

21
20315
P.C.A.

NATIONAL IRRIGATION BOARD

PARLIAMENT
OF KENYA
LIBRARY



**Annual Report
and
Accounts
1993 — 1994
NAIROBI — KENYA**

657.3
NIB

NATIONAL IRRIGATION BOARD

The Hon. Dairus M. Mbela M.P.,
Minister for Land Reclamation, Regional
and Water Development,
Maji House,
NAIROBI.

Dear Sir,

In accordance with Section 23 of the Irrigation Act, 1966, I have pleasure in submitting the Annual Report and Accounts for the year ended 30th June, 1994 for submission to the National Assembly.

Yours sincerely,

JOSIAH KIMEMIA

Chairman

Nairobi,
30th June, 1994

KENYA NATIONAL ASSEMBLY
Accession: 10013803
Call No: 657.3/NIB



NATIONAL IRRIGATION BOARD

Chairman

Board Members

Josiah Kimemia, Esq.

Basil Mwakiringo, Esq.

H. Kiplagat, Esq.

Appointees of the Minister of Agriculture,
Livestock Development and Marketing

Peter O. Okola, Esq.

Yassin M. Aden, Esq.

Awadh Doyo, Esq.

John Kiriimi M'Murungi, Esq.

Mrs. Josephine K. Wanyoike

Manoah E. Misaki, Esq.

W.K. Arap Letting, Esq.

Provincial Representative

Ex-Officio Members:

Permanent Secretary,

Ministry of Land Reclamation, Regional
and Water Development or his representative,
F.T. Kimemia, Esq.

P.N. Machiri, Esq.

P.N. Machiri, Esq. (Rep. Director of
Water Development)

Permanent Secretary,

Ministry of Finance or his Representative,
J.J. Nyaga, Esq.

Permanent Secretary,

Ministry of Agriculture,
Livestock Development and Marketing
Representative, A.G. Gathua, Esq.
G.M. Osoro, Esq.
(Rep. Director of Agriculture)

Permanent Secretary,

Ministry of Health or his
Representative A. K. Gathua, Esq.

Permanent Secretary,

Office of the Vice-President and
Ministry of Planning and National
Development, or his representative,
Wilfred Onono

Attorney-General

His Representative, A. Okola, Esq.

General Manager

Secretary

Finance Manager

Chief Accountant

Solicitors

Auditors

Bankers

Head Office

Irrigation Schemes

B.T.C. Bargarora, Esq.

F.N. Mungai (Mrs)

C.N. Kariithi

S.N. Mwaniki

Attorney General

Auditor General

(Corporations)

Barclays Bank of Kenya Ltd.

Kenya Commercial Bank Ltd.

Lenana Road,

P.O. Box 30372, Nairobi

Ahero, Bunyala, Mwea,

Perkerra, Hola and West Kano.

REPORT & ACCOUNTS FOR THE YEAR ENDED 30TH JUNE, 1994

General Manager's Annual Report	1
Board Members and Officers as at 30th June, 1994	2
Part I The year under Review	4
Part II Staff and the Administration.....	5
Part III Irrigation and the Environment.....	6
Part IV Production and Settlement.....	6
Part V The Irrigation Schemes	9
1. Mwea Irrigation Settlement	9
2. Perkerra Irrigation Scheme	11
3. Hola Irrigation Scheme	16
4. Ahero Irrigation Scheme	16
5. West Kano Irrigation Scheme	18
6. Bunyala Irrigation Scheme	18
Part VI Research & Training.....	21
Ahero Irrigation Research Station	21
Mwea Irrigation Research Station	21
Mwea Irrigation Agricultural Development Project (MIAD).....	22
Perkerra Irrigation Research Station.....	22
Training	22
Part VII Development Projects.....	22
Accounts	23
Report of the Auditors	24
Consolidated Balance Sheet	25
Consolidated Income and Expenditure Account (Operating Schemes Only).....	26
Notes to the Accounts.....	29

PART 1 THE YEAR UNDER REVIEW

During the year under review, as in the previous year, agricultural activities took place in five of the six irrigation schemes under the National Irrigation Board. Rice was produced in four of the schemes and remained the most important crop. It accounted for 91.1% of the schemes gross value. Other crops grown were onions, chillies, cotton, water melon and pawpaws. Maize was grown in Mwea Irrigation Settlement and Perkerra Irrigation Scheme mainly for subsistence. The area under crop increased from 7975 hectares in the previous year to 8101 hectares during the year under review.

There were no farming activities in Hola Irrigation Scheme as was the case in the previous year due to lack of irrigation water which was caused by River Tana having changed course at scheme's water intake point. The total gross value of the crops grown in the five schemes increased from K£ 10,385,191 in 1992/93 to K£ 15,986,318 in the year under review, an increase of 53.9%. Payment to farmers increased by 34.8% from 6,306,495 in the previous year to K£ 8,501,604 during the year under review. The improvement in both gross value of the crops and the net payment was attributable to increase in producer prices of paddy, water melon and onions. Paddy producer prices rose from KShs. 5.20/kg to Kshs. 8.00/kg for Sindano and from Kshs. 7.40/kg to Kshs. 11.20/kg for Basmati.

Phase 1 of the Mwea Irrigation Development Project was commissioned by His Excellency the President Hon. Daniel T. Arap Moi on 22nd September 1993. Phase 11 of the project took off on 3rd June 1994 after an agreement was signed for the Engineering Services to be carried out by Nippon Koei Company Limited. At Hola Irrigation Scheme there was no progress on the re-location of the pump station due to lack of funds as in the previous year.

PART II STAFF AND THE ADMINISTRATION

The staff situation remained satisfactory. The staff establishment decreased from 1156 in June 1993 to 1042 in June 1994, a decrease of 9.8%.

As in the previous year, one Japanese Irrigation Engineer was attached to the Engineering Department at Head Office while seven experts were based at Mwea Irrigation Agricultural Development (MIAD) as part of the technical cooperation with the Japan International Cooperation Agency (JICA). The composition of Board staff as at 30th June 1993 and 30th June 1994 is shown in Table 1.

Table 1
STAFF ESTABLISHMENT AS AT 30TH JUNE, 1993 AND 30TH JUNE, 1994

GRADE OF STAFF								
STATION	SENIOR		JUNIOR		SUBORDINATE		TOTAL	
	1993	1994	1993	1994	1993	1994	1993	1994
Head Office	62	70	53	49	16	10	131	129
Mwea	21	26	213	240	229	99	463	365
Miad	16	18	34	24	4	14	54	56
Perkerra	7	6	62	63	9	26	78	95
Hola	1	1	64	21	16	31	81	53
Hola Research	2	1	9	4	9	7	20	12
Ahero	12	17	130	109	23	33	165	159
Ahero Research	7	8	25	27	16	12	48	47
West Kano	1	4	51	65	18	21	70	90
Bunyala	2	2	26	18	18	16	46	36
TOTAL	131	153	667	620	358	269	1,156	1,042

PART III IRRIGATION AND THE ENVIRONMENT

As in the previous years, the Board continued to be involved in the general environmental management and health in all the schemes in collaboration with the Ministry of Health and other medical organizations. The main programmes were aimed at prevention of diseases prevalent in irrigated areas, especially malaria and bilharzia (schistosomiasis) through health education and treatment where necessary. Some cases of meningitis and typhoid occurred in Mwea Irrigation Scheme but the situation was brought under control through the combined efforts by the Board and Ministry of Health staff.

The Board emphasized more on preventive measures of diseases by providing anti-malaria drugs and mollusciding the irrigation water. Small quantities of anti-malarial drugs were provided to pregnant women and children. High spreading (H.S.) malaria oil was sprayed on stagnant water bodies to kill mosquito larvae. The environmental management undertaken to reduce incidences of diseases included such operations as clearing of vegetation in the canals, filling of water troughs, draining of unwanted water bodies and carrying out limited canal lining. As in the previous year, farmers were encouraged to keep sound sanitation around their homesteads to combat bacterial infections and parasitic infestations.

During the year under review, a number of health activities were carried out by the Board in collaboration with other medical organizations. The division of vector Borne Diseases (DVBD) of the Ministry of Health assisted in carrying out epidemiological surveys in the schemes while the population and health services (PHS) provided various Family Planning devices. The African Biodiversity Institute (ABI) carried out a U.N.I.C.E.F. sponsored project in Mwea Irrigation Settlement. The International Centre for Insect Physiology and Ecology (ICIPE) in collaboration with U.N.I.C.E.F. were involved in the control of malaria in Perkerra. The Lions Club of Kikuyu donated drugs to farmers in Mwea.

PART IV PRODUCTION AND SETTLEMENT

The trends in agricultural production in the six schemes were as shown in Table 11. As in the previous year, there was no production at Hola Irrigation Scheme due to change of course of River Tana, which left the pumping station dry. The total gross value of crops grown in the five operational schemes improved from K£ 10,385,191 in 1992/93 to K£ 15,986,318 during the period under review, an increase of 53.9%.

The scheme by scheme gross returns per hectare for both 1992/93 and 1993/94 are summarised in Table 111. Mean gross returns per hectare improved from K£ 1929 in 1992/93 to K£ 2756 in 1993/94. The mean net return per farmer increased from K£ 1257 in 1992/93 to K£1431 during the year under review.

Table II

IRRIGATION PRODUCTION 1965/66. 1992/93 AND 1993 /94

SCHEME	PARTICULARS	UNITS	1965/66	1992/93	1993/94
Mwea Irrigation Settlement	Area Cropped	Ha.	2,593	5,846	5,882
	Plot Holders	No.	1,484	3,240	3,242
	Paddy Yied	M-tonnes	14,454	23,448	24,206
	Gross Value Crop	K.£	318,662	7,388,024	11,844,567
	Payment to Plot Holders	K.£	189,136	4,584,556	6,683,876
Ahero Irrigation Scheme	Area cropped	Ha.		858	857
	Plot Holders	No.		519	519
	Paddy Yield	M-tonnes		1,990	2,712
	Gross Value Crop	K£		507,405	1,084,860
	Payment to Plot Holders	K£		137,994	428,057
West Kano	Area cropped	Ha.		585	898
	Plot Holders	No.		553	553
	Paddy Yield	M-tonnes		2,303	2,997
	Gross Value Crop	K£		586,946	1,198,628
	Payment to Plot Holders	K£		264,895	353,509
Bunyala Irrigation Scheme	Area cropped	Ha.		211	213
	Plot Holders	No.		131	131
	Paddy Yield	M-tonnes		1,045	1,072
	Gross Value Crop	K£		224,970	428,970
	Payment to Plot Holders	K£		129,058	195,171
Perkerra Irrigation Scheme	Area Cropped				
	Onions	Ha.	231	133	111
	Chillies	Ha.		81	78
	Water Melon	Ha.		32	23
	Pawpaws	Ha.		9	11
	Cotton	Ha.		40	28
	Plot Holders	No.	403	386	393
	Yields				
	Onions	M-tonnes	2,499	1,914	997
	Chillies	M-tonnes		226	159
	Water melon	M-tonnes		524	264
	Pawpaws	M-tonnes		220	265
	Cotton	M-tonnes		117	75
	Gross Value Crops	K£	70,837	1,677,846	1,429,293
	Payment To Plot Holders	K£		1,189,992	840,991
Hola Irrigation Scheme	Area Cropped	Ha.	449	0	0
	Plot Holders	No.	276	0	0
	Seed Cotton Yield	M-tonnes	822	0	0
	Gross Value Crop	K£	43,312	0	0
	Payment to Plot Holders	K£	26,813	0	0
TOTAL N.I.B. SCHEMES	Area Cropped	Ha.	3,273	7,795	8,101
	Plot Holders	No.	2,163	4,829	4,838
	Gross Value Crop	K£	432,811	10,385,191	15,986,318
	Payment to Plot Holders	K£	215,949	6,306,495	8,501,604

Table III*GROSS RETURN PER HA AND NET RETURN PER FARMER*

SCHEME	Gross Return per Ha K£		Net Return per Farmer K£	
	1992/93	1993/94	1992/93	1993/94
Mwea	1,264	2,014	1,415	2,062
Ahero	591	1,266	324	825
West Kano	1,003	1,988	479	639
Bunyala	1,080	2,013	985	1,489
Perkerra	5,706	6,497	3,083	2,140
Mean	1,929	2,756	1,257	1,431

Table IV*1993/94 DISTRIBUTION OF FARMERS INTO INCOME CLASSES
DISTRIBUTION OF FARMERS INTO INCOME CLASSES*

Net Return Classes Kshs.	Mwea		Ahero		West Kano		Bunyala		Perkerra		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0 - 1000	266	8.2	41	7.9	152	27.5	7	5.3	79	20.1	545	11.3
1001 - 2000	30	0.9	10	1.9	49	8.9	0	0.0	8	2.0	97	2.0
2001 - 3000	20	0.6	10	1.9	10	1.8	1	0.8	5	1.3	46	1.0
3001 - 4000	14	0.4	9	1.7	11	2.0	0	0.0	12	3.1	46	1.0
4001 - 5000	24	0.7	14	2.7	16	2.9	0	0.0	14	3.6	68	1.4
5001 - 6000	32	1.0	14	2.7	10	1.8	1	0.8	10	2.5	67	1.4
6001 - 7000	42	1.3	14	2.7	10	1.8	2	1.5	7	1.8	75	1.5
7001 - 8000	39	1.2	14	2.7	9	1.6	1	0.8	10	2.5	73	1.5
8001 - 9000	33	1.0	16	3.1	10	1.8	1	0.8	12	3.1	72	1.5
9001 - 10000	43	1.3	16	3.1	11	2.0	1	0.8	4	1.0	75	1.5
10000+	2699	83.3	361	69.6	265	47.9	118	89.2	232	59.0	3,675	75.9
Total	3,242	100.0	519	100.0	553	100.0	132	100.0	393	100.0	4,839	100.0

PART V THE IRRIGATION SCHEMES

1. MWEA IRRIGATION SCHEME

In the Mwea Irrigation Settlement, paddy production increased from 23,448 metric tonnes in 1992/93 season to 24,206 metric tonnes in 1993/94 an increase of 757.5 metric tonnes or 3.23%. The increase was attributed to favourable weather conditions. A much heavier crop would have been recorded if farmers refrained from paddy smuggling and illegal retention of harvested paddy. A mean yield of 22.2 bags/acre (4.1 t/ha) was achieved as compared to 21.6 bags/acre (4.0t/ha.) in the previous year, an increase of 0.6 bags/acre or 2.7%. Average of Sindano variety grown on 4,438 acres was 29.42 bags/acre while Basmati grown on the 10,007 acres averaged 19 bags/acre at 75 kgs.

The 1993/94 paddy crop realized a gross value of K£ 11,844,566.8 against K£ 7,388,023 in the previous year, an increase of K£ 4,466,542.8 or 60%.

The above improvement in the gross value of crop was attributed mainly in paddy producer prices. The price rose from Kshs. 5.20 to Kshs. 8.00 per kg. and from Kshs 7.40 to 11.20 per kg. on Sindano and Basmati paddy respectively.

There was an improvement of the mean net income per farmer from Kshs. 28,300 in 1992/93 to Kshs. 41,233 during the period under review. The number of farmers earning over Kshs. 10,000 increased from 71.5% in 1992/93 to 83.3% during the period under review.

Lack of spares and at times intermittent shortage of water were experienced. However, the working spirit was very high among the tractor drivers, which contributed to improvement in rotavation exercise. A total of 5836 ha were rotavated in 111 days in 1993/94 as compared to 5817 ha in 147 days in the previous year. The average number of tractors in the field was 21 per day while the overall output was 2.51 ha/tractor/day as compared to 1.80 ha/tractor/day achieved in 1992/93 with an average of 22 tractors.

Table V

*1992/93 DISTRIBUTION OF FARMERS INTO INCOME CLASSES
DISTRIBUTION OF FARMERS INTO INCOME CLASSES*

Net Return Classes	Mwea		Ahero		West Kano		Buryala		Perkerra		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Kshs.												
0 - 1000	370	11.4	76	14.6	281	50.8	15	11.5	4	1.0	746	15.4
1001 - 2000	62	1.9	27	5.2	36	6.5	1	0.8	0	0.0	126	2.6
2001 - 3000	54	1.7	29	5.6	42	7.6	4	3.1	2	0.5	131	2.7
3001 - 4000	58	1.8	19	3.7	33	6.0	2	1.5	1	0.3	113	2.3
4001 - 5000	61	1.9	25	4.8	29	5.2	3	2.3	1	0.3	119	2.5
5001 - 6000	58	1.8	48	9.2	23	4.2	4	3.1	1	0.3	134	2.8
6001 - 7000	59	1.8	56	10.8	21	3.8	3	2.3	1	0.3	140	2.9
7001 - 8000	70	2.2	48	9.2	24	4.3	1	0.8	1	0.3	144	3.0
8001 - 9000	77	2.4	42	8.1	16	2.9	3	2.3	0	0.0	138	2.9
9001 - 10000	56	1.7	36	6.9	9	1.6	4	3.1	0	0.0	105	2.2
10000+	2,315	71.5	113	21.8	39	7.1	91	69.5	375	97.2	2,933	60.7
Total	3,240	100.0	519	100.0	553	100.0	131	100.0	386	100.0	4,829	100.0

Reference Tables:

Table VI - Mwea Rice Statistics 1984/85 - 1993/94

Table V11 - Distribution of Mwea Farmers over various Income Classes 1993/94

Table VIII - Mwea Mechanical Cultivation Statistics 1984/85 - 1993/94

Table VI

MWEA RICE STATISTICS 1984/85 - 1993/94

CROP	Ha.	Production		Mean Net Return/ farmer Kshs.
		Total M-Tonnes	Mean Kg/Ha	
1984/85	5,825	27,553	4,730	12,776
1985/86	8,271	26,407	4,530	9,017
1986/87	5,799	25,736	4,438	15,448
1987/88	5,795	27,153	4,686	16,695
1988/89	5,818	27,555	4,736	19,947
1989/90	5,820	26,713	4,590	18,718
1990/91	5,802	25,504	4,396	19,127
1991/92	5,815	29,274	5,034	27,609
1992/93	5,846	23,448	4,011	28,300
1993/94	5,882	24,206	4,115	41,233

Table VII

DISTRIBUTION OF MWEA FARMERS OVER VARIOUS INCOME CLASSES 1993/94

Net. Return Classes Kshs.	No. of Farmers	%
0 - 1000	266	8.2
1001 - 2000	30	0.9
2001 - 3000	20	0.6
3001 - 4000	14	0.4
4001 - 5000	24	0.7
5001 - 6000	32	1.0
6001 - 7000	42	1.3
7001 - 8000	39	1.2
8001 - 9000	33	1.0
9001 - 10000	43	1.3
10000+	2,699	83.3
Total	3,242	100.0
Mean Net Return	Ksh. 41,233	

Table VIII*MWEA MECHANICAL CULTIVATION STATISTICS 1984/85 - 1993/94*

YEARS	CROP	TRACTORS NO.	PRODUCTION	
			Total (Ha)	Mean Ha. per tractor/day
1984	1984/85	24	5,827	1.56
1985	1985/86	26	5,831	1.35
1986	1986/87	25	5,836	1.16
1987	1987/88	25	5,822	1.16
1988	1988/89	25	5,825	1.27
1989	1989/90	24	5,823	1.37
1990	1990/91	28	5,815	1.28
1991	1991/92	28	5,816	1.61
1992	1992/93	22	5,815	1.80
1993	1993/94	21	5,882	2.51

1. PERKERRA IRRIGATION SCHEME

During the year under review, the scheme received rainfall amounting to 529.6mm compared to 820.6mm recorded in 1992/93. This resulted in inadequate availability of irrigation water throughout the year.

Onion yields declined by 47.9% from 1,914 metric tonnes in 1992/93 to 997 m-tonnes from 79.9ha during the year under review. This gave an average yield of 8.98t/ha against 14.39t/ha in the previous year. At the end of the period under review, onion crop was not ready in 31 ha. A total of 159 tonnes of dry chillies were realised from 78 ha which was equivalent to 2.1t/ha. This was 25% lower than 1992/93 average yield of 2.8t/ha.

A decrease in cotton seed production was realised. The average yield was 2.68t/ha during the period under review as compared to 2.96t/ha in 1992/93. A total of 75 tonnes of the crop was harvested and sold against 117 tonnes in 1992/93. Total pawpaw production improved with an average yield of 22.5t/ha. A total of 265 tonnes of pawpaws were realised in 1993/94 against 221 tonnes in the previous year. (Table XIV).

A total of 264 tonnes of water melon was realised from 23 hectares giving an average yield of 11.4/ha. The total production was 49.6% lower during the period under review as compared to 524 tonnes in 1992/93.

As a result of the decline in production of onions, water melon, chillies and seed cotton, the gross revenue decreased by 14.87% from c1,677,846 in 1992/93 to K£ 429,293 during the period under review. The net payment to plot holders likewise decreased by 29.3% from K£ 1,189,992 in the previous year to K£ 840,991 in 1993/94. (Table 11).

The mean net return per farmer decreased by 30.6% from Kshs. 61,657.60 in 1992/93 to Kshs. 42,799.

Reference Tables

Table IX - Perkerra Onion Crop Statistics 1984/85 - 1993/94

Table X - Perkerra Mean Monthly Onion Prices 1993/94

Table XI - Perkerra Onion Prices 1984/85 - 1993/94

Table XII - Perkerra Dried Chillies Crop Statistics 1984/85 - 1993/94

Table XIII - Perkerra Water melon Crop Statistics 1984/85 - 1993/94

Table XIV - Perkerra Pawpaw Crop Statistics 1988/89 - 1993/94

Table XV - Monthly Pawpaw Sales 1993/94

Table XVI - Perkerra Cotton Crop Statistics 1988/89 - 1993/94

Table XVII - Distribution of Pekerra Farmers Over Various Net Income Classes 1993/94

Table IX

PERKERRA ONION CROP STATISTICS 1984/85 - 1993/94

YEAR	CROPPING (months)	HECTARES	PRODUCTION	
			Total M-ton	Mean yield M-ton/Ha
1984/85	8	61	960	15.74
1985/86	10	53	587	11.08
1986/87	10	68	492	7.24
1987/88	9	51	254	4.98
1988/89	7	88	939	10.67
1989/90	8	110	1.218	11.07
1990/91	9	111	1.630	14.68
1991/92	9	108	1.158	10.72
1992/93	8	133	1.914	14.39
1993/94	12	111	997	8.98

Table X

PERKERRA MEAN MONTHLY ONION PRICES - 1993/94

Month	MEAN PRICE - CENTS/KG	
	Grade 1	Grade 11
July 1993	1,163.29	1,051.24
August	1,138.50	1,062.21
September	0.00	0.00
October	0.00	0.00
November	0.00	0.00
December	0.00	0.00
January 1994	1,327.71	1,289.36
February	1,494.85	1,422.64
March	3,100.57	3,007.71
April	3,350.71	2,976.78
May	2,472.86	2,172.50
June	2,187.50	1,974.11
Year Mean	2,029.49	1,870.70

Table XI*PERKERRA ONION PRICES 1984/85 - 1993/94*

Year	MEAN PRICE - CENTS/KG	
	Grade I	Grade II
1984/85	301.00	248.15
1985/86	375.11	312.40
1986/87	545.38	438.45
1987/88	454.21	356.71
1988/89	517.86	431.20
1989/90	589.22	452.38
1990/91	736.29	555.30
1991/92	611.02	492.32
1992/93	1,181.38	1,056.85
1993/94	2,029.49	1,870.70

Table XII*PERKERRA DRIED CHILLIES CROP STATISTICS 1984/85 - 1993/94*

Crop	No. of Farmers	Hectares	PRODUCTION	
			Total (Kg)	Mean (Kg/ha)
1984/85	342	75.3	133,061	1,767
1985/86	384	91.4	223,771	2,448
1986/87	371	115.7	240,928	2,080
1987/88	141	36.5	67,900	1,869
1988/89	0	0.0	0	0
1989/90	99	28.0	70,957	2,534
1990/91	201	56.3	110,492	1,963
1991/92	203	57.3	156,605	2,733
1992/93	280	81.0	226,152	2,792
1993/94	274	78.0	159,708	2,047
** No crop was planted				

Table XIII*PERKERRA WATERMELON CROP STATISTICS 1984/85 - 1993/94*

YEAR	NO. OF FARMERS	AREA CROPPED Ha	PRODUCTION M-tonnes	YIELD M-Tons/Ha	GROSS VALUE K£	NET RETURN PER FARMER (KSh)
1984/85	30	7	71	10.1	8,242	4,169
1985/86	44	12	134	11.2	14,483	4,296
1986/87	47	13	71	5.5	10,120	2,252
1987/88	4	17	172	10.1	18,038	5,128
1988/89	42	18	148	8.2	15,836	4,612
1989/90	53	22	277	12.9	32,042	8,843
1990/91	84	24	271	11.5	34,903	5,563
1991/92	99	28	252	9.0	29,506	3,169
1992/93	114	32	524	16.4	80,615	8,492
1993/94	79	23	264	11	63,454	9,199

Table XIV*PERKERRA PAWPAW CROP STATISTICS 1988/89 - 1993/94*

YEAR	No. of Farmers	AREA CROPPED Ha	PRODUCTION M-tonnes	YIELD Kg/Ha	GROSS VALUE K£	NET RETURN PER FARMER (KSh)
1987/88	25	10	127	12,711	4,025	0*
1988/89	25	10	477	47,671	15,095	7,892*
1989/90	34	14	355	22,140	9,278	3,431
1990/91	42	17	350	20,863	11,459	3,509
1991/92	24	9	313	34,792	13,332	9,089
1992/93	22	9	221	25,060	11,026	6,549
1993/94	40	11	265	24,091	25,671	8,295

* Fruit Delivered in 1987/88 was paid for in 1988/89 together with 1988/89 crop

Table XV*MONTHLY PAWPAW SALES 1993/94*

MONTH	SALES (Kg)
July 1993	36,206
Aug.	26,804
Sep.	21,260
Oct.	18,087
Nov.	35,746
Dec.	25,988
Jan 1994	29,325
Feb.	11,203
Mar.	11,043
Apr.	14,414
May.	22,816
Jun.	12,113
TOTAL	265,005

Table XVI*PERKERRA COTTON CROP STATISTICS 1988/89- 1993/94*

YEAR	NO. OF FARMERS	AREA CROPPED Ha	PRODUCTION (Kg)	YIELD Kg/Ha	GROSS INCOME (K£)	NET RETURN PER FARMER (KSh)
1988/89	10	4	16,762	4,191	5,027	6,386
1989/90	93	40	72,551	2,780	22,266	2,360
1990/91	148	41	113,505	2,742	55,799	5,145
1991/92	136	38	105,967	2,781	51,508	4,136
1992/93	140	40	117,195	2,959	87,896	8,187
1993/94	98	28	75,071	2,681	93,795	8,518

Table XVII*DISTRIBUTION OF PERKERRA FARMERS OVER VARIOUS NET INCOME CLASSES 1993/94*

Net Income Class (Ksh)	Number of Farmers	%
0 - 1,000	41	14.5
1,001 - 2,000	8	2.8
2,001 - 3,000	11	3.9
3,001 - 4,000	11	3.9
4,001 - 5,000	10	3.5
5,001 - 6,000	10	3.5
6,001 - 7,000	9	3.2
7,001 - 8,000	9	3.2
8,001 - 9,000	9	3.2
9,001 - 10,000	17	6.0
10,000 +	147	52.1
Total	282	100.0
Scheme Mean Net Return per Farmer KSh. 42,799		

3. HOLA IRRIGATION SCHEME

As reported in the previous year, there were no farming activities carried out in the scheme during the period under review.

4. AHERO IRRIGATION SCHEME

During the year under review, the scheme produced 2712 metric tonnes of paddy as opposed to 1990.3 metric tonnes in 1992/93 crop, an increase of 36%. The increase in yield was attributed to measures instituted by the National Irrigation Board to check on paddy smuggling by farmers. The gross value of the crop increased from K£ 507,405 in 1992/93 crop to K£ 1,084,860 during the period under review, an increase of 113.8%. Increase in the price of Sindano from KShs. 5.20/Kg to KShs. 8.00/Kg resulted in higher percentage increase in gross income compared to percentage increase in paddy yield. The 519 farmers in the scheme earned a total net income of K£ 428,057 during the period under review compared to a net income of K£ 137,994 in 1992/93. The unit area yields increased from 2.3t/ha in 1992/93 to 3.16t/ha during the period under review while net income per farmer increased from KShs.6437.70 in 1992/93 to KShs. 16,495.45 during the year under review, an increase of 156%.

There were shortages of tractors and rotavators for land preparation due to old age and lack of spares. To save the situation both dry and wet land preparation were undertaken in the scheme. A total of 606 acres (245 ha) were ploughed by private contractors. Tractors output improved from 1.29h/tractor/day in 1992/93 to 3.2ha/tractor/day. Tractor output improved as a result of dry land preparation by private contractors. Ahero Irrigation Scheme production statistics, land preparation and distribution of farmers over various net income classes are given in Tables XVII to XX.

Table XVIII

AHERO RICE STATISTIC 1984/85 - 1993/94

YEAR	CROP	HA	NO. OF GROWERS	PRODUCTION		MEAN NET RETURN/ HOLDING (KSHS)
				TOTAL (M-Ton)	YIELD (Kg/Ha)	
1984/85	33	371	243	1,230	3,315	6,258
	34	702	446	2,547	3,628	7,832
1985/86	35	450	285	1,565	3,478	6,516
	36	827	519	2,813	3,401	7,054
1986/87	37	517	334	1,339	2,590	2,779
	38	475	298	1,563	3,291	6,397
1987/88	39	461	291	1,393	3,022	5,261
	40	827	519	2,820	3,410	6,273
1988/89	41	827	519	2,983	3,607	6,773
1989/90	42	827	519	2,865	3,464	5,472
1990/91	43	853	519	2,800	3,283	9,240
1991/92	44	856	519	3,088	3,607	6,183
1992/93	45	858	519	1,990	2,319	6,474
1993/94	46	857	519	2,712	3,168	16,495

TABLE XIX*AHERO - DISTRIBUTION OF FARMERS OVER VARIOUS INCOME CLASSES 1993/94*

Net Return Class (Ksh)	Number of Farmers	%	Percentage
0 - 1,000	41	7.9	7.9
1,001 - 2,000	10	1.9	1.9
2,001 - 3,000	10	1.9	1.9
3,001 - 4,000	9	1.7	1.7
4,001 - 5,000	14	2.7	2.7
5,001 - 6,000	14	2.7	2.7
6,001 - 7,000	14	2.7	2.7
7,001 - 8,000	14	2.7	2.7
8,001 - 9,000	16	3.1	3.1
9,001 - 10,000	16	3.1	3.1
10,000+	361	69.6	69.6
Total	519	100.0	100.0
Mean Net Return KShs. 16.495 per Farmer.			

Table XX*AHERO MECHANICAL CULTIVATION STATISTICS 1984/85 - 1993/94*

Year	Crop	No. of Tractors	TRACTOR OUTPUT	
			Total Area Ha.	Mean Ha/ Tractor/Day
1984/85	34	6	682	0.97
	35	6	441	0.85
1985/86	36	8	794	0.87
	37	6	506	0.81
1986/87	38	7	475	0.89
1987/88	39	6	461	0.87
	40	6	827	0.91
1988/89	41	5	827	0.88
1989/90	42	6	817	0.91
1990/91	43	6	821	0.89
1991/92	44	6	856	0.81
1992/93	45	3	858	1.29
1993/94	46	3	857	3.20

5. WEST KANO IRRIGATION SCHEME

West Kano Irrigation Scheme experienced incidences of Rice Yellow Mottle Virus (RYMV) disease and glume discoloration. However, the diseases did not significantly affect the yields. Wild ducks and Quelea populations were low and did not cause any significant damage as they were effectively controlled by the Kenya Wildlife Services. A total of 898ha were cropped and at the end of the year under review, 602 ha were harvested giving a gross production of 2,997 metric tonnes of paddy an increase of 30% from 2302 tonnes in 1992/93. The increase in gross production was attributable to 3% increase in harvested area, measures instituted by the Board to recover as much paddy as possible from the farmer and the high prices of Sindano which were Kshs. 8.00 in 1993/94 as compared to KShs. 5.20 in the previous year. The gross value of the crop was K£ 1,198,628 as compared to K£ 586,946 in the previous year, an increase of 104%. The net income per farmer increased by 33.5% from KShs. 9850 in 1992/1993 to KSh. 12,795 during the period under review. The increase in net income to farmers was attributed to increase in paddy production and minimisation of paddy smuggling. The net payment to farmers increased by 33.4% to K£ 353,509 from K£ 264,895 in the previous year (Table II).

As in the previous year, there were severe shortages of tractors and rotavators due to old age and lack of spares. Land preparation was completed two and a half months behind schedule. This was as a result of inadequate availability of irrigation water due to prolonged drought and inadequate tractor availability. A total of 1199 acres (485 ha) were ploughed by private contractors. Tractor output improved from 0.85ha/tractor/day in the previous year to 3.2ha/tractor/day in 1993/94. This was attributable to dry land preparation by private contractors (Table XXII). West Kano rice production statistics and distribution of farmers over various net income classes are given in Tables XXI to XXIII respectively.

6. BUNYALA IRRIGATION SCHEME

During the year under review, the 213 hectares were cropped. The scheme experienced low incidences of Rice Yellow Mottle Virus (RYMV) and glume discoloration which did not significantly affect paddy yields. The scheme produced 1072 M-tonnes of paddy compared to 1095 metric tonnes in 1992/93, a decrease from 5.1t/ha in 1992/93 to 5.0t/ha (Table XXIV). The gross value of the crop increased by 90.6% from K£ 224,970 in 1992/93 to K£ 428,970 during the period under review due to price increase for Sindano. The net payment to farmers increased from K£ 129,058 in the previous year to K£195,171 in 1993/94. The percentage of farmers earning KShs. 10,000 and above increased from 69.5% in 1992/93 to 89.0% during the year under review (Tables IV, V and XXVI).

Despite the old age of tractors, the output increased from 1.13ha/tractor/day in 1992/93 to 1.62ha/tractor/day during the period under review (Table XXV).

Table XXI
WEST KANO RICE STATISTICS 1984/85 - 1993/94

YEAR	CROP	CROPPED AREA HA.	NO. OF FARMERS	PRODUCTION		MEAN NET RETURN PER HOLDING (KSHS)
				Total (M-Ton)	Yield (Kg/Ha)	
1984/85	16	451	553		4,562	5,801
1985/86	17	451	553	2,059	5,870	8,852
1986/87	18	451	553	2,650	5,141	7,356
1987/88	19	449	553	2,319	3,847	3,656
1988/89	20	449	553	1,728	5,303	5,065
1989/90	21	475	553	2,387	5,600	6,285
1990/91	22	734	553	2,800	3,469	7,780
1991/92	23	894	553	2,546	3,131	5,867
1992/93	24	585	553	2,799	3,934	9,580
1993/94	25	603	553	2,303	4,965	12,795
				2,997		

TABLE XXII

WEST KANO MECHANICAL CULTIVATION 1984/85 - 1993/94

YEAR	CROP	NO. OF TRACTORS	TRACTOR OUTPUT	
			TOTAL AREA HA.	MEAN HA / TRACTOR / DAY
1984/85	16	4	451	1.7
1985/86	17	4	451	1.1
1986/87	18	4	451	1.0
1987/88	19	5	451	0.7
1988/89	20	4	450	0.8
1989/90	21	6	451	0.8
1990/91	22	5	659	0.8
1991/92	23	5	730	0.8
1992/93	24	2	585	0.9
1993/94	25	2	603	3.2

TABLE XXIII

DISTRIBUTION OF WEST KANO FARMERS OVER VARIOUS NET RETURN CLASSES 1993/94

Income Class (Ksh)	Number of Farmers	%
0 - 1,000	152	27.5
1,001 - 2,000	49	8.9
2,001 - 3,000	10	1.8
3,001 - 4,000	11	2.0
4,001 - 5,000	16	2.9
5,001 - 6,000	10	1.8
6,001 - 7,000	10	1.8
7,001 - 8,000	9	1.6
8,001 - 9,000	10	1.8
9,001 - 10,000	11	2.0
10,001+	265	47.9
Total	553	100.0
Mean Net Income per Farmer KShs. 12,795		

Table XXIV
BUNYALA RICE STATISTICS 1984/85 - 1993/94

YEAR	CROP	AREA CROPPED HA.	NO. OF GROWERS	PRODUCTION		MEAN NET RETURN / HOLDING (KSHS)
				TOTAL M-TONNES	MEAN YIELD KG/HA.	
1984/85	24	215	131	1,094	5,200	10,920
1985/86	25	213	131	1,259	5,913	14,216
1986/87	26	213	131	1,209	5,674	13,476
1987/88	27	213	132	1,379	6,475	15,455
1988/89	28	213	132	1,243	5,836	14,526
1989/90	29	213	132	1,049	4,924	13,395
1990/91	30	84	54	335	3,989	11,230
1991/92	31	213	132	1,002	4,706	11,730
1992/93	32	211	131	1,095	5,142	19,703
1993/94	33	211	131	1,072	5,020	29,797

Table XXV

BUNYALA MECHANICAL CULTIVATION 1984/85 - 1993/94

YEAR	CROP	NO. OF TRACTORS	TRACTOR OUTPUT	
			TOTAL AREA (HA)	MEAN HA TRACTOR/DAY
1984/85	24	2	215	
1985/86	25	2	213	1.20
1986/87	26	2	213	1.40
1987/88	27	2	213	1.37
1988/89	28	1	213	*
1989/90	29	2	213	1.07
1990/91	30	2	85	1.60
1991/92	31	2	215	1.94
1992/93	32	2	211	1.05
1993/94	33	2	211	1.13
*No records				

TABLE XXVI

DISTRIBUTION OF BUNYALA FARMERS OVER VARIOUS NET INCOME CLASSES 1993/94

NET INCOME CLASS	NO. OF FARMERS	PERCENTAGE
0 - 1,000	7	5.3
1,001 - 2,000	0	0.0
2,001 - 3,000	1	0.8
3,001 - 4,000	0	0.0
4,001 - 5,000	0	0.0
5,001 - 6,000	1	0.8
6,001 - 7,000	2	1.5
7,001 - 8,000	1	0.8
8,001 - 9,000	1	0.8
9,001 - 10,000	1	0.8
10,000+	118	89.4
Total	132	100
Mean Net Income per Farmer KShs.		29,797

PARTVI RESEARCH AND TRAINING

1. RESEARCH STAFF

Research staff establishment remained stable. As in the previous year, there were seven expatriate Japanese nationalists stationed at Mwea Irrigation Agricultural Development Project (MIAD). The staffing position as at 30/6/94 is as shown in Table XXVII.

Table XXVII

STAFF ATTACHED TO THE RESEARCH SECTION AS AT 30TH JUNE 1994

STATION	SENIOR	GRADE OF STAFF		TOTAL
		JUNIOR	SURBORDINATE	
H/Office	1	0	0	1
Ahero	8	27	12	47
Mwea	2	5	2	9
Hola	1	4	7	12
MIAD	18	24	14	56*
Perkerra	1	2	2	5
Total	31	62	37	130

* 6 of the senior staff are Japanese Nationals

2. AHERO IRRIGATION RESEARCH STATION

The station carried out research programmes aimed at alleviating various problems in rice growing schemes. Rice Varietal selection remained the main research component in the research programmes. A number of rice varieties were screened for their resistance to blast and Rice Yellow Mottle Virus. To cater for Kenyan Consumers' preference for aromatic rice, emphasis was laid on aromatic variety selection. Trials were also carried out on proper and effective weed control methods, herbicide screening, fertilizers use, crop protection practises and crop water requirements. General monitoring of water use was also carried out in the schemes.

3. MWEA IRRIGATION RESEARCH STATION

The research programmes in this station continued to be linked to those of Ahero Irrigation Research Station. Rice variety, crop management and crop protection trials were the main research programmes in the station. The station was involved in monitoring incidences of pests and diseases in Mwea Irrigation Settlement. The station, as in the previous years continued to undertake multiplication of pure seed as well as supervising rice seed production in the scheme.

4. **MWEA IRRIGATION AGRICULTURAL DEVELOPMENT PROJECT (MIAD)**

The project, as in the previous year, continued with the implementation of the five-year technical cooperation programmes as signed in the schedule of implementation. The project was involved in rice variety evaluations, variety selection, rice seed multiplication, fertilizer use, water management, soil improvement techniques, machinery testing and utilization. The project continued to train both farmers and staff on various aspects of rice growing.

5. **PERKERRA IRRIGATION RESEARCH STATION**

The station carried out trials on onions, cotton and maize. Fertilizer and irrigation trials were also carried out. Post harvest keeping quality of onions was given special attention.

6. **TRAINING**

The Board continued as in the previous year to train farmers and members of staff by holding seminars and organizing courses locally. In addition the Board organized field days for farmers in various schemes. Nine members of staff attended course outside the country as tabulated below:

Japan - 7
Egypt - 1
Netherlands - 1

PART VII DEVELOPMENT PROJECTS

Construction of a dormitory and a dining hall for Mwea Irrigation Development Project was in progress. The design works on Mutiithi Extension in Mwea were started early 1994. Feasibility studies on gravity intake for Ahero were undertaken.

At Hola, there was no progress on the relocation of the pump station due to lack of funds as in the previous year.

There were no development projects either initiated or on-going in Perkerra, Bunyala and West Kano Irrigation Schemes.

In the same period under review, the Board was called upon to play an active role in various governmental task forces namely:

1. Intergrated River Basin Management
2. National Environmental Impact Assesment Programme
3. The National Wetlands Standing Committee

**ACCOUNTS:
THE YEAR 1993/94**

REPORT OF THE AUDITOR-GENERAL (CORPORATIONS) ON THE ACCOUNTS OF NATIONAL IRRIGATION BOARD FOR THE YEAR ENDED 30 JUNE 1994

I have examined the accounts of National Irrigation Board for the year ended 30 June 1994 in accordance with the provisions of Section 29 (2) of the Exchequer and Audit Act (Cap 412). I have obtained all the information and explanations that I needed for the purpose of audit. Proper books of accounts have been kept by the Board and the accounts are in agreement therewith.

In my opinion, the Balance Sheet and the Income and Expenditure account, when read together with the notes thereon, present a true and fair view of the Company's state of affairs as at 30 June 1994 and of its deficit for the year ended on that date.

W.K. KEMEI
AUDITOR-GENERAL (CORPORATIONS)

19 December 1996

NATIONAL IRRIGATION BOARD

CONSOLIDATED BALANCE SHEET AS AT 30th JUNE 1994

	NOTES	1994 K£	1993 K£
Fixed Assets	2	13,037,119	13,572,521
Investments	3	2,035,997	137,500
Long Term Debtors			208,148
		15,073,116	13,918,169
<u>CURRENT ASSETS</u>			
Stock & Work in Progress		10,727,002	7,303,453
Debtors		11,514,768	6,214,167
Short Term Deposits		850,000	2,050,000
Bank Balances			1,213,814
Cash on Hand	12	3,999,536	1,514,553
		27,091,306	18,295,987
<u>CURRENT LIABILITIES</u>			
Creditors		14,099,629	
Bank Balances		612,640	
		14,712,269	
Net Current Assets/Liabilities		12,379,037	9,679,725
Total Assets		27,452,153	23,597,894
FINANCED BY:			
Excess of Income /Expenditure	6	16,783,497	12,431,111
Development Fund	7	584,761	584,761
Capital Fund	5	8,909,700	6,944,608
Tenants Welfare Fund	8	24,595	27,029
Loan capital	9	1,483,514	3,580,700
Research & Pilot Schemes net Grants	11	(333,914)	29,685
		27,452,153	23,597,894

B.T.C. BARGORIA
GENERAL MANAGER

JOSIAH KIMEMIA
CHAIRMAN

NATIONAL IRRIGATION BOARD

CONSOLIDATED INCOME & EXPENDITURE ACCOUNT FOR OPERATING SCHEME

FOR THE YEAR ENDED 30TH JUNE 1994

NOTES	1994 K£	1993 K£
INCOME:		
Land preparation	1,591,315	1,750,386
Water Rates	24,613	25,573
Interest receivable	130,401	245,093
Traders commission	4,417	3,749
Transport of crops	320,354	14,852
Accountancy &		40,135
Administration (MRM)	80,410	
Rice Account	5,047,235	6,128,717
Profit/loss on sale of assets		2,275
Other operational income	(476,009)	(446,780)
TOTAL INCOME	<u>(6,722,736)</u>	<u>7,764,000</u>
EXPENDITURE		
Harvesting Charges	53,283	
Staff costs	2,540,403	2,574,044
Training Expenses	16,229	9,147
Travelling and Entertainment	396,310	371,571
Office Expenses & Insurance	836,349	703,478
Medical Expenses	111,127	106,255
Research and Training Project	14,385	18,588
Buildings and works mtce	592,493	430,991
Diesel, Petrol and Oils	1,386,424	1,149,333
Plant and Machinery mtce	480,576	487,363
Motor vehicles mtce	485,680	311,881
Tractors and Equipment mtce	487,807	491,475
Interest on Loans	18,922	126,489
Bad debts	16,237	
Auditors Remuneration	5,669	5,669
Depreciation of Fixed Assests	<u>1,262,515</u>	<u>828,957</u>
TOTAL EXPENDITURE	<u>8,704,409</u>	<u>7,615,241</u>
Surplus/ (Deficit) for the year	(1,981,673)	148,759
Less: Prior years depreciation	<u>390,085</u>	
Net Surplus/ (Deficit)	(2,371,758)	
Government Grants	961,343	1,781,076
Surplus / (Deficit)	<u>(1,410, 415)</u>	<u>1,929,835</u>

NATIONAL IRRIGATION BOARD

DETAILED BALANCE SHEET AS AT 30TH JUNE 1994

	HEAD OFFICE K£	MWEA K£	PERKERRA K£	TANA K£	AHERO K£	WEST KANO K£	BUNYALA K£	TOTAL K£
CURRENT ASSETS								
Stocks & Work in Progress	3,454,312	4,744,444	340,244	499,050	869,827	517,741	301,384	10,727,002
Debtors	1,195,519	5,298,486	1,182,601	516,574	1,313,265	1,787,751	220,572	11,514,768
Short Term Deposits	850,000							850,000
Bank balances	10,741,100	307,837		343,488	2,104,752			11,048,937
Cash on Hand	500	1,422,103	128,693					3,999,536
	16,241,431	11,772,870	1,651,538	1,359,112	4,287,844	2,305,492	521,956	38,140,243
CURRENT LIABILITIES								
Creditors	1,457,023	9,482,298	105,206	902,165	1,948,237	165,624	39,076	14,099,629
Bank balances			1,569,421	1,502,619	3,080,700	5,106,496	402,341	11,661,577
Net Current Assets/Liabilities	14,784,408	2,290,572	(23,089)	(1,045,672)	(741,093)	(2,966,628)	80,539	12,379,037
Total Assets	17,195,972	7,174,361	275,204	968,951	912,904	673,304	251,457	27,452,153
FINANCED BY:								
Excess of Income/Expenditure	16,783,497				45,424	22,466	10,396	16,783,497
Development fund		506,475						584,761
Capital Fund	746,389	5,159,777	275,204	968,951	867,480	650,838	241,061	8,909,700
Tenants Welfare Fund		24,595						24,595
Loan Capital		1,483,514						1,483,514
Research & Pilot Schemes net grants	(333,914)							(333,914)
	17,195,972	7,174,361	275,204	968,951	912,904	673,304	251,457	27,452,153

**NATIONAL IRRIGATION BOARD
DETAILED INCOME & EXPENDITURE ACCOUNT FOR OPERATING SCHEMES FOR THE YEAR ENDED 30TH JUNE 1994**

INCOME	HEAD OFFICE K£	MWEA K£	PERKERRA K£	TANA K£	AHERO K£	WEST KANO K£	BUNYALA K£
Land Preparation		1,171,673	20,685		189,419	147,651	61,888
Water Rates		24,613					
Interest Receivable	130,401						
Traders Commission		4,417					
Transport of Crops		18,006			16,799	14,162	5,689
Accountancy & Administration (MRM)	80,410						
Rice Account	5,047,235						
Other Operational income	8,326	(581,235)	80,789	10,516	8,168	(808)	(1,765)
TOTAL INCOME	5,266,372	856,135	148,510	10,516	214,386	161,005	65,812
EXPENDITURE							
Harvesting Charges	653,572	820,434	234,316	98,436	9,641	24,955	18,687
Staff costs	16,229				403,733	230,233	99,679
Training Expenses	138,697	93,988	50,884	26,203	59,621	17,003	9,914
Travelling and Entertainments	190,118	266,994	100,551	55,169	161,215	35,822	26,480
Office Expenses & Insurance	43,144	42,757	5,077	1,507	6,818	11,588	236
Medical Expenses	14,385						
Research & Training Projects	58,209	381,504	40,095	34,452	37,572	33,946	6,715
Building and works mtce	78,223	573,083	109,889	63,992	269,393	131,321	160,523
Diesel, Petrol and Oils		112,352	39,954	22,611	73,492	184,103	48,064
Plant and Machinery mtce	73,526	139,665	80,633	63,980	79,020	39,849	9,007
Motor Vehicles mtce		254,090	84,003	3,386	13,360	89,903	43,065
Tractors and Equipment mtce		18,922					
Interest on Loans	16,237						
Bad debts	786	2,046	673	762	645	615	142
Auditors Remuneration	36,265	1,119,516	13,481	15,175	88,373	375,249	4,541
Depreciation of Fixed Assets	1,319,391	3,825,351	759,557	385,673	1,202,883	1,174,587	427,053
TOTAL EXPENDITURE	3,946,981	(2,969,216)	(611,046)	(375,157)	(988,497)	(1,013,582)	(361,241)
Excess of Income/Expenditure	961,343						
Government Grants	4,908,324	(2,969,216)	(611,046)	(375,157)	(988,497)	(1,013,582)	(361,241)
Surplus / (Deficit)							

NATIONAL IRRIGATION BOARD

NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 30TH JUNE 1994

ACCOUNTS POLICIES

1. BASIS OF ACCOUNTING

The accounts are prepared on the historical cost basis of accounting.

STOCKS

Stock and work in progress is valued at the lower of cost and estimated net realisable value.

DEPRECIATION OF FIXED ASSETS

Depreciation is calculated to write off the cost of the fixed assets over their anticipated useful lives at the following rates:-

Irrigation works and sewerage system	None
Freehold land and buildings	None
Buildings at schemes	2%
Plant, machinery and equipment	10%
Tractors and motor vehicles	20% to 33 1/3%

PILOT SCHEMES

Until a scheme has become operational, the Board produces only a receipts and payments account and carries forward the net costs as development expenditure. When the scheme becomes operational, the accumulated costs are fixed assets and the grants received transferred to capital fund.

GOVERNMENT GRANTS

The Government has agreed to provide grants to cover legitimate prior years' deficits on operational schemes and an appropriate adjustment is made to the total deficits carried forward each year in the income and expenditure accounts. In addition, capital grants are provided by the Government.

NATIONAL IRRIGATION BOARD

NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 30TH JUNE 1994

2

FIXED ASSETS	Irrigation Works & Sewerage	Freehold Land & Buildings	Buildings at Schemes	Plant Machinery & Equipment	Tractors & Motor Vehicles	Total
COST	K£	K£	K£	K£	K£	K£
Balance as at 30th June 1993	6,628,759	191,141	2,848,769	5,206,860	3,703,847	18,579,376
Additions	20,397		544,534	74,915	2,110,197	2,750,043
Transfer to W.K.R.M.			(358,443)	(1,540,054)		(1,898,497)
Balance as at 30th June 1994	6,649,156	191,141	3,034,860	3,741,721	5,814,044	19,430,922
DEPRECIATION						
At 30th June 1993		2,722	559,271	1,523,322	2,921,519	5,006,834
Transfer to W.K.R.M.			(21,364)	(244,267)		(265,631)
Charge for the Year		134	56,776	415,321	790,284	1,262,515
Prior years depreciation					390,085	390,085
Writeback on Disposals						
At 30th June 1994		2,856	594,683	1,694,376	4,101,888	6,393,803
Net Book value 1994	6,649,156	188,285	2,440,177	2,047,345	1,712,156	13,037,119
At 30th June 1993	6,628,759	188,419	1,963,887	2,110,631	782,328	11,674,024

INTEREST ON LOANS

Interest on loans to the Board is included as an expense as it accrues and is calculated on the principal amount of the loans outstanding.

TAXATION

The National Irrigation Board is exempt from Kenya Income Tax.

3.	INVESTMENTS	1994	1993
	Mwea Rice Mills Ltd. 55% shareholding	137,500	137,500
	Western Kenya Rice Mills Ltd. 91.7% shareholding	1,898,496	
		<u>2,035,996</u>	<u>137,500</u>

4.	DEBTORS
	(a) Debtors - £11,514,768
	This amount includes a figure of K£ 20,178 which is a contingency loss in Ahero Irrigation scheme which is subject to court decision.

(b) The total debtors figure is subject to adjustment by an amount of K£ 490,526 during the year 1994/95

5.	CAPITAL FUND		
	Balance brought forward	6,944,608	6,944,608
	Capitalised during the year	1,965,091	
		<u>8,909,699</u>	<u>6,944,608</u>

6.	EXCESS OF EXPENDITURE OVER INCOME		
	(a) Balance brought forward	12,430,482	10,347,577
	Adjustment	5,763,430	153,070
	Excess of Income over expenditure for the year	(1,410,415)	1,929,835
		<u>16,783,497</u>	<u>12,430,482</u>

(c) The excess of expenditure over income includes a sum of K£ 390,085 prior years depreciations.

NATIONAL IRRIGATION BOARD

6B RICE PROCESSING ACCOUNT FOR THE YEAR ENDING 30TH JUNE 1994

	K£	K£
Sales		22,995,763
Opening Stock	7,958,269	
Add — Purchases	<u>21,345,327</u>	
	29,303,596	
Less — Closing balance	<u>11,355,068</u>	
		17,948,528
		<u>5,047,235</u>

7. **DEVELOPMENT FUND**

Up to 30th June, 1994 the price structure for rice sales by the National Irrigation Board to the National Cereals & Produce board set aside an amount of Shs. 2.50 per bag of rice towards a development fund. These funds are used where necessary to defray losses. The amount received into the funds and as yet unused to defray losses as at 30th June, 1993 are as follows:-

MWEA	AHERO	BUNYALA	WEST KANO	TOTAL
K£	K£	K£	K£	K£
506,475	45,424	10,396	22,466	584,761

8. **TENANTS WELFARE FUNDS**

	1994	1993
	K£	K£
Balance brought forward	27,029	27,964
Increase /(Decrease during the year)	(2,434)	(935)
Balance carried forward	<u>24,595</u>	<u>27,029</u>

9.	LOAN CAPITAL	1994	1993
		K£	K£
	(a) (i) Kenya Government Loan in respect of Mwea Repayments	1,593,181 (203,339) <u>1,389,842</u>	1,679,558 (86,377) <u>1,593,181</u>
	(b) Kenya Government loans in respect of West Kano Repayments		1,893,847 <u>1,893,847</u>
	(c) Mwea Rice Mills Ltd Loan for Tenants housing Repayments	93,672 <u>93,672</u>	93,672 <u>93,672</u>
	Total Loans as at 30th June, 1994	<u>1,483,514</u>	<u>3,580,700</u>

- (d) The balance in (a) above is for double crop in Mwea Scheme which was irredeemable and interest free.
- (e) The Kenya Government Loan in respect of West Kano of K£ 1,893,847 and interest there on has been converted to interest free grant which has been adjusted accordingly .
- (f) Mwea Rice Mills Ltd. loan includes an amount of K£ 62,440 as at 30th June 1993. The amount of K£ 31,232 is not governed by formal agreement. Under the terms of the Irrigation Act, all government loans are secured by a first charge on the property, assets, revenues and funds of the Board.

10. **SUBSIDIARY COMPANY**
 The Board has 55% and intends to own 60% (actual 91.7%) equity in Mwea Rice Mills Ltd. and Western Kenya Mills Ltd. respectively.
 Due to the very different nature of the operations of these companies, it has not been considered appropriate to consolidate the accounts of the Board and those of the subsidiaries.

11. **CASH ON HAND**
 This represents balances of money sent to the schemes in a way of imprest for schemes' operations. At the end of every month funds are remitted to the scheme bank accounts operated by the scheme manager and scheme accountant.
 The funds so remitted are treated as cash on hand.

NATIONAL IRRIGATION BOARD
RECEIPTS & PAYMENTS ACCOUNT FOR AHERO RESEARCH & TANA RESEARCH STATIONS FOR THE YEAR ENDED 30th JUNE 1994

	AHERO RES. K£	TANA RES. K£	YALA SWAMP K£	SOUTH KANO K£	TOTALS K£ 1994	TOTALS K£ 1993
RECEIPTS						
Balance over/underspent as at 30th June 1993	(362,255)	284,725	99,835	7,380	29,685	431,736
Government Grants	(362,555)	284,725	99,835	7,380	29,685	431,736
PAYMENTS						
Staff costs	176,146	24,431			200,577	234,391
Auditors Remuneration	438	393			831	831
Medical Expenses	5,070				5,070	5,001
Travelling & Entertainment	23,319	1,213			24,532	25,230
Agricultural Expenses & Insurance	21,090	2,863			23,952	10,186
Office Expenses & Insurance	57,028	(3,433)			53,595	47,742
MAINTENANCE AND RUNNING EXPENSES						
Petrol, Diesel & Oils	7,523	3,792			11,315	16,547
Motor Vehicles maintenance	22,186	2,689			24,875	24,198
Tractor and Equipment maintenance	1,233	522			1,755	6,309
Plant & Machinery maintenance	393				393	624
Buildings and works maintenance	3,000	176			3,176	11,970
FIXED ASSETS ADDITIONS						
Buildings and General Cost	13,141				13,141	18,782
Office Machinery Cost	18				18	240
P & M Misc. Cost	370				370	
	330,954	32,645			363,599	402,051
	(693,209)	252,080	99,835	7,380	(333,914)	29,685
OVER/UNDERSPENT AS AT 30TH JUNE 1994						
	EXPENDITURE	GOV GRANTS	NET EXP.			
	K£	K£	K£			
CUMMULATIVE BALANCE AS AT 30TH JUNE 1993	3,988,003	(4,017,688)	(29,685)			
EXPENDITURE DURING THE YEAR	363,599	363,599	363,599			
	4,351,602	(4,017,688)	333,914			



