

TECHNICAL NOTE NO 17
ESTIMATED CHANGES IN CAPITAL INVESTMENT
IN CEREAL PROJECTS, BUNASEM AND THE
AGRICULTURAL SECTOR 1987/89

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Estimated Changes in Capital Investment in Cereal Projects,
Bunasem and The Agricultural Sector, 1987/89

1. INTRODUCTION

Data were available for the PIP listing the origin of project funding as government (internal financing or IF) or foreign donor (external financing or EF).

Given the current concern with cereal imports and the policy of self-sufficiency, it was decided to look at actual funding policies being pursued by the government.

2. METHODOLOGY

All data were obtained from available lists of projects and actual or planned funding from the SEP. The following assumptions were made:

- * conversion from Zaires to \$ US was made using the March rate for each of the years 1987, 1988 and 1989
- * 1987 figures were actual expenditures
- * 1988 and 1989 figures were planned figures
- * financial costs for these funds were estimated at 40 % for internal sources and 5 % for external funding.

3. RESULTS

A. PIP Agricultural Sector Investment 1989

There were 43 projects under the PIP for the agricultural sector in 1989. Of these, 9 were concerned in large part with cereals, 1 with improved seed multiplication (Bunasem), 2 with agricultural input supply and 1 with agricultural research (RAV) (Table 1).

Total investment planned for 1989 was \$ US 17.7 million. A total of 35 % was going into cereals projects, 9.5 % into seeds, 1.5 % into agricultural inputs, 8 % into research a portion of which should in fact have been assigned to cereal projects due to the maize component of RAV.

Foreign financing supplied 74 % (\$US 13 million) and internal financing provided the remaining 26 % (\$US 4.7 million) for the total planned investment in agricultural projects by the government.

If we assume a finance charge of 5 % for foreign funding and 40 % for internal sources, the estimated financial cost of these 43 projects in 1989 was \$US 2.5 million or 850 million Zaires or 14 % if the value of total investment planned (Table 2).

B. PIP Cereal Investment

The \$ US value of investments in cereal projects went down 14 % between 1987 and 1988 and a further 44 % between 1988 and 1989. There was a strong decline in both the level of internal and external financing (Table 3).

The SUS value of investments in the Agricultural Sector as a whole went down by 45 % between 1987 and 1988 and by 41 % between 1988 and 1989. There was a strong decline in the level of both internal and external financing (Table 4).

C. PIP Seed Investment (Bunasem)

There was a serious decline in the \$ value of investment in the Bunasem by 19 % between 1987 and 1988 and by 50 % between 1988 and 1989 (Table 5). A similar analysis should probably be carried out for other sub-sectors.

4. CONCLUSIONS

The following conclusions can be made:

* the estimated total financial cost of 43 agricultural projects in 1989 was \$ US 2.5 million or 14 % of the total value of planned investment in these projects

* the level of both internal and external financing in cereal projects declined considerably between 1987 and 1988 and between 1988 and 1989

* this was also true for overall agricultural sector investment as well as for investment in Bunasem

* there is an apparent contradiction between the rhetoric of agricultural self-sufficiency and the level of investment in the agricultural sector

* the level of investment through the private sector should be studied

Table 1 : Program of Public Investment (PIP) in the Agricultural Sector 1988 to 1991, Planned for 1989

(S US million; 1S = 340 Zaires March 1989)

Projects	Internal		External		Total	
	Financing (IF)	%	Financing (EF)	%		%
<u>A. Cereals</u>						
PMKO/Kabinda	0.112	10	0.991	90	1.103	100
Lubude	0.020	100	0	0	0.020	100
PNR	0.129	71	0.053	29	0.182	100
PNS	0.091	100	0	0	0.091	100
Shaba Central	0.353	46	0.420	54	0.773	100
" Hinterland	0.074	6	1.124	94	1.198	100
Dev Ag Kivu	0	0	1.241	100	0.620	50(1)
Cuevette Riz.	0	0	0.847	100	0.847	100
PRAAL	0.826	100	0	0	0.826	100
Sub-total	1.605	26	4.676	74	6.281	100
<u>B. Selected Projects</u>						
Seeds	0.174	10	1.512	90	1.686	100
AG Inputs	0.029	100	0	0	0.029	100
PNE	0.065	28	0.170	72	0.235	100
RAV	0.732	51	0.691	49	1.423	100
<u>C. Total Agricultural Sector</u>						
Total Sector	4.712	26	13.012	74	17.724	100
% Cereal		34		36		35
% Seeds		3.7		11.7		9.5
% Inputs		2		1.3		1.5
% Research		15.5		5.3		8.0
% Others		44.8		45.7		46.0

(1) about 50 % of this project is on rice

Source: PIP.1988 - 91. All calculations by the author.

TABLE 2 : FINANCIAL COST OF PIP AGRICULTURAL SECTOR PLANNED
INVESTMENT FOR 1989

ITEM	S US	MILLIOIN Z	COMMENTS
1. Total Funding	17.724.000	6.026	1SUS = 340 Z
2. % External(EF)	74		
3. Value EF	13.115.760	4.459	
4. % Internal(IF)	26		
5. Value IF	4.608.240	1.567	
6. Interest on EF	655.788	223	5% X line 3
7. Interest on IF	1.843.296	627	40% X line 5
8. Total interest	2.499.084	850	lines 6+7
9. Total interest as % of total funding	14		(line 8/Line 1)X100

Source: Table 1 calculations by the author

TABLE 3: INVESTMENT IN CEREAL PROJECTS 1987 TO 1989
(SUS million: 1S= March Zaires)

Project	1987(Actual)					
	(1S=95 Z)					
Cereals	IF	%	EF	%	Total	%
PMKO/Kabinda	0.400	6	6.390	94	6.790	100
Lubude	0.116	44	0.147	56	0.263	100
PNR	0.484	55	0.394	45	0.878	100
PNS	0.084	100	0	0	0.084	100
Shaba Central	1.252	100	0	0	1.252	100
Shaba Htland	0	0	0.505	100	0.505	100
Dev Ag Kivu(1)	0	0	0	0	0	0
Cuevette Riz	0	0	0	0	0	0
PRAAL	3.000	100	0	0	3.000	100
Bunasem(1)	0.332	8	1.773	42	2.105	50
Inputs(1)	0	0	0	0	0	0
PNE(1)	0	0	3.226	50	3.226	50
RAV(1)	1.390	20	2.079	30	3.469	50
Sub-total	7.058	46	8.124	54	15.182	100
<u>Ag Sector</u>	12.884	24	41.695	76	54.579	100
% Cereal		55		19		28
Finance costs	5.154		2.085		7.239	

(1) 50 % cereal (2) IF=internal funding at 40 % interest and EF= external financing at 5 %.

Project	1988(Forecast)					
	(1S=157Z)					
Cereals	IF	%	EF	%	Total	%
PMKO/Kabinda	0.134	14	0.841	86	0.975	100
Lubude	0.025	10	0.217	90	0.242	100
PNR	0.032	22	0.115	78	0.147	100
PNS	0.032	100	0	0	0.032	100
Shaba Central	0.764	82	0.172	18	0.936	100
Shaba Htland	0.032	2	2.127	98	2.159	100
Dev Ag Kivu(1)	0	0	2.688	100	2.688	100
Cuevette Riz	0	0	0	0	0	0
PRAAL	2.694	100	0	0	2.694	100
Bunasem(1)	0.067	2	1.645	48	1.712	50
Inputs(1)	0.044	100	0	0	0.044	100
PNE(1)	0.032	2	0.873	48	0.905	50
RAV(1)	0.675	24	0.739	26	1.414	50
Sub-total	4.531	35	8.576	65	13.107	100
<u>Ag Sector</u>	9.911	33	20.146	67	30.057	100
% Cereal		46		42		44
Finance costs	3.964		1.007		4.971	

(1) 50 % cereal (2) IF=internal funding at 40 % interest

and EF= external financing at 5 %.

TABLE 3: INVESTMENT IN CEREAL PROJECTS 1987 TO 1989
(SUS million: 1S= March Zaires)

Project	1989 (Forecast)					
			(1S=340Z)			
Cereals	IF	%	EF	%	Total	%
PMKO/Kabinda	0.112	10	0.991	90	1.103	100
Lubude	0.020	100	0	0	0.020	100
PNR	0.129	71	0.053	29	0.182	100
PNS	0.091	100	0	0	0.091	100
Shaba Central	0.353	46	0.420	54	0.773	100
Shaba Htland	0.074	6	1.124	94	1.198	100
Dev Ac Kivu(1)	0	0	0.620	50	0.620	50
Cuevette Riz	0	0	0.847	100	0.847	100
PRAAL	0.826	100	0	0	0.826	100
Bunasem(1)	0.087	5	0.756	45	0.843	50
Inputs(1)	0.015	50	0	0	0.015	50
PNE(1)	0.033	14	0.085	36	0.118	50
RAV(1)	0.366	25	0.346	25	0.712	50
Sub-total	2.106	29	5.242	71	7.348	100
<u>Ag Sector</u>	4.712	26	13.012	74	17.724	100
% Cereal		45		40		41
Finance costs	2.356		0.650		3.006	

(1) 50 % cereal (2) IF=internal funding at 40 % interest
and EF= external financing at 5 %.

TABLE 4 : CHANGES IN INVESTMENT BY SECTOR 1987 TO 1989

Sector	Source	1987 to 1988		Source	1988 to 1989	
Cereal	IF	down	36 %	IF	down	54 %
	EF	up	6 %	EF	down	39 %
	S value	down	14 %	S vlaue	down	44 %
Total Ag Sector	IF	down	23 %	IF	down	52 %
	EF	down	52 %	EF	down	35 %
	S value	down	45 %	S value	down	41 %

Source: Table 3 all calculations by the author
 IF = internal government financing
 EF = external sources of financing

TABLE 5 : INVESTMENT IN BUNASEM 1987 & 1989, \$ US MILLION

Project	1987		1988		1989	
		(1\$= 95 Z)		(1\$= 157 Z)		(1\$= 340 Z)
Bunasem	IF	0.663		0.134		0.174
	%	16		4		10
	EF	3.547		3.290		1.512
	%	84		96		90
Total		4.210		3.424		1.686
	%	100		100		100

% change		1987 to 1988		1988 to 1989	
	IF	down	80 %	up	30%
	EF	down	7 %	down	54%
	S value	down	19 %	down	50%