APPENDICES

APPENDIX I

Implementation Schedule of Sudan Public Sector Manufacturing Projects

S.No.	Name of Project	Zero Date	Completion Date	
			Planned	Actual
1.	White Nile Tannery	Aug. 70	Aug. 73	Jan. 75
2.	Gezira Tannery	Apr. 73	Jan. 75	Jan. 77
3.	Abu Naama Kenaf Sacks Project	Apr. 73	Dec. 74	Feb. 76
4.	Hassahysa Spinning & Weaving Project	Jun. 73	Feb. 75	May 76
5.	North West Sennar Sugar Project	Apr. 74	Dec. 75	Oct. 76
6.	Tonj Kenaf Sacks Project	Apr. 74	Apr. 78	Unknown
7.	Hager Assalaya Sugar Project	Dec. 74	Apr. 77	Jan. 80
8.	Gadow Spinning and Weaving Project	Mar. 75	Oct. 77	Unknown
9.	Melut Sugar Project	May 75	Oct. 77	Unknown
10.	Khartoum North Spinning Project	Jun. 75	Nov. 78	Unknown
11.	Kosti Weaving Project	Nov. 75	Jul. 77	May 78
12.	Shendi Weaving Project	Nov. 75	Jul. 77	Jun. 78
13.	Nyala Weaving Project	Nov. 75	Nov. 77	Mar. 79
14.	Ed Duiem Weaving Project	Nov. 75	Apr. 78	Jan. 79
15.	Port Sudan Spinning Project	Dec. 75	Aug. 78	Unknown
16.	Mangalla Weaving Project	Jan. 76	Oct. 77	Jun. 79
17.	Kadugli Weaving Project	Jan. 76	Feb. 78	Apr. 79
18.	Haj Abdalla Spinning Project	May 77	May 80	Jun. 82

SOURCE: This table is compiled by the present writer from: (i) Project contracts, (2) Projects Bureau, "A Guide to Implementation of Industrial Projects", Ministry of Industry, Government of Sudan, 1980, (iii) Internal Reports, Ministry of Industry, 1985.

APPENDIX 2

Costs & Cost Overruns of Sudan Public Sector Manufacturing Projects*

Ls (000)

S.No.	Project	PROJECT COST			Overrun as % of planned cost
		Planned	Actual	Overrun	
1	Hager Assalaya Sugar Project	16,748	21,874	5,126	31
2	Kosti Weaving Project	3,455	3,569	114	3
3	Shendi Weaving Project	3,452	3,534	82	2
4	Nyala Weaving Project	3,539	3,628	89	3
5	Ed Duiem Weaving Project	3,497	3,734	237	7
6	Mangalla Weaving Project	3,603	3,747	144	4
7	Kadugli Weaving Project	3,517	3,845	328	9
	TOTAL	37,811	43,931	6,120	

SOURCE: Compiled by the present writer from: Planning Department, "Internal Reports," Ministry of Finance and Economic Planning, Government of Sudan.

* The last column is calculated by the present writer.

APPENDIX 3

Magnitude of Delays in Public Sector Manufacturing Projects of Sudan*

S.No.	Name of Project	MONTHS		
		Completion Delay (D)	Planned completion Period (PCP)	$\frac{D}{PCP}$ (%)
1.	White Nile Tannery	17	36	47
2.	Gezira Tannery	24	21	114
3.	Abu Naam Kenaf Sacks Project	14	20	70
4.	Hassahysa Spinning & Weaving Project	15	20	75
5.	North West Sennar Sugar Project	10	20	50
6.	Tonj Kenaf Sacks Project	-	48	-
7.	Hager Assalaya Sugar Project	33	28	118
8.	Gadow Spinning & Weaving Project	-	31	-
9.	Melut Sugar Project	-	29	-
10.	Khartoum North Spinning Project	-	41	-
11.	Kosti Weaving Project	10	20	50
12.	Shendi Weaving Project	11	20	55
13.	Nyala Weaving Project	16	24	63
14.	Ed Duiem Weaving Project	9	29	31
15.	Port Sudan Spinning Project	-	32	-
16.	Mangalla Weaving Project	20	21	95
17.	Kadugli Weaving Project	14	25	56
18.	Haj Abdalla Spinning Project	25	36	70

Source: * D and PCP columns are prepared from Appendix I. D is the difference between planned completion date and actual completion date while PCP is the difference between zero date and planned completion date.

D and D/PCP for projects with dashes are unknown as they are under implementation.

APPENDIX 4

Production of the Six Weaving Sheds of Sudan
1978-79 - 1986-87
(000 Yds)

Location / Year	Kosti	Shendi	Nyala	Ed Duiem	Mangalla	Kadugli	Total*
1978-1979	2,752	2,349	Nil	630	Nil	Nil	5,731
1979-80	2,257	1,903	717	750	121	518	6,266
1980-81	1,888	1,187	301	509	Nil	685	4,570
1981-82	1,727	1,786	119	921	Nil	399	4,952
1982-83	2,253	2,002	610	1,240	Nil	1,123	7,228
1983-84	717	1,435	254	1,386	Nil	1,130	4,922
1984-85	711	1,531	Nil	1,475	Nil	1,479	5,196
1985-86	2,851	1,159	361	1,506	Nil	1,563	7,440

Sources: Compiled by the present writer from:

(1) Bank of Sudan, "Annual Reports, 1982-1985".

(2) Economic Department, "Economic Surveys, 1984-85 - 1986-87", Ministry of Finance and Economic Planning, Government of Sudan.

* This column is calculated by the present writer.

APPENDIX 5

Implementation Schedule of Indian Public Sector Fertiliser Projects

S.No.	Location	Zero Date	Completion date	
			Planned	Actual
1.	Durgapur	Feb. 66	Dec. 69	Oct. 74
2.	Namrup (E)	Dec. 67	Jan. 71	Oct. 76
3.	Sindri (R)	Dec. 67	Oct. 71	Oct. 79
4.	Barauni	Mar. 68	Jul. 71	Nov. 76
5.	Talcher	Oct. 69	Jul. 75	Nov. 80
6.	Ramagundam	Oct. 69	Jul. 75	Nov. 80
7.	Gorakhpur (E)	Jun. 72	Apr. 75	Apr. 79
8.	Nangal II (E)	Oct.72	Mar. 76	Nov. 78
9.	Sindri (M)	Jan. 73	Feb. 78	Oct. 79
10.	Bhatinda	Aug. 74	Jan. 78	Oct. 79
11.	Trombay IV	Sep. 74	Apr. 77	May 78
12.	Panipat	Feb. 75	May 78	Sep. 79
13.	Trombay V	Oct. 75	Apr. 78	Jul. 82

Source: Compiled by the present writer from:

(1) Department of Fertilisers,Status of Fertiliser Projects as on 1st April, 1986", Ministry of Agriculture, Government of India, 1986.

(2) Internal Reports, Fertiliser Corporation of India.

(3) Internal Reports, Hindustan Fertiliser Corporation.

E = Expansion
R = Rehabilitation
M = Modernisation

APPENDIX 6

Costs and Cost Overruns of Indian Public Sector Fertiliser Projects*

(Rs. million)

S.No.	Location	Project Cost			Overrun as % of Planned Cost
		Planned	Actual	Overrun	
1.	Durgapur	381	886	505	133
2.	Namrup (E)	295	749	454	154
3.	Sindri (R)	230	608	378	164
4.	Barauni	351	923	572	163
5.	Talcher	705	2231	1526	216
6.	Ramagundam	712	2241	1529	215
7.	Gorakhpur (E)	118	184	66	56
8.	Nangal II (E)	756	1298	542	72
9.	Sindri (M)	889	1832	943	106
10.	Bhatinda	1384	2405	1021	74
11.	Trombay IV	440	763	323	73
12.	Panipat	1397	2214	817	58
13.	Trombay V	1114	1726	612	55
	TOTAL	8772	18060	9288	

Sources: This table is compiled by the present writer from:

(1) Department of Fertilisers, "Status of the Fertiliser Projects as on 1st April, 1986" Ministry of Agriculture, Government of India, 1986.

(2) Internal Reports, Fertiliser Corporation of India.

(3) Internal Reports, Hindustan Fertiliser Corporation.

* The last two columns are calculated by the present writer.

E = Expansion
R = Rehabilitation
M = Modernisation

APPENDIX 7

Magnitude of Delays in Indian Public Sector Fertiliser Projects*

S.No.	Location	MONTHS		
		Copmletion Delay (D)	Planned Completion Period (PCP)	D/PCP %
1.	Durgapur	58	46	126
2.	Namrup (E)	69	37	186
3.	Sindri (R)	96	46	209
4.	Barauni	64	40	160
5.	Talcher	64	69	93
6.	Ramagundam	64	69	93
7.	Gorakhpur (E)	48	34	141
8.	Nangal II (E)	32	41	78
9.	Sindri (M)	20	61	33
10.	Bhatinda	21	41	51
11.	Trombay IV	13	31	42
12.	Panipat	16	39	41
13.	Trombay V	51	30	170

* D and PCP columns are prepared from Appendix 5. D is the difference between planned completion date and actual completion date while PCP is the difference between zero date and planned completion date.

E = Expansion
R = Rehabilitation
M = Modernisation

APPENDIX 8

Sudan Exports and Imports* 1984
Value in Ls (000)

EXPORTS		IMPORTS	
Commodity	Value	Commodity	Value
Cotton	450,000	Food stuffs	195,972
Gum Arabic	64,106	Beverages & Tobacco	28,472
Sesame	96,111	Petroleum	409,101
Groundnuts	26,773	Raw materials	6,174
Foodgrains	10,257	Chemicals	182,202
Livestock	92,633	Manufactured goods	279,017
Hides and Skins	17,418	Machinery and Equipment	217,240
Edible oils	19,121	Transport equipment	148,704
Cakes and Meals	26,200	Textiles	23,884
Seeds	13,599		
Others	775		
TOTAL	817,293		1,490,766

Source: The table is compiled by the present writer from the data found in Bank of Sudan, "Annual Report, 1985", pp. 92-99.

* The imports figures do not reflect the country's actual demand of the imported items because of the continuous restrictions on imports resulting from balance of payments deficits which became very acute in the 1980s.

APPENDIX 9

Measurement of Completion Delays in Sudan and Indian Projects

The statistical tools used to measure completion dalays are the mean, standard deviation, coefficient of variation and average completion delay. Data presented in Appendices 3 and 7 are used to calculate the above measures for Sudan and India respectively as defined by the following equations:

$$\bar{D} = \sum_{i=1}^{n} D_i ,$$

$$\sigma = \sqrt{\frac{\sum_{i=1}^{n} (D_i - \bar{D})^2}{n}} ,$$

$$cv = \frac{\sigma}{\bar{D}} \quad \text{and}$$

$$ACD = \frac{\sum_{i=1}^{n} \frac{D_i}{PC\ P_i}}{n} \quad \text{where,}$$

$\bar{D}$ = mean delay in completion

Σ = summation notation

D_i = completion delay of the ith project

n = number of projects in the industry

σ = standard deviation of completion delay

cv = coefficient of variation of completion delay

ACD = average completion delay for industry

Appendix 9 (Contd.)

PCP_i = Planned completion period for the ith project.

For Sudan projects : $n^* = 13$; $\bar{D} = \frac{218}{13} = 17$ months

$\sigma = \sqrt{\frac{599}{13}} = 7$ months; cv = 41 %; ACD = 69 %

For Indian fertiliser projects : n = 13; $\bar{D} = \frac{616}{13}$

= 47 months

$\sigma = \sqrt{\frac{7837}{13}} = 25$ months; cv = 53 %; ACD = 109 %

---

* Out of the eighteen projects of Sudan, five are still under implementation. Therefore, n = 13.

APPENDIX 10

Application Form for Licensing and Concessions

According to the Encouragement of Investment Act, 1980 (Sudan)

1. Name of the applicant, address and telephone.
2. Date and present business registration No.
3. Nature of present business
4. For the proposed project:
   a) Proposed location (province and district).
   b) Proposed name of the enterprise.
5. Brief description of the project (equipments, necessary resources and costs for establishing the enterprise).
6. Nature and location of activities of the proposed project.
7. Economies of the proposed project:
   a) investment outlay of the project (if it is a loan finance, terms of payment should be stated; if there is a contract, loan or collaboration agreement it should be attached).
   b) investment capital, divided into local and foreign components.
   c) guarantee of financial ability to implement the project.
   d) technical expertise (local and foreign).
8. Previous concessions given, if any.
9. Applied-for concession.
10. Expected date of production start-up of the project.

11. Other information.

12. a) Signature of the applicant.
    b) Name of the applicant.
    c) Place.

N.B.

The following documents are to be attached:

a) Techno-economic feasibility study of the project.
b) Tax certificate and tax clearance from the Taxation Department.
c) Financial ability certificate from a commercial bank.

APPENDIX 11

NEW INDUSTRIAL STRATEGY (INDIA)

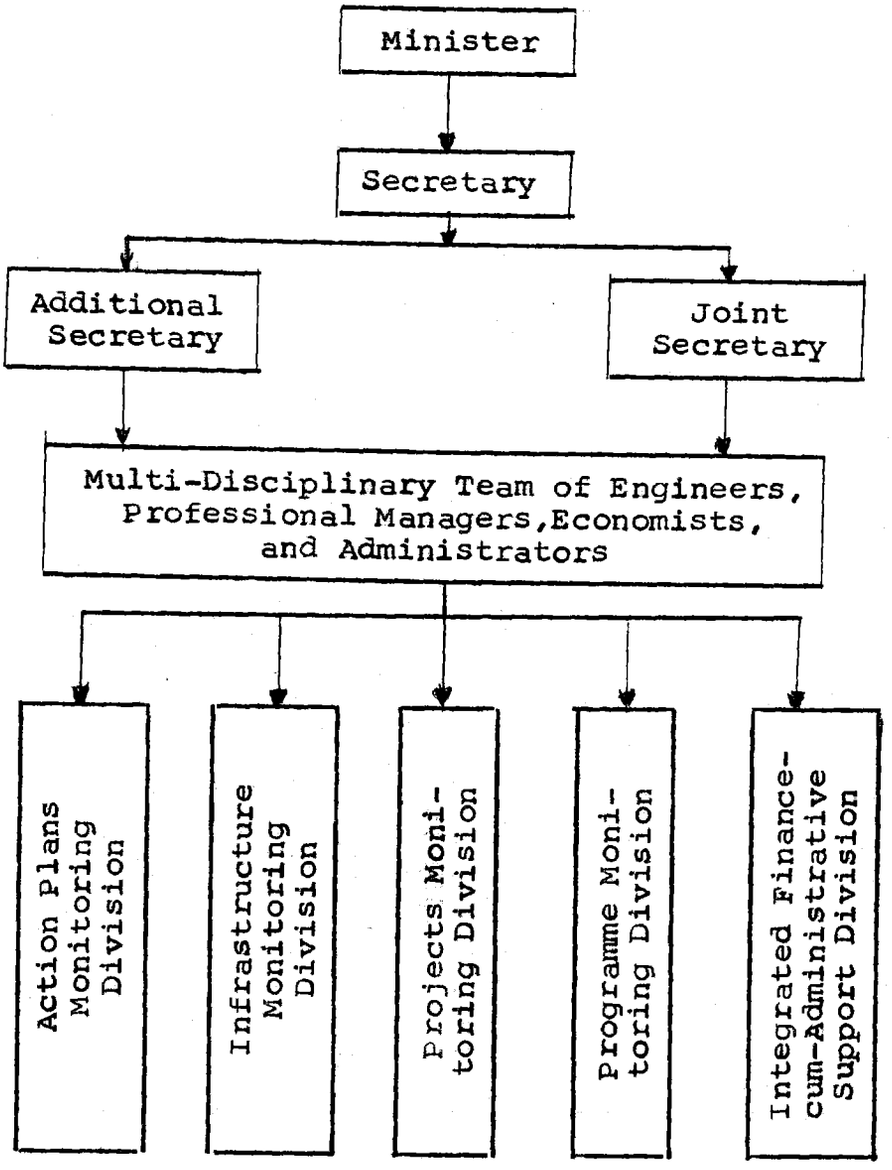
The Government has revised the licensing system in an attempt to encourage setting industrial undertakings in backward areas. In this liberalised system, 30 industries have been eliminated from the purview of licensing. There will be no need for non-MRTP/non-FERA companies to obtain industrial licences, except in projects involving an investment in fixed assts of more than Rs. 500 million, if they are located in backward areas, or more than Rs. 150 million if they are located in non-backward areas. However, this facility will be denied to units if they are located within 50 kms of the periphery of cities having a population of more than 2.5 million, 30 kms of cities with more than 1.5 million people, 15 kms of the cities having between 0.75 and 1.5 million people and standard urban/municipal area limits of other cities and towns. Projects which require foreign exchange for imported raw materials (other than steel and specified items) and components for more than 30 per cent of the value of ex-factory production from the first year of commercial production will also have to get a licence.

SOURCE : Extracted by the present writer from:

Saxena, Anoop, "New Industrial Strategy - Good for a start", Business India, 13-26 June, 1988, p.23.

APPENDIX 12

Organisation Chart of the Ministry of Programme Implementation (India)



Source: Ministry of Programme Implementation, "Annual Report 1985-86", Government of India, p.5.

Key: ⟶ Flow of authority.

APPENDIX 13

Format for the Integrated Reporting System :
Projects Under Construction
(India)

Report No.	Subject	Periodicity	P u r p o s e
PC-1	Basic Information	Quarterly	Shows information regarding location, nature of the project, date of start of construction, collaboration arrangements etc.
PC-2	Pre-Construction Information	Quarterly	Shows information regarding the time framed in respect of preliminary project formulation, feasibility study report, detailed project report etc.
C-1	Physical Progress Report	Quarterly	Gives information relating to civil works of factory construction.
C-2	Physical Progress Milestones	Quarterly	Indicates position relating to achievement and impact of delays on project completion date.
C-3	Financial progress	Quarterly	Shows information on the total project cost and progress of expenditure and causes of variation.
C-4	Progress of Inter-related Activities	Quarterly	Gives information relating to the agencies responsible for different activities with the execution of the project.
C-5	Manpower	Quarterly	Shows break-up of manpower recruited and training undertaken.
C-6	Scarce Resource Position	Quarterly	Shows current position and projection of requirement of scarce materials.

SOURCE: Information and Research Division, "Management Information System Reporting by: Public Enterprises to Government", Ministry of Finance, Government of India, 1975, p.5.

APPENDIX 14

Employee-Turnover at the Projects Bureau, 1972-81
(Sudan)

Office	No. of Employees who left	Percentage of Total*
Managing Director ...	8	10
Finance & Administration ...	20	26
Engineering ...	20	26
Follow-up ...	12	15
Services ...	18	23
TOTAL ...	78	100

Source: Projects Bureau, "Internal Records", Ministry of Industry, Government of Sudan, 1982.

* This column is calculated by the present writer.