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ADVISORY SERVICES IN INDUSTRIAL PLANNING

DP/SYR/76/011

SYRIAN ARAB REPUBLIC .

Technical report: Financial and economic analysis of the  
Deir es Zor vegetable oil project

Prepared for the Government of the Syrian Arab Republic  
by the United Nations Industrial Development Organization,  
executing agency for the United Nations Development Programme

Based on the work of H. Khoudja,  
industrial development officer

United Nations Industrial Development Organisation  
Vienna

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Explanatory notes

References to dollars (\$) are to United States dollars, unless otherwise stated.

The monetary unit in the Syrian Arab Republic is the Syrian pound (LS). During the period covered by the report (August 1977), the value of the Syrian pound in relation to the United States dollar was \$US 1 = LS 3.90.

A full stop (.) is used to indicate decimals.

A comma (,) is used to distinguish thousands and millions.

References to "tons" are to metric tons, unless otherwise specified.

The following forms have been used in tables:

A dash (-) indicates that the amount is nil or negligible.

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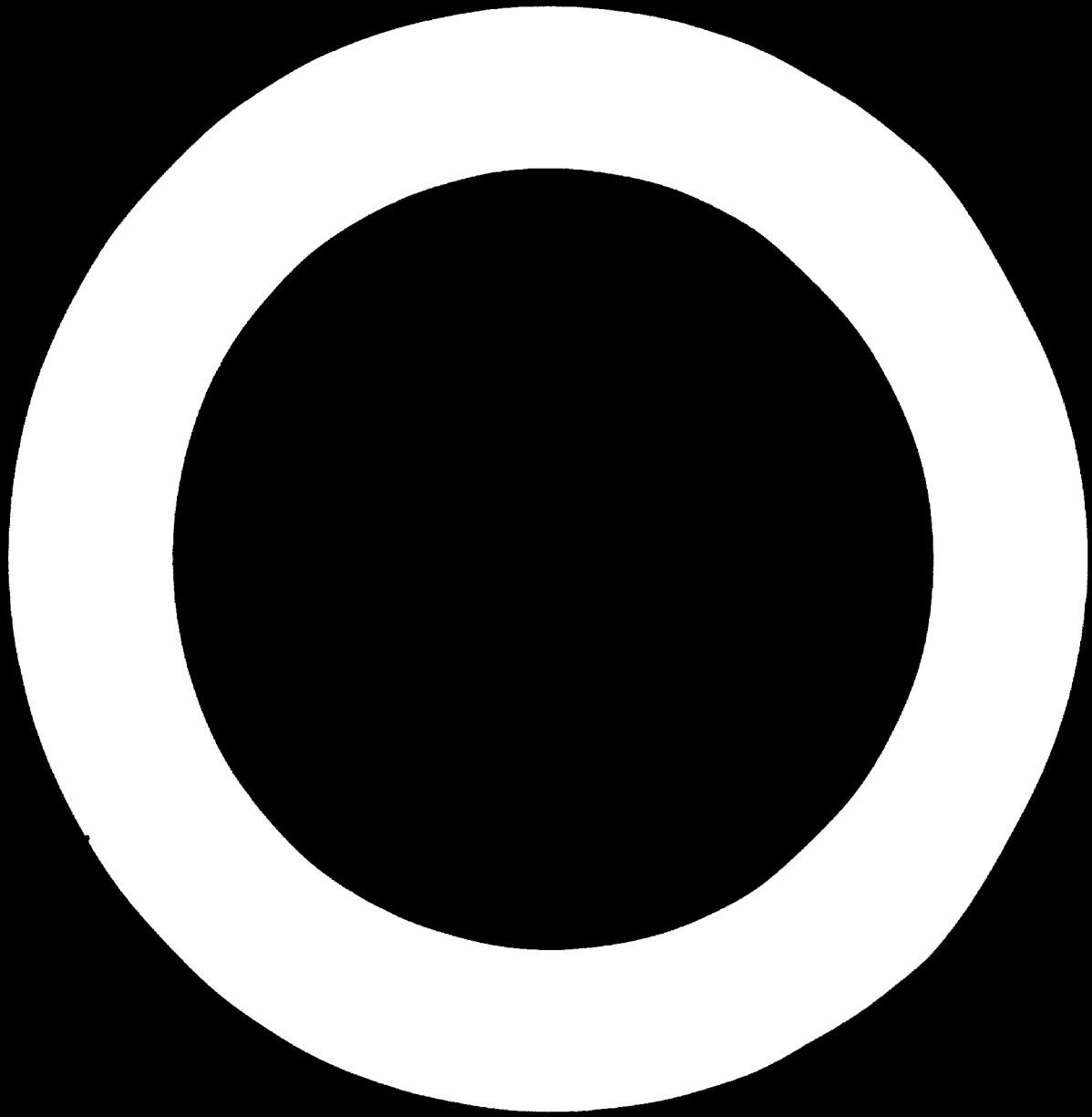
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ABSTRACT

This is the report of a mission to the Syrian Arab Republic as part of the United Nations Development Programme (UNDP) project "Advisory services in industrial planning" (DP/SYR/76/011). The United Nations Industrial Development Organization (UNIDO), as executing agency, fielded a team of UNIDO staff members under the UNDP New Dimensions Programme.

This mission report covers the financial and economic analysis of a proposed vegetable-oil production plant at Deir ez Zor. The plant is intended to have an annual capacity of 35,000 tons of cotton seed in its first stage (starting 1978-1979), which would be expanded to 60,000 tons in the second stage (1983-1984). The analysis considers the case of an unsubsidized project, and covers its commercial profitability and socio-economic value to the national economy.

It is concluded that the project is viable and would have a favourable effect on the national economy, partly by stimulating the Deir ez Zor cotton growing and ginning activities (with the resultant benefits of increased edible oil and cattle feed), and partly by acting on the balance of payments of the country by reducing imports of fats and edible oil and increasing exports of linters. The Deir ez Zor area would also benefit from the increased employment opportunities offered by the project.



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### INTRODUCTION

This analysis is based on the report of Mr. H. Koenig, vegetable oils extraction expert: "The development of the vegetable oil industry by the establishment of modern solvent extraction plants". In his report, Mr. Koenig recommends the introduction of the solvent extraction process to the plants at Aleppo and the establishment of a new vegetable oil factory in Deir ez Zor. The following financial analysis concentrates on the Deir ez Zor project for the following reasons:

Syrian authorities appear to have assigned a high priority to the establishment of such a project in the Deir ez Zor area

The main raw material (cotton seed) is available in sufficient quantities

Most of the factory output can easily be sold in the area



## I. PROJECT FORMULATION

### A. The project

The proposed plant will initially have an annual processing capacity of 35,000 tons of cotton seeds; after a few years, this will increase to 60,000 tons. The solvent extraction process will be used to produce the following output:

	<u>First stage</u> 35,000 t capacity (tons)	<u>Second stage</u> 60,000 t capacity (tons)
Linters	3,150	5,400
Hulls	10,850	17,835
Oil-cake	14,280	25,450
Edible oil	6,020	10,180

As mentioned, there should be no difficulty in selling the above quantities. However, a study should be carried out to define the precise extent of the Syrian market for edible oil, and the optimum size of the new oil factories to be established.

### B. Finance

#### Investment

Table 1 shows the investment required in the first and second stages of the plant. The costs are broken down by years and according to source (foreign and domestic). The interest rate during construction is computed at 9%. The main parts of table 1 are summarized below.

#### Consolidated plant investment ( '000 LS)

	<u>First stage</u>	<u>Second stage</u>
Fixed assets	25,800	9,550
Preliminary	950	350
Working capital	3,945	2,864
Initial investment	30,695	12,764
Interest rate during construction	4,815	1,888
Total investment	35,510	14,652

The working capital is described in more detail in table 2.

The expansion is due to take place in 1982-1983 after the completion of the first stage. It is expected that the project will be extended to 1994. This is reflected in table 3, where equipment from the first stage is shown as being replaced in 1989-1990 in order to take account of this extended life. Estimated replacement costs are somewhat lower than the initial investment because it was assumed that the factory would benefit from acquired know-how and have a greater stock of technical experience to be used in the expansion scheme.

#### Income

In table 4, the sales revenues have been calculated using an unsubsidized price for edible oil (LS 1,600/ton). According to the technical specialist, the existing factory in Aleppo is receiving a subsidy of LS 1,100 per ton of edible oil. The different process to be used in the proposed factory at Deir ez Zor would be more efficient than that used in the Aleppo factory, and would have lower production costs. It would also produce by-products, such as oil-cake used as animal feed. The income generated by the by-products represents more than half of the annual sales revenues. Given these added revenues, and a better technology, the project could balance its accounts, and would not need a subsidy.

#### Operating costs

In the operating costs calculation (table 5) a provision for Security and Property Taxes has been included. The operating costs were calculated based on the assumption that the plant will be functioning at capacity.

#### Capital structure

Like all other Syrian projects, the total financing of the project will be covered by loans. It is assumed in table 6 that part of the financing will come from suppliers' credits, to be repaid in seven years (including a two-year grace period). The credits will bear 9% interest per annum. Local loans will be provided by the Public Debt Fund at a rate of interest of 9% and repaid over ten years.

#### Financial obligations

Table 7 shows the financial obligations over the entire life of the project. These obligations are very heavy during the first years of operations and decrease thereafter.

Table 1. Plant investment and schedule of construction  
('000 Syrian pounds)

Items	1st stage						2nd stage					
	1978		1979		1983		1984		1983		1984	
	Domestic	Foreign	Total	Domestic	Foreign	Total	Domestic	Foreign	Total	Domestic	Foreign	Total
Fixed assets	11 300	8 100	19 400	2 300	4 100	6 400	2 450	4 550	7 000	1 000	1 550	2 550
Equipment installed	4 300	8 000	12 300	1 700	4 000	5 700	150	4 500	4 650	750	1 500	2 250
Land	1 500	-	1 500	-	-	-	-	-	-	-	-	-
Buildings	4 800	-	4 800	200	-	200	2 200	-	2 200	50	-	50
Other	700	100	800	400	100	500	100	50	150	200	50	250
Preliminary expenses	150	250	400	550	-	550	50	50	100	250	-	250
Planning services	-	250	250	-	-	-	-	50	50	-	-	-
Start-up expenses	-	-	-	500	-	500	50	-	50	200	-	200
Others	150	-	150	50	-	50	-	-	-	50	-	50
Working capital	-	-	-	3 826	119	3 945	-	-	-	2 792	72	2 864
Initial investment	11 450	8 350	19 800	6 676	4 219	10 895	2 500	4 600	7 100	4 042	1 622	5 664
Interest during construction	2 204	1 608	3 812	614	389	1 003	481	886	1 367	372	149	521
Total investment	13 654	9 958	23 612	7 290	4 608	11 898	2 981	5 486	8 467	4 414	1 771	6 185

Table 2. Working capital  
(\*000 Syrian pounds)

	1st stage	2nd stage	Increase in working capital
<b>Raw materials</b>			
Cotton seeds (1-month supply)	975	1 625	650
Consumables (1-month supply)	233	375	142
<b>Finished product inventory</b>			
Linters (3-month supply)	433	743	310
Hulls (1-month supply)	181	297	116
Oilcake (1-month supply)	714	1 273	559
Edible oil (1-month supply)	803	1 357	554
Accounts receivable (1 month of sales)	1 842	3 175	1 333
Accounts payable (1-month supply)	(1 209)	(2 000)	(791)
Cash in hand (2 months wages + overheads)	169	225	56
Depreciation charges included in inventory	(196)	(261)	(65)
<b>Working capital</b>	3 945	6 809	2 864

Table 3. Depreciation, replacements and residual values  
('000 Syrian pounds)

Items	1st stage 1978-1979	2nd stage 1983-1984	Replace- ments 1985	Replace- ments 1989-1990	Expected lifetime from starting- up (years)	Annual depreciation		Years of depre- ciation	Residual values in 1994
						1980-1984	1985-1994		
<b>Fixed assets</b>	25 800	9 550	-	17 000					
Equipment installed	18 000	6 900	-	15 700	10	1 800	2 490	1980-1994	9 000
Land	1 500	-	-	-	Non- depreciable	-	-		1 500
Buildings	5 000	2 250	-	-	25	200	290	1980-1994	2 900
Others	1 300	400	1 300	1 300	5	260	340	1980-1989	-
Preliminary expenses	950	350	-	-	10	95	130	1980-1994	-
Working capital	3 945	2 864	-	-	Non- depreciable	-	-		6 809
Interest during con- struction	4 815	1 888	-	-	10	482	670		
<b>Total</b>	<u>35 510</u>	<u>14 652</u>	<u>1 300</u>	<u>17 000</u>		<u>2 837</u>	<u>3 920</u>		<u>20 209</u>

Table 4. Annual income

	Price (LS/ton)	1980 - 1984		1985 - 1994	
		Quantity (tons)	Value ( '000 LS)	Quantity (tons)	Value ( '000 LS)
<b>Annual sales</b>			22 102		38 095
Linters	550	3 150	1 732	5 400	2 970
Hulls	200	10 850	2 170	17 835	3 567
Oil-cake	600	14 280	8 568	25 450	15 270
Edible oil	1 600	6 020	9 632	10 180	16 288
<b>Residual value</b>					20 209

Table 5. Annual operating costs (at capacity utilization)  
( '000 Syrian pounds)

Items	Years					
	1980 - 1984			1985 - 1994		
	Variable	Fixed	Total cost	Variable	Fixed	Total cost
Raw materials	11 375			19 500		
Consumables	2 800			4 500		
Imported	1 428			2 295		
Domestic	1 372			2 205		
Wages (domestic)		1 213			1 569	
Overheads (domestic)		350			480	
Security and property taxes		15			20	
<b>Operating cash expenses</b>	14 175	1 578	15 753	24 000	2 069	26 069
Depreciation		2 837	2 837		3 920	3 920
<b>Total operating costs</b>			18 590			29 989

Table 6. Capital structure  
( '000 Syrian pounds)

Items	First stage			Second stage		
	1978	1979	Total	1983	1984	Total
<b>Investment</b>	23 612	11 898	35 510	8 467	6 185	14 652
Initial investment	19 800	10 895	30 695	7 100	5 664	12 764
Interest during construction	3 812	1 003	4 815	1 367	521	1 888
<b>Financing</b>	23 612	11 898	35 510	8 467	6 185	14 652
Domestic loans	11 962	4 948	16 910	3 667	3 385	7 052
Foreign loans	11 650	6 950	18 600	4 800	2 800	7 600





## II. PROJECT EVALUATION

### A. Commercial profitability

The integrated financial analysis contained in table 8 was prepared with the data described in the first part of this report. It is the starting point for the analysis of the project in terms of commercial profitability.

#### Simple rate of return on total investment

The simple rate of return is defined as the ratio of net profit before interest in a normal year to the total investment. As there are two phases in the project, there will be different rates calculated for 1980 and 1985.

$$\text{First Stage. Rate of return} = \frac{3,512,000}{35,510,000} = 0.099.$$

With a return on investment of 10%, the project is commercially acceptable, since the rate of interest prevailing in the capital market is 9%.

$$\text{Second Stage. Rate of return} = \frac{8,106,000}{50,162,000} = 0.16$$

It seems that the expanded project corresponds to the optimal size of the plant as it yields the highest return on investment.

#### Pay-back period

The pay-back period is the time needed for the project to recover its total investment. Table 9 shows this calculation: annual cash earnings are subtracted from the total investment. The table shows that the investment for both stages will be recovered in less than nine years.

#### Net present value and internal rate of return

The net present value (NPV) of the project is calculated in table 10 and is equal to LS 2,314,000. The NPV becomes slightly negative at a discount rate of 14%. Further calculations (table 11) give an internal rate of return of 13.99%, which is a good rate, higher than the rate of interest on loans for this project. For a discount rate of 13%, the net present value is positive.

Table 5. Integrated financial analysis, unadjusted percent (over US)

	1990	1991	1992	1993	1994
<b>Investment</b>					
Fixed assets	100	100	100	100	100
Construction	-	-	-	-	-
Replacement	-	-	-	-	-
<b>Operating costs</b>					
Operating cash	32 236	31 421	30 426	30 163	30 085
Depreciation	26 069	26 069	26 069	26 069	26 069
Interest	15 753	15 753	15 753	15 753	15 753
<b>Income</b>					
Sales revenue	38 095	38 095	38 095	38 095	38 095
Residual value	38 095	38 095	38 095	38 095	38 095
<b>Net cash earnings</b>					
Net profit after interest	5 327	5 327	5 327	5 327	5 327
Plus interest	2 927	2 927	2 927	2 927	2 927
Net profit before interest	8 106	8 106	8 106	8 106	8 106
Plus depreciation	3 512	3 512	3 512	3 512	3 512
plus residual value	3 512	3 512	3 512	3 512	3 512
Financial sources					
Loan	10 726	10 726	10 726	10 726	10 726
Financial obligations					
Payment	3 125	3 125	3 125	3 125	3 125
Interest return	2 927	2 927	2 927	2 927	2 927
Net cash balance Net cash flow plus financial sources - obligations	(233)	(233)	(233)	(233)	(233)
Cumulative net cash balance	14 055	14 055	14 055	14 055	14 055

Table 9. Calculation of the pay-back period  
('000 Syrian pounds)

<u>Investment year</u>	<u>Nominal amount</u>	
1978	23 612	
1979	11 898	
1983	8 467	
1984	6 185	
<u>Annual net cash earnings (Year)</u>		<u>Uncovered investment at end of year</u>
1978	-	23 612
1979	-	35 510
1980	6 349	29 161
1981	6 349	22 812
1982	6 349	16 463
1983	6 349	18 581
1984	6 349	18 417
1985	12 026	6 391
1986	12 026	-

Break-even point

The break-even point was determined for the expanded project with a capacity of 60,000 tons per annum. Data for the calculation of the break-even point is taken from table 5, where operating costs are broken down into variable and fixed costs. The variable costs consist mainly of the costs of raw materials, and consumables such as utilities and spare parts. The fixed expenses consist of wages, overheads and depreciation of equipment. The graph in the figure shows that the break-even point is reached at 33% of capacity utilization, which gives a very broad safety margin against production fluctuations.

B. National profitability

The socio-economic contributions of the project can be evaluated from the following aspects: net national value added; income distribution effect; and net foreign exchange effect.



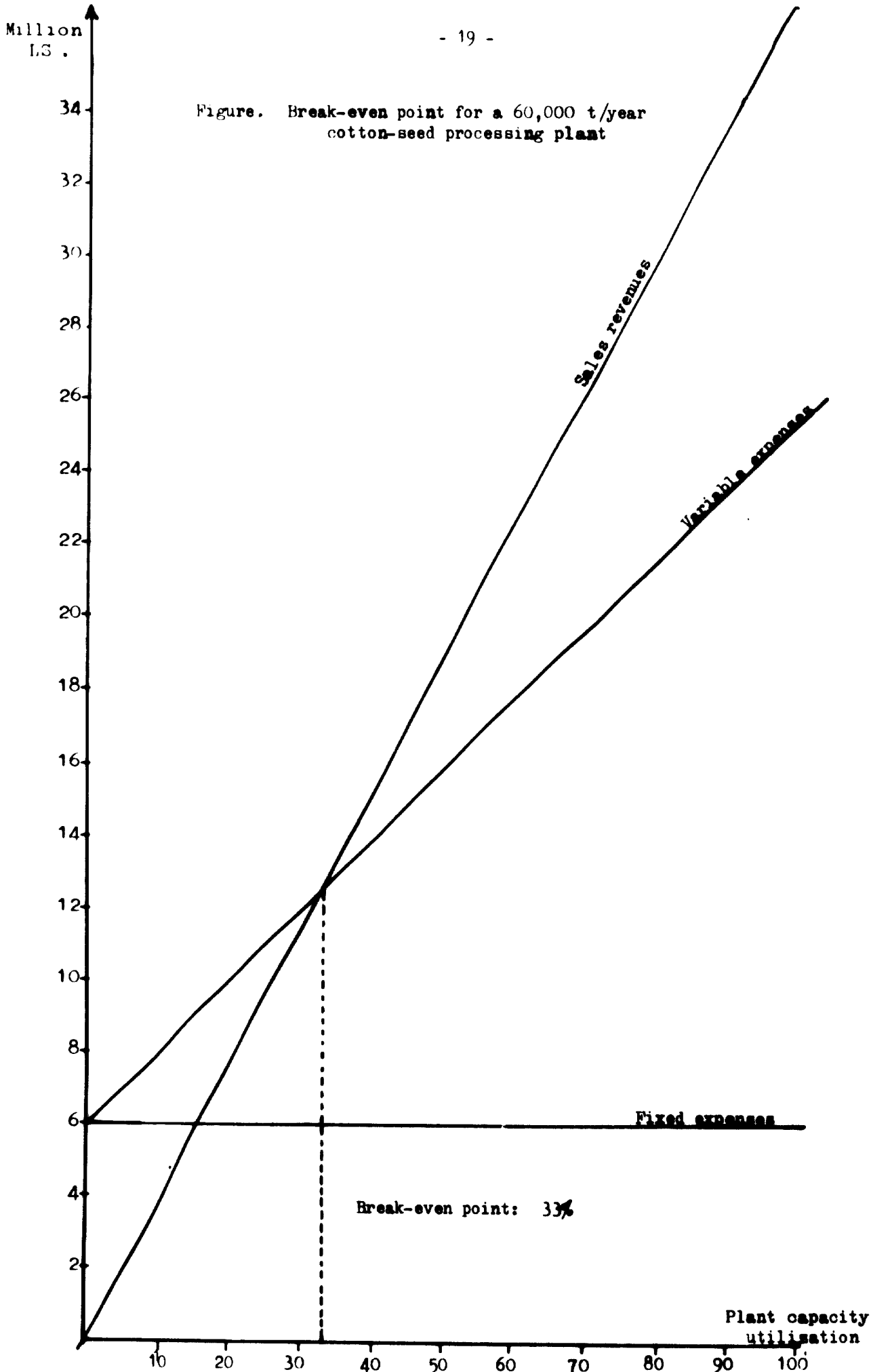


Figure. Break-even point for a 60,000 t/year cotton-seed processing plant

Break-even point: 33%

Plant capacity utilisation

National value added

The value added generated by the project is the difference between the value of its output and the value of the material inputs used, including capital and current material inputs.

In the calculation of the value added no adjustment has been made to the foreign rate of exchange. The official rate of exchange in August 1977 was LS 3.90 to \$1.00, and the unofficial one was LS 4.00 or slightly more to \$1.00. The difference between the rates is thus negligible: no adjustment is needed to the foreign components of the value added. Moreover, it does not appear that the adjusted rate of exchange has been used as a national parameter by the State Planning Commission or by any other official body.

Furthermore, it was not possible to obtain a social rate of discount for discounting the nominal annual values of the net national value added. A 9% social rate of discount has been adopted throughout the analysis because it is at this rate that most industrial projects are financed from the Public Debt Fund. This rate is comparable to the interest rates generally used in the world capital market, in suppliers' credits, Eurodollar financing or World Bank loans. It is expected that the Syrian Arab Republic will finance most of its future industrial projects at a rate close to the one prevailing in the international capital market.

Table 12 provides the data necessary for the assessment of the project's contribution to the economy in terms of value added and distribution of income in the Deir ez Zor area.

Absolute efficiency test. With an annual processing capacity of 35,000 tons of cotton-seeds, the net domestic added value for a normal year of operations (in this case 1980) amounts to LS 7,577,000. This amount covers the wages and leaves a social surplus of LS 6,364,000. Even after repatriating the interest on foreign loans, the net national value added remains considerable and amounts to LS 5,903,000. The project, therefore, passes the absolute efficiency test. With an increased capacity (60,000 t/year), the project generates a net domestic value added estimated at LS 12,315,000 and, after the payment of interest on foreign loans, the net national value added is still large (LS 11,631,000 in 1985). This amount more than covers the wages and generates a large surplus.

Table 12. Integrated value added analysis  
('000 LS)

Items	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1978-1994
Value of output			22 102	22 112	22 102	22 102	22 112	38 095	38 095	38 095	38 095	38 095	38 095	38 095	38 095	38 095	38 095	58 304
Domestically marketed			22 112	22 102	22 102	22 102	22 102	38 095	38 095	38 095	38 095	38 095	38 095	38 095	38 095	38 095	38 095	38 095
Value of material inputs	19 800	10 895	14 525	14 525	14 525	21 625	20 189	25 780	24 480	24 480	24 480	33 480	32 480	24 480	24 480	24 480	24 480	24 480
Investment	19 800	10 895			7 100	5 664	1 300					9 000	8 000					
Imported	8 350	4 219			4 600	1 622	200					5 000	5 000					
Domestically procured	11 450	6 676			2 500	4 042	1 100					4 000	3 000					
Current material inputs	14 525	14 525	14 525	14 525	14 525	14 525	24 480	24 480	24 480	24 480	24 480	24 480	24 480	24 480	24 480	24 480	24 480	24 480
Imported	1 428	1 428	1 428	1 428	1 428	1 428	2 295	2 295	2 295	2 295	2 295	2 295	2 295	2 295	2 295	2 295	2 295	2 295
Domestically procured	12 187	12 187	12 187	12 187	12 187	12 187	20 625	20 625	20 625	20 625	20 625	20 625	20 625	20 625	20 625	20 625	20 625	20 625
Infrastructural services	910	910	910	910	910	910	1 560	1 560	1 560	1 560	1 560	1 560	1 560	1 560	1 560	1 560	1 560	1 560
Net domestic value added (output value-input value)	(19 800)	(10 895)	7 577	7 577	7 577	477	1 913	12 315	13 615	13 615	13 615	4 615	5 615	13 615	13 615	13 615	13 615	33 824
Repatriated payments	1 608	389	1 674	1 394	1 089	757	394	684	570	445	309	161						
Interest	1 608	389	1 674	1 394	1 089	757	394	684	570	445	309	161						
Net national value added (Domestic value added - repatriated payments)	(21 408)	(11 284)	5 903	6 183	6 488	(280)	1 519	11 631	12 045	13 170	13 306	4 454	5 615	13 615	13 615	13 615	13 615	33 824
Wages			1 213	1 213	1 213	(280)	1 213	1 569	1 569	1 569	1 569	1 569	1 569	1 569	1 569	1 569	1 569	1 569
Social surplus			4 690	4 970	5 275		306	10 062	11 476	11 601	11 737	2 885	4 046	12 046	12 046	12 046	12 046	32 255
Discounting factors at the social rate of discount of	0.958	0.879	0.806	0.740	0.678	0.623	0.571	0.524	0.481	0.441	0.405	0.371	0.341	0.313	0.287	0.263	0.241	
Discounted values of wages			978	898	824	756	693	822	755	692	635	582	535	491	450	413	378	9 902
Discounted values of the net national value added	(20 508)	(9 919)	4 758	4 399	(174)	587	6 095	6 275	6 275	5 838	5 389	1 652	1 915	4 262	3 908	3 581	8 152	31 635
Discounted values of investments	20 508	9 919			4 423	3 234	651					-3 339	2 728					44 332

Relative efficiency test. The relative efficiency test determines how much value added is generated by one unit of investment. For this purpose the discounted net national value added generated by the project throughout its life is divided by the discounted value of all investments made during the same period. The investments include initial investments, investments for expansion and replacements. For the 60,000 t/year plant the following result is obtained:

$$\frac{\text{Discounted values added}}{\text{Discounted investments}} = \frac{31,160,000}{44,832,000} = 0.70$$

This means that a unit of investment in fixed capital, when discounted to the present value, generates 0.70 units of discounted net national value added. This a good ratio, which makes the project attractive and profitable to the national economy. Such a result is expected because the project would use a large amount of national resources (raw materials, labour etc.) for a relatively small investment.

#### Distribution effect

The distribution of the net value added is shown in table 13 for both stages: initial capacity (1980), and increased capacity (1985).

In 1980 the oil factory will generate a net national value added of LS 3,990,000. Of this amount the wage earners will get LS 1,213,000 and the government LS 2,777,000 in profit, taxes and interest on loans. In 1985 the value added increases with capacity and amounts to LS 8,945,000 shared between the wage earners (18%) and the government (82%).

#### Net foreign exchange effect

The calculation of the net foreign exchange effect is based on the following assumptions:

There will be no export sales, since the country is still a net importer of edible oil

Marketing of output locally will be a substitution for import

The imported equipment is financed with a supplier's credit

Table 14 gives information on the foreign exchange situation of the project throughout its life.



Table 13. Distribution of the net national value added  
('000 Syrian pounds)

	Initial capacity	Increased capacity
	1 980	1 985
<u>Value of output</u>	22 102	38 095
Sales Revenues	22 102	38 095
<u>Value of inputs</u>	17 362	28 400
Investment (depreciation)	2 837	3 920
Current material inputs	14 525	24 480
Imported	1 428	2 295
Domestic	12 187	20 625
Infrastructural services	910	1 560
<u>Net domestic value added</u>	4 740	9 695
<u>Repatriated payments</u>		
Interest (average over 10 years)	750	750
<u>National net value added</u>	3 990	8 945
Wages	1 213	1 569
Government revenues (profit, taxes and interest on domestic loans)	2 777	7 376

Table 14. Foreign-exchange effect  
('000 LS)

Items	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1978-1994	
Foreign exchange inflow			1 732	1 732	1 732	6 532	4 532	2 970	2 970	2 970	2 970	2 970	2 970	2 970	2 970	2 970	2 970	2 970	
Foreign loans	11 650	6 950				4 800	2 800												
Export of lintier			1 732	1 732	1 732	1 732	1 732	2 970	2 970	2 970	2 970	2 970	2 970	2 970	2 970	2 970	2 970	2 970	
Foreign exchange outflow	4 650		6 211	6 211	6 211	8 110	6 009	4 249	4 249	4 249	4 249	4 248	2 295	2 295	2 295	2 295	2 295	2 295	
Imported equipment	4 650					1 900													
Imported current materials			1 428	1 428	1 428	1 428	1 428	2 295	2 295	2 295	2 295	2 295	2 295	2 295	2 295	2 295	2 295	2 295	
Repayment of foreign loans			3 109	3 389	3 694	4 025	4 387	1 270	1 384	1 509	1 645	1 792							
Interest on foreign loans			1 674	1 394	1 089	757	394	684	570	445	309	161							
Net foreign exchange flow	7 000	6 950	(4 479)	(4 479)	(4 479)	(1 578)	(1 677)	(1 279)	(1 279)	(1 279)	(1 279)	(1 278)	675	675	675	675	675	675	
Import substitution effect (Edible oil)			9 632	9 632	9 632	9 632	9 632	16 095	16 095	16 095	16 095	16 095	16 095	16 095	16 095	16 095	16 095	16 095	
Net foreign exchange effect	7 000	6 950	5 153	5 153	5 153	8 054	7 955	14 816	14 816	14 816	14 816	14 817	16 770	16 770	16 770	16 770	16 770	16 770	
Discounting factors at the social rate of discount 9%	0.958	0.879	0.806	0.740	0.678	0.623	0.571	0.524	0.481	0.441	0.405	0.371	0.341	0.313	0.287	0.263	0.241	0.241	
Discounted value of the net foreign exchange effect	6 706	6 109	4 153	3 813	3 494	5 018	4 542	7 764	7 126	6 534	6 000	5 497	5 719	5 249	4 813	4 411	4 042	4 042	90 990

It indicates that the oil factory will have positive net foreign exchange flows over its implementation period thanks to the loan given by the machinery supplier. However, between 1980 and 1989, the project will have negative annual net foreign exchange flows due to the repayment of foreign loans and interest and the import of current material inputs.

The situation changes radically when the foreign exchange saved due to import substitution is taken into consideration. In this case the net foreign exchange effect is positive throughout the project's lifetime. By discounting the annual net foreign exchange effects at the social rate of discount, we arrive at a present value of the net foreign exchange effect of LS 90,990,000. Hence, the amount of foreign exchange saved by implementing this project would be such that in spite of repaying the foreign loans and using imported material, there is still a surplus, which in terms of present value amounts to LS 90,990,000.

### III. CONCLUSIONS

Unlike most of the existing Syrian plants, the new project will not require a subsidy in order to balance its accounts. This represents a very important saving for the Government, which can use the money for other purposes.

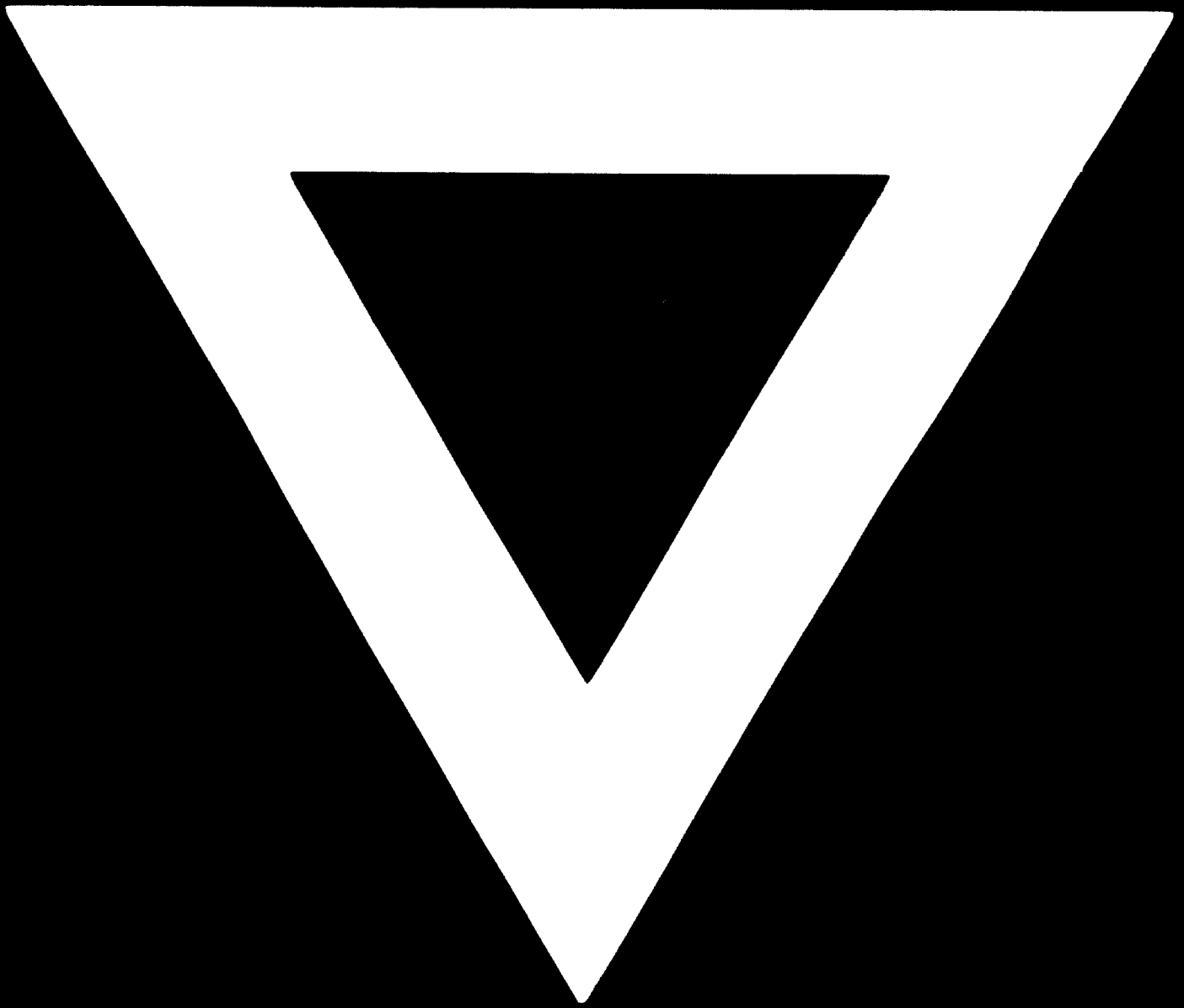
Considered from the operator's point of view the project is a good venture. The internal rate of return, calculated over a period of 15 years of operation and 2 years of construction, is high (about 14%) and exceeds the interest rate applied to the loans received.

The project contribution to the national economy is also positive. The proposed oil factory will valorize 60,000 tons of cotton seeds which will be available in the Deir ez Zor area, where cotton-plantation schemes are being developed in association with cotton gins. The processing of cotton seeds will bring more value added and benefits to the area in the form of edible oil and cattle feed. The project will have a beneficial impact on the country's balance of payments as there will be additional exports of linters and a decrease in the imports of fats and edible oil.

Finally, thanks to the new factory, the Deir ez Zor area will receive more income as more employment opportunities are offered.



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