca					5.0		16.4			12.0			10.0	10.0		14.7	10.6	13.1
barisley					11.0		9.0			11.5			10.0	10.0		15.0	10.0	13.3
brava					12.7		11.7			9.0			16.5	-		12.5	-	12.5
sablale										10.0			16.5	12.0		17.5	-	17.5
kurtunwaa										12.0			16.5	12.0		16.5	-	16.5
AWDAL	-	-	-	-	-	-	-	-	-	12.3	10.0	11.0	-	-	-	12.0	-	12.0
GALBEED	-	-	-	-	-	-	-	-	-	12.1	8.0	11.5	13.1	-	13.1	12.0	-	12.1
SANAG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.0	-	7.0
TOGDHEER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.0	-	8.0
SOOL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BARI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BUGAAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NUGAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GALGADUD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SOMALIA	7.2	7.2	7.2	11.2	9.1	10.6	11.9	13.0	12.3	10.7	11.3	12.0	15.0	8.0	13.7	11.6	8.6	11.0

Table B.10.2

sc.-Sorghum - Crop yields (q/ha)

F.E.W.S. Project

District	1962			1963			1964			1965			1966			1967		
	qu	der	tal	qu	der	tal	qu	der	tal	qu	der	tal	qu	der	tal	qu	der	tal
GEDO	4.3	4.3	4.3	0.6	1.4	0.8	4.0	4.0	4.0	5.2	5.5	5.3	6.6	0.0	5.8	4.7	0.6	3.5
gerá wepa										-			-	-		1.5	-	1.5
tal										5.1			6.2	-		3.0	-	3.0
garba bare										5.1			5.0	-		3.0	3.0	3.0
beled-hawa										5.5			5.0	-		3.0	0.0	0.5
bardera										5.3			6.0	0.0		1.5	0.5	1.2
MIDDLE JU	4.4	4.3	4.4	5.4	2.7	4.0	4.0	4.0	4.0	3.7	3.1	3.5	6.9	2.0	6.7	1.2	0.2	0.6
saton										4.1			7.0	2.0		1.2	0.0	0.7
bardo										3.5	-		6.0	-		-	0.0	0.0
jilib										1.4			-	-		-	-	-
LOWER JUB	4.4	4.3	4.4	10.0	1.3	5.4	2.3	4.0	4.0	5.0	3.3	4.5	-	-	-	-	-	-
jamame										5.0								
kisaayo										-								
BAY	4.4	4.4	4.4	3.2	0.0	2.4	4.0	4.0	4.0	4.0	4.4	4.2	7.2	0.1	6.3	7.1	3.0	5.5
bur akaba										4.0			4.0	0.0		0.4	1.2	0.4
baidoa										4.5			0.0	0.1		0.2	2.0	5.6
qansa dheré										4.0			10.0	0.2		3.7	2.5	3.6
diinsor										5.1			7.0	0.0		5.6	3.0	5.1
BAKOOL	4.4	4.4	4.4	3.6	0.0	3.3	4.0	4.0	4.0	4.0	4.3	4.1	1.3	-	1.3	4.0	3.0	3.0
wajid										0.0			7.1			4.0	3.0	3.5
buddur										4.0			1.0			4.0	4.0	4.0
teeglaw										4.5			0.0			4.0	2.5	3.3
HIRAN	4.4	4.4	4.4	3.3	2.2	2.7	4.0	4.0	4.0	7.0	0.0	2.5	5.5	2.7	5.4	3.6	2.3	3.3
belet wene										7.2			6.0	3.0		3.0	3.0	3.0
hala burti										7.1			5.0	4.0		4.6	2.0	3.3
jalalaasi										6.7			6.3	5.0		5.0	2.0	3.5
MIDDLE SHA	4.4	4.3	4.4	4.0	4.7	4.3	4.0	4.0	4.0	3.4	2.7	3.2	8.4	2.9	7.3	2.0	2.9	3.6
jowhar										4.4			6.0	3.0		2.0	2.3	3.6
idaa yaal										1.3			7.4	0.0		4.0	3.0	7.2
bilad										3.1			8.0	3.0		2.0	2.5	3.5
LOWER SHA	4.4	4.4	4.4	5.5	3.0	4.3	4.4	4.0	4.5	4.3	2.6	3.7	5.2	2.9	6.4	4.0	1.9	2.9
afgoi										7.3			8.3	3.0		5.0	4.0	4.4
wanla weia										3.4			5.0	0.0		3.1	1.5	2.6
merca										-			-	0.4		0.0	0.0	2.6
barialey										0.0			-	-		-	-	-
brava										-			-	-		-	-	-
sakiaie										-			-	-		-	-	-
kurtunwarr										-			-	-		-	-	-
AKOOL	-	-	-	-	-	-	-	-	-	4.0	5.5	5.1	-	-	-	4.0	-	4.0
GALGEEB	4.4	-	4.4	4.2	-	4.2	4.4	-	4.0	5.5	5.5	5.0	6.6	-	6.6	6.4	-	6.0
SANAAG	4.4	-	4.4	-	-	-	4.0	-	4.0	5.0	5.4	5.0	-	-	-	5.0	-	5.0
TOGDHEER	4.4	-	4.4	-	-	-	4.0	-	4.0	6.0	5.5	6.0	3.5	-	3.1	4.0	-	4.1
SAHL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BARI	4.4	-	4.4	-	-	-	4.0	-	4.0	4.7	5.0	4.5	-	-	-	4.0	-	4.0
NUGAAL	4.4	-	4.4	-	-	-	4.0	-	4.0	-	-	-	-	-	-	-	-	-
MUDUG	4.4	-	4.4	-	-	-	4.0	-	4.0	5.2	4.0	5.0	-	-	-	-	-	-
GALGADUD	4.4	-	4.4	-	-	-	4.0	-	4.0	6.2	4.0	5.0	-	-	-	4.0	1.5	2.6
SOMALIA	4.4	4.4	4.4	4.2	1.1	3.6	4.1	4.0	4.1	5.2	4.3	5.0	6.5	1.1	6.1	4.0	2.2	4.7

Table B.10.

3c. SESAME yields (qt/ha) F.E.W.S. Project

district	1982 gu	1982 der	1982 tot	1983 gu	1983 der	1983 tot	1984 gu	1984 der	1984 tot	1985 gu	1985 der	1985 tot	1986 gu	1986 der	1986 tot	1987 gu	1987 der	1987 tot
GEDO	6.6	6.5	6.5	5.0	3.9	4.2	2.9	2.9	2.9	-	-	-	5.0	4.4	4.6	4.3	3.0	4.0
yeed wegh													-	4.1		4.0	-	4.0
luuq													-	4.1		4.5	-	4.3
garba hare													5.0	5.4		4.1	-	4.1
belet-hawa													-	-		-	-	-
bardera													5.0	4.0		4.1	3.0	4.0
MIDDLE JU	6.3	6.3	6.3	3.4	3.1	3.2	3.0	5.2	4.4	4.0	5.5	4.9	4.0	3.0	3.5	3.9	4.4	4.0
sakow					3.0					4.9			4.4	3.6		3.3	-	3.3
buale					2.8					4.9			4.1	3.0		3.3	5.4	3.6
jilib					3.3					4.0			4.0	3.0		4.0	4.1	4.5
LOWER JUB	6.2	6.3	6.3	4.4	2.5	3.1	3.0	4.5	3.0	5.4	5.5	5.5	4.3	5.9	4.9	4.9	5.0	5.7
jamame					2.7					5.4			4.6	5.6		5.1	5.0	5.7
kismayo					2.1					-			11.0	5.9		4.1	6.0	5.4
BAY			-	3.1	4.1	3.0	-	-	-	-	-	-	-	-	-	4.7	-	4.7
bur akaba					-											5.0		5.0
baidoa					4.1											3.7		3.0
qansa dhere					-											-		-
dinsor					-											-		-
BAKOOL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0	3.0	4.5
wajid																-	-	-
oddur																5.1	3.0	4.5
tayeglow																5.0	3.0	4.5
HIRAN	5.0	6.4	6.4	2.1	4.1	2.4	3.0	5.3	4.3	3.0	5.0	4.4	5.0	4.2	4.0	5.0	2.0	3.2
belet weyn					5.0					-			5.9	2.0		5.0	2.0	4.3
bulo burti					5.0					3.0			-	5.9		5.0	2.0	2.3
jalalaksi					4.3					3.0			5.0	5.0		5.0	2.0	3.1
MIDDLE SH	6.4	6.2	6.3	3.3	1.7	1.6	1.9	5.0	4.3	4.6	5.5	5.0	6.0	5.0	5.2	5.0	3.2	4.0
jowhar					1.5					4.0			5.0	5.6		5.3	3.4	3.3
aden yabal					-					-			-	6.0		3.9	2.5	2.6
balad					2.3					4.0			6.2	6.0		5.5	4.0	4.4
LOWER SHA	6.3	6.2	6.3	4.7	3.3	3.2	3.0	3.1	4.4	5.4	5.5	5.5	3.3	5.6	5.6	5.4	4.2	4.5
afgoi					3.4					5.4			2.5	5.0		5.4	5.0	4.7
wanle weyn					-					-			-	0.0		3.0	2.0	2.5
merca					3.4					5.4			3.3	4.0		6.2	4.5	5.0
kurtuley					3.7					5.5			5.0	5.0		-	4.5	4.5
brava					0.0					5.0			0.0	5.0		5.4	3.0	4.5
sablaale					-					-			-	5.0		5.0	4.0	4.0
kurtunwarey					-					-			-	5.6		-	4.5	4.5
BANADIR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GALBEED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SANAAG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOGDHEER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SOOL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BARI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NUGAAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MUDUG	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GALGADUD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SOMALIA	6.3	6.3	6.3	3.0	3.4	3.3	3.0	5.0	4.2	4.3	5.5	5.2	3.7	5.3	5.5	5.0	4.7	4.0

Table B.10.4

4c. RICE yields (qt/ha)

F.E.W.S. Project

District	1982			1983			1984			1985			1986			1987		
	gu	der	tot	gu	der	tot	gu	der	tot	gu	der	tot	gu	der	tot	gu	der	tot
GEDO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
geed weyn																		
fugh																		
garba bare																		
belet-hawa																		
bardera																		
MIDDLE JU	-	-	-	20.0	-	-	36.0	36.4	35.5	46.1	48.0	43.0	35.7	42.1	46.9	48.0	37.0	38.5
sakow				-			-	-		-	-		-	-		-	-	-
beale				-			-	-		-	-		-	-		-	-	-
jilib				20.0			36.0	36.4		46.0	48.0		35.7	42.1		48.0	37.0	38.5
LOWER JUB	-	-	-	-	-	-	-	-	-	38.1	38.0	32.7	48.0	25.2	35.1	23.0	29.0	27.7
Jamame										38.0	38.0		48.0	25.2		23.0	29.0	27.7
kismayo										-	-		-	-		-	-	-
BAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
bur akaba																		
baidoa																		
qansa dhere																		
diinsor																		
BAKOL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
wajid																		
Odour																		
teyeglow																		
HIRAN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
belet weyn																		
hulo burti																		
jalalaksi																		
MIDDLE SH	-	-	-	42.5	-	-	34.0	22.7	27.2	37.3	46.3	42.0	36.7	34.0	35.5	36.5	28.0	31.0
jowhar				42.5			34.0	22.7		37.3	46.3		36.7	34.0		36.5	28.0	31.0
aden yabal				-			-	-		-	-		-	-		-	-	-
balad				-			-	-		-	-		-	-		-	-	-
LOWER SHA	-	-	-	15.0	-	-	-	-	-	-	-	-	30.0	-	30.0	-	-	-
afgoi				-									-					
wanle weln				-									-					
merca				-									30.0					
kurioley				-									-					
brava				-									-					
saklaale				15.0									-					
kurtunwarre				-									-					
AYDAR																		
GALGEEB																		
SANAG																		
TOGDHEER																		
SOOL																		
BARI																		
NUGAAL																		
MUDUG																		
GALGADUD																		
SOMALIA	-	-	31.7	27.2	51.5	35.0	34.0	31.2	32.3	41.0	41.6	41.3	38.5	36.1	37.4	36.1	33.3	33.4

Table B.10.5

4c. GROUNDNUT yields (qt/ha) F.E.W.S. Project

District	1982 gu	1982 der	1982 tot	1983 gu	1983 der	1983 tot	1984 gu	1984 der	1984 tot	1985 gu	1985 der	1985 tot	1986 gu	1986 der	1986 tot	1987 gu	1987 der	1987 tot
GEDO	-	-	-	11.[illegible]	14.[illegible]	11.[illegible]	7.5	4.[illegible]	1.4	-	-	-	1.[illegible]	-	4.[illegible]	1.[illegible]	-	1.[illegible]
geed weyn													-			1.[illegible]		4.[illegible]
lugh													-			6.[illegible]		3.[illegible]
garba hare													-			-		-
belet-hawa													-			-		-
bardera													1.[illegible]			-		-
MIDDLE JU	-	-	-	15.[illegible]	6.7	11.[illegible]	7.[illegible]	7.[illegible]	7.[illegible]	-	-	-	-	-	-	1.[illegible]	5.[illegible]	5.[illegible]
saakow				-	14.[illegible]											-	-	-
buale				15.[illegible]	-											-	-	-
jilib				-	6.[illegible]											7.[illegible]	5.[illegible]	3.[illegible]
LOWER JUB	-	-	-	10.[illegible]	4.[illegible]	6.[illegible]	7.[illegible]	7.6	7.1	-	5.1	1.1	-	-	-	-	1.[illegible]	1.[illegible]
jamame				10.[illegible]													1.[illegible]	1.[illegible]
kismayo				-													-	-
BAY	-	-	-	12.2	1.[illegible]	6.7	11.1	4.5	1.7	10.2	1.2	3.3	1.1	-	1.1	6.7	-	6.7
bur akaba				12.1						-			-			1.[illegible]		1.[illegible]
baidoa				12.5						10.2			1.3			7.[illegible]		7.1
qansa dhere				-						10.2			1.3			4.[illegible]		4.[illegible]
dinsor				-						10.[illegible]			1.1			5.[illegible]		5.[illegible]
BAKOL	-	-	-	-	4.[illegible]	1.[illegible]	12.3	-	12.3	1.[illegible]	-	1.[illegible]	-	-	-	6.[illegible]	5.[illegible]	5.[illegible]
wajid																-	-	-
oddur																6.1	5.[illegible]	5.[illegible]
Tegeglow																6.1	5.[illegible]	5.[illegible]
HIRAN	-	-	-	-	7.7	7.7	7.[illegible]	7.2	7.1	10.[illegible]	1.5	10.3	-	-	-	-	5.[illegible]	5.[illegible]
belet weyn										10.[illegible]							-	-
bulo burti										10.5							-	-
jalalaksi										10.5							5.[illegible]	5.[illegible]
MIDDLE SH	-	-	-	10.[illegible]	-	10.4	15.3	6.5	11.4	10.2	3.1	1.9	1.1	5.[illegible]	6.5	7.[illegible]	7.5	6.[illegible]
jowhar				-						10.2			4.6	6.[illegible]		6.[illegible]	6.[illegible]	6.[illegible]
adan yabal				-						-			-	-		5.1	4.[illegible]	4.1
balad				10.1						10.2			-	6.[illegible]		6.6	5.[illegible]	6.[illegible]
LOWER SHA	-	-	-	14.[illegible]	5.7	16.3	15.[illegible]	7.[illegible]	12.3	16.3	1.2	10.3	4.[illegible]	6.1	6.6	10.[illegible]	3.[illegible]	1.3
afgoi										16.3			4.[illegible]	-		10.[illegible]	-	11.[illegible]
wanle weyn										10.[illegible]			-	-		11.[illegible]	3.[illegible]	6.6
merca										14.3			-	5.1		11.[illegible]	-	11.[illegible]
korioley										11.6			-	6.1		16.[illegible]	-	18.[illegible]
brava										-			-	-		-	-	-
sablaale										-			-	-		-	-	-
kurtunwarey										-			-	-		10.1	-	10.[illegible]
BANADIR																-	-	-
GALBEED	-	-	-	-	-	-	6.1	-	6.4	-	-	-	-	-	-	-	-	-
SANAAG																-	-	-
TOGDHEER																-	-	-
SOOL																-	-	-
BARI																-	-	-
NUGAAL																-	-	-
MUDUG																-	-	-
GALGADUD																-	-	-
SOMALIA	-	-	10.7	14.[illegible]	4.1	10.[illegible]	11.9	6.2	11.[illegible]	1.4	1.2	1.6	1.2	6.[illegible]	4.5	1.2	3.4	1.4

Table B.11.1

SORGHUM.: relative regional importance of the cropping areas in %

	1982	1983	1984	1985	1986	1987
Gedo	2.1	14.1	3.9	12.8	5.2	5.1
Middle Juba	5.7	4.3	5.8	4.6	2.7	3.6
Lower Juba	2.6	0.5	1.7	0.2	0.0	0.0
Bay	35.6	31.6	38.5	33.8	57.4	39.1
Bakool	3.3	6.7	3.9	1.7	8.6	6.6
Hiran	6.1	3.2	6.7	6.4	6.0	6.5
Middle Shabe	5.6	1.9	5.8	6.7	5.6	5.7
Lower Shabel	10.8	5.6	10.6	13.3	6.2	8.1
Awdal				4.5		0.6
NW Galbeed	28.0	17.6	16.4	10.6	6.6	5.4
Sanaag		2.8	1.7	0.6		0.3
Togdheer		5.3	4.8	2.1	1.5	1.4
Sool		0.0	0.0	0.0		0.0
Bari		0.2	0.2	0.1		0.1
Nugaal		0.5	1.0	0.0		0.0
Mudug		0.4	0.6	0.3		0.0
Galgadud		0.8	0.4	0.3		0.2
Somalia	100.0	100.0	100.	100.0	100.0	100.0

F.E.W.S. project

Table B.11.2

MAIZE : relative regional importance of the cropping areas in %

	1982	1983	1984	1985	1986	1987
Gedo	3.6	4.4	5.4	8.4	2.9	3.1
Middle Juba	9.9	4.4	8.9	5.5	5.7	4.4
Lower Juba	12.0	6.7	13.6	4.5	5.0	5.2
Bay	0.0	3.2	0.9	2.8	1.3	2.0
Bakool	0.0	0.0	0.0	0.5	0.0	1.3
Hiran	12.0	16.1	5.5	3.2	2.3	4.1
Middle Shabe	14.4	21.9	18.3	19.5	26.7	24.3
Lower Shabel	48.1	43.3	47.4	54.5	51.7	52.2
Awdal	0.0	0.0	0.0	0.3		0.2
NW Galbeed	0.0	0.0	0.0	0.8	4.4	2.7
Sanaag	0.0	0.0	0.0	0.0	0.0	0.3
Togdheer	0.0	0.0	0.0	0.0	0.0	0.2
Sool	0.0	0.0	0.0	0.0	0.0	1.0
Bari	0.0	0.0	0.0	0.0	0.0	0.0
Nugaal	0.0	0.0	0.0	0.0	0.0	0.0
Mudug	0.0	0.0	0.0	0.0	0.0	0.0
Galgadud	0.0	0.0	0.0	0.0	0.0	0.0
Somalia	100.0	100.0	100.0	100.0	100.0	100.0

F.E.W.S. project

Table B.11.

SESAME : relative regional importance of the cropping areas in %

	1982	1983	1984	1985	1986	1987
Gedo	2.3	3.9	2.8	0.0	3.3	4.3
Middle Juba	13.9	8.5	11.7	17.4	2.0	10.8
Lower Juba	14.2	6.2	15.5	15.5	6.1	11.5
Bay	0.0	5.1	0.0	0.0	0.0	0.3
Bakool	0.0	0.0	0.0	0.0	0.0	1.8
Hiran	5.2	9.5	3.5	8.2	4.6	6.4
Middle Shabe	21.6	18.5	19.8	22.2	41.6	30.8
Lower Shabel	43.2	48.3	46.7	36.7	42.4	33.9
Awdal	0.0	0.0	0.0	0.0	0.0	0.0
NW Galbeed	0.0	0.0	0.0	0.0	0.0	0.0
Sanaag	0.0	0.0	0.0	0.0	0.0	0.0
Togdheer	0.0	0.0	0.0	0.0	0.0	0.0
Sool	0.0	0.0	0.0	0.0	0.0	0.0
Bari	0.0	0.0	0.0	0.0	0.0	0.0
Nugaal	0.0	0.0	0.0	0.0	0.0	0.0
Mudug	0.0	0.0	0.0	0.0	0.0	0.0
Galgadud	0.0	0.0	0.0	0.0	0.0	0.0
Somalia	100.0	100.0	100.0	100.0	100.0	100.0

F.E.W.S. project

Table B.11.3

COWPEAS : relative regional importance of the cropping areas in %

	1982	1983	1984	1985	1986	1987
Gedo			7.1	0.8	2.8	1.8
Middle Juba			12.4	0.0	2.1	1.0
Lower Juba			0.8	7.6	0.0	0.4
Bay			10.1	0.0	5.9	4.7
Bakool			1.7	2.1	11.0	6.4
Hiran			5.8	5.8	3.6	2.7
Middle Shabelle			4.8	13.9	19.6	23.0
Lower Shabelle			6.1	7.4	5.3	6.6
Awdal				5.8	0.8	0.4
NW Galbeed			2.7	10.0	4.2	2.1
Sanaag			1.4	0.0	0.0	0.0
Togdheer			0.0	0.0	4.2	2.1
Sool			0.0	0.0	0.0	0.0
Bari			1.4	0.0	2.1	1.0
Nugaal			13.1	0.0	0.0	0.0
Mudug			11.0	19.3	17.1	12.4
Galgadud			13.8	19.3	21.3	35.2
Somalia			100.0	100.0	100.0	100.0

F.E.W.S. project

Table B.11.5

TILLED AREAS): relative regional importance in %

	1982	1983	1984	1985	1986	1987
Gedo	4.9	10.9	4.0	9.6	5.1	4.3
Middle Juba	6.3	6.5	8.0	8.1	5.1	4.3
Lower Juba	7.1	4.1	6.1	4.2	2.5	3.3
Bay	21.2	16.7	21.5	17.5	28.3	31.4
Bakool	2.0	2.7	2.2	1.2	4.3	4.5
Hiran	7.0	8.6	5.8	5.7	4.1	5.4
Middle Shabe	9.8	10.6	12.1	13.2	16.1	14.6
Lower Shabel	22.2	23.7	23.6	28.1	26.2	24.4
Awdal				2.3		0.4
NW Galbeud	17.5	16.2	10.0	7.1	6.2	3.7
Sanaag			1.1	0.4		0.3
Togdheer			2.7	0.9	0.7	0.9
Sool			0.0	0.0		0.0
Bari			0.2	0.1		0.1
Nugaal			1.1	0.0		0.0
Mudug			0.8	0.8		0.6
Galgadud			0.8	0.0	0.4	1.8
Somalia	100.0	100.0	100.0	100.0	100.0	100.0

F.E.W.S. project

Table B.12.1

SORGHUM : relative regional importance of the production in %

	1982	1983	1984	1985	1986	1987
Gedo	2.1	3.0	3.8	13.6	5.1	1.6
Middle Juba	5.7	7.6	5.7	4.7	3.2	0.3
Lower Juba	2.6	0.7	1.7	0.2	0.0	0.0
Bay	35.8	20.8	36.2	32.3	63.9	68.1
Bakool	3.3	5.8	3.8	1.4	1.9	5.5
Hiran	6.1	3.9	6.6	9.6	4.9	4.5
Middle Shabe	5.6	2.6	5.7	4.4	6.5	3.1
Lower Shabel	10.8	7.2	11.8	9.8	4.5	5.0
Avdal	0.0	0.0	0.0	5.5	0.0	1.1
NW Galbeed	15.7	48.2	16.1	14.4	9.3	9.2
Sanaag	1.6		1.7	0.7	0.0	0.3
Togdheer	7.1		4.7	2.5	0.7	1.1
Sool	0.0		0.0	0.0		0.0
Bari	0.1		0.2	0.1		0.1
Nugaal	0.9		1.0	0.0		0.0
Mudug	0.6		0.6	0.4		0.0
Galgadud	2.0		0.4	0.4		0.1
Somalia	100.0	100.0	100.0	100.0	100.0	100.0

F.E.W.S. project

Table B.12.2

MAIZE : relative regional importance of the production in %

	1982	1983	1984	1985	1986	1987
Gedo	3.6	4.8	4.4	9.0	3.2	2.9
Middle Juba	9.9	3.4	7.8	5.1	6.3	3.5
Lower Juba	11.9	9.3	12.2	5.5	5.2	5.2
Bay	0.0	0.9	0.5	1.5	0.5	1.2
Bakool	0.0	0.0	0.0	0.3	0.0	0.9
Hiran	12.0	4.2	4.9	2.4	1.4	3.2
Middle Shabe	14.4	29.3	18.0	19.4	24.3	21.3
Lower Shabel	48.2	47.8	52.2	55.8	54.9	58.3
Avdal	0.0	0.0	0.0	0.3	0.0	0.3
NW Galbeed	0.0	0.0	0.0	0.7	4.2	2.9
Sanaag	0.0	0.0	0.0	0.6	0.0	0.2
Togdheer	0.0	0.0	0.0	0.0	0.0	0.1
Sool	0.0	0.0	0.0	0.0	0.0	0.0
Bari	0.0	0.0	0.0	0.0	0.0	0.0
Nugaal	0.0	0.0	0.0	0.0	0.0	0.0
Mudug	0.0	0.0	0.0	0.0	0.0	0.0
Galgadud	0.0	0.0	0.0	0.0	0.0	0.0
Somalia	100.0	100.0	100.0	100.0	100.0	100.0

F.E.W.S. project

Table B.12

SESAME : relative regional importance of the production in %

	1982	1983	1984	1985	1986	1987
Gedo	2.5	4.5	1.9	0.0	2.8	4.4
Middle Juba	13.3	7.6	11.9	16.5	1.3	10.0
Lower Juba	14.2	5.9	14.7	16.4	5.5	15.1
Bay	0.0	4.2	0.0	0.0	0.0	0.4
Bakool	0.0	0.0	0.0	0.0	0.0	1.9
Hiran	5.3	7.3	4.0	7.1	4.0	5.0
Middle Shabe	21.5	19.7	19.9	21.2	43.1	28.3
Lower Shabel	43.2	50.8	47.6	38.8	43.3	34.9
Awdal	0.0	0.0	0.0	0.0	0.0	0.0
NW Galbeed	0.0	0.0	0.0	0.0	0.0	0.0
Sanaag	0.0	0.0	0.0	0.0	0.0	0.0
Togdheer	0.0	0.0	0.0	0.0	0.0	0.0
Sool	0.0	0.0	0.0	0.0	0.0	0.0
Bari	0.0	0.0	0.0	0.0	0.0	0.0
Nugaal	0.0	0.0	0.0	0.0	0.0	0.0
Mudug	0.0	0.0	0.0	0.0	0.0	0.0
Galgadud	0.0	0.0	0.0	0.0	0.0	0.0
Somalia	100.0	100.0	100.0	100.0	100.0	100.0

F.E.W.S. project

Table B.12.4

COWPEAS : relative regional importance of the production in %

	1982	1983	1984	1985	1986	1987
Gedo			3.7	5.1	4.1	2.2
Middle Juba			14.7	6.5	3.8	1.7
Lower Juba			8.6	4.2	1.9	1.4
Bay			14.8	15.4	16.8	23.6
Bakool			2.4	1.8	0.6	4.7
Hiran			5.9	6.7	1.0	4.4
Middle Shabelle			5.2	15.6	22.7	19.0
Lower Shabelle			5.4	19.9	24.2	12.1
Awdal				1.8		0.8
NW Galbeed			2.7	8.2	11.8	5.6
Sanaag			1.3	0.0		0.0
Togdheer			0.0	0.0		2.1
Sool			0.0	0.0		0.0
Bari			1.3	0.0		0.5
Nugaal			2.7	0.0		0.0
Mudug			17.8	8.3		5.7
Galgadud			13.5	8.2	12.1	16.2
Somalia			100.0	100.0	100.0	100.0

Table C

F.E.W.S. PROJECT

	# 1975	Total population 1987	1988	% increase	number villages	rural households 1988	ac rural people 1988	% rural	total agric. area	agr. area per household	av. tilled area per household
NORTH WEST	448	608	612	1.95	202	14816	96290	15.7	50400	6.07	2.77
TOGDHEER	268	290	293	1.09	138	8400	51650	14.6	5100	0.64	-
SANAAG&SOOL	145	290	298	4.11	69	6540	42500	20.1	4200	6.64	-
BARI	151	150	161	6.66	96	4600	29910	18.6	600	0.13	0.13
NUGAAL	85	90	90	0.22	14	1650	10740	11.9	1050	0.64	-
MUDUG	215	280	283	1.03	52	3700	24050	8.5	23500	6.00	1.43
GALGADUD	182	220	225	2.10	37	5910	38420	17.1	42500	8.19	1.46
HIRAN	167	220	222	1.05	95	10360	67360	30.3	44200	4.27	2.52
MIDDLE SHEB	236	450	486	8.00	162	21620	140530	28.5	135200	6.69	2.71
BENADIR	371	900	1001	11.17	1	0	0	0.0	0	-	-
LOWER SHEB	359	150	935	10.00	715	92240	599570	64.1	187500	2.25	1.53
LOWER JUBA	(2161	100	215	5.27	177	25260	164190	75.0	51300	2.03	1.16
MIDDLE JUBA	( )	300	321	1.27	151	18660	121260	37.0	57300	3.07	1.67
GEDO	212	260	254	1.53	204	18660	121230	45.8	60300	3.26	2.06
BAY	302	650	715	11.05	1328	79830	515300	72.6	214500	3.45	2.77
BAKOOL	100	154	158	5.20	187	5630	36620	23.2	25600	4.14	3.25
SOMALIA	3501	5810	6226	6.69	3627	325150	2112190	34.1	1017850	3.22	2.15

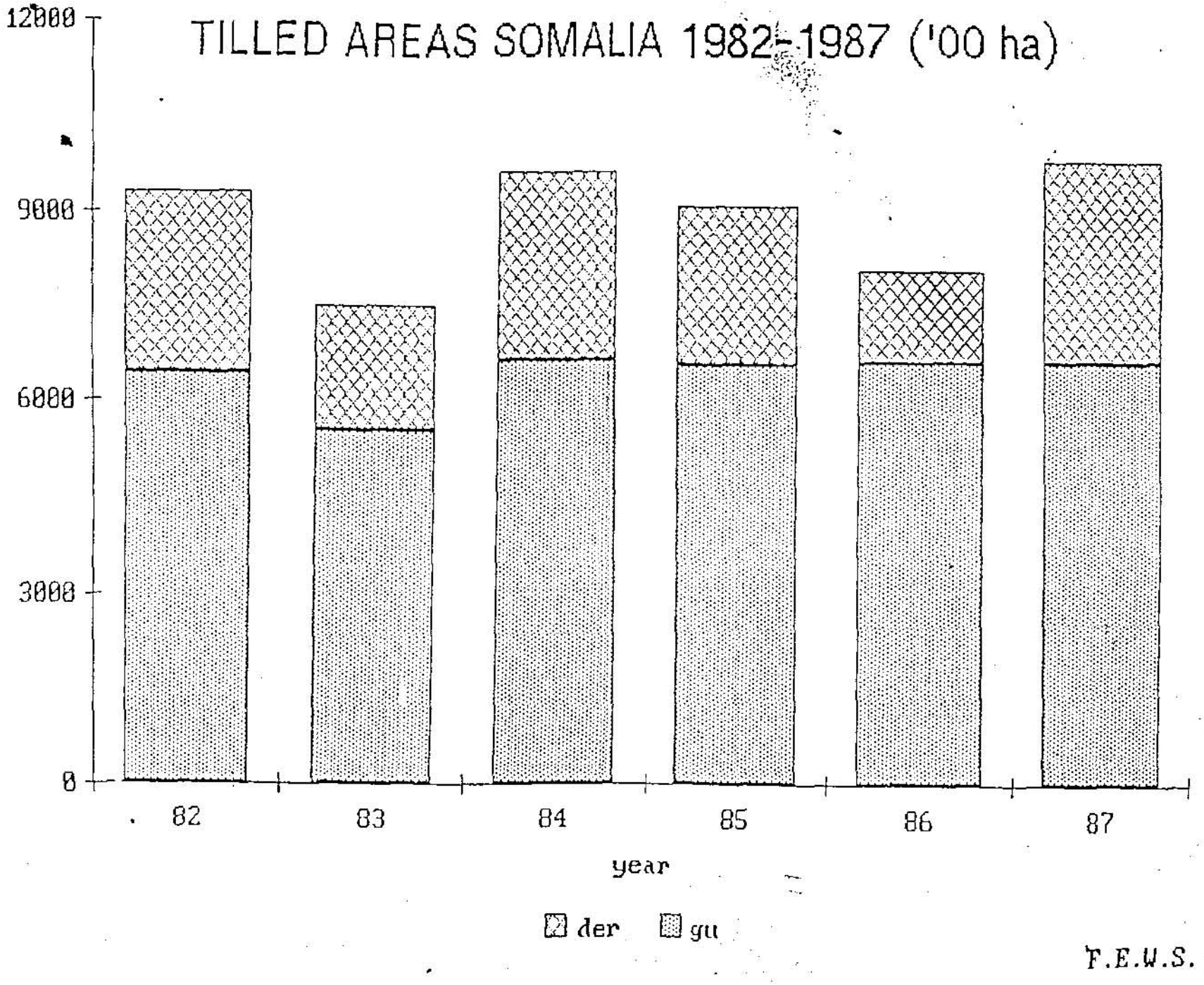

TILLED AREAS SOMALIA 1982-1987 ('00 ha)
12000
9000
6000
3000
0
82
83
84
85
86
87
year
der
gu
F.E.W.S.

Figure 1.

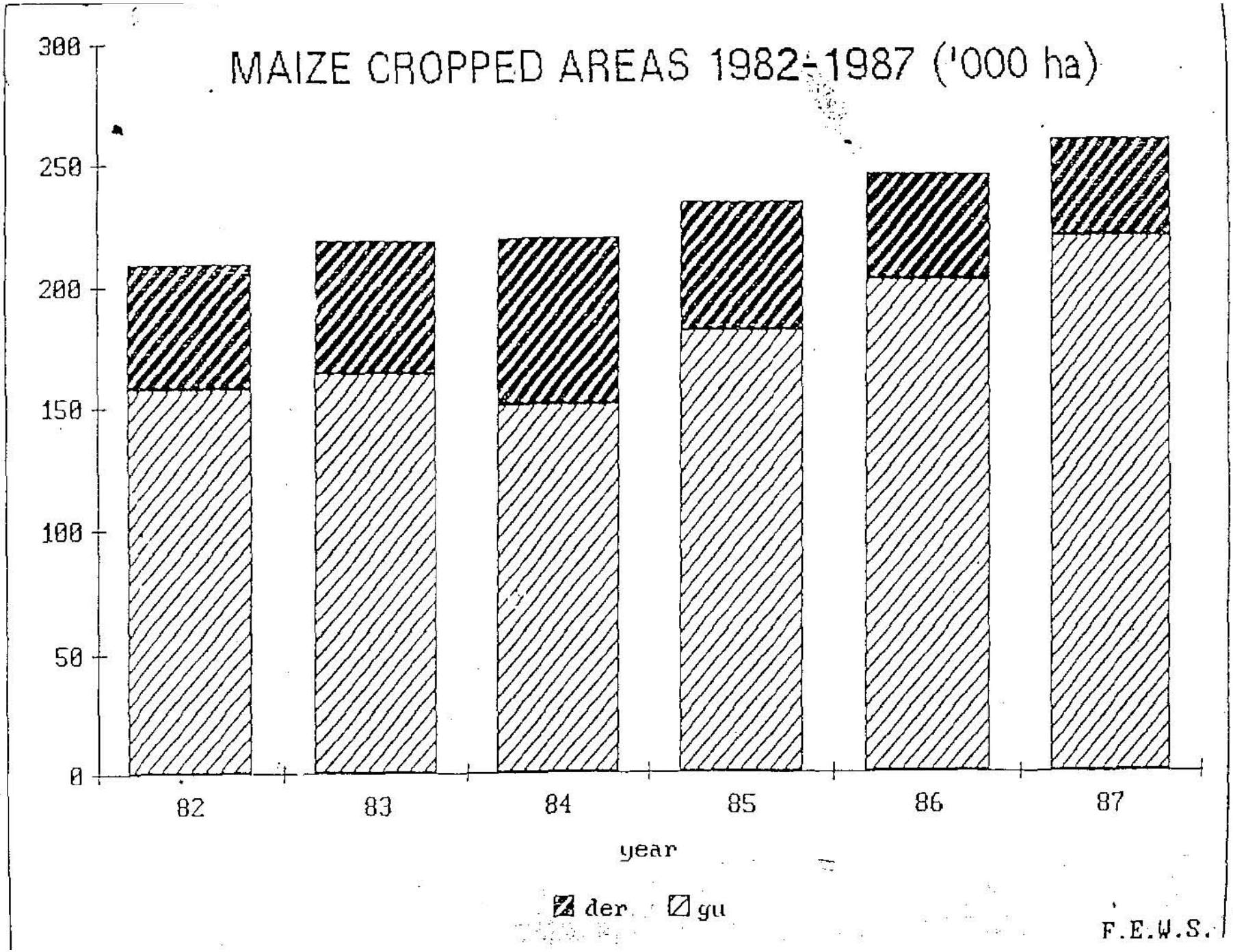
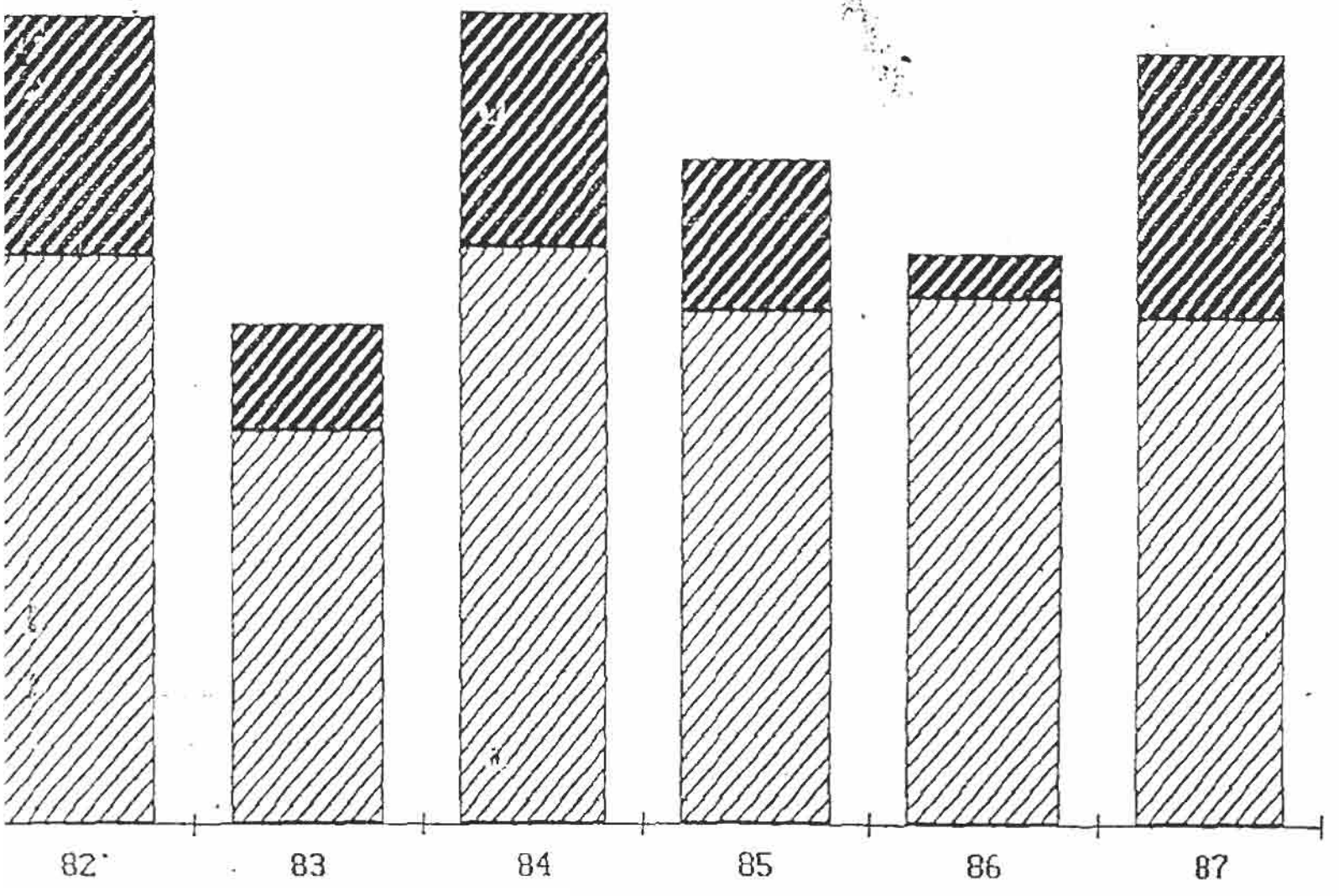
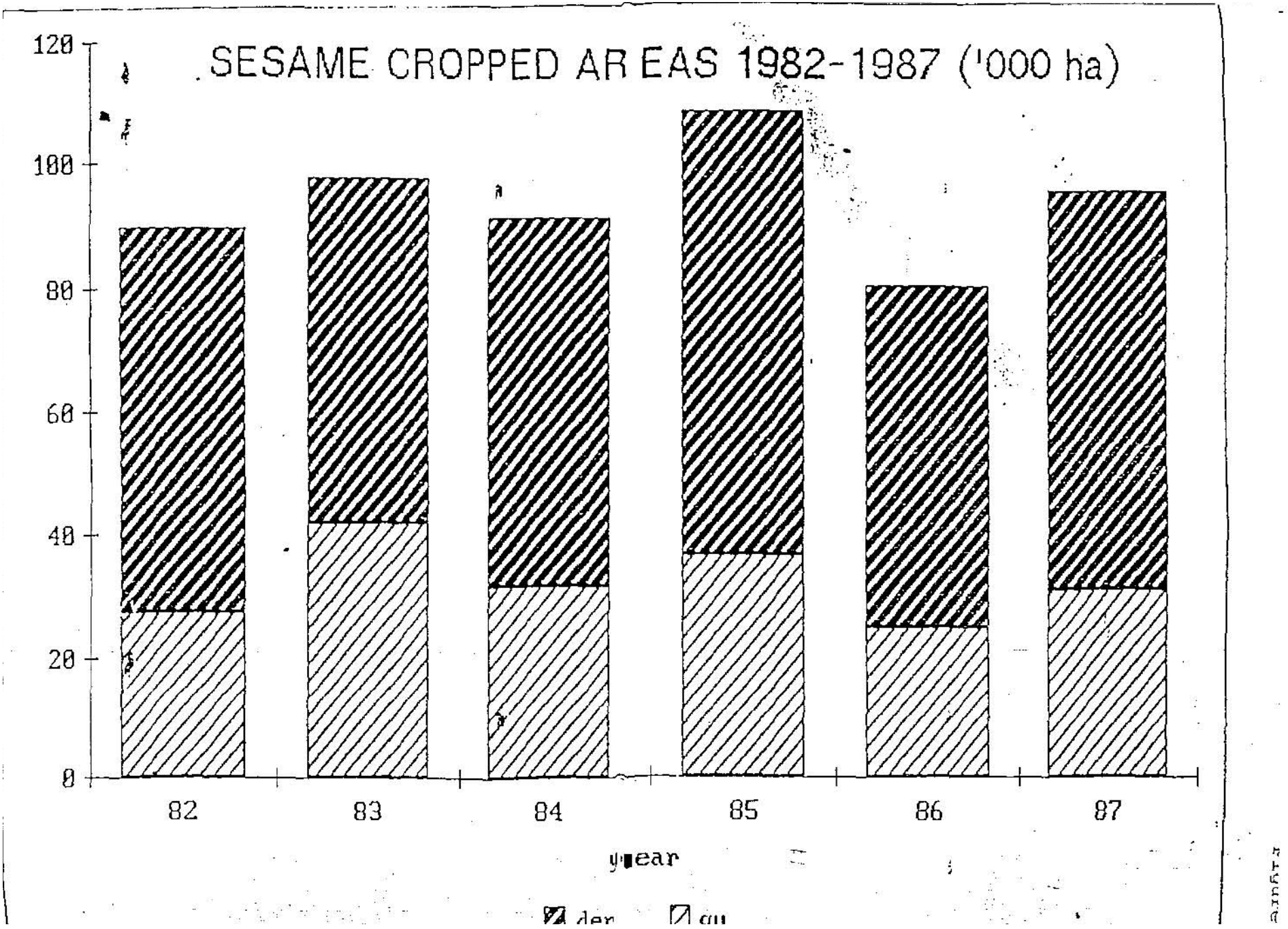

MAIZE CROPPED AREAS 1982-1987 ('000 ha)
300
250
200
150
100
50
0
82
83
84
85
86
87
year
der
gu
F.E.W.S.

Figure 1.

SORGHUM CROPPED AREAS 1982-1987 ('000 ha)




SESAME CROPPED AR EAS 1982-1987 ('000 ha)
120
100
80
60
40
20
0
82
83
84
85
86
87
year

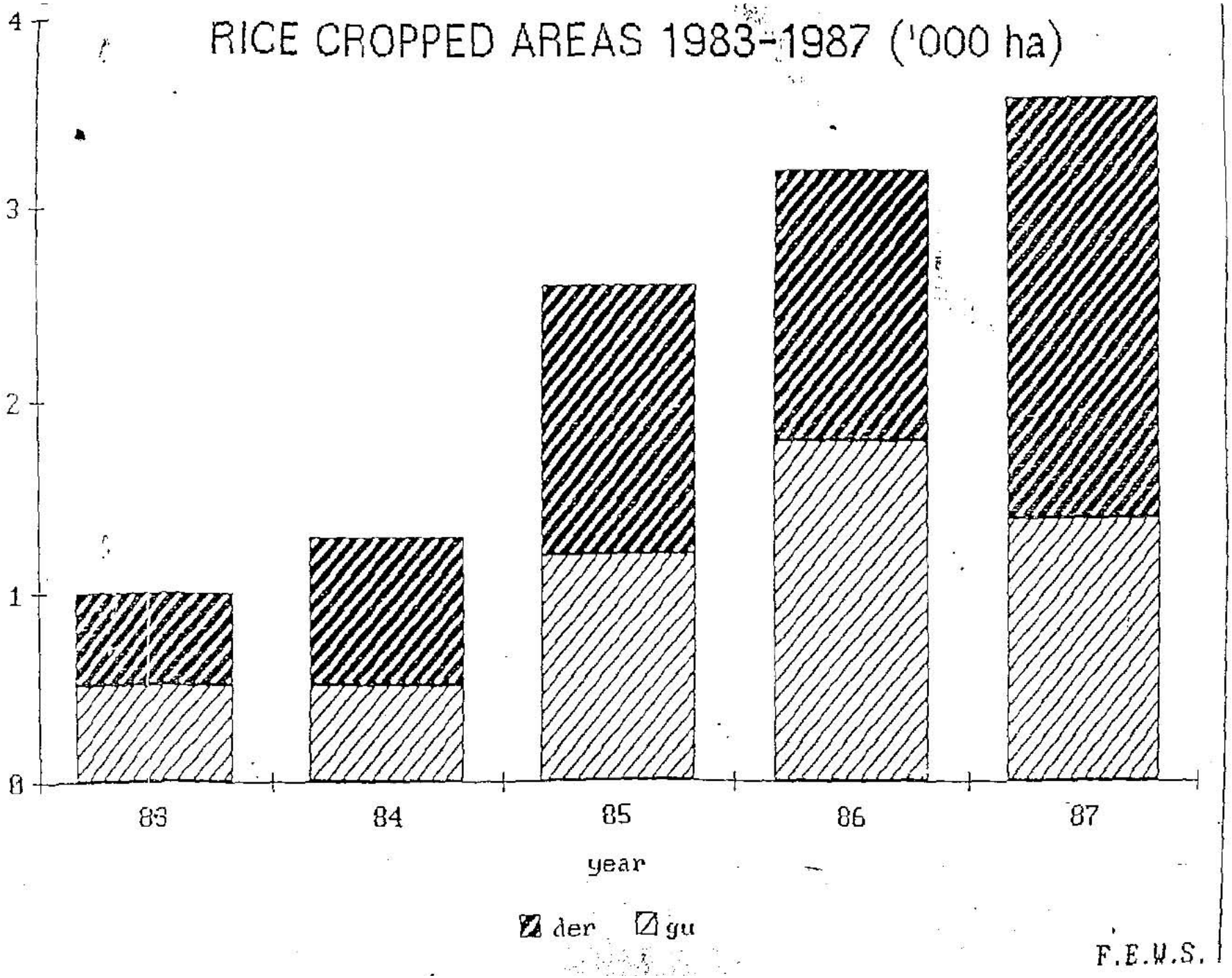
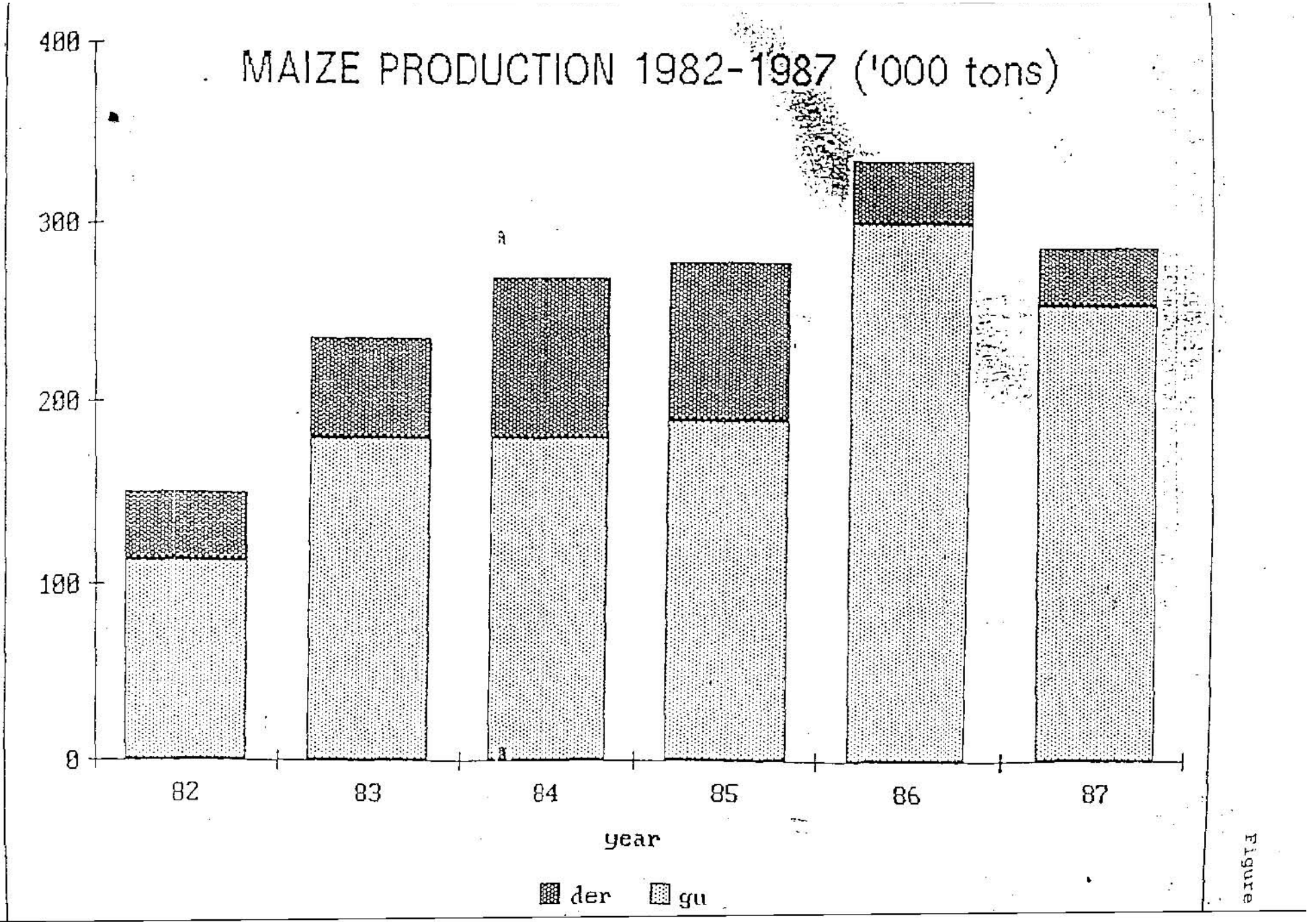

RICE CROPPED AREAS 1983-1987 ('000 ha)
4
3
2
1
0
83
84
85
86
87
year
der
gu
F.E.W.S.

Figure 1.


MAIZE PRODUCTION 1982-1987 ('000 tons)
400
300
200
100
0
82
83
84
85
86
87
year
der
gu

Figure

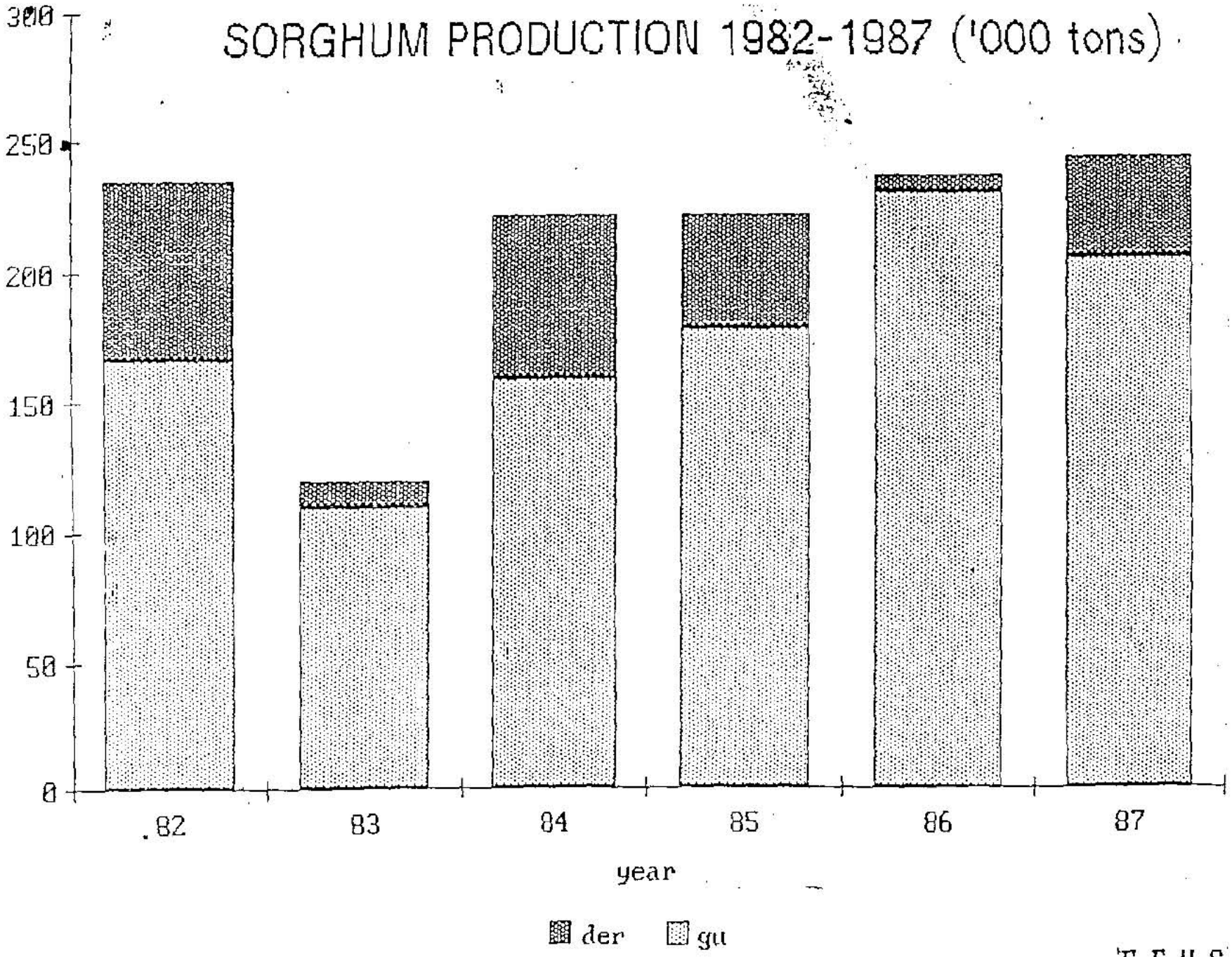

SORGHUM PRODUCTION 1982-1987 ('000 tons)
300
250
200
150
100
50
0
82
83
84
85
86
87
year
der
gu
F.E.W.S.

Figure 2.2

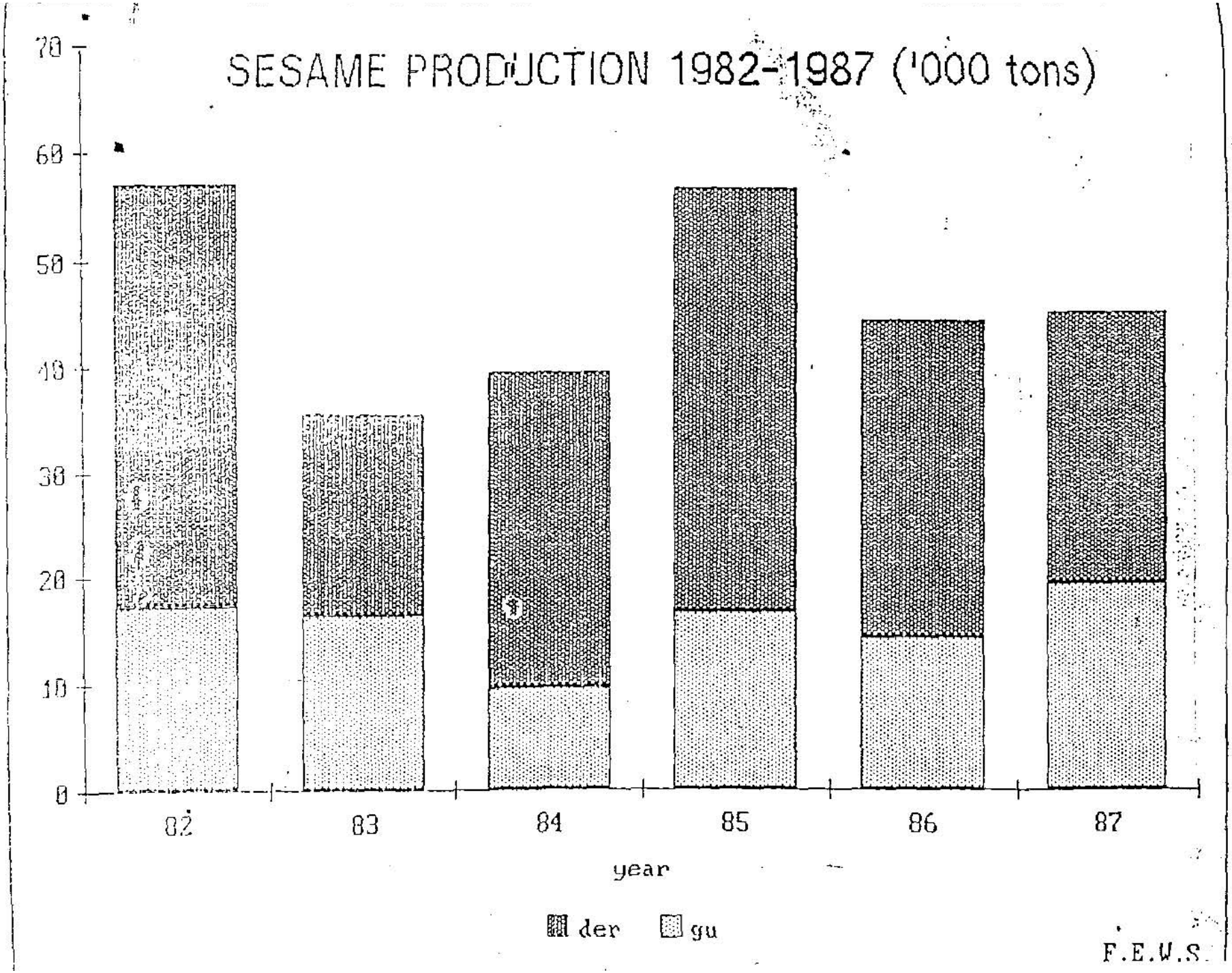

SESAME PRODUCTION 1982-1987 ('000 tons)
70
60
50
40
30
20
10
0
82
83
84
85
86
87
year
der
gu
F.E.W.S.

Figure 2.

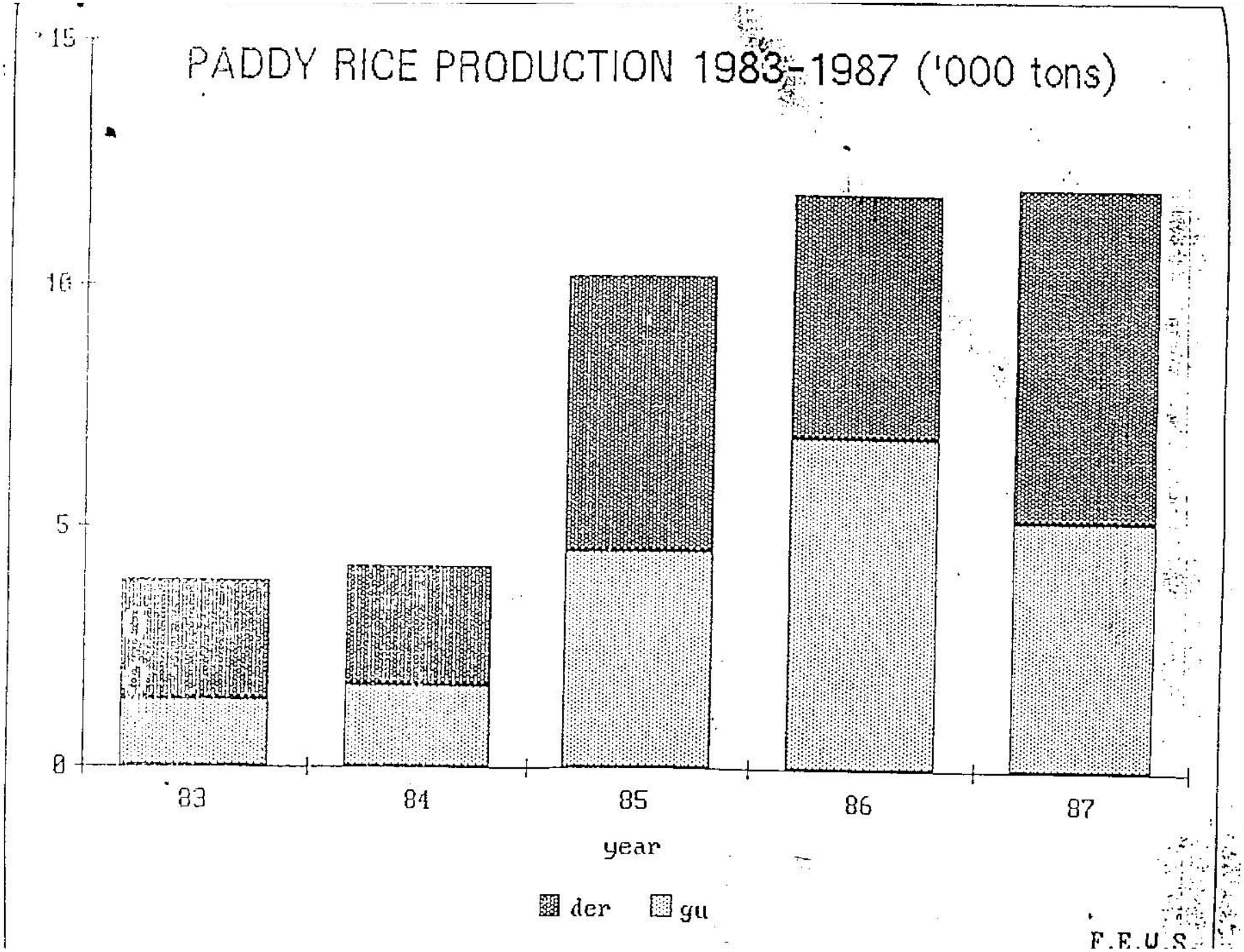
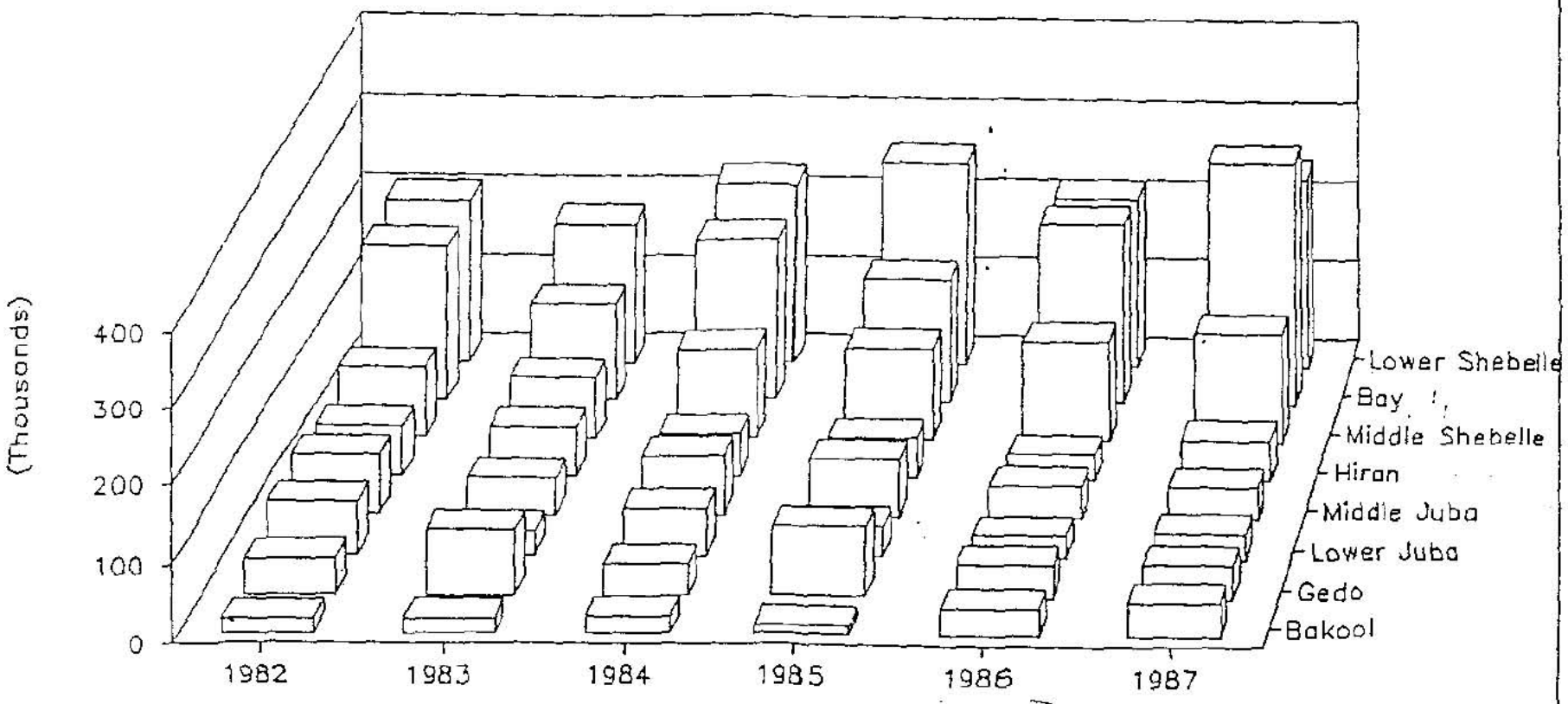


Figure 2

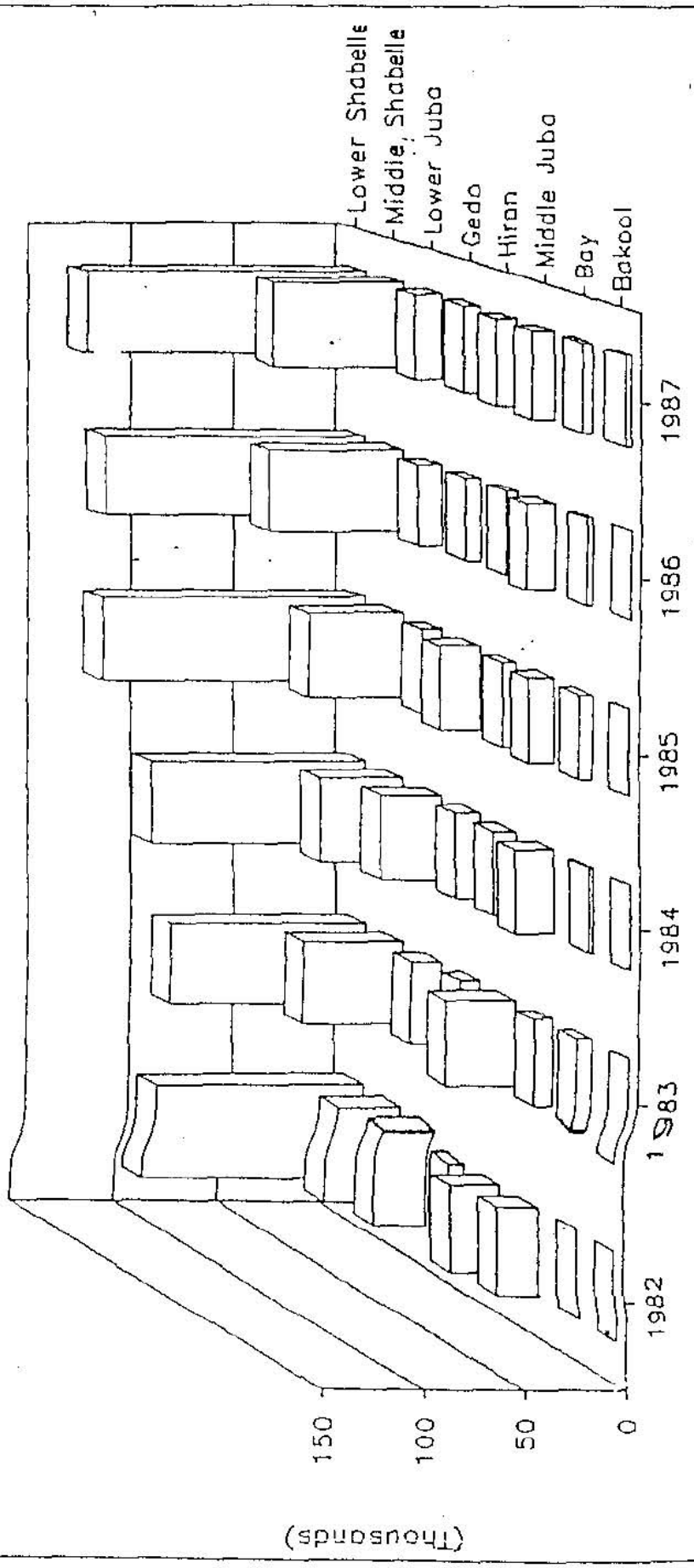
F.E.U.S.

TILLED AREAS (ha)



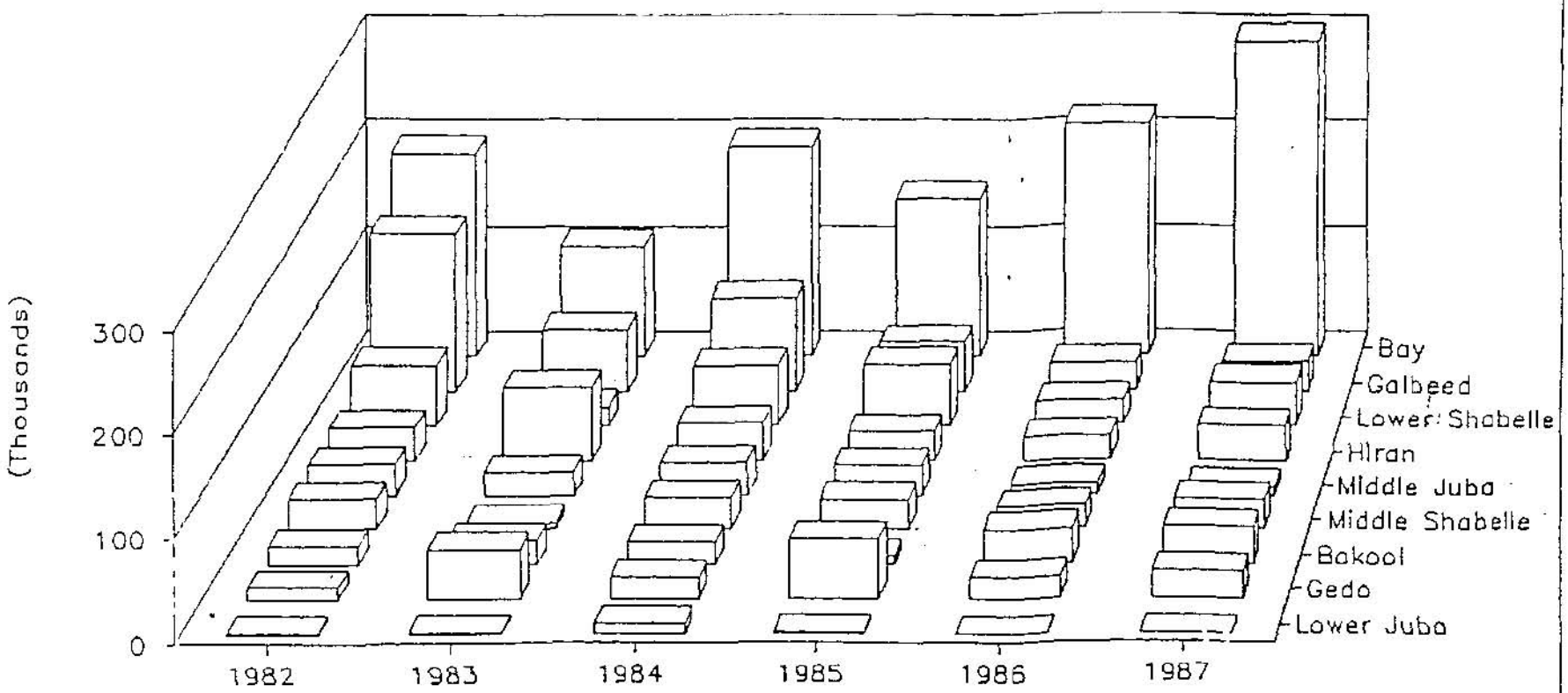
F.E.W.S.

MAIZE CROPPED AREAS (ha)



F.E.W.S.

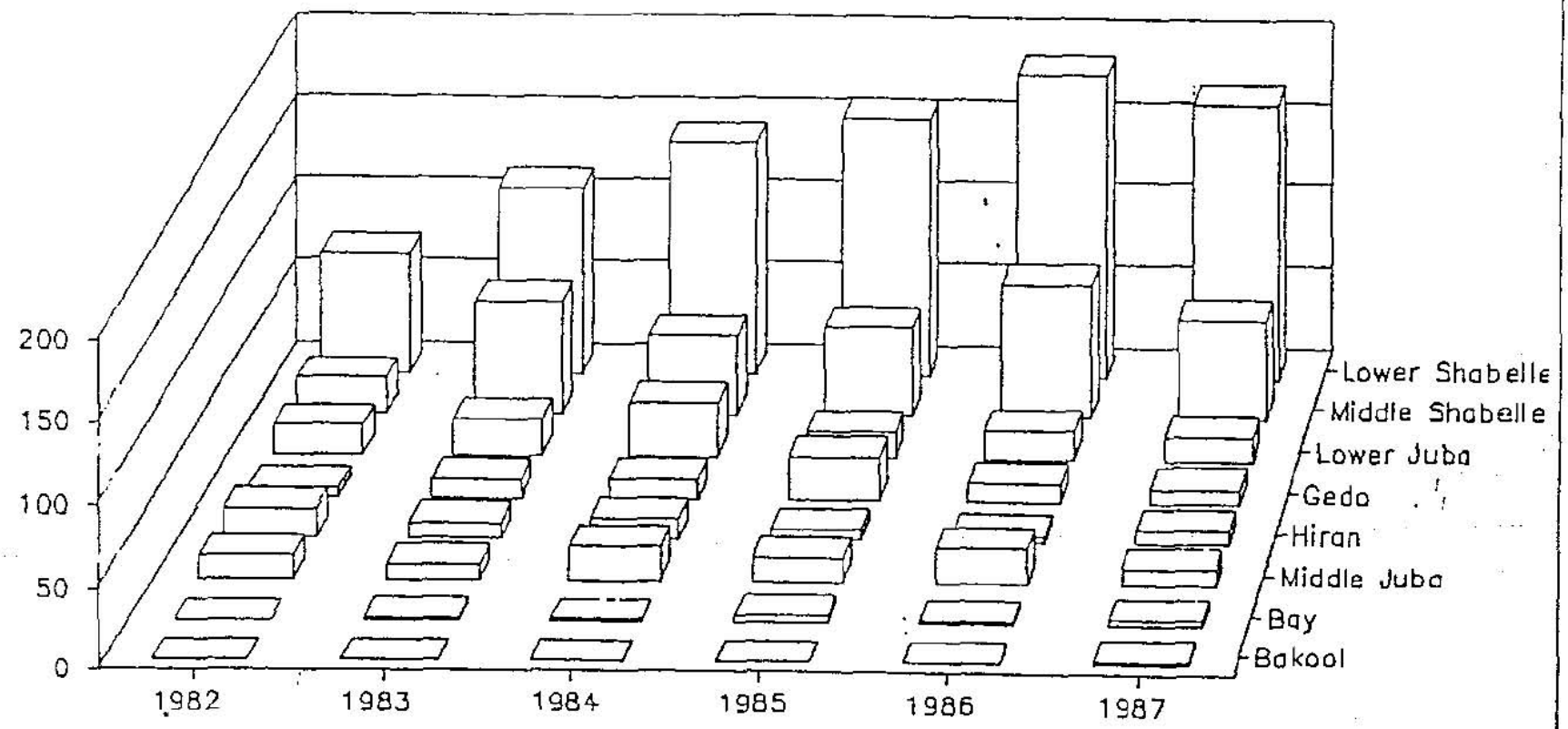
SORGHUM CROPPED AREAS (ha)



F.E.W.S.

Figure 3

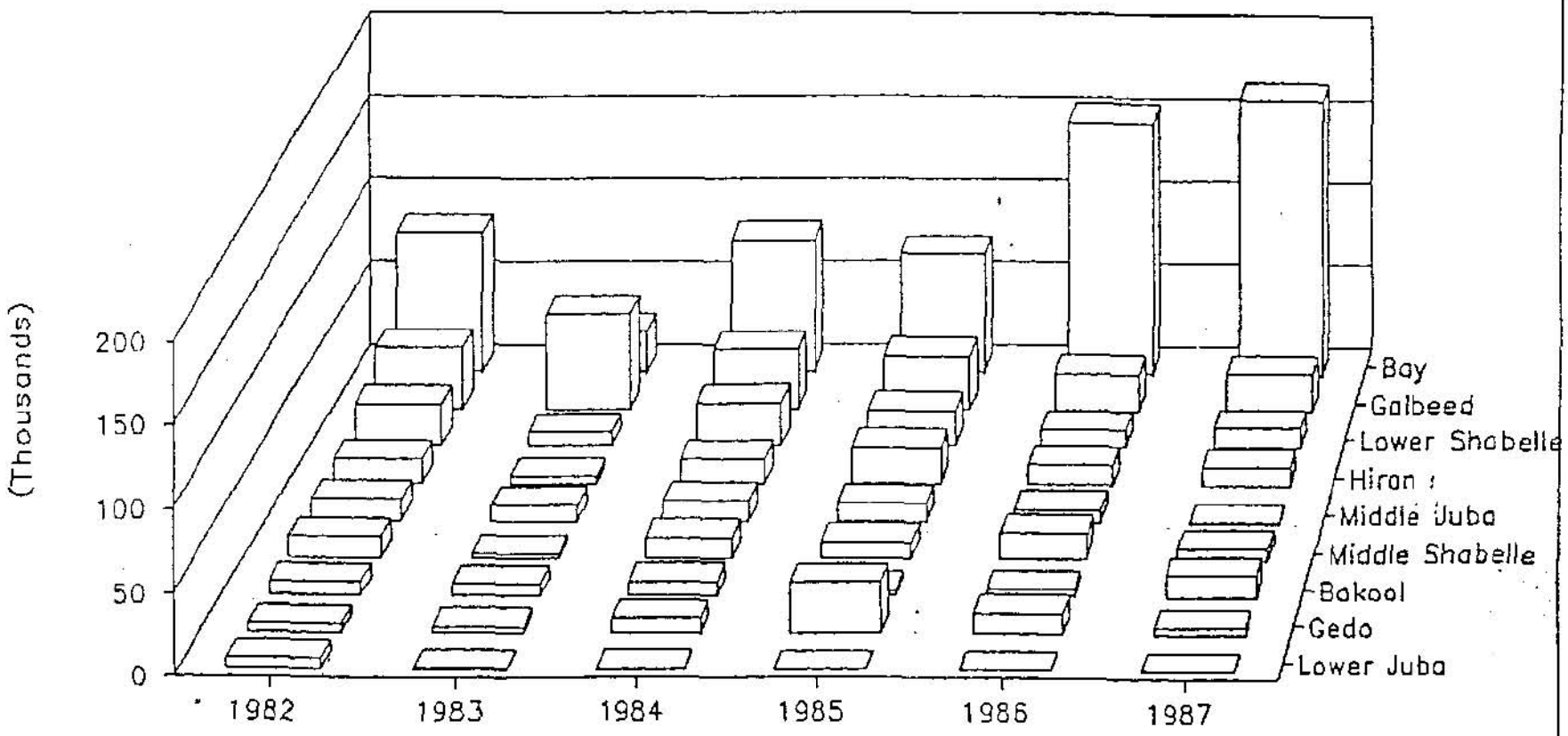
MAIZE PRODUCTION (tons)



F.E.W.S.

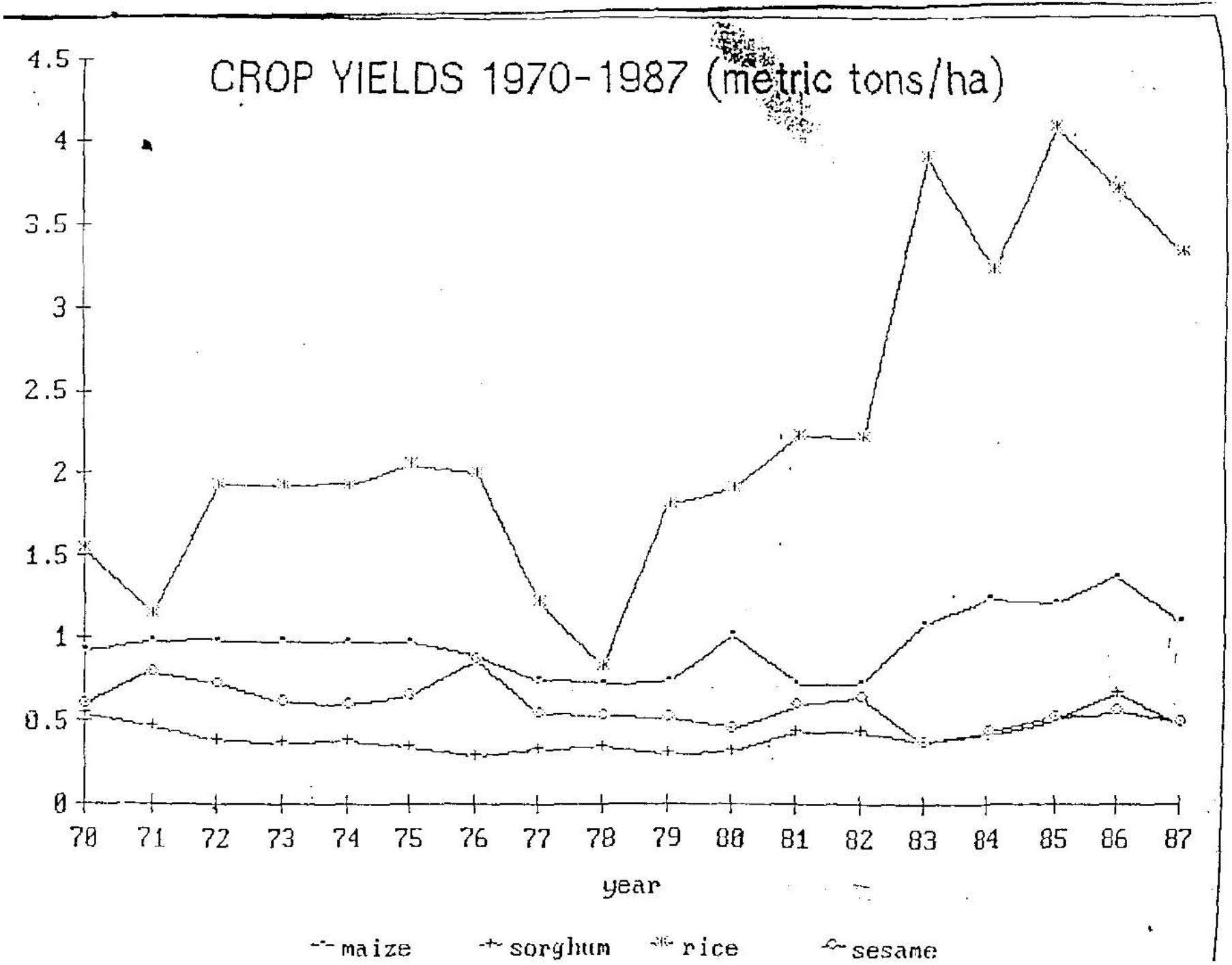
Figure 4.

SORGHUM PRODUCTION (tons)



F.E.W.S.

Figure 4

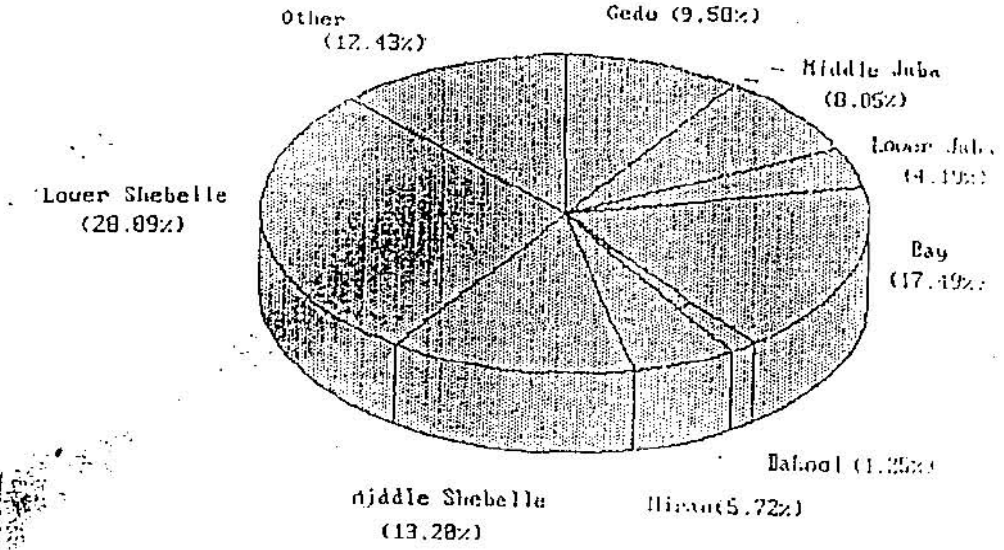

CROP YIELDS 1970-1987 (metric tons/ha)
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
year
maize
sorghum
rice
sesame

Figu

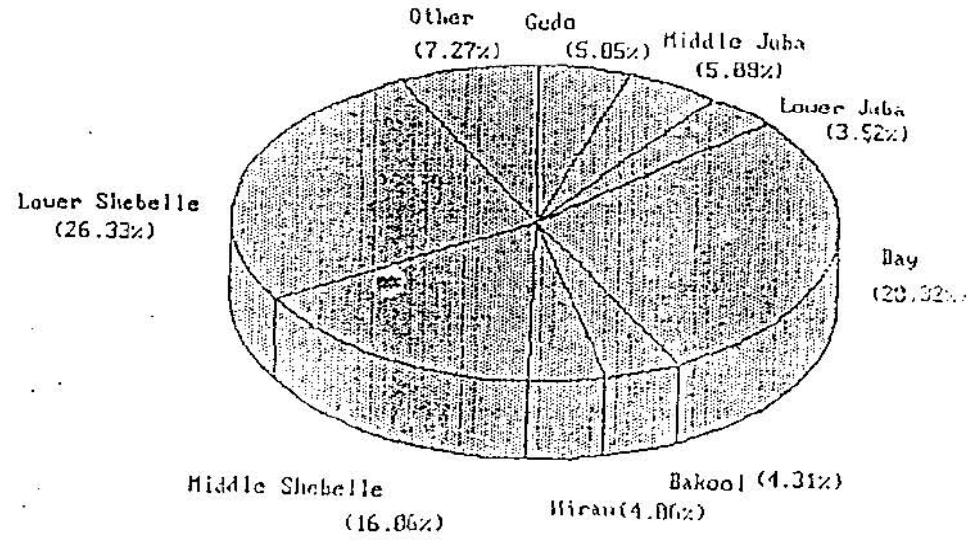
TILLED AREAS

Figure

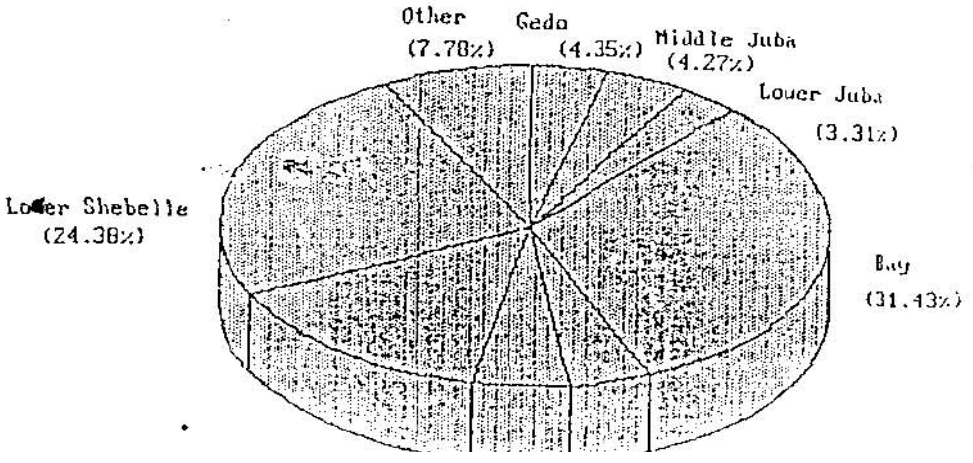
1985



1986



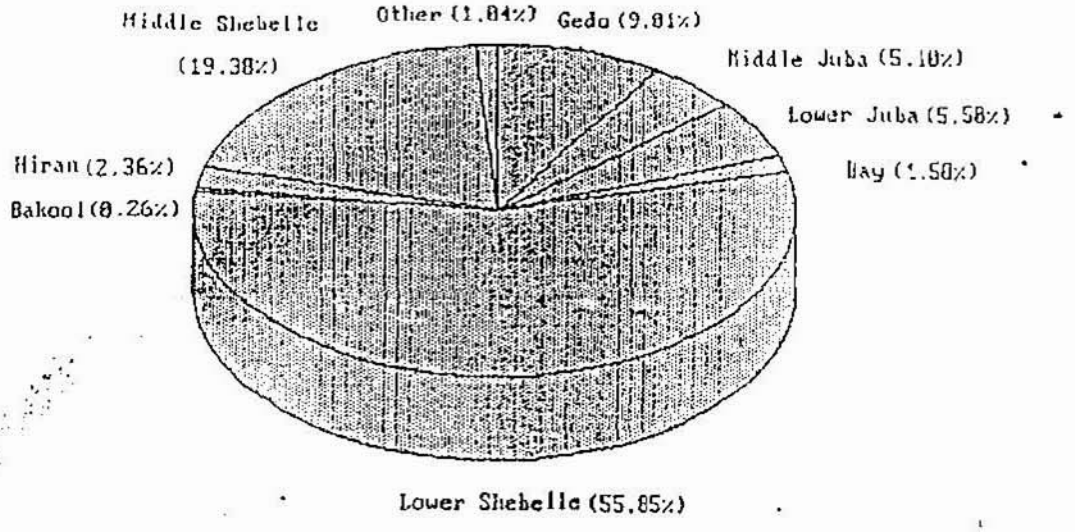
1987



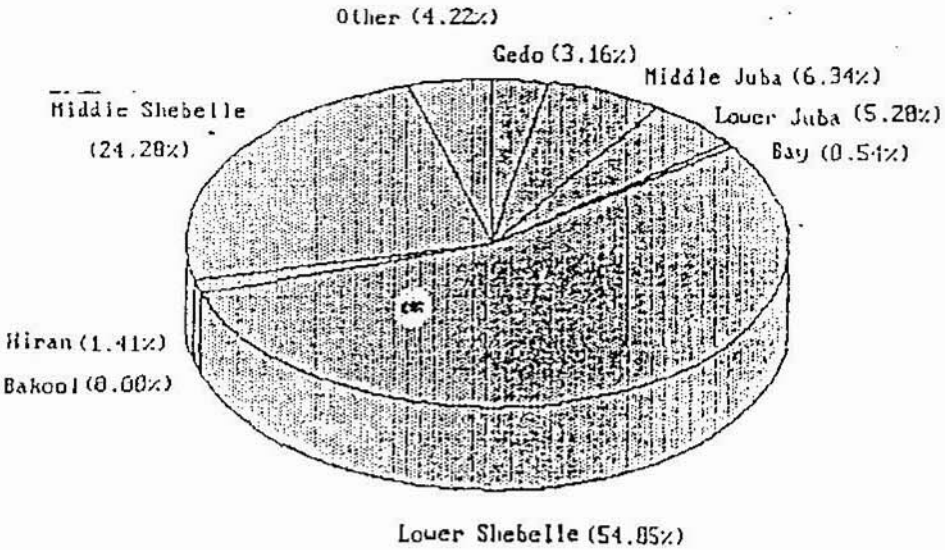
MAIZE PRODUCTION

Figure 6.2

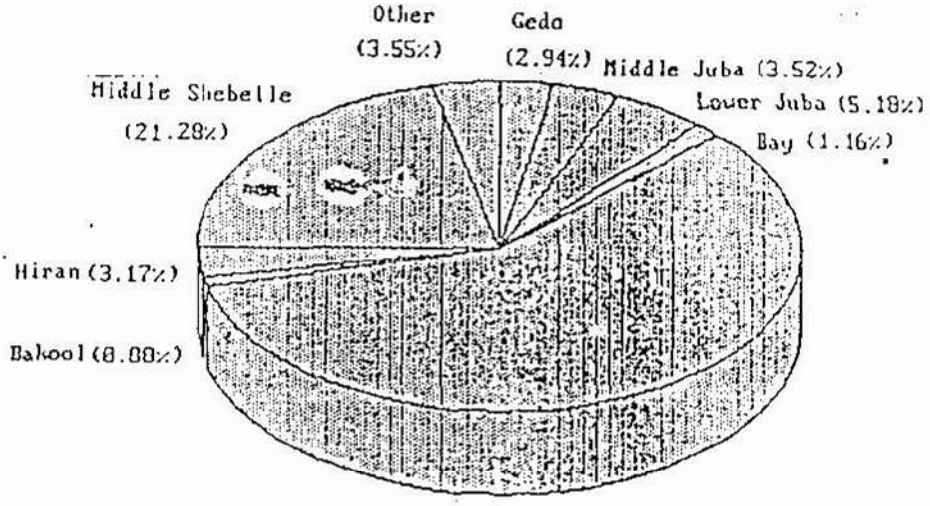
1985



1986



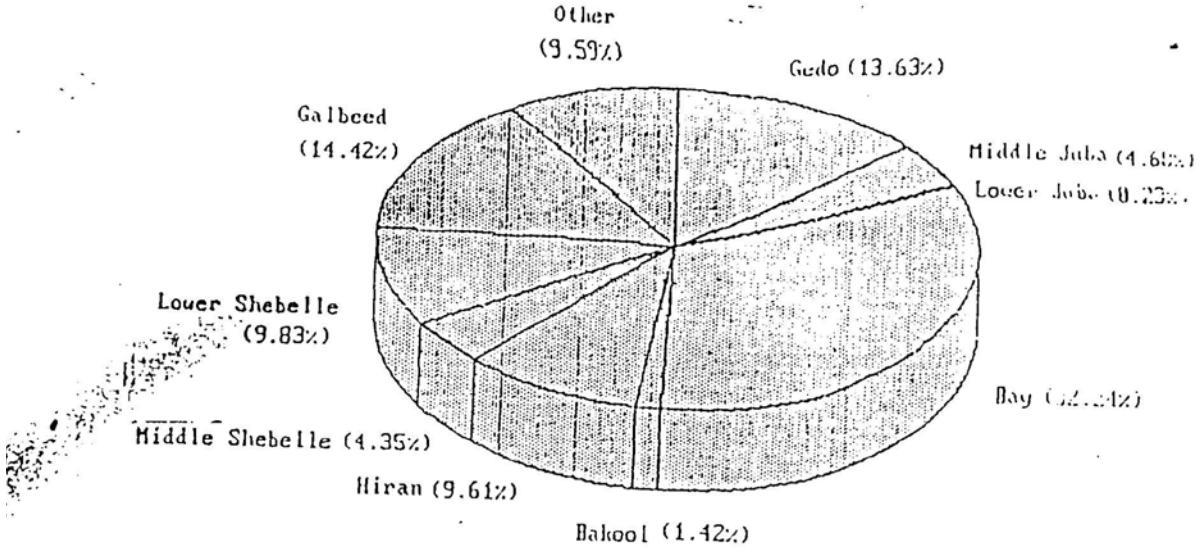
1987



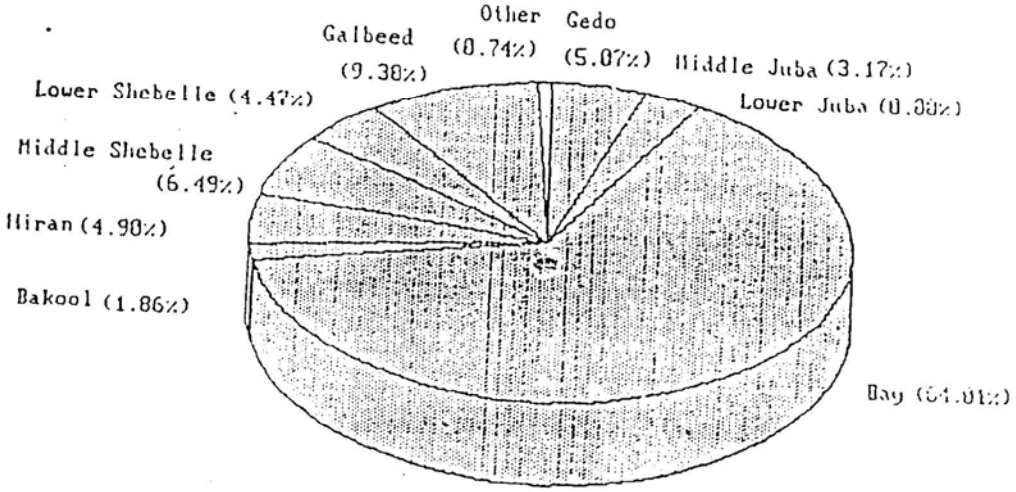
SORGHUM PRODUCTION

Figure 6.3.

1985



1986



1987