

Somali Democratic Republic
Ministry of Agriculture

Directorate of Planning & Statistics / Food Security Project

Retail & Wholesale Maize Price Trends
Between September 1986 to April 15, 1987

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Market Report Series

The Food Security Project, since September 1986, has been monitoring and gathering farmgate prices of maize and sesame in ten villages in the Middle and Lower Shabelle, retail and wholesale prices of major food items including maize and sesame in several selected towns in southern Somalia (including Mogadishu, Jenale, Jowhar, Bulo Burte, Baidoa, Jilib, and Kismayo). The following is the first one of several periodic price and market reports which the Food Security Project will continue as a method of disseminating the price behavior of major agricultural products aimed at informing government officials, traders, and other interested parties (e.g. projects, and donor agencies) to enable them to make better informed decisions regarding producer floor prices, release of stocks and stock acquisition, and the level and timing of commercial and concessional cereal imports. This report covers maize wholesale and retail price behavior from September 1986 to April 15, 1986 of the following five urban markets¹: Mogadishu, Jowhar, Bulo Burte, Baidoa, and Jilib. The report is organized as follows:

- A) A short description of the method of price data collection.
- B) Temporal and spatial price trends of maize retail and wholesale prices over the period of analysis.
- C) An analysis of the price spread between retail and wholesale maize prices.
- D) An appendix containing tables and graphs of the price data.

¹ Kismayo prices were excluded from the present analysis due to questionable and unreliable price data. Jenale was also excluded because no wholesale price quotations are available for that market.

A) Methodology of Price Collection

Retail and wholesale prices are collected weekly on every Wednesday from these selected markets, and are transmitted via the Ministry of Agriculture radio posts in these selected market towns (of course, with the exception of Mogadishu). Enumerators of the price data are generally the radio operators. Both retail and wholesale price data are obtained for the following commodities, with their specified varieties, grades, quality, and brands shown where necessary:

1. White maize (local, produced during the most recent Gu season)
2. Yellow maize (imported)
3. White sorghum (local, produced during the most recent Gu season)
4. Red sorghum (local, produced during the most recent Gu season)
5. Sesame seed
6. Sesame oil
7. White vegetable oil
8. Local rice
9. Imported rice (Ali-Uray quality)
10. Cowpeas (produced during the most recent season)
11. Imported granular white sugar
12. Imported spaghetti (Santa Lucia brand)

Retail prices of maize, sorghum, sesame seed, and cowpeas are quoted by the volume of the particular type of local a can (locally known as Shood) used in each particular market. Types of cans used in different markets are generally of different volumes and weights. Wholesale prices of the above commodities are also reported in a variety of different sacks with differing volumes. Due to this lack of standardized retail and wholesale weights and measures for these commodities, a table of coefficients with which to convert the retail and wholesale prices collected in local volume units into standard weight measures (1 Kg. for the retail prices, and 100 Kg. for the wholesale prices) was constructed. The conversion of the units is performed in the office after price reports are obtained.

Rice, sugar, sesame oil, and vegetable oil retail and wholesale prices are reported in standard weights and volumes (Kilograms and liters, respectively).

B) Temporal and Spatial Maize Price Relationships

I) Temporal Price Relationship

Maize prices have almost doubled between September 1986 and April 1987. Wholesale maize prices for 100 Kg. was selling for approximately So. Sh. 1400 in September in Mogadishu. In April of this year, the price for the same 100 Kg. of maize in Mogadishu

has gone up to approximately So. Sh. 2600 (See the Appendix). Retail prices of maize have also almost doubled during this period. The upward price trend of maize could possibly be explained as follows:

a) Approximately 40 % of the increase of maize prices could be attributed to the seasonality trend of maize prices. Since the Gu maize of last year was harvested in late August and September, maize prices were at their lowest level of the year during the September 1986 period. The Grand Seasonality Index based on the maize price behavior over the last eight years² shows that maize prices are generally 40 % higher in April than in September of every year.

Thus, wholesale maize prices should have been on average around So. Sh. 2000 in April based on the seasonal price differences. However, maize price levels in April were more than So. Sh. 400 higher than would normally have been expected.

b) A major contributing factor for the rise of maize price this year is the dry Der season and the bad drought that has engulfed most of the country. Even though Gu 1986 was a very good one, the small Der maize harvest would have been required as normally happens during average Der season to slow down maize prices until the 1987 Gu maize harvest. However, ADC maize stock releases into

²) See Y. J. Wehelie, Maize Price Seasonality, Working Paper # 1, Ministry of Agriculture, January 1987.

the market seems to have slowed down maize price increases.

c) The general inflation rate between September 1986 and April 1987 as indicated by the Mogadishu CPI has also contributed approximately 15 %³ (or about So. Sh. 200) of the observed nominal maize price increase.

II) Spatial Price Relationships

Among the five urban markets, both retail and wholesale maize prices have been highest on the average in Buloburte, Mogadishu, and Baidoa markets respectively. On the other hand, maize prices have been lowest in Jilib, followed by Jowhar. Obviously, these spatial price differences clearly reflect that maize prices are lower in the producing areas and prices are higher in the consumption areas.

Spatial retail and wholesale price relationships between the five urban markets shows a high degree of integration in price formations and supply movements, as indicated in the below shown correlation matrices.

³ Source: Central Statistics Department, Ministry of National Planning.

Retail Price Correlation of the 5 Markets

Correlations:	MOGADISHU	JOWHAR	B/BURTE	BAIDOA	JILIB
MOGADISHU	1.0000	.8802**	.8136**	.8830**	.9389
JOWHAR	.8802**	1.0000	.7635**	.8996**	.9190
B/BURTE	.8136**	.7635**	1.0000	.7639**	.7871
BAIDOA	.8830**	.8996**	.7639**	1.0000	.8479
JILIB	.9389**	.9190**	.7871**	.8479**	1.0000

N of cases: 21 1-tailed Significance: * - .01 ** - .001

Wholesale Price Correlation of 5 Markets

Correlations:	MOGADISHU	JOWHAR	B/BURTE	BAIDOA	JILIB
MOGADISHU	1.0000	.9092**	.7358**	.8490**	.9451
JOWHAR	.9092**	1.0000	.7373**	.8882**	.952
B/BURTE	.7358**	.7373**	1.0000	.6540**	.716
BAIDOA	.8490**	.8882**	.6540**	1.0000	.866
JILIB	.9455**	.9528**	.7162**	.8669**	1.000

N of cases: 20 1-tailed Significance: * - .01 ** - .00

From the above correlation matrices of both retail and wholesale maize prices, it is clear that prices generally go

and down in tandem in all five urban markets⁴.

C) Maize Retail and Wholesale Price Spread

In Somalia, open stand food retailing (including vegetables, milk, meat, cereals, etc.) is generally a women's business. Maize retailers in all five markets are predominantly women. In the five urban markets, the price spread between retail and wholesale maize prices is very low and maize retailing seems to be highly competitive.

The price spread between retail and wholesale maize prices of the five markets is as follows:

<u>Market</u>	<u>Price Spread/1 Kg. (in So. Sh.)</u>
Mogadishu	1.26
Jowhar	1.42
Bulo Burte	0.63
Baidoa	0.91
Jilib	1.26

Due to the large number of sellers and buyers, no collusive or exploitative maize trader behavior is evident in these markets.

⁴) A correlation coefficient closer to one indicates a higher degree of relationship between prices of different markets

D) APPENDIX

Market	Date	Retail Prices (So.Sh./1 Kg.)	Wholesale Prices (So.Sh./100 Kg.)	Price Spread (So.Sh./1 Kg.)
Mogdishu	Sept3/86			
	Sept10/86	16.00	1500.00	1.00
	Sept17/86			
	Sept24/86			
	Oct1/86		1458.29	
	Oct8/86	14.67	1388.85	0.78
	Oct15/86	16.00	1481.44	1.19
	Oct22/86	16.00	1527.74	0.72
	Oct29/86			
	Nov5/86		1574.03	
	Nov12/86	21.33	1666.62	4.67
	Nov19/86			
	Nov26/86	21.33	2083.28	0.50
	Dec3/86	21.33	2129.57	0.04
	Dec10/86	21.33	2083.28	0.50
	Dec17/86	21.33	2083.28	0.50
	Dec24/86	21.33	1999.94	1.33
	Dec31/86	21.33	2036.98	0.96
	Jan7/87	22.67	2036.98	2.30
	Jan14/87	22.67	2092.53	1.74
	Jan21/87	25.33	2222.16	3.11
	Jan28/87	22.67	2133.27	1.33
	Feb4/87	24.00	2407.34	-0.07
	Feb11/87	24.00	2407.34	-0.07
	Feb18/87	24.00	2399.99	0.00
	Feb25/87	26.67	2333.33	3.33
	Mar4/87	25.33	2399.99	1.33
	Mar11/87	25.33	2373.33	1.60
	Mar18/87	26.67	2399.99	2.67
	Mar25/87	24.00	2333.33	0.67
	Apr1/87	25.33	2399.99	1.33
	Apr8/87	26.67	2599.99	0.67
	Apr15/87	26.67	2599.99	0.67
	Average	21.63	2076.89	1.26

Market	Date	Retail Prices (So.Sh./1 Kg.)	Wholesale Prices (So.Sh./100 Kg.)	Price Spread (So.Sh./1 Kg.)
Jowhar	Sept3/86	15.06	1338.40	1.67
	Sept10/86	12.55	1254.75	0.00
	Sept17/86	15.06	1338.40	1.67
	Sept24/86	15.06	1422.05	0.84
	Oct1/86	15.06	1422.05	0.84
	Oct8/86	15.06	1380.23	1.25
	Oct15/86	17.57	1631.18	1.25
	Oct22/86	17.57	1547.53	2.09
	Oct29/86	17.57	1547.53	2.09
	Nov5/86	20.08	1882.13	1.25
	Nov12/86	22.58	2049.43	2.09
	Nov19/86	21.33	2007.60	1.25
	Nov26/86	22.58	2049.43	2.09
	Dec3/86	21.33		
	Dec10/86	22.58	2050.00	2.08
	Dec17/86	21.33	2007.60	1.25
	Dec24/86	22.58	2049.43	2.09
	Dec31/86	21.33	2007.60	1.25
	Jan7/87	21.33	2007.60	1.25
	Jan14/87	21.33	2007.60	1.25
	Jan21/87	22.58	2133.08	1.25
	Jan28/87	25.09	2384.03	1.25
	Feb4/87	23.84	2258.55	1.25
	Feb11/87	23.84	2258.55	1.25
	Feb18/87	25.09	2384.03	1.25
	Feb25/87	25.09	2383.93	1.25
	Mar4/87	25.09	2308.65	2.01
	Mar11/87	27.60	2634.87	1.25
	Mar16/87	27.60	2634.87	1.25
	Mar25/87	27.60	2509.40	2.51
	Apr1/87	26.35	2509.40	1.25
	Apr8/87	26.35	2509.40	1.25
Apr15/87	23.84	2308.65	0.75	
	Average	21.48	2006.81	1.42

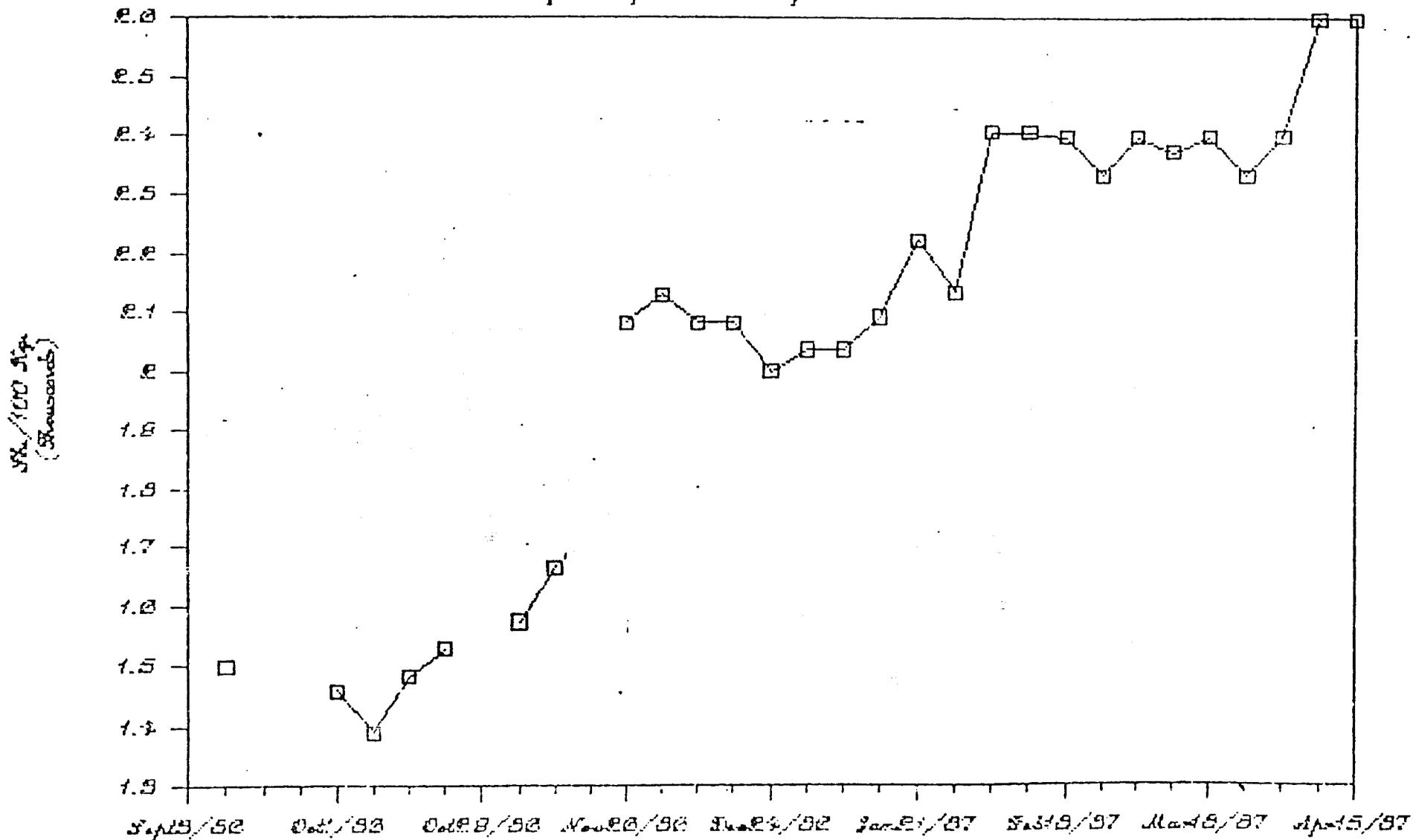
Market	Date	Retail Prices (So.Sh./1 Kg.)	Wholesale Prices (So.Sh./100 Kg.)	Price Spread (So.Sh./1 Kg.)
Buulo Burte	Sept3/86	17.82	1782.00	0.00
	Sept10/86	19.80	1980.00	0.00
	Sept17/86	17.82	1782.00	0.00
	Sept24/86	15.84	1405.80	1.78
	Oct1/86	17.82	1782.00	0.00
	Oct8/86	19.80	1980.00	0.00
	Oct15/86	19.80	1980.00	0.00
	Oct22/86	19.80	1980.00	0.00
	Oct29/86	19.80	1980.00	0.00
	Nov5/86		1980.00	
	Nov12/86	23.76	2376.00	0.00
	Nov19/86	23.76	2376.00	0.00
	Nov26/86			
	Dec3/86	23.76	2178.00	1.98
	Dec10/86	21.78	2178.00	0.00
	Dec17/86	21.78	2079.00	0.99
	Dec24/86	23.76	2376.00	0.00
	Dec31/86	21.78	2079.00	0.99
	Jan7/87	21.78	2178.00	0.00
	Jan14/87	21.78	2178.00	0.00
	Jan21/87	21.78	2178.00	0.00
	Jan28/87	23.76	2376.00	0.00
	Feb4/87	23.76	2376.00	0.00
	Feb11/87	23.76	2376.00	0.00
	Feb18/87	23.76	2376.00	0.00
	Feb25/87			
	Mar4/87	23.76	2178.00	1.98
	Mar11/87	23.76	2046.00	3.30
	Mar18/87	23.76	2310.00	0.66
	Mar25/87	23.76	2151.60	2.25
	Apr1/87	23.76	2151.60	2.25
	Apr8/87			
Apr15/87	27.72	2574.00	1.98	
Average		21.92	2124.10	0.63

Market	Date	Retail Prices (So.Sh./1 Kg.)	Wholesale Prices (So.Sh./100 Kg.)	Price Spread (So.Sh./1 Kg.)
Baidoa	Sept3/86	15.79	1279.18	3.00
	Sept10/86	14.47	1279.18	1.68
	Sept17/86	13.16	1315.73	0.00
	Sept24/86	13.16	1315.73	0.00
	Oct1/86	14.47	1447.30	0.00
	Oct8/86	13.16	1315.73	0.00
	Oct15/86	17.11	1736.03	-0.26
	Oct22/86	18.42	1842.02	0.00
	Oct29/86	18.42	1842.02	0.00
	Nov5/86			
	Nov12/86	18.42	1842.02	0.00
	Nov19/86	18.42	1842.02	0.00
	Nov26/86	19.74	1973.59	0.00
	Dec3/86	19.74	1973.59	0.00
	Dec10/86	19.74	1973.59	0.00
	Dec17/86	21.05	2101.51	0.04
	Dec24/86	21.05	1736.03	3.69
	Dec31/86	21.05	1736.03	3.69
	Jan7/87	21.05	1736.03	3.69
	Jan14/87	19.74	1973.59	0.00
	Jan21/87	21.05	1736.03	3.69
	Jan28/87	21.05	2105.16	0.00
	Feb4/87	21.05	2145.37	-0.40
	Feb11/87	21.05	2105.16	0.00
	Feb18/87	22.37	2236.74	0.00
	Feb25/87	25.00		
	Mar4/87	22.37		
	Mar11/87			
	Mar18/87			
	Mar25/87	25.00	2236.69	2.63
	Apr1/87	25.00	2368.26	1.32
	Apr8/87	25.00	2368.26	1.32
	Apr15/87	25.00	2368.26	1.32
	Average	19.74	1854.67	0.91

Market	Date	Retail Prices (So.Sh./1 Kg.)	Wholesale Prices (So.Sh./100 Kg.)	Price Spread (So.Sh./1 Kg.)
Jilib	Sept3/86	12.33	1141.56	0.91
	Sept10/86	12.33	951.30	2.82
	Sept17/86	12.33	998.87	2.34
	Sept24/86	10.96	913.25	1.83
	Oct1/86	12.33	1046.43	1.86
	Oct8/86	12.33	1141.56	0.91
	Oct15/86	12.33	1236.69	-0.04
	Oct22/86	12.33	1284.26	-0.51
	Oct29/86			
	Nov5/86		1379.39	
	Nov12/86	17.12	1426.95	2.85
	Nov19/86	20.55	1522.06	5.33
	Nov26/86	17.12	1617.21	0.95
	Dec3/86	17.12	1617.21	0.95
	Dec10/86	17.12	1617.21	0.95
	Dec17/86	16.44	1617.21	0.27
	Dec24/86	17.12	1617.21	0.95
	Dec31/86	17.12	1617.21	0.95
	Jan7/87	16.44	1617.21	0.27
	Jan14/87	19.18	1807.47	1.10
	Jan21/87	19.18	1807.47	1.10
	Jan28/87	19.18	1807.47	1.10
	Feb4/87	19.18	1807.47	1.10
	Feb11/87	20.55	1997.73	0.57
	Feb18/87	21.92	2092.86	0.99
	Feb25/87	21.92	2187.99	0.04
	Mar4/87	21.92	2055.00	1.37
	Mar11/87	20.55	1918.00	1.37
	Mar18/87	21.92	2055.00	1.37
	Mar25/87	21.92	2055.00	1.37
	Apr1/87	20.55	1918.00	1.37
	Apr8/87	20.55	1918.00	1.37
	Apr15/87	20.55	1918.00	1.37
Average		17.50	1615.88	1.26

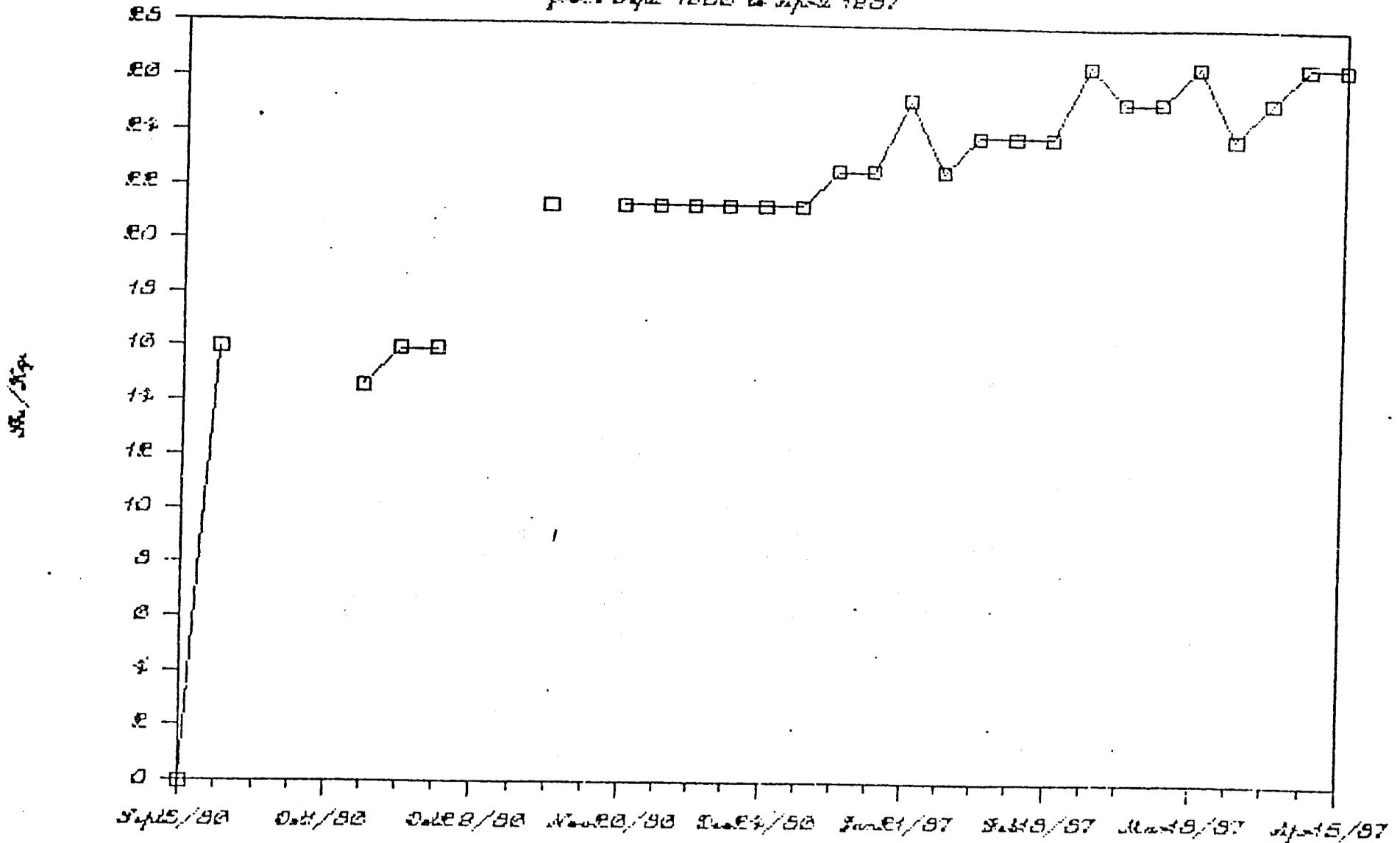
Mogadishu Wholesale Maize Prices

from Sept 1950 to April 1957



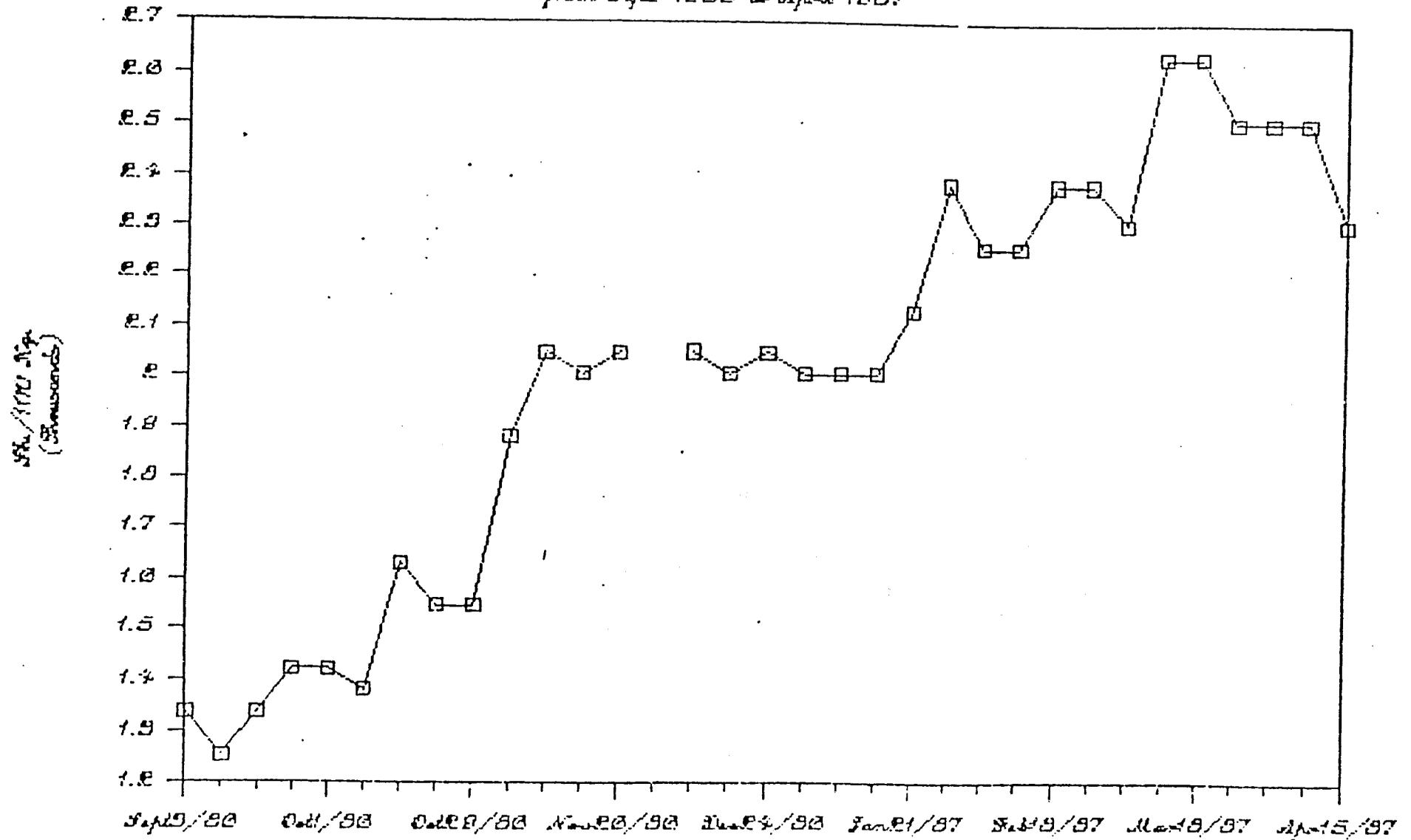
Mogadishu Retail Maize Price

from Sept 1896 to April 1897



Gowhar Maize Wholesale Prices

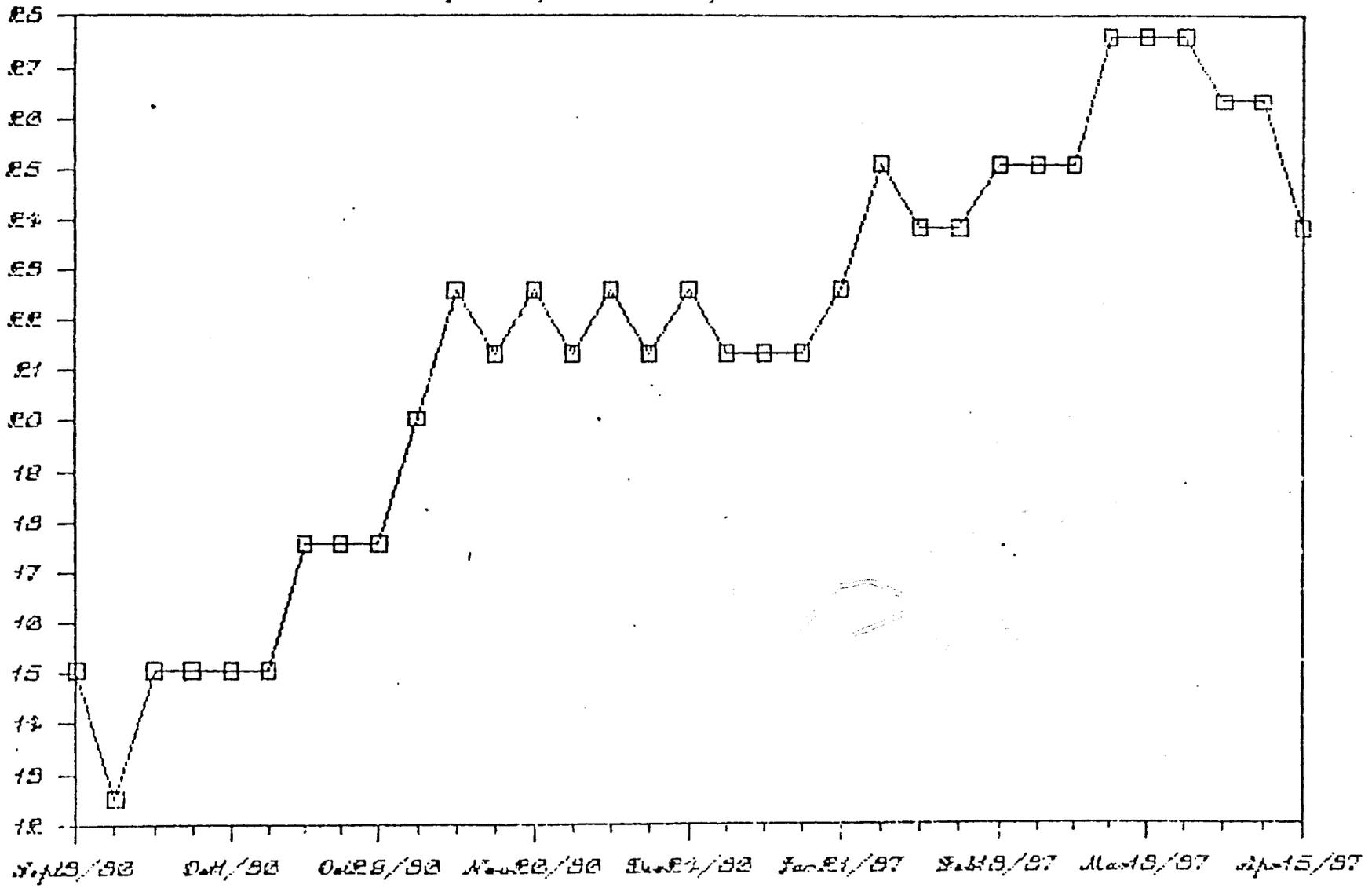
from Sept 1896 to April 1897



Jowhar Maize Retail Prices

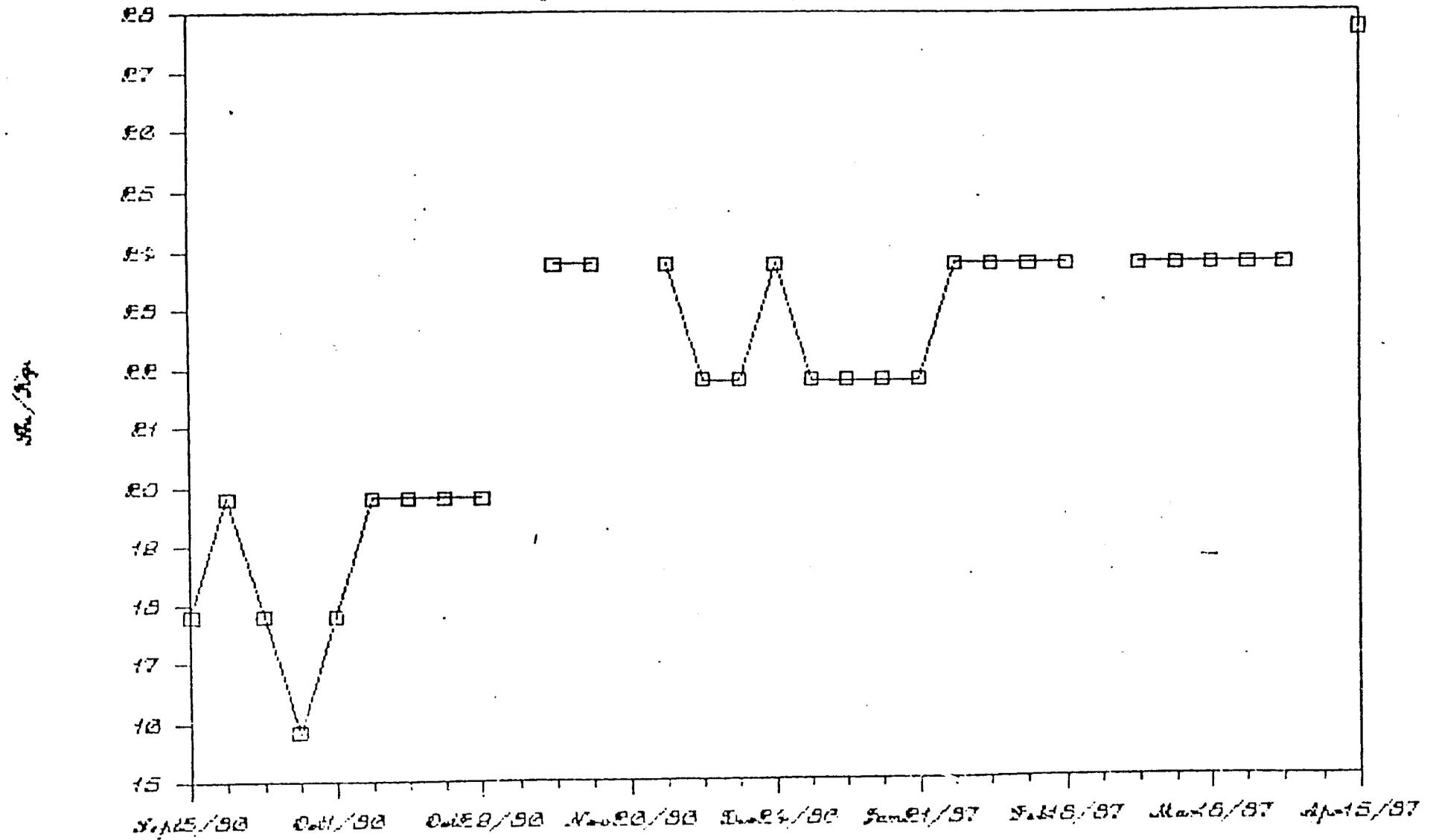
from Sept 1896 to April 1897

Rs/54



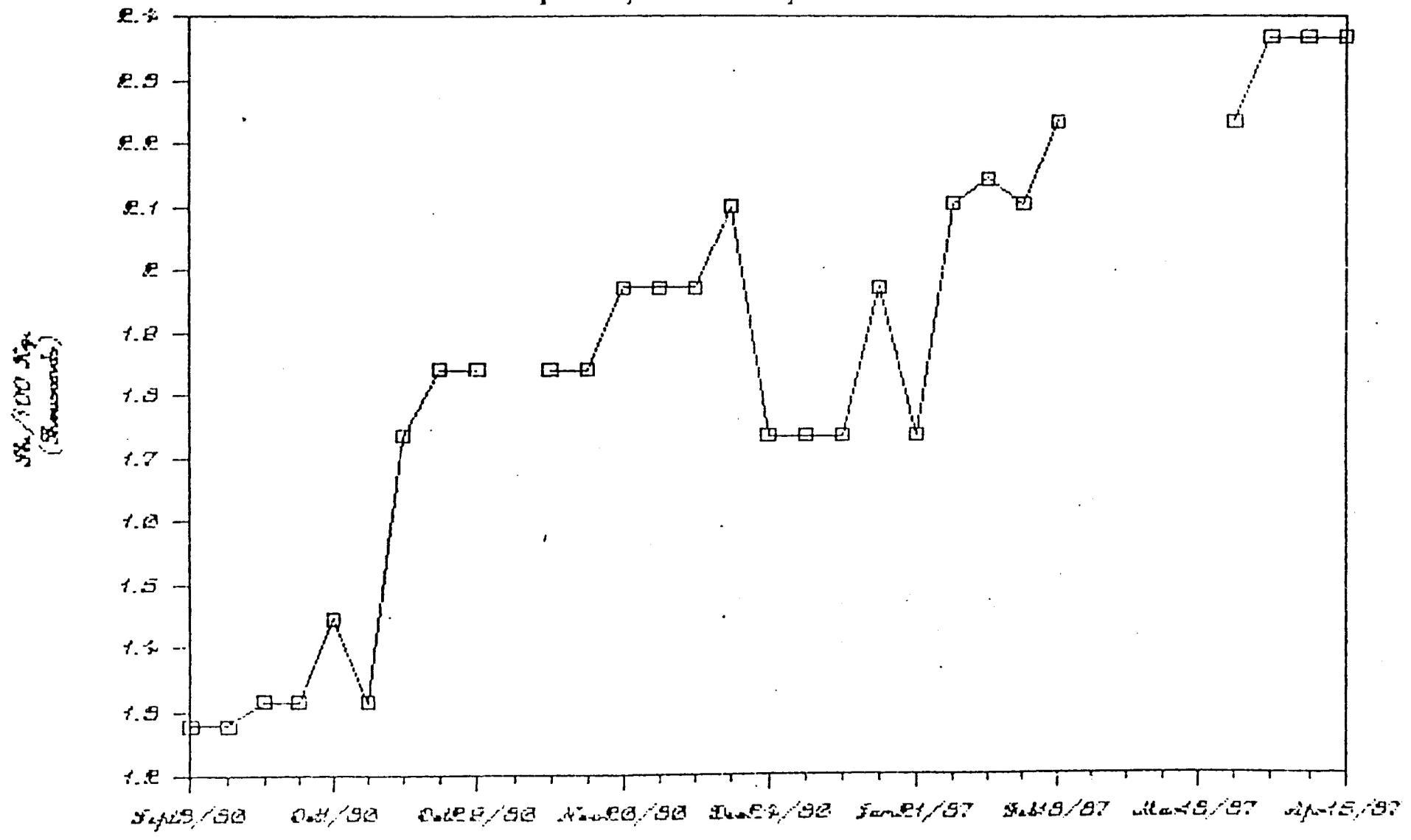
Bulo Burtu Maize Retail Prices

from Sept 1896 to April 1897



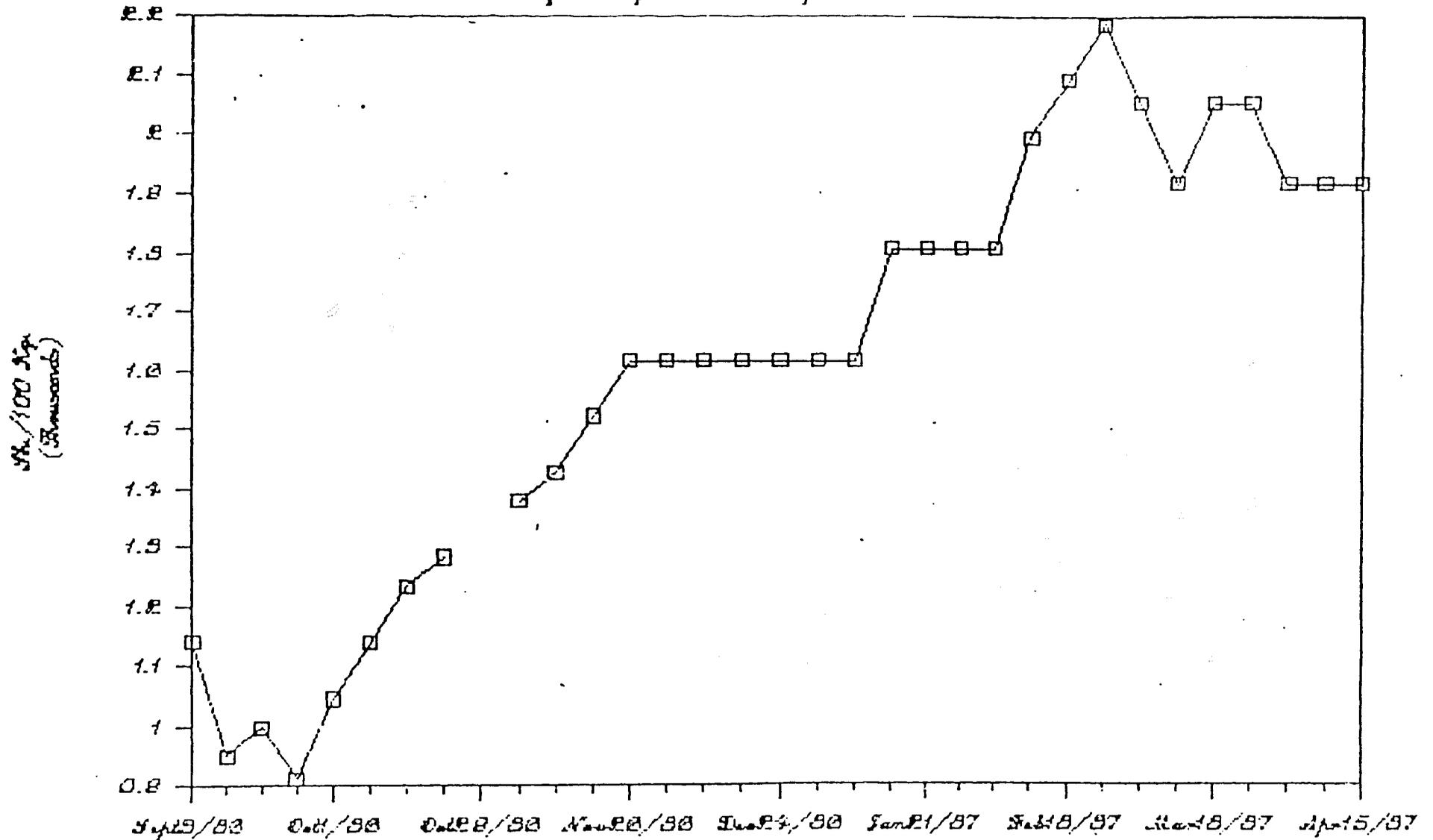
Baidoa Maize Wholesale Prices

from Sept 1886 to April 1887



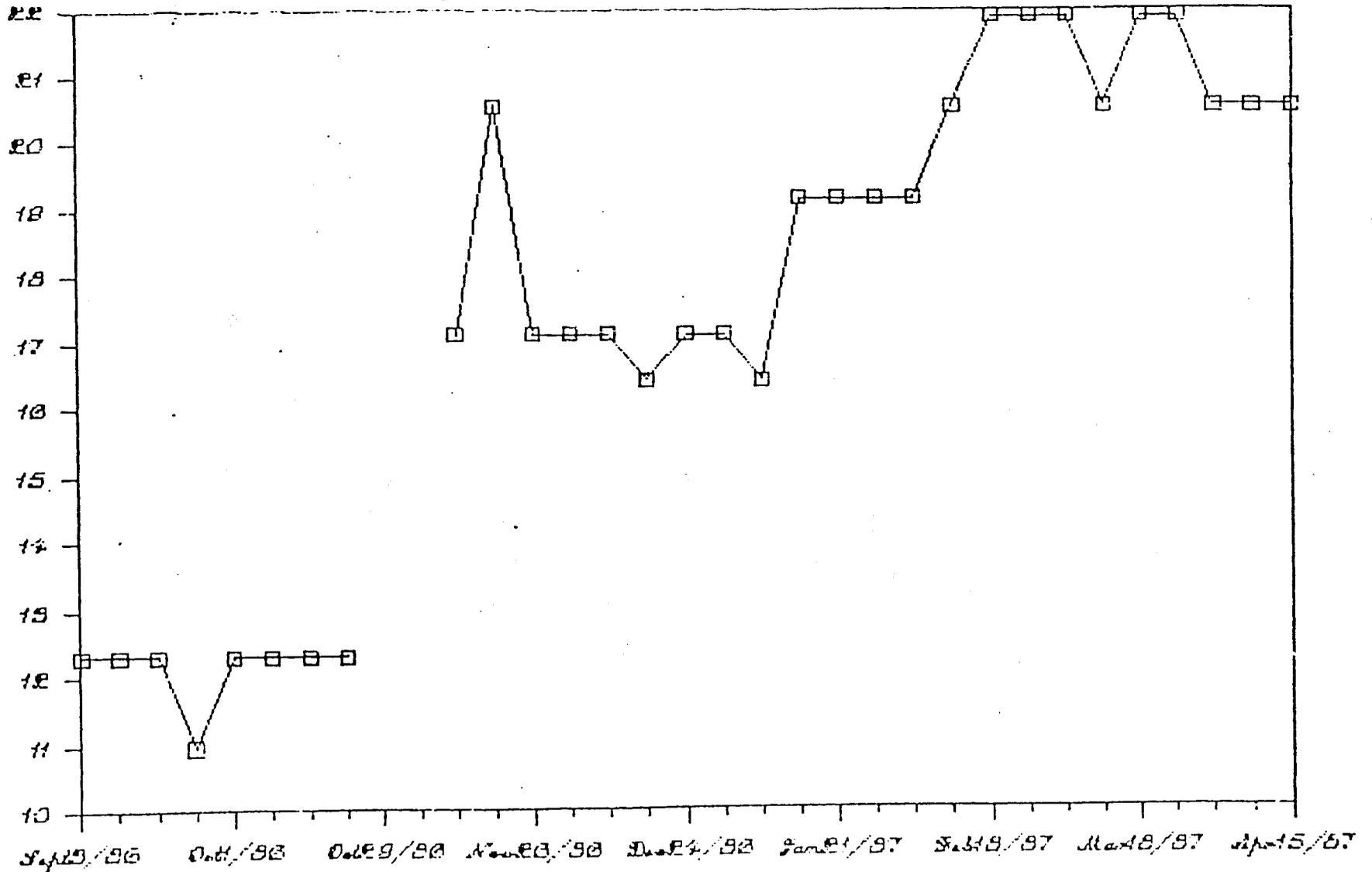
Jilili Maize Wholesale Prices

from Sept 1886 to April 1887



Jilili Maize Retail Prices

from Sept 1886 to April 1887



Rs/Ship