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Industrial Feasibility Studies

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GRANITE QUARRYING IN UGANDA

UGA/091/M/95 - 08

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tables
diagrams
maps
illus.

FEASIBILITY STUDY

OF AN INDUSTRIAL PROJECT FOR

GRANITE QUARRYING

IN UGANDA

UGA/091/M/95-09

UNIDO

FEASIBILITY STUDY

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GRANITE QUARRYING

IN UGANDA

UGA/091/M/95-09

This Feasibility Study was carried out, on behalf of UNIDO, by a Project Team whose components were:

- Mr. Dario Milano, project leader
- Mr. Giacomo D'Agnolo, market analyst
- Mr. Renato Fabbri, quarry expert
- Mr. Paul Richardson, financial analyst

AUGUST 1996

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1.1 Scope of the Joint Venture Project

Geoseven Srl (Italy) and Luku Mixed Farm Ltd. (Uganda) are willing to create a joint venture company named Victoria Stone Ltd. with the objective of extracting stone material in West Nile and sell it primarily on international and in a second phase on domestic markets.

The project will take advantage of the conducive political and economic environment in Uganda supporting foreign investments and the introduction and use of technology and know how.

Project objective is to generate continuous supply of stones for the Italian and the European markets. To attain that goal a project strategy will be implemented in order to create a solid link with local institutions and private counterparts creating visibility of mutual expected advantages.

1.2 Project background

In October 1994 Ugandan Authorities asked an Italian technician, who was carrying on a co-operation project in West Nile region, to investigate the opportunities for developing a plan aimed at industrial activities. The investigation focused on the exploitation of natural resources (forestry, livestock and mining).

After a short survey (in an area where rock formations were outcropping) a promising activity was identified in the extraction of stones for the production of building material.

In the same year the management of Geoseven Company was carrying on a study aimed at widening and diversifying its business activities. When informed of the survey carried out following the requests of the Ugandan authorities, in April 1995 Geoseven organised a study mission in Uganda with the aim of identifying the most suitable area for opening quarries, taking into consideration the logistics.

During the study mission the experts of Geoseven had the opportunity to meet the representatives of the Diocesis of Arua which is the owner of Luku Mixed Farm Ltd. They expressed their interest in developing a co-operation project aimed at improving income generation activities for farm members, and at creating new jobs in the area.

The objectives of the study mission were attained (also with the active support of the commercial attaché of the Italian Embassy in Kampala) and the outcomes were presented to the UNIDO office in Milan for starting up a project feasibility study.

1.3 Market Analysis

The material extracted from the quarry is a leucocratic stone with high content of quartz and it is similar to the material traded in Italy under the name of "Paradise".

The quantity of material that will be yearly extracted (about 10.000/12.000 tons) will be completely absorbed by the Italian and the European markets that generate an increasing demand for such material; in future it will also meet the demand coming from neighbouring countries as Kenya and from Uganda itself, due to the expected growth of construction industry.

At present the "Paradise" is sold on the Italian market at about 1,200-1,400 USD/m^3 . A conservative figure of 1,200 USD/m^3 will therefore be considered in view of the Italian company's limited market experience. Such an amount means 1,000 USD free at works and 850 - 900 USD free on board.

1.4 Raw Materials

The project involves the purchase of new equipment in Italy where the ratio price/quality is quite attractive. Consumable will be bought from local and foreign suppliers.

A total amount of about 270 USD / block have been identified as direct raw material expenditures.

1.5 Environmental Assessment

The quarry is located in the area of Moni (2°59' N - 30°55'40" E) and is mainly constituted by a kind of Migmatitis (Embrachite and Anatessite) together with Horneblende in blocks and lodes.

The quarry covers various acres and offers huge reserves of material.

The initial concession could be limited to ten acres. The sloping ground facilitates cultivation, stocking and use of scraps.

Environmental impact will not be negative and there are no landscape constraints.

1.6 Engineering and Technology

About 480 blocks of material per year can be produced. However, according to a very prudential estimation, a realistic workload of 200 blocks/year has been considered throughout the study.

The total investment will include European new equipment, for a total amount of about 670,000 USD. The installation and commissioning of the full equipment will require additional 30,000 USD. Repair and maintenance expenditures have been estimated per year.

The stone blocks will be carried from the quarry to final markets through a transport chain including trucks, train and cargo boat, from the quarry to Mombasa (Kenya) and to the final destination of Italy.

1.7 Human Resources

A number of about 16 persons will be employed in the quarry, divided into three groups. A limited training on the job is required. The staff is completed by 2 administrative persons. A Technical Director and a Financial Director will complete the personnel acting as Italian Expatriates.

The planning horizon of the company's activity is considered absolutely sufficient to provide an adequate training on the job to all the workers, therefore letting the expatriates to be released from their staying on site, and leaving the local personnel to run the normal operations. However, as far as the financial calculations ar concerned, the expatriates have been considered for the whole duration of the project, and the associated (high) costs accordingly.

1.8 Organisation and Overheads

The project will be implemented through the Victoria Stone Ltd. joint venture company. Victoria Stone Ltd. will be managed by the Chairman, from Luku Farm and the Deputy, coming from Geoseven. The Deputy will be assisted by a Ugandan lawyer for all institutional activities of the company and for assistance to deal with litigation that could arise. A Technical Director, provided by Geoseven, will be responsible for quarrying operations including safety and training of workers, and reliability of equipment. The Technical Director will be also responsible for activating and managing the sales network that will have terminals in Italy, Switzerland and Germany which are the countries where the above-mentioned dealers are based to sell the stone products.
A Financial Manager from Geoseven will be responsible for all economic and financial aspects of the project. He will also be responsible, following the

production needs indicated by the technical director, of the procurement of consumable on the local and the international market.
All personnel will be under the supervision of the Technical Director.

The overhead costs consist of the followings:

- Company set up: costs related to legal aspects and taxes for company registration. That amount has been estimated up to 10,000 USD.
- Permits for the concessions: which consist in the right to exploit the land where the quarry is located. The amount has been estimated up to 120,000 USD.
- An operative base in Kampala has been estimated necessary for the contacts with the relevant authorities, as well as for the administrative work. An office rent of about 1,000 USD/month has been added to the total indirect costs.
- As far as the lodging and living expenses of the two expatriates are concerned, a total amount of 4,000 USD / month has been estimated. Additionally, telecommunication expenditures related to the operations are estimated in about 6,000 USD for the whole 1997, and in about 2,000 USD/month onward. Eventually, travel expenses up to 2,000 USD/month for the initial 24 months have been added, and then reduced to 4,000 USD/year.
- Repair and maintenance of the equipment have been estimated at about 40,000 USD (6% over nominal value) in 1999 and 2000, and in 67,500 onward (about 10% out of nominal value).
- Marketing costs: due to unforeseen costs an additional amount of 10% of final market value has been added to the overall costs of the products, under the reference name of direct marketing costs (i.e. 1,700 USD/block, or 136 USD/m^3).

1.9 Implementation and Planning

Special attention will be placed on getting the required local authorisation and clearances, which may affect significantly the overall time schedule of the project. The local partner, due to its good introduction with the local authorities, will be in charge of all the local procedures, and is since now confident of the positive results.

The local partner will also be in charge of selecting the appropriate local personnel and to hire the workers according to the local rules and regulations.

Finally, the local partner will operate to smooth any possible inconvenience or struggle may rise from the local population living in the surroundings of the quarry, so that no social disturbance derives from.

The joint venture will be managed by a Board of Directors, a Chairman, a Deputy and a Technical Director. The manpower will consist of 16 people which will be under the supervision of the Technical Director.

A number of about 12 months will be necessary to set-up the company, prepare the site and the equipment and start the production. The total envisaged investment is about 910,000 USD.

1.10 Financial evaluation

The financial evaluation has been carried out assuming a basic reference configuration for the investment project, defined by the cost estimation summarised in the previous paragraphs. This base case involves real costs and prices, with inflation not incorporated. The related printouts are enclosed in the Annex 1. The main considerations that can be pinpointed are the following:

i) Given the general assumptions of the project, the Net Present Value (NPV), calculated at 20% the discount rate, is positive (1,180,297 USD), thus indicating that the industrial project provides a remuneration higher than required discount rate. The internal rate of return is 49.1%, which is far higher than the required rate of return of 20%.

iii) The Net Profit starts to show positive results from the first year of production (1998) with Net Profit stabilising at around 18.6% of sales. Net Profit reaches just over 560,000 Lit. by 2000.

iv) A low break-even point demonstrates that the cost structure is mainly based on the variable issues, being the fixed fairly limited.

v) The sensitivity analysis shows a certain degree of strengthen of the project against fluctuations of production costs and investment capital expenditures, still maintaining a positive NPV.

2. PROJECT BACKGROUND AND BASIC IDEA

2.1 Name and address of project promoters

a. Geoseven S.r.l.
Via Castelfidardo 26/28 - 61032 FANO (PS), Italy

b. Luku Mixed Farm Ltd - Arua (West Nile), Uganda

2.2 Project Background and history

In October 1994 Ugandan Authorities asked an Italian technician, who was carrying on a co-operation project in West Nile region, to investigate the opportunities for developing a plan aimed at industrial activities focusing on some key aspects such as:

- infusion of an acceptable level of investment
- use of accessible and sustainable technology
- use of local resources

The investigation focused on the exploitation of natural resources (forestry, livestock and mining).

After a short survey (in an area where rock formations were outcropping) a promising activity was identified in the extraction of stones for the production of building material.

Rock samples were brought to Italy and high interest was expressed by businessmen operating in stone industry.

That initial positive evaluation represented the basis for developing further investigation.

In the same year the management of Geoseven Company was carrying on a study aimed at widening and diversifying its business activities. Geoseven, whose mission is in the business of design of oil and hydraulic infrastructures, identified in projects related to environment a ground where developing activities with high chance of success.

When informed of the survey carried out following the requests of the Ugandan authorities, in April 1995 Geoseven organised a study mission in Uganda with the aim of:

- identifying the most suitable area for opening quarries, taking into consideration the logistics;
- carrying out a preliminary survey on the quantities of materials that could be extracted and the environmental impact of these activities;
- investigating the legal framework within which to develop such activities and to identify a local partner;
- getting the cartographic data and any other information useful for the development of that initiative.

The objectives of the study mission were attained (also with the active support of the commercial attaché of the Italian Embassy in Kampala) and the outcomes were presented to the UNIDO office in Milan for starting up a project feasibility study.

In such a context, in October 1995, another survey was carried on in Uganda, after the collection in Italy of some information related to the market potential of the product.

The area for the petrographic research was widened and research on logistics and on legal framework were completed.

Preliminary contacts were initiated to identify reliable financial institutions and assess their availability to support the project.

In the meanwhile the study focused on the technical and organisational aspects of the project. As a result, one product only was selected for sale, a block to be squared in the quarry, while the use of scraps, grade 2 products and small stones that could supply the local market for building and road industry will be considered at a further stage of development of the project. All production is supposed to be exported in order to get the most favourable conditions from financial and tax laws points of view.

During the study mission the experts of Geoseven had the opportunity to meet the representatives of the Diocesis of Arua which is the owner of Luku Mixed Farm Ltd. They expressed their interest in developing a co-operation project aimed at improving income generation activities for farm members, and at creating new jobs in the area. The presence of a European partner in a quarrying project could contribute to reduce the major constraints faced by the mining sector today:

- lack of basic equipment
- lack of repair and maintenance facilities
- lack of innovation and technological development.

As regards mining legislation, government owns and controls mineral deposits except where there has been recognition of title or express grant. Minerals in Uganda are liable to royalties and fees are payable on gold, tin, wolfram, copper and associated minerals and metals at a rate of 15% of profits.

A prospecting license is required for mineral prospecting in the country and a mining lease may be granted to a holder of a prospecting licence. The period of validity of the licence can even be extended by the Authority, if production process begins in delay. Since 1986 Government is committed to create a better investment climate. Increasing confidence in the government policy is demonstrated by the increasing participation by international mining corporations in the exploration and prospecting for minerals. Examples include the conclusion of various joint ventures with international companies.

In the Appendix, a SUMMARY OF THE MINING LAW AND REGULATIONS OF THE REPUBLIC OF UGANDA is attached.

2.3 Project strategy

Project objective is to generate continuous supply of stones for the Italian and the European markets. To attain that goal a project strategy will be implemented in order to create a solid link with local institutions and private counterparts creating visibility of mutual expected advantages as:

- increase in the number of qualified manpower

- creation of the basis for the development of a stone / quarrying industrial district.

- stimulation for improvement or creation of ancillary services.

In particular, project objectives will be reached through the creation of a joint venture company denominated VICTORIA STONES LTD. whose partners will be Geoseven Ltd. and Luku Mixed Farm Ltd.

The joint venture will be based in Arua and a support office will be set in Kampala.

The company will be established with the objective of cultivating stone material in West Nile Region and sell it on international and domestic markets. The duration of the JV. shall be approximately 10-15 years.

Geoseven and Luku Mixed Farm will infuse capital respectively for an amount of about 450.000 USD and 150.000 USD.

The joint venture will try to have access to terms loans on the financial market up to 320.000 USD, according to the limits set by the Ugandan Investment Code. Additional short term loans supporting the working capital will be required.

The joint venture will also try to have access to all facilities made available by Ugandan law, such as a drawback of duties and sales tax payable on imported inputs used in producing goods for export.

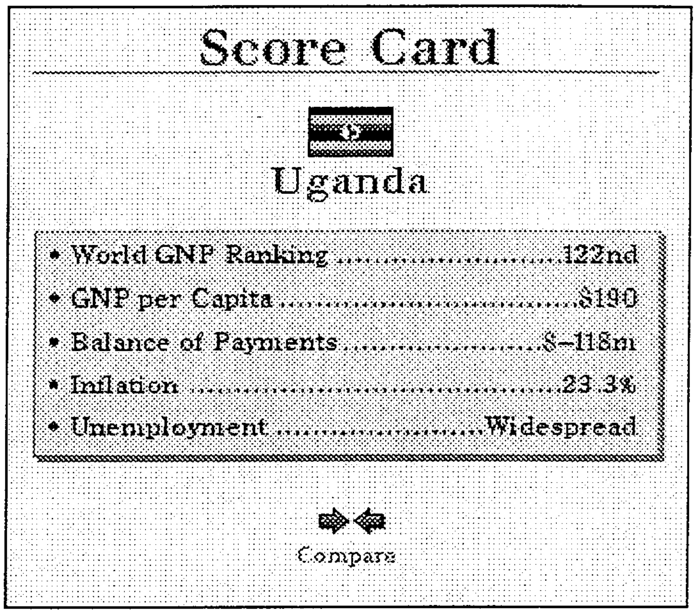
The planning horizon initially envisaged for the joint venture is as long as 1 year of construction (from company set-up to final installation and commissioning of the quarry equipment) and 7 years of production.

2.4 Economic and industrial policies supporting the project

Uganda which has gained independence in 1962, accounted in 1995 for a population of about 20 millions with a growth rate of 3%. The capital city is Kampala, and the other main cities are Jinja and Entebbe, both located on the Victoria Lake.

The forecast of future economic development in Uganda is positive even though the economy will probably not reach the two digits figures of 1994.

According to Financial Times (25-4-96) "the highest economic growth rate in Africa is turning a country once associated with disaster into an inspiration for the continent".



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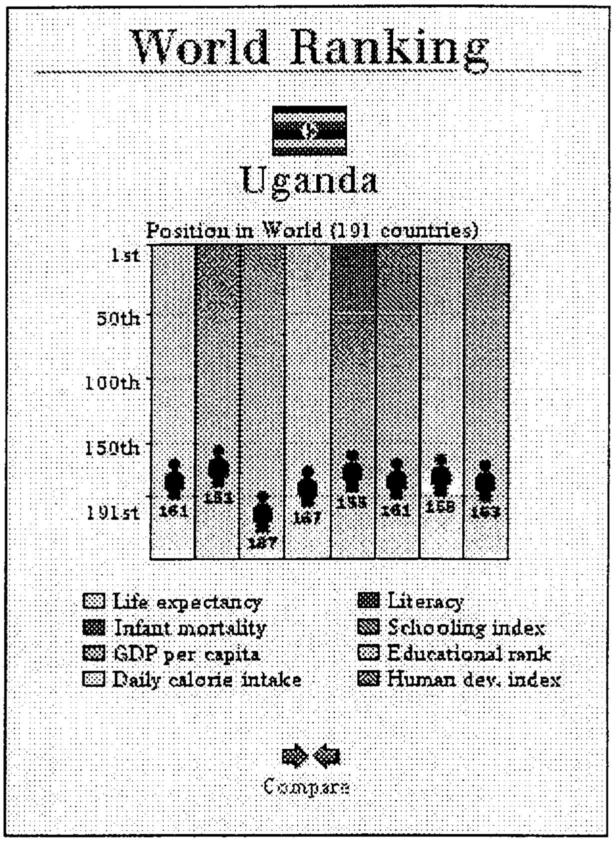
The 1994 good performances have been possible thanks both to the favourable meteorological conditions for agriculture and the increase of the world price of coffee. At the same time in the last years Uganda has set the basis for a strengthening of its economy through improvement of liberalisation and development of the privatisation process.

In 1995 GDP was about 4,9 billion USD, with an increase, in real terms, of 10% compared with 1994. The foreign debt, at the same date, was about 3 billions USD, while the hard currency reserves accounted for 321 millions USD. The inflation rate is decreasing if compared with 1993 and 1994.

The mining industry is of great interest for domestic and international investors. Its development is sustained by foreign financial support and it follows the guidelines of the Mineral Development Promotion Programme. Through such a support new tenders have been called and prospecting licences have been renewed (for copper, nickel, and basic metals in Ntungamo district, for gold and basic metals in the Kotido, Moroto, Iganga and Busia districts. A survey for phosphates has been carried out in Busumbu.

The quarrying project that here is presented will be developed in a conducive political and economical environment. In fact the new budget 95-96 is consistent with the guidelines of Ugandan economic policy like the privatisation process, expansion of export, inflation control and harmonisation of fiscal policies.



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The project will be in line with one of the above mentioned objectives of the country economic policy aimed at reaching a self sustainable economy.
In particular the project will contribute to the diversification of exports at present based by about 80% on coffee.

The project will take advantage of the Ugandan investment code of 1991 trying to contribute to the following objectives:

- generation of new earnings or savings of foreign exchange through exports and resource based import substitution.

- use of local materials, supplies and services.

- creation of employment opportunities.

- introduction of new technology

According to the investment code the new JV. company will be exempted from corporate tax, withholding tax and tax on dividends for five years and will be exempted from paying duties on import of technology and on import of all inputs useful to the production of goods to export.

3. MARKET ANALYSIS AND MARKETING STRATEGY

Examining 1995 data in the stone sector and comparing them to those of the previous year, some comments have to be made:

- the overall rate of growth over the sector has increased;
- the role of the leading (until yesterday) producing countries has changed: the leadership, at least in terms of quantities produced, passed in other hands. Italy was until 1993 the most important producer of marble and granite; today it is China.
- putting together the figures related to the export of the forty major countries in this sector, both producers and transformers, towards their partners countries, and bringing forward the figures related to quantities, including processed pieces, to the equivalent in blocks, using parameters generally accepted by technicians, a figure of 20 million tons of exchanged stone materials comes out.

Models of consumption tend to a duality of profiles:

- a form of consumption of a high qualification of product and prestige, high customisation of manufacture and high complexity of work orders.
- a form of consumption of products personalised to the consumer, not to the producer.

In Europe it is envisaged a future in construction consumption dedicated more to renovation and to maintenance, rather than to new buildings.

3.1 The product

The material extracted from the quarry is a leucocratic stone with high content of quartz and it is similar to the material traded in Italy under the name of "Paradise". It's well known that it is quite impossible to find stones that are rigorously similar even from the same quarry, and it will be possible to compare the production of one quarry with the production of another one only with reference to similar characteristics.(colour, specific weight and geo-technical characteristics).

At present the "Paradise" is sold on the Italian market at about 1,200-1,400 USD/m^3 . A conservative figure of 1,200 USD/m^3 will therefore be considered in view of the Italian company's limited market experience. Such an amount means 1,000 USD free at works and 850 - 900 USD free on board.

Assuming letter of credit method of payment, credit collection from international buyers has been estimated in 30 days (accounts receivable).

3.2 Demand, target markets and projected sales

The stone sector in E.U. accounts in terms of production for 17,2 millions tons of raw (1994), representing the world's biggest quarries. Besides, the E.U. countries import 3,7 million tons of raw materials.
In terms of consumption its importance becomes even more evident as it absorbs 160 million net square metres with a per capita ratio of 45 sq. m. for every hundred inhabitants.

Table T3.2a: World Production

WORLD PRODUCTION OF RAW (tons)	1992	1993	1994
BELGIUM	364.000	340.000	350.000
GERMANY	200.000	210.000	170.030
GREECE	2.250.000	2.400.000	2.500.000
SPAIN	2.980.000	2.800.000	3.000.000
FRANCE	1.058.000	1.140.000	1.260.000
ITALY	7.300.000	7.750.000	8.370.000
PORTUGAL	1.163.000	1.145.000	1.100.000
GREAT BRITAIN	650.000	500.000	450.000
EU	**15.965.000**	**16.285.000**	**17.200.030**
UCRAINE			900.000
RUSSIA	675.000	700.000	1.100.000
BULGARIA	132.700	132.350	135.000
SWEDEN	96.800	100.000	300.000
FINLAND	417.200	414.000	550.000
NORWAY	150.000	160.000	180.000
AUSTRIA	30.000	22.000	21.000
TURKEY	850.000	850.000	750.000
USA	1.019.000	1.020.000	901.000
CANADA	240.500		250.000
BRASIL	1.673.400	1.821.100	1.977.250
MEXICO	750.000	712.000	1.086.000
ARGENTINA	90.600	106.350	185.254
SAUDI ARABIA	552.300	543.700	534.000
SOUTH AFRICA	720.000	554.400	653.000
INDIA	3.050.000	3.578.000	4.424.000
CHINA	2.545.000	8.500.000	9.000.000
PHILIPPINE	712.200		
INDONESIA	223.000	239.000	284.000
JAPAN	252.800	231.720	237.300
SOUTH COREA	1.445.000	2.000.000	2.130.000
TAIWAN	280.000	334.000	321.800
THAILAND	178.750	170.000	170.000
AUSTRALIA		35.530	32.620
OTHERS	3.500.000	2.700.000	3.100.000
TOTAL	**35.549.250**	**41.209.150**	**46.422.254**

E.U. consumption is seven times more than the US. Huge are the differences between one country and another in the Community. As an example England's unit consumption is fifteen times smaller than Italy's. Such discrepancies are the effect of different attitudes toward marble, related to specific factors as, among others, climate, availability and transport costs.

As an effect of globalisation it could be assumed that discrepancies will gradually disappear as aesthetic and technological changes are making great strides in creating shared tastes, while the weight constraint is being overcome by new ultra-thin use techniques for many kinds of finished products combined with the availability of quicker, cheaper and rational transport.

In E.U. Italy accounts (data 1992) for the:

- 43,2% of production
- 44,5% of incoming raw
- 2,6% of finished imports
- 21,7% of outgoing raw
- 52,3% of finished exports
- 33,4% of consumption

The stone compartment in E.U. has still an enormous development potential. The reasons are that in several E.U. countries stone use is still at a minimum and that there are still good prospects for exports outside Europe.

Stone import - export trends for Italy (1994/1995) are expressed in the following tables **T3.2b** and **T3.2c**

TABLE T3.2b
EXPORT TREND

ITALY to:	**1994 tons**	**1994 value 000£**	**1995 tons**	**1995 value 000£**	DIFFERENCE IN % QTY.	VAL.
European Union	1.930.826	1.333.764.672	2.043.487	1.527.638.216	6	15
Other Europ. Countries	335.538	271.291.181	342.720	340.848.619	2	26
Africa	189.294	60.424.960	247.064	78.964.156	31	31
North America	233.421	378.737.070	239.326	391.803.219	3	3
Centre and S. America	74.175	71.828.801	84.369	85.091.681	14	18
Middle East	1.037.993	452.483.294	1.050.540	418.182.174	1	-8
Far East	483.986	576.707.582	566.534	736.009.950	17	28
Australia	21.128	31.601.759	23.257	39.138.484	10	24

These figures represent the percentage change from 1994 to 1995.

According to these figures and trends, it can be assumed that the production of the quarry in Uganda will be absorbed by the strong demand coming from European countries.

In future it will also meet the demand coming from neighbouring countries as Kenya and from Uganda itself, meeting the expected growing demand of construction industry.

The market does not award any "price premiums" to the marble qualities coming from special areas, as the African continent.

TABLE T3.2c

PRODUCTION OF RAW (tons)	**1992**	**1993**	**1994**	
WORLD PRODUCTION	35.549.250	41.209.150	46.422.254	
ITALIAN PRODUCTION			8.368.950	
granite			1.723.000	
ITALY-ALL COUNTRIES	IMPORT	IMPORT	IMPORT	IMPORT
IMPORT	1994	1994	1995	1.995
	ton	value 000£	ton	value 000£
Marble, blocks and slabs	215.858	96.729.937	261.561	118.390.150
Granite, blocks and slabs	1.444.382	533.911.415	1.698.697	635.111.527
Processed marble	23.946	28.020.893	31.413	33.509.079
Processed granite	20.010	16.212.355	26.377	22.106.609
Total marble and granite	1.704.196	674.874.600	2.018.048	809.117.365
Total import	1.866.672	709.060.738	2.169.905	849.219.728
ITALY-ALL COUNTRIES	EXPORT	EXPORT	EXPORT	EXPORT
EXPORT	1994	1994	1995	1.995
	ton	value 000£	ton	value 000£
Marble, blocks and slabs	507.995	239.905.976	588.998	272.870.748
Granite, blocks and slabs	159.444	96.486.553	178.307	116.320.268
Processed marble	1.467.879	1.481.490.975	1.507.153	1.640.846.822
Processed granite	757.108	1.092.999.358	853.096	1.325.213.634
Total marble and granite				
Total import	4.306.785	3.177.068.135	4.597.707	3.618.214.642
ITALY-AFRICA	IMPORT	IMPORT	IMPORT	IMPORT
IMPORT	1994	1.994	1995	1.995
	ton	value 000£	ton	value 000£
Marble, blocks and slabs	3.433	1.396.244	8.721	2.881.570
Granite, blocks and slabs	250.133	79.263.569	272.258	93.229.860
Processed marble	414	1.523.216	326	1.277.455
Processed granite	74	110.164	238	387.214
Total marble and granite	254.054	82.293.193	281.543	97.776.099

Total import	254.319	82.574.393	281.937	98.105.270
(Total import from Uganda)	0	0	0	0
ITALY-AFRICA	EXPORT	EXPORT	EXPORT	EXPORT
EXPORT	1994	1994	1995	1995
	ton	value 000£	ton	value 000£
Marble, blocks and slabs	85.133	20.284.196	134.132	32.187.940
Granite, blocks and slabs	975	1.238.044	1.565	1.057.030
Processed marble	34.857	25.514.073	53.122	33.782.600
Processed granite	5.930	6.599.632	5.499	5.549.126
Total marble and granite	126.895	53.635.945	194.318	72.576.696
Total export	189.294	60.424.960	247.064	78.964.156
(Total export to Uganda)	1	2.300	0	0

All production of the proposed quarry will be absorbed in the first year by the European market.

Geoseven will take care of contacting the appropriate dealers in Carrara, even if the company has not yet developed a consolidated experience in that field. However, the very limited amount of granite (less than 1% of the Italian import market) to be handled justifies the assumption that the whole production will be sold without major problems.

The maximum estimated capacity the quarry will be about 500 m^3 per month (about 1,000 tons per month), accounting for a production and sales of about 10,000/12,000 tons per year. A more realistic assumption of production and sales will decrease the amount to about 5,000 tons per year, mainly due to logistic problems and transportation delays.

Therefore, with respect to the overall demand, we assume that the total granite production of the quarry will be easily absorbed by selected purchase contracts undersigned by Italian importers. The possibility of selling properly the whole amount of production is more correlated to appropriate opportunistic contracts instead of a broad market access.

4. RAW MATERIALS AND SUPPLIES

Due to the peculiarity of this project activity, it must be underlined that only one raw material is used, that is the stone cultivated in the quarry.

As regards consumable, fuel can be purchased at the Agip dealer of Kampala and stored in a container at the quarry, as described in Chapter 6.

Other consumable (such as lubricants, iron, woods,...) can be purchased from local suppliers.

A summary table of all the relevant raw materials involved is herein presented.

Due to the lead time for getting the required materials, very high stock have been assumed, being the related cost relatively inexpensive.

TABLE T4

LIST OF CONSUMABLE	unit cost (USD)	L/F	A/P	STOCK FORECAST (days of coverage)
consumption per month (equivalent to production of 40 blocks)				
Fuel (5000 l. of diesel)	123	L	1	30/60
Lubricants (10% of fuel value)	12	L	1	30/60
Explosives and similar	30	F	30	60/120
Oxygen, acetylene, arc welding electrodes	15	F	30	60/120
Drilling tools	60	F	30	60/120
Miscellaneous (iron, wood, grease)	30	L	1	30/60
TOTAL	270	-	-	-

Possible bottlenecks in raw material procurement from Europe could be overcome by alternative sources easily accessible in South Africa.

5. LOCATION, SITE AND ENVIRONMENTAL ASSESSMENT

5.1 Location and site

Surveys have been conducted on a pentagon shaped area of 260 Km^2 with vertices at:

- Kijomoro (3°10'05" N - 30°54' E),
- Egubu Waterfall (3°10'05" N - 30°57'25" E)
- Ocoko (2°56' N 30°57'25" E)
- Sultan Vurra (2°56' N30°54' E)
- Adumi (3°02'20" N 30°50' E)

This area offers a variety of petrographic types of great interest from the commercial point of view. In this area, various good prospect stone quarries for building material can be opened. In this study only one quarry is considered , having material easily marketable and where easy access and the easy way of cultivation may favour the exploitation of resources.

The quarry is located in the area of Moni(2°59' N - 30°55'40" E) and is mainly constituted by a kind of Migmatitis (Embrachite and Anatessite) together with Horneblende in blocks and lodes.

The quarry covers various acres and offers huge reserves of material.
The initial concession could be limited to ten acres. The sloping ground facilitates cultivation, stocking and use of scraps.

Other key factors that have been considered are:

- availability of the area
- easy access to the quarry
- quality of the material
- distance of urban centres from sources of noise related to cultivation

The location, four kilometres from Arua, capital of the region, can be easily reached by the workers, avoiding the need for workers lodging.

The weather is intertropical, with two dry seasons, corresponding the first to September, the second to the months from December to march.

In all other periods could rain with a total of about 1500 mm.

The location is reached by the main road (at half kilometre from the quarry), not yet tarred.

Water in acceptable quantity for production needs is available close to the location.

Civil works are not necessary. At the location, some containers will be used as offices, depot and for maintenance facilities, connecting them with shades.

The extraction process produces a disposal that is estimated at the 50% of the product to be sold.
Such a material could be utilised for various uses (concrete aggregates, road making aggregates, production of tiles and kerbs) and by now it has not been yet included in the income generating products, because it would need the implementation of additional production facilities and related costs. Feasibility of such a development will be taken into consideration after the successful start-up of the core business.

5.2 Environmental impact

The study of environmental impact must take into account an assessment of physical, ecological and aesthetic alterations that such an action can induce in the environment and the impact on future benefit of population.
Stone cultivation produces profound modifications in the existing environment.

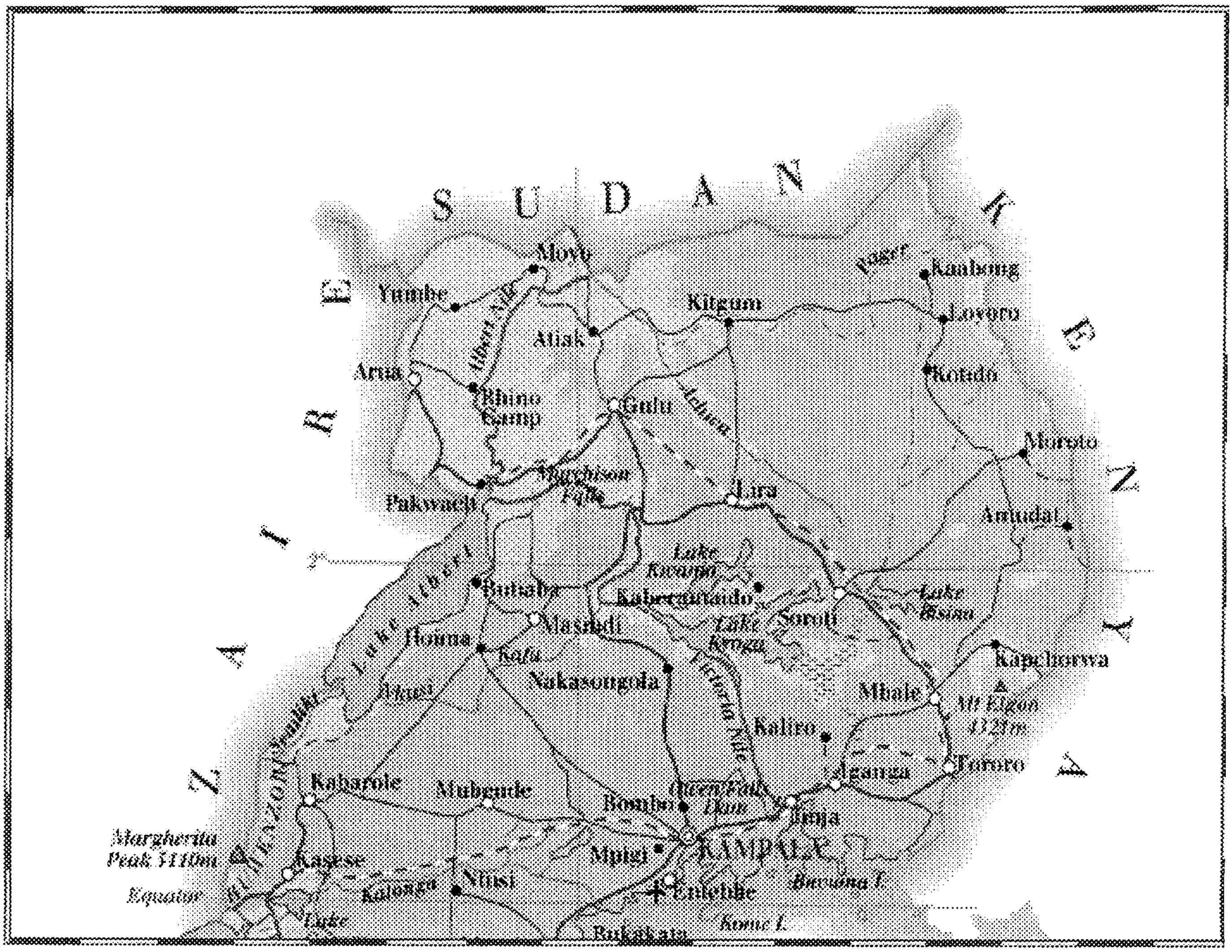
Where the rock is not on the surface the alteration is produced by the removal of vegetation and soil.

As regards the quarry that is the object of the present study, it has to be considered that:

- the quarry will cover an area between 1 and 2 ha, where the rock is surfacing.

- human dwellings are limited in that area and are constituted essentially by some huts which can be easily rebuilt in the neighbouring villages

- there are not physical assets to compensate, cultivation, minor building, power lines, irrigation infrastructures to be removed or big trees to be cut. Vegetation is shrubby and scarce avifauna does not belong to any protected specie.



(c) 1995 Dorling Kindersley Multimedia

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- there are not physical assets to compensate, cultivation, minor building, power lines, irrigation infrastructures to be removed or big trees to be cut. Vegetation is shrubby and scarce avifauna does not belong to any protected specie.

The ground is mainly made of outcropping rocks and the vegetation, where existing can be planted again.

There is not underground hydrological network and there is not pollution from cultivation disposal. The mud that could be generated is in small quantities and should be confined inside the quarry.

Alteration of the surfacing hydrological network, due to deposit of disposal, is not envisaged. Scraps from cultivation will be used to consolidate the access way to the quarry, so to facilitate the heavy trucks that will operate during the quarry activity.

The extraction will not create pollution in the atmosphere, as the emissions come from the diesel compressor, the generator and the crawler shovel. The landscape is open, there are not physical barriers keeping the flue gas.
In conclusions there is a minimum environmental impact. Minimum impact will be caused along the road (1-2 trips per day) in the stretch from the quarry to Pakwach.

As far as the landscape is concerned, it is evident that the quarry modify the aspect of the location. The Local Authority should assess the real impact of such an initiative.

At the moment there are not landscape constraints in that area.

5.3 Infrastructures

The relevant infrastructures to be built on the site are herein listed:

- construction and maintenance of a gravel road, as long as about 500 metres, to link the site to the national road

- build up a parking area for the vehicles and the caterpillar unit

- set up an office area, made up a small container

- set up a service area, to operate the assistance and maintenance of the equipment, in a small container as well

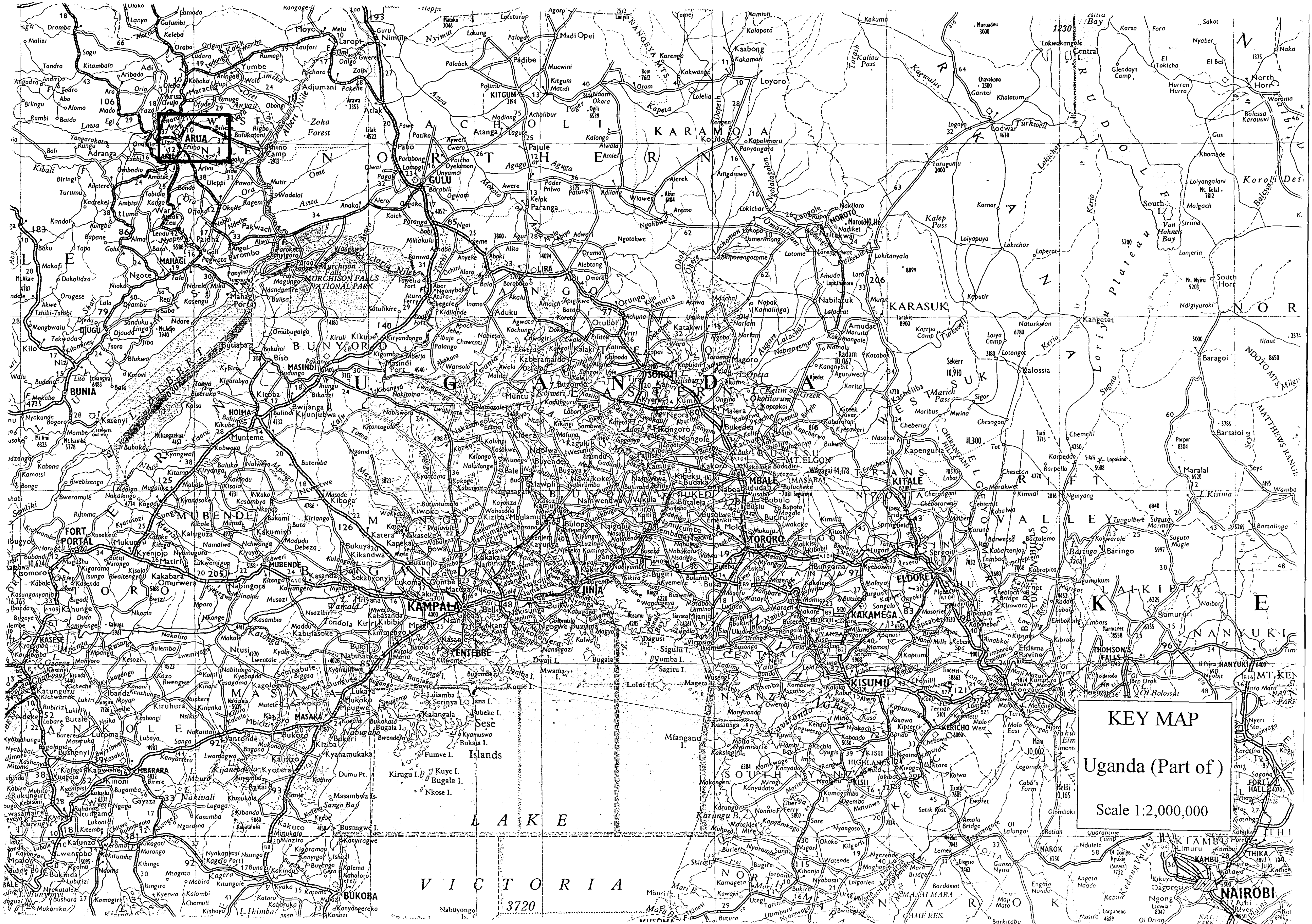
- installation of a water tank for industrial usage

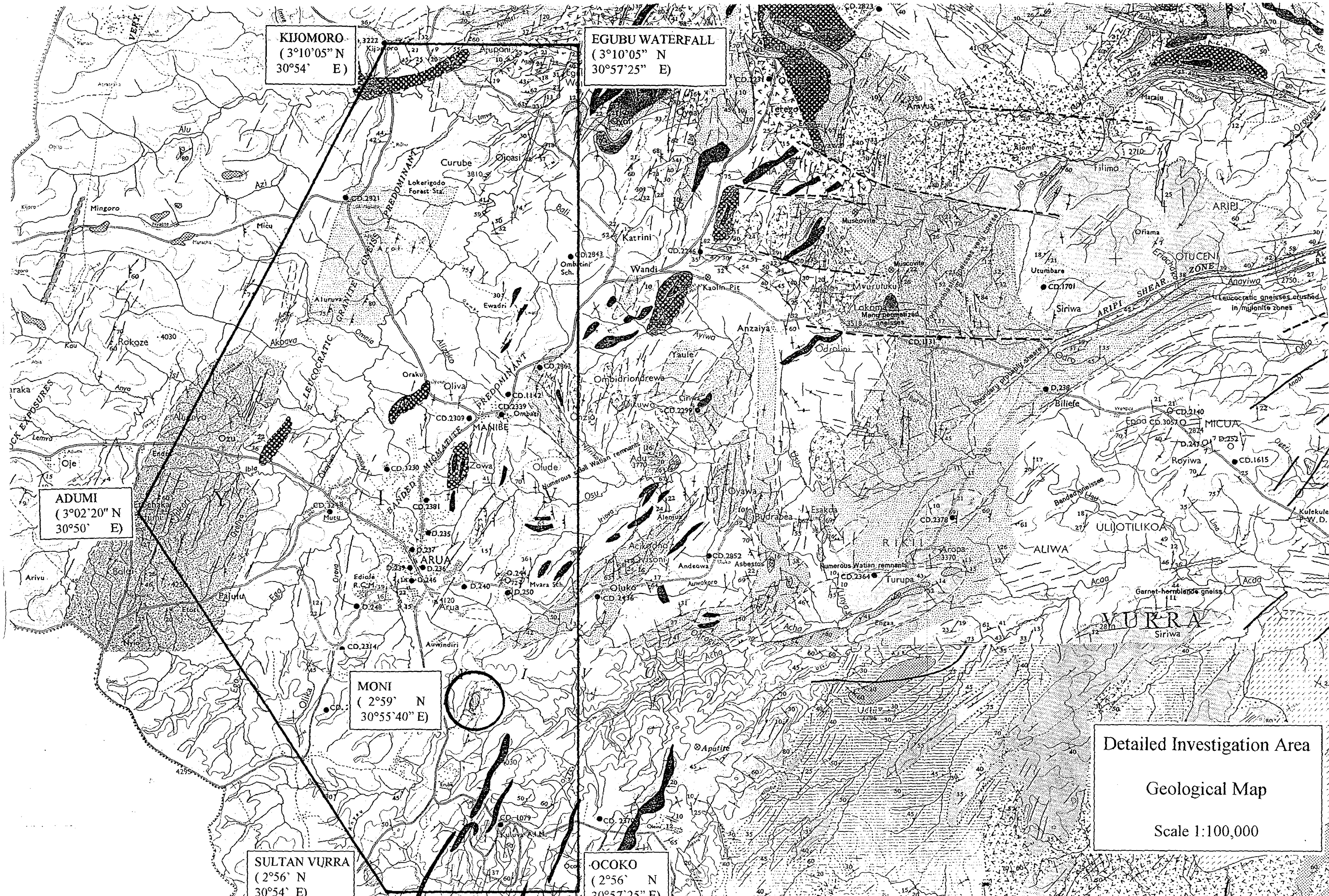
- installation of a fuel tank (about 10,000 lt.)

The maintenance of the access road will be subject to uninterrupted revision, that will force the company to an yearly expenditure for the reparation of the damages due to the heavy trucks passing over.

MIGMATITE "PARADISE"
MONI. West Nile, Uganda

GRANITE-LIKE STONE ADUMI HILL
West Nile, Uganda


KEY MAP
Uganda (Part of)
Scale 1:2,000,000
ARUA
GULU
LIRA
SOROTI
MBALE
TORORO
JINJA
KAMPALA
ENTEBBE
MASAKA
MBARARA
FORT PORTAL
HOIMA
MASINDI
MUBENDE
KITGUM
MOROTO
KITALE
ELDORET
KISUMU
KAKAMEGA
KERICHO
KISII
NAIROBI
THIKA
NANYUKI
BUKOBA
BUNIA
MAHAGI
KASESE
LAKE VICTORIA
L. ALBERT
MURCHISON FALLS NATIONAL PARK
KARAMOJA
NORTHERN
EASTERN
WEST NILE
ACHOLI
LANGO
BUNYORO
MENGO
TORO
ANKOLE
MASAKA
BUSOGA
BUKEDI
KARASUK
Sese Islands
MT. ELGON
3720


KIJOMORO
(3°10'05" N
30°54' E)
EGUBU WATERFALL
(3°10'05" N
30°57'25" E)
ADUMI
(3°02'20" N
30°50' E)
MONI
(2°59' N
30°55'40" E)
SULTAN VURRA
(2°56' N
30°54' E)
OCOKO
(2°56' N
30°57'25" E)
ARUA
MANIBE
VURRA
ARIPI SHEAR ZONE
LEUCOCRATIC GRANITE GNEISS PREDOMINANT
BANDED MIGMATITE PREDOMINANT
Numerous small Watian remnants
Numerous Watian remnants
Leucocratic gneisses crushed in mylonite zones
Kaolin Pit
Muscovite
Detailed Investigation Area
Geological Map
Scale 1:100,000

6. ENGINEERING AND TECHNOLOGY

6.1 Technology selected

The cultivation of the Moni quarry is developed through a boring machine and with the use of explosives. Through a drilling liner it is possible to line vertical holes made by compressed air drilling tools. Some holes are charged with high speed fuse of which explosion determines the detachment of the block, cut at the basis by an horizontal blade.

In the start up phase of quarrying operation there is a huge amount of crushed scrap before the creation of a nearly vertical working-face.

Then, with the combined action of vertical holes and horizontal holes and cut, it is possible to isolate parallelepiped blocks with a length that is consistent with the acceptable weight of each block and adapted to the technology to be applied for further treatment (approx. average size are 1,5 by 2 by 3 m.).

The working face can be some tenth metres long. According to the morphology of the quarry, the cultivation proceeds isolating parallelepipeds of rocks (steps-working) that are sliced and brought to the hauling platform through a loading shovel and using derricks which are generally used in pit working.

6.2 Main plant items

In **TABLE T6.2** main plant items are listed and their price are expressed in USD.

The installation of all the equipment has been estimated up to 4.5%-5% of the value, i.e. about additional 30,000 USD.

The project involves the use of new equipment: however, interesting purchasing opportunities are available in Italy due to the rather low prices for equipment of internationally competitive quality. Geoseven will take care of the technical evaluations related to the purchase of all the equipment.

TABLE T.6.2 LIST AND PRICE OF EQUIPMENT New equipment will be used in the project. (all equipment are foreign sourced)		
UNITS	EQUIPMENT	UNIT PRICE
		(,000 USD)
1	Loading shovel (Michigan medium 2-300 HP)	322.5
2	Driller (Toyo 90)	22.5
2	Horizontal liner	7.5
2	Derricks	22.5
1	Compressor (Atlas Copco 800 l)	30
1	Compressor (400 l)	15
10	Drilling tools 0,60 - 5,00	3.75
1	Generator 15kw	11.25
1	Arc welder	3.75
1	Generator 3kw	3.75
	Machine shop	33.75
	Portable equipment, high pressure tubes,	
	hydrocleaner, etc.	22.5
2	Four wheel drive vehicles (Suzuki, Toyota)	52.5
3	Containers and furniture	11.25
	Sheds, tank etc.	7.5
	Spare parts (for two years)	100
	TOTAL (,000 USD)	**670**

6.3 Production programme and plant capacity

When in full operation the quarry will produce a maximum amount of two blocks of material per day (not including the scraps that could be used for other destinations). However, for the sake of a very prudential assessment of the investment, in the present study the actual production is estimated at a lower level of 4 blocks per week, leading to a steady state of about 200 blocks per year.

The production escalation starts since the beginning according to the following programme:

Period	Block/period	Production / capacity
1/98	5	12.5%
2/98	10	25%
3/98	10	25%
4/98	10	25%
5/98	10	25%
6/98	10	25%
7/98	10	25%
8/98	10	25%
9/98	16	40%
10/98-12/98	48	40%
1999	200	41%
2000	200	41%

Assumptions:

capacity of 500 m^3/months (i.e. 1,000 ton/month, or 40 block/month)
actual production : 210 m^3/month (i.e. 16 block/month)
one block = 12.5 m^3, equivalent to 25 ton/block (density = 2 ton/m^3)

6.5 Logistics and transportation

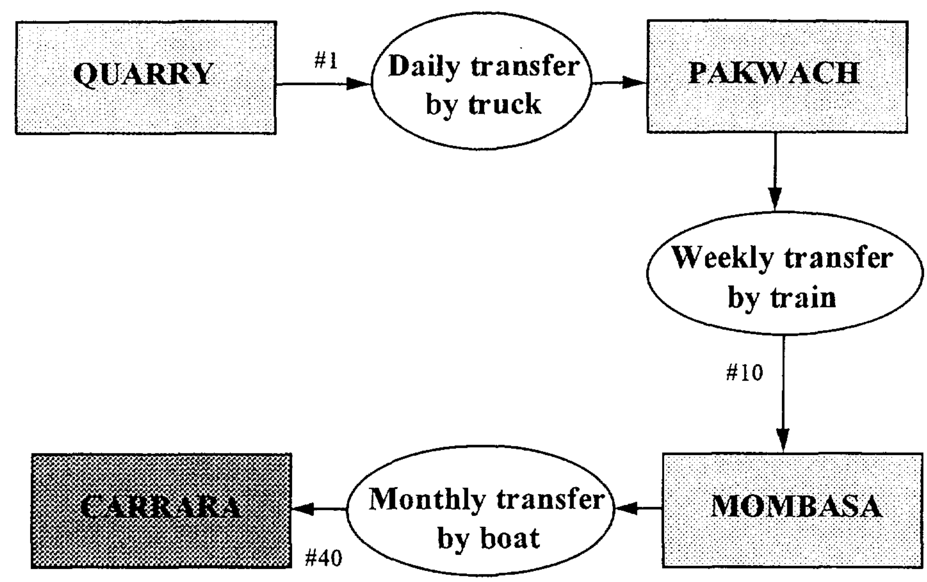
Three different means of transportation are used to move the stones from the quarry to Carrara. The first step from the quarry to the Packwach Railway Station is operated by truck, then from Packwach to Mombasa Port by railway and the last step from Mombasa to Carrara will be operated by cargo-boat.

The following table summarises the additional costs due to transportation of the block from the quarry to Carrara, final port of destination.

The distance from the quarry to Pakwach (120 Km) is covered by trucks, and an intermediate storage stock is retained in Pakwach.

The transportation from Pakwach to the port of Mombasa (Kenia) is made by means of railway connection. While the cost estimation is pretty clear, the uncertainties of service are high, and the regularity of delivery is likely to be controlled. Among the others, technical problems of the railways, weather difficulties and unstable labour conditions may affect the effective lead time, thus increasing the finished product stocks frozen at different stages of the delivery process.

The structure of the transportation flow is shown in the following picture.



Transportation Flow from the quarry to the final port

Therefore, as already mentioned, it has been assumed that, while the cost estimation reflects only the financial commitment (as investigated on the field by the expert team), the uncertainties of the delivery process quarry-Mombasa are reflected in over-estimated working capital days (for finished and work in progress), in order to assume a pessimistic version of the investment assumptions. If the reality will let a softer approach to the process, the financial evaluation will result improved accordingly.

Transport Costs	unit cost	cost /block (USD)
Quarry to Packwach	15 USD/ton	375
Packwach to Mombasa	90 USD/ton	2,250
Storage fees	0.7% product value	106.25
Handling costs	3.5 of declared value	531.25
Jetty fees	3.5 of declared value	531.25
Mombasa - Carrara	15 USD/ton	1,500
TOTAL		**5,293.75**

From the ninth month onwards the production level is considered at steady level.

A MIGA insurance has been foreseen to cover the occurrence of expropriation or social unrest. MIGA cost an be preliminary estimated as 1% of the fixed assets value.

Period	MIGA insurance (USD)
97	70,875
98	63,700
99	56,700
2000	49,600
2001	42,500
2002	35,500
2003	28,500
2004	21,500

7. ORGANISATION AND OVERHEAD COSTS

The project will be implemented through the Victoria Stone Ltd. joint venture company.

Victoria Stone Ltd. will be managed by:

- the Chairman, from Luku Farm, will be in charge of keeping and developing relations with Local Authorities and economic stakeholders in the Region and will be responsible of all activities necessary to facilitate the business activity of the company

- the Deputy, coming from Geoseven, will have management responsibilities in the functions of Production, Marketing and Sales, Auxiliaries and Administration

- the Deputy will be assisted by a Ugandan lawyer for all institutional activities of the company and for assistance to deal with litigation that could arise.

- the Technical Director, who is provided by Geoseven, will be responsible for quarrying operations including safety and training of workers, and reliability of equipment. The Technical Director will be also responsible for activating and managing the sales network that will have terminals in Italy, Switzerland and Germany which are the countries where the above-mentioned dealers are based to sell the stone products.

In few years a Ugandan marketing and sales manager will be recruited in order to extend sales to selected African countries, as Uganda itself and Kenya.

- The Financial Manager will be responsible for all economic and financial aspects of the project. He will also be responsible , following the production needs indicated by the technical director, of the procurement of consumable on the local and the international market.

All personnel will be under the supervision of the Technical Director.

A diagram of the organisational structure is shown in **TABLE T7**.

The overhead costs consist of the followings:

- Company set up: costs related to legal aspects and taxes for company registration. That amount has been estimated up to 10,000 USD

- Permits for the concessions: which consist in the right to exploit the land where the quarry is located. The amount has been estimated up to 120,000 USD

- An operative base in Kampala has been estimated necessary for the contacts with the relevant authorities, as well as for the administrative work. An office rent of about 1,000 USD/month has been added to the total indirect costs.

- As far as the lodging and living expenses of the two expatriates are concerned, a total amount of 4,000 USD / month has been estimated. Additionally, telecommunication expenditures related to the operations are estimated in about 6,000 USD for the whole 1997, and in about 2,000 USD/month onward. eventually, travel expenses up to 2,000 USD/month for the initial 24 months have been added, and then reduced to 4,000 USD/year.

- Repair and maintenance of the equipment have been estimated at about 40,000 USD (6% over nominal value) in 1999 and 2000, and in 67,500 onward (about 10% out of nominal value). Spare parts are included in the investment costs for the first two years.

- Marketing costs: due to unforeseen sunk costs related to the transfer of valuable goods through the Ugandan territory (truck and railway) and through the Kenyan territory (railway), an additional amount of 10% of final market value has been added to the overall costs of the products, under the reference name of direct marketing costs (i.e. 1,700 USD/block, or 136 USD/m^3).

8. HUMAN RESOURCES

The assessment of manpower needs is based on the assumption that two teams of three workers each will operate with the help of supporting workers for a total of 14 people. In addition to those "operational workers" there will be an administrative staff, so the total is 15 people. Furthermore, two experts from Europe have been considered: one Technical Director and one Financial Manager.

Their costs have been estimated respectively in 8,000 USD and 7,000 USD per month. Lodging and travel expenses for expatriates are estimated at 2,000 USD per month.

Number and costs of personnel are defined in the **TABLE T8.0**

Personnel	units	unit cost (USD/month)
Drilling and cutting operator	6	75
Mechanic	1	60
Assistant Mechanic	1	50
Auxiliaries	1	50
Driver	2	75
Reserve	3	45
Administrative staff	2	75
TOTAL	16	
Technical Director	1	8,000
Financial Director	1	7,000

Appropriate training will be provided on the job by the Italian epatriates to the local workers.

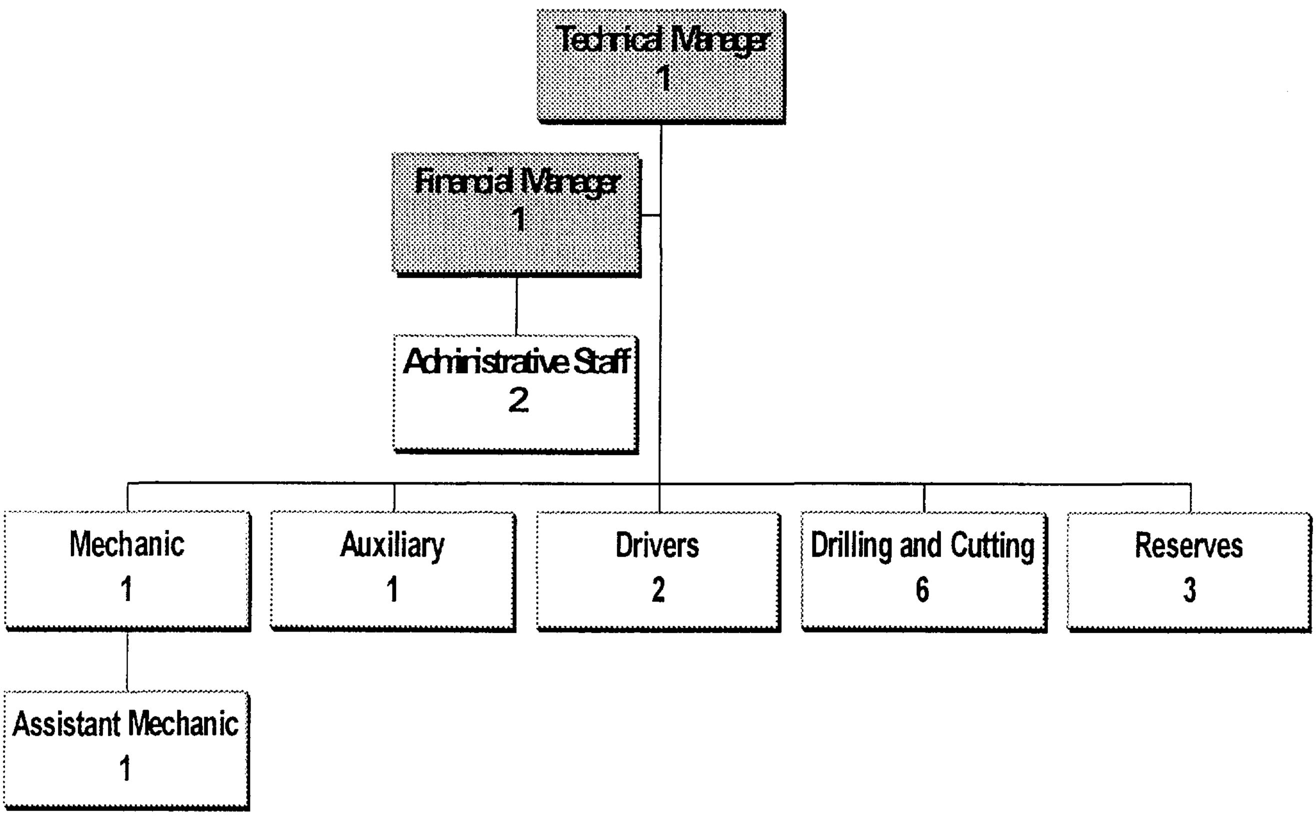
The training does not include crititcal items, as the main techniques involve an ordinate utilisation of the quarry capacity (i.e. how to prepare the quarry area for the frontal extraction, how to load the explosives and how to fire them, how to handle the blocks and load onto the trucks). Further training will be provided as far as the maintenance of the mechanical equipment is concerned.

A separate issue will be represented by the training of the clerks on the financial matters, which will be developed under the responsibility of the Financial Manager. After that, the overall operations can be co-ordinated (especially the marketing activitities) even from outside the country, leaving to the local personnel the management of any normal operation.

The planning horizon of the company's activity is considered absolutely sufficient to provide an adequate training on the job to all the workers, therefore letting the expatriates to be released from their staying on site. However, as far as the financial calculations ar concerned, the expatriates have been considered for the whole duration of the project, and the associated (high) costs accordingly.

The way the employees are organised is shown in the following chart.

Organization Chart of the Joint Venture
VICTORIA STONES Ltd.



9. IMPLEMENTATION PLANNING AND BUDGETING

The implementation planning has been developed identifying various phases, resources and related costs and defining the sequence of operations. Special attention will be placed on getting the required local authorisation and clearances, which may affect significantly the overall time schedule of the project. The local partner, due to its good introduction with the local authorities, will be in charge of all the local procedures, and is since now confident of the positive results.

The local partner will also be in charge of selecting the appropriate local personnel and to hire the workers according to the local rules and regulations.

Finally, the local partner will operate to smooth any possible inconvenience or struggle may rise from the local population living in the surroundings of the quarry, so that no social disturbance derives from.

The implementation steps of the company have been described in the following table.

Workbreakdown Structure	Activity	Cost (USD)
COMPANY SET UP	Travel and accommodation for one week trip to Uganda plus costs related to legal aspects of company set up, registration and tax payment	10,000
PERMITS FOR THE CONCESSION	Concession costs. If the concession is given to LUKU, the additional transfer cost should be included	120,000
PURCHASE OF EQUIPMENT	Purchase and transport of all the equipment .Priority to equipment for land, site and access road preparation	670,000
INSTALLATION	Installation of equipment and testing	30,000
HIRING OF WORKERS	Selection; salary for workers (monthly)	2,090
	Technical director (monthly)	8,000
	Financial director	7,000
CONSTRUCTION OF INFRASTRUCTURES	Preparation of infrastructure (access road, tanks,...) by local companies. Scraps will be used to maintain the roads	2,000

In the following planning schedule, the relevant activities are reported according to the expected time duration.

The overall plan starts on January, 1997 from the company set-up activity, lasting one year (1997 to 1998) for the completion of the erection and commissioning of the equipment and infrastructure.

Implementation Planning Schedule

Year	1997				1998			
Quarter	1	2	3	4	1	2	3	4
1 Company Set-up	oooooo							
2 Government Approval		oooo						
3 Purchase of Equipment		ooo						
4 Construction of Infrastructures			ooo					
5 Installation			oooo					
6 Recruitment				oooo				
7 Supply of Materials and Services				ooooo				
8 Production					oooooooooo..................			

10. Financial Appraisal and Investment Appraisal

10.1 General Aspects

The following financial analysis has been carried out using the methodology recommended in the UNIDO Manual for the Preparation of Industrial Feasibility Studies. In accordance with this methodology, UNIDO COMFAR III expert package has been used for the financial and economic calculations.

The financial analysis has been carried out to evaluate the Ugandan Joint Venture, established as described in the present feasibility study, for granite quarrying and block export to Italy. By taking into consideration the required project input costs and output prices, risks and uncertainty this study is aimed at clarifying the main issues of the business plan, calculating:

1) the analysis of the cost estimates for the project, based on the information included in the previous chapters of the study

2) the financial analysis, including the flow of financial resources and the project financial net benefits

In the appendices, COMFAR III Expert printout are given. All financial calculations have been carried out using the international currency USD (USA Dollars) as accounting currency, for the sake of simplicity in understanding the figures. As well, it has been assumed that the products will be sold exclusively in the international market, generating revenues in USD.

10.2 Analysis Method

The financial and economic evaluation has been conducted using the methodology which UNIDO recommends as well as standard capital budgeting procedures. The future cash flows are forecasted, generated by the project over the estimated planning horizon of 8 years (1 construction plus 7 production years).

In determining the rate of discount to be used, the appropriate cost of funding was considered, calculating the weighted average cost of capital (WACC). This reflects both the risk involved in Ugandan investment and the capital structure[i].

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[i]The discount rate used for NPV calculation is the WACC, where the weights are based on the proportion of the firm's capital structure accounted for by each source of capital. This discount rate takes in account the time value of money, as well as the riskiness of the JV's cash flows.

$$WACC = \%D * Rd *(1-tax) + \%E * Re$$

Finally the COMFAR III Expert Software has been used to evaluate the present value of the JV's future cash flow discounted at the cost of capital.

The following assumptions have been made:

i) It has been assumed all the granite blocks extracted from the quarry will be shipped to Carrara, Italy, where potential buyers have already shown their interest. The limited amount of the blocks (with respect to the total market and to the import to Italy) justifies the hypothesis that 100% of produced volume will be sold over all the project life.

ii) A model without inflation is considered (real terms analysis) to examine the profitability of the industrial initiative independently from the general economic conditions. The calculations have been carried out using USD cash flows for product sales and for all payments which will take place on local basis, and finally discounting all cash flows at the calculated weighted rate of return. For the sake of an easy understanding, the final results are reported in US dollars. A relatively high political risk (expropriation, exchange control, repatriation, civil disturbance) was taken into consideration in determining the shareholders' expectations.

iii) Due to the uncertainties on the operative conditions, namely in the logistic of the transportation from the quarry to the shipment port, a very conservative hypothesis on the working capital requirements was considered. As a result, the increase in working capital (with respect to the theoretical transportation conditions) forces the JV to bear a higher investment, thus slightly reducing the efficiency in the use of contributed capital.

10.3 Input Data

The following sections highlight the input data utilised for the COMFAR III calculations, as derived from the previous chapter of the present feasibility study (Chapt.2 - Chapt.9).

10.3.1 Pre-production and Fixed Investment Costs

Initial investment costs are defined as the sum of fixed assets (fixed investment costs plus pre-production expenditures) and current assets (net working capital).

---

where Rd is the cost of debt, Re is the expected rate of return on each partners' equities and 'tax' is the income tax rate applicable.

Re = Rf + Risk premium over the market

In this case we have estimated the Re for the Ugandan partner is about 15%, and that the Rf for the Italian partner is about 15% plus an Rf of approx. 12% (for a 8-year investment), thus the Italian Re equals 27%. The composed Re, weighting the different rates and different invested capitals, is equal to 21%. In addition %D is 35%, at a cost Rd of 20%. Therefore the WACC is equal to 20% in our case.

These costs will be met during the construction phase foreseen for the first 12 months of activity. The production phases starts on January 1st, 1998, being considered in the start-up phase for 9 months (till October 1998, and then definitively proceeding for a further 6 years.

The fixed investment cost is estimated as 700,000 USD in the construction phase, plus additional 24,999 USD in the production phase, of which the main part is accounted for foreign equipment (670,000 USD).

Pre-production expenditures account for 130,000 USD in the construction phase, split by concession (120,000 USD) and company set-up expenditures (10,000 USD).

An additional international insurance against social and political risks (MIGA), ranging about 1% of the fixed investment value, is attributed to the yearly expenditure costs, resulting in some 76,000 USD of working capital increase in the construction period.

As suggested from Italian machinery manufacturers, the technical life of these kind of fixed assets is around 10 years; thus a depreciation rate of no lower than 10%/yr. (straight-line method) has been selected. The present model includes a depreciation rate linear to zero.

FIXED INVESTMENTS COSTS AND PRE-PRODUCTION	Invest (USD) in construct.	Invest (USD) in product.	Depreciation rate (%)
site preparation & buildings	4,000	20,999	100%
plant machinery & equipment	670,000	0	10%
installation	30,000	0	10%
pre-production expenditure	130,000	0	10%
TOTAL INITIAL INVESTMENT (without Working Capital)	834,000	20,999	

10.3.2 Working Capital

Net Working Capital requirements have been calculated according to the expected minimum days of coverage (MDC) determined for the JV in a very prudential estimation. It should be considered that logistic problems could remarkably affect the efficiency of the raw materials flow, as well as the granite block flow to the shipment port.

The foreign supplies have been prudentially considered generating the need for a local stock up to 120 days, mainly due to oversee shipment and local transportation.

Local supplies contribute to stock for a 60 days: such a figure could still be properly tuned (reduced) during operations with an appropriate selection of the local suppliers.

Work in progress (days) and finished products (days) capitals are the most sensitive parameters to the possible fluctuations in term of efficiency of transportation. The estimations have intentionally been forced to very conservative values. Work in progress have been estimated up to 15 days, mostly considering the delay in the operations of storage of the block in the quarry and transportation to the railway. Finished products have been estimated to 60 days, taking into consideration the units retained along the path from the quarry deposit to the final shipment port of Mombasa.

Similarly, as far as the accounts payable are concerned, a distinction was made in between local and foreign contributions. As a matter of fact, the foreign payable are regulated by international system of payment. For the present estimation, a conservative figure of 30 were considered as the maximum delay in payment allowed to the JV. On the contrary, on local basis, especially at the beginning of the operational phase, it is highly unlikely having payment delays at all, at least until long-term relationship will be set-up with the suppliers.

For the same reason, the cash-in-hand part of the working capital was considered, equivalent to 5 days, to give the JV company the possibility to fulfil very short term requirements in case no delay would be accepted.

The following table summarises the main input for working capital coverage (MDC, Minimum Days of Coverage):

Item	MDC
Raw Material (foreign sourced)	60
Raw Material (locally sourced)	30
Work in Progress	7
Finished Products	60
Accounts Receivable	60
Cash in Hand	5
Accounts Payable (foreign source)	30
Account Payable (local source)	1

The yearly average capital trapped in the company can subsequently be calculated.

The first year of production (second year, 9 months at reduced capacity) requires an additional increase of investment due to the working capital over the first, estimated up to about 582,000 USD, to be increased again of 60,000 USD over the third and reaching the final level of about 642,000 USD.

As it will result, the net investment in WIC results in about 21.5% of sales level.

10.3.3 Sources of Finance

The initial capital contributed to the Joint Venture are shared among the two partners' equity (up to 600,000 USD) and a medium term loan of 320,000 USD.

The total amount of equity infusion is fixed at 600,000 USD, divided among the partners with a share of 25% (150,000 USD) to the local Luku Mixed Farm and 75% to the Italian Geoseven (450,000 USD).

The total equity is considered paid in at the beginning of the activity (1/1997). The limited additional investments during the production phases are supposed to be paid through the retained earnings of the JV company.

The distribution of total investment and financial coverage is as follows:

Investment vs Sources of Capital	1997	1998
Total fixed investment (USD)	(704,000)	(5,999)
Pre-production expenses (USD)	(130,000)	0
Increase in Working Capital (USD)	(76,875)	(506,567)
TOTAL INVESTMENT	**(910,875)**	**(512,566)**
Equity contribution (USD)	600,000	0
Term Loan (USD)	320,000	0
Short term Loan (USD) -1-	0	530,000
Short term Loan (USD) -2-	0	180,000
TOTAL CAPITAL COVERAGE	**920,000**	**710,000**
Balance	9,125	197,434

Of course, the financial requirements for sustainable growth are covered through the borrowed capital during the first year of production. The profit obtained by the operations are sufficient to pay back the whole borrowed capital, for the short term and the medium term capitals, as discussed in Chapter 10.4.2 about the Cash Flow for Financial Planning. As further discussed, the cash flow for financial planning states that the growth is effectively supported by inflow of finance.

Partner	Equity (USD)	Share %
LUKU MIXED FARM	150,000	25
GEOSEVEN	450,000	75
TOTAL EQUITY	600,000	100

10.3.4 Production Phase

The production phase is planned to start from 1/1998 (after 12 months of construction period), and lasts for 7 years.

The production is analysed into different phases: the start-up period lasts 9 months, from 1/98 to 9/98, and is analysed on monthly basis in the financial statements.

The production phase starts on 10/98, and lasts until end of 2004. The production periods are analysed on yearly basis, except for the first 3 months, stated separately.

The full capacity is never reached. According to the Chapter 6 Engineering and Technology, the total capacity of the quarry is stated up to 480 block/year. Coming from the technical assessment to a realistic assumption of sustainable local production, a very lower practical capacity is stated, due to logistics, social conditions, weather and other uncertainties. Therefore, the forecasted production sold is limited to 200 block/year.

Year	Produced Granite Blocks	Utilised Capacity
1/98	201	41.8
1/99	201	41.9
1/2000	200	41.6
1/2001	200	41.6
1/2002	200	41.6
1/2003	200	41.6

The year 2001 was selected as reference year. In the present model, all the production is considered to be sold on yearly basis.

The reference price has been defined through the market study; it has been assumed that at the beginning the level will be of 1,200 USD / m^3, i.e. 15,000 USD/block (12,5 m^3/block), and that the price remains unchanged over the whole planning horizon.

Year	1998	1999	2000	2001	2002
Block Price (USD)	15000	15000	15000	15000	15000

The unit cost of a granite block is affected by the list of raw materials, both local and foreign sourced. According to the indications of Chapter 4. Raw Materials and Supplies, the consumption can be synthesised according to the following table:

Granite Block Direct Expenses	Unit cost (USD)
Raw Materials (local)	165.00
Raw Materials (foreign)	105.00
TOTAL R/M	**270.00**
Transports (1+2+3)	4,125.00
Storage, Handling and Jetty fees	1,168.75
Direct Marketing	1,500.00
TOTAL	**7063.75**

Granite Block Indirect Expenses	Yearly cost (USD)
Office in Kampala (rent)	12,000.00
Staff Accommodation	48,000.00
Telecom	24,000.00
Travel Expenses (regime)	4,000.00

Repair and maintenance account for 6% over the investment nominal value on the second and third year of production (40,000 USD), while are accounted up to 10% on the remaining (67,500 USD).

The MIGA political insurance is evaluated up to 1% of the nominal residual value of fixed investment, therefore decreasing from 70,875 USD on the first year to the 21,500 USD of year 2004.

Personnel costs are divided by categories, and has been considered as direct fixed and indirect fixed costs.

Direct Personnel	year salary (USD)	q.ty
drilling	900	6
mechanic	720	1
assist.mechanic	600	1
auxiliaries	600	1
driver	900	2
reserve	540	3
adm. staff	900	2

Indirect Personnel	year salary (USD)	q.ty
Technical Director	96,000	1
Financial Director	84,000	1

10.3.5 Income Taxes

In the present study, an income tax of 40% was assumed, even though a foreign investment in Uganda can benefit of fiscal incentives, such as tax holiday periods on income tax, withholding tax, dividend tax. The 40% assumption is a conservative position, being the JV fiscal position not yet stated by the local authorities.

10.4 Analysis of Results

10.4.1 Net Income Statement

The Net Income Statement schedule shows an increasing trend of sales from 2,535,000 USD of the first production year to 3,000,000 USD of 2000 onward.

The variable costs account for 375,000 USD, about 14.7% on the first year of production, and about 350,000 USD onward (about 11.6% of total sales), thus leaving about 31.8% of operational margin (total revenues less fixed and variable costs).

As the company does not pay very high interests with respect to the operational margin, the gross profit from operations accounts for about 685,000 USD (first year), 894,000 (second year) and 938,000 USD from the third year onward: it leads to about 31% of gross profit to total sales.

The Net Profit is positive since the very first year, starting from 411,000 USD. The Net Profit increases to about 560,000 USD at regime.

Part of the Net Profit generated in the first two years is utilised to finance the growth of business volume of the company (at regime on the third year), and therefore dividends could start being distributed partially from the third year. Such a distribution policy is an exclusive responsibility of the company management, and therefore the present analysis does not provide any comment on that. As a consequence, such parameters such as Net Present Value on Equity, and Liquidity ratios will not be considered at all.

The Net Profit to Equity ratio (ROE) shows a huge positive initial sequence (ranging from 68% of the first year to 93% of the third year).

The trend can be easily understood from the Net Profit to Total Sales diagram (see Annex.1) As ROE should be compared with the equity return expectation of the partners, it be underlined that both the Ugandan and Italian partner's expectations are largely exceeded at any single stage of the company business plan.

As far as the Return On Investment is concerned, the COMFAR III printouts show that the ROI level, which is quite comfortable in all the period 1997-2000, being set about 38% over the planning horizon.

10.4.2 Cashflow for financial planning and profit distribution

The cashflow has been evaluated on both yearly basis and on periodical (monthly) basis. The results, as previously introduced, show that basically the equity infusion (600,000 USD) together with the planned medium term loan (320,000 USD) permit the coverage of the initial fixed investment (and the first MIGA insurance payment), with a very limited excess of 9,100 USD. In the reality the size of the loan cannot be fixed, but should be negotiated with the lending institute in order to obtain a certain elasticity, given the interest rate, with respect to possible overshooting of the capital expenditure during the construction.

The required term loan was assumed to have 3-year duration, at the rate of 15%, and to grant one grace period. The size of the loan was assumed according to the equity resources declared by the parties, as well as to setting-up a reasonable Debt Equity Ratio of about 0.53 (i.e. Equity 65%, Loan 35%). As a comment, it should be underlined that, given the limited amount of investment, a larger ratio would be hardly acceptable, and that an even lower one would be clearly preferred by the potential lenders.

As made evident in the cash flow tables (monthly analysis), at the beginning of the production period a large cash inflow is required to cover the further investment for the creation of a working capital deposit. The short term loan planned is as large as (about) the increase in working capital, resulting in about 530,000 USD, drawn on the first month of the second year (first month of production). The duration of the short loan has been studied to be the shortest possible, given that the production plan would generate revenues in order to repay back that amount. The shortest period identified is 7 months, at a supposed interest rate of 22%. A second loan -substituting the first expired, but of a lower amount - should be borrowed at the beginning of the 10/1998, for a total amount of 180,000 USD at the same interest rate (22%) of the previous. The total coverage required should last for some few months, until about mid of the 1999. As shown in the COMFAR tables, at the end of 1999 the total cumulated cash largely exceeds the zero threshold, thus confirming the limited cash inflow needs of the second short term loan.

In this way, the availability of cash is sufficient to cover the need for the first seven months of operations. The generated revenues sustains the production, cumulating an excess of cash as high as 513,000 USD at the end of the seventh month. Therefore, the repayment of 530,000 USD can effectively take place at the end of the eighth month, still leaving the company in the condition not to need further loans for the whole project life. The surplus generated by the operations provides the company with cash sufficient to pay back even the debt service of the term loans.

Of course, in the reality, a certain recourse to the financial leverage will be introduced, under the control of the internal administrator. It is not the purpose of the present study give recommendations about the most effective financial daily management, therefore the assumption made is to reduce and balance all the debts in the shortest period possible, leaving the company in outstanding self-financed conditions.

10.4.3 Discounted cashflows

The financial evaluation has been carried out assuming a basic reference configuration for the investment project, defined by the cost estimation summarised in the previous paragraphs. This basic version does not include any inflation rate. The related printouts are enclosed in the Annex 1 to the present study.

- Given the general assumptions of the project, the Net Present Value (NPV) over the project, calculated at 20% of discount rate, is positive (1,180,297 USD), with a NPV ratio of 0.85 (i.e. total cumulated net cash -deriving from the operations- 1.85 times higher than the total initial investment), which represent a fairly high value. The evaluation show a positive result, with a very good margin of the threshold of decision (0 level).

- The internal rate of return over total investment IRR looks very high (49.13%), which represents a calculated 29% spread over the required discount rate. Such a value is very high with respect to usual industrial rates, but should take into consideration that a consistent margin is required for the implicit risk of operating in uncertain, unstable local conditions. Long unpredictable interruptions in the production process (inclusive of the transportation logistics) can badly affect the production sold, thus resulting in a sudden drop of the indicator. A very large (theoretical) margin is therefore a minimum requirement for a possible positive appraisal.

- The dynamic payback period is calculated in 4 years; it means that the overall investment is paid back within a period of four years, which appears to in line with a normal industrial expectation.

10.4.4 Break-even Analysis

A break-even analysis was performed on this base case. First, costs were allocated according to their variable and direct cost contribution. All raw material, factory supplies, and other costs were considered completely variable. All other costs, including all personnel costs, were considered fixed. The JV operation was determined to break-even when it reached abut 27% of its operating capacity, considered in steady state.

The break-even shows a very positive results, confirming that the most relevant costs have a variable nature, while the fixed costs (personnel, administration,...) account only for a limited part of the total expenditure.

The annexed table and graph show how the break-even level results rather constant along the years.

10.5 Sensitivity Analysis

10.5.1 Sensitivity Analysis: Assumptions

Sensitivity analysis was not performed on the predicted market prices of the product and volume of product sold. As a matter of fact, the production capacity related to the plant organisation is far larger than the supposed unit of product sold. On the other side, the overall demand in the sector of granite block is much larger than the supposed production, therefore the company is unlikely to suffer sales fluctuations.

The present analysis concentrates on the variability of the production costs. Production costs were forecasted to be 10% and 20% higher than the base case costs, while production volume and prices costs were kept constant. As additional scenarios, incremental increase of investment expenditures were added to the cost increase, for the same percentage.

10.5.2 Sensitivity Analysis: Financial Results

As it is easy to understand from the following table, the sensitivity of the IRR results higher versus the production costs rather than the investment expenditures.

However, in all the examined cases, the Net Present Value results positive, and the Internal Rate of Return (IRR) beyond the hurdle rate limit.

The combined effect of production costs increase (+20%) and investment costs increase (+20%) would force the IRR close to the limit of the discount factor. However, it useful to remind that the investment costs have been structured with the use of new machines, and therefore are subject to reduction (if any of the equipment is available locally or on the second-hand market) rather than to increase. Similarly, the cost estimation has been carried out with large margins, so that further increases are unlikely to be expected.

Variations	1	2	3	4
Production Costs	+10%	+10%	+20%	+20%
Investment Expenditures	0	+10%	0	+20%
Internal Rate of Return (%)	37.5%	34.9%	26.5%	23.0%
Net Present Value (USD)	737,600	671,000	285,000	152,000
NPV Ratio	0.51	0.44	0.19	0.09

As a result, the project accepts a certain degree of flexibility against fluctuation in production costs and in investment expenditures.

10.6 Conclusions

The financial evaluation has been carried out assuming a basic reference configuration for the investment project, defined by the cost estimation summarised in the previous paragraphs. This base case involves real costs and prices, with inflation not incorporated. The related printouts are enclosed in the Annex 1. The main considerations that can be pinpointed are the following:

i) Given the general assumptions of the project, the Net Present Value (NPV), calculated at 20% the discount rate, is positive (1,180,297 USD), thus indicating that the industrial project provides a remuneration higher than required discount rate. The internal rate of return is 49.1%, which is far higher than the required rate of return of 20%.

iii) The Net Profit starts to show positive results from the first year of production (1998) with Net Profit stabilising at around 18.6% of sales. Net Profit reaches just over 560,000 Lit. by 2000.

iv) A low break-even point demonstrates that the cost structure is mainly based on the variable issues, being the fixed fairly limited.

v) The sensitivity analysis shows a certain degree of strengthen of the project against fluctuations of production costs and investment capital expenditures, still maintaining a positive NPV.

ANNEX 1

COMFAR PRINTOUT

Basic Version

SUMMARY SHEET

Project title: UGA/109/M/95-08 Granite Quarrying in Uganda

Project description: Granite quarrying in the Arua area, Uganda. The feasibility study was carried out by the IPO on behalf of the sponsors Geoseven Srl (Italy) and Luku Mixed Farm (Uganda)

Date and time: August, 1996

Project classification: New project
Joint-venture project

Construction phase: 1/1997 - 12/1997
Length: 1 years
Production phase: 1/1998 - 12/2004
Length: 7 periods

Accounting currency: US.Dollars
Units: Absolute
Reference currency:
Exchange rate:

INVESTMENT COSTS

	Total construction	Total production	Total investment
Total fixed investment costs	704,000.00	20,999.48	724,999.48
Total pre-production expenditures	130,000.00	0.00	130,000.00
Increase in net working capital	76,875.00	562,450.97	639,325.97
TOTAL INVESTMENT COSTS	910,875.00	583,450.45	1,494,325.45

SUMMARY SHEET

SOURCES OF FINANCE

	Total inflow
Equity capital	600,000.00
Long-term loans	320,000.00
Total short-term loans	752,930.12
TOTAL SOURCES OF FINANCE	1,672,930.12

INCOME AND COSTS, OPERATIONS

	First year 1998	Reference year 2001	Last year 2004
SALES REVENUE	2,535,000.00	3,000,000.00	3,000,000.00
Factory costs	1,094,995.00	1,253,540.00	1,232,540.00
Administrative overhead costs	279,518.75	425,750.00	425,750.00
OPERATING COSTS	1,374,513.75	1,679,290.00	1,658,290.00
Depreciation	86,649.97	86,399.93	85,999.93
Financial costs	134,661.67	0.00	0.00
TOTAL PRODUCTION COSTS	1,595,825.39	1,765,689.93	1,744,289.93
Marketing costs	253,500.00	300,000.00	300,000.00
COSTS OF PRODUCTS	1,849,325.39	2,065,689.93	2,044,289.93
Interest on short-term deposits	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	685,674.61	934,310.07	955,710.07
Extraordinary income	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00

SUMMARY SHEET

GROSS PROFIT	685,674.61	934,310.07	955,710.07
Investment allowances	0.00	0.00	0.00
TAXABLE PROFIT	685,674.61	934,310.07	955,710.07
Income (corporate) tax	274,269.85	373,724.03	382,284.03
NET PROFIT	411,404.77	560,586.04	573,426.04

RATIOS

Net present value	at 20.00 %	1,180,297.42
Internal rate of return on investment (IRR)	49.13 %	
Modified IRR on investment	49.13 %	
Internal rate of return on equity (IRRE)	54.69 %	
Modified IRRE on equity	54.69 %	

FIXED INVESTMENT COSTS - TOTAL
US.Dollars

	Total construction	Total production	1997	1998	1999	2000	2001	2002	2003
Land purchase	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site preparation and development	2,000.00	20,999.48	2,000.00	5,999.85	2,999.93	2,999.93	2,999.93	2,999.93	2,999.93
Access Road Construction	2,000.00	20,999.48	2,000.00	5,999.85	2,999.93	2,999.93	2,999.93	2,999.93	2,999.93
Civil works, structures and buildings	2,000.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Office Set-up	2,000.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Machinery and equipment	700,000.00	0.00	700,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Machinery and Equipment	670,000.00	0.00	670,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Installation	30,000.00	0.00	30,000.00	0.00	0.00	0.00	0.00	0.00	0.00
General operations equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Environmental protection	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incorporated fixed assets (project overheads)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Contingencies	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL FIXED INVESTMENT COSTS	704,000.00	20,999.48	704,000.00	5,999.85	2,999.93	2,999.93	2,999.93	2,999.93	2,999.93
Foreign share (%)	95.17	0.00	95.17	0.00	0.00	0.00	0.00	0.00	0.00

FIXED INVESTMENT COSTS - TOTAL US.Dollars	
	2004
Land purchase	0.00
Site preparation and development	0.00
Access Road Construction	0.00
Civil works, structures and buildings	0.00
Site Office Set-up	0.00
Machinery and equipment	0.00
Machinery and Equipment	0.00
Installation	0.00
General operations equipment	0.00
Environmental protection	0.00
Incorporated fixed assets (project overheads)	0.00
Contingencies	0.00
TOTAL FIXED INVESTMENT COSTS	0.00
Foreign share (%)	0.00

NET WORKING CAPITAL REQUIREMENTS - TOTAL
US.Dollars

	Coefficient of turnover	1997	1998	1999	2000	2001	2002	2003	2004
Total inventory	0.00	76,875.00	325,204.00	335,877.50	334,112.50	338,362.50	336,904.17	335,445.83	333,987.50
Supplies	0.00	0.00	6,281.25	6,291.67	6,250.00	6,250.00	6,250.00	6,250.00	6,250.00
Utilities	0.00	76,875.00	7,175.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spare parts consumed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Work in progress	24.00	0.00	51,484.79	51,920.83	51,380.83	52,230.83	51,939.17	51,647.50	51,355.83
Finished product	0.00	0.00	260,262.96	277,665.00	276,481.67	279,881.67	278,715.00	277,548.33	276,381.67
Accounts receivable	0.00	0.00	271,335.63	327,665.00	326,481.67	329,881.67	328,715.00	327,548.33	326,381.67
Cash-in-hand	72.00	0.00	19,591.44	21,365.95	21,267.92	21,649.86	21,649.86	21,649.86	21,649.86
CURRENT ASSETS	0.00	76,875.00	616,131.07	684,908.45	681,862.08	689,894.03	687,269.03	684,644.03	682,019.03
Current liabilities									
Accounts payable	0.00	0.00	33,188.73	42,871.45	42,692.73	42,751.39	42,731.94	42,712.50	42,693.06
TOTAL NET WORKING CAPITAL REQUIREMENTS	0.00	76,875.00	582,942.34	642,037.00	639,169.36	647,142.64	644,537.08	641,931.53	639,325.97
INCREASE IN NET WORKING CAPITAL	0.00	76,875.00	506,067.34	59,094.66	-2,867.64	7,973.28	-2,605.56	-2,605.56	-2,605.56
Foreign share (%)	0.00	92.20	24.86	18.60	18.27	17.63	17.30	16.96	16.63

INVESTMENT COSTS - TOTAL
US.Dollars

	Total construction	Total production	1997	1998	1999	2000	2001	2002	2003
Total fixed investment costs	704,000.00	20,999.48	704,000.00	5,999.85	2,999.93	2,999.93	2,999.93	2,999.93	2,999.93
Total pre-production expenditures	130,000.00	0.00	130,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase in net working capital	76,875.00	562,450.97	76,875.00	506,067.34	59,094.66	-2,867.64	7,973.28	-2,605.56	-2,605.56
TOTAL INVESTMENT COSTS	910,875.00	583,450.45	910,875.00	512,067.19	62,094.58	132.29	10,973.21	394.37	394.37
Foreign share (%)	81.34	6.07	81.34	14.46	-41.03	-2,014.31	-24.10	-660.69	-660.69

INVESTMENT COSTS - TOTAL
US.Dollars

	2004
Total fixed investment costs	0.00
Total pre-production expenditures	0.00
Increase in net working capital	-2,605.56
TOTAL INVESTMENT COSTS	-2,605.56
Foreign share (%)	100.00

ANNUAL COSTS OF PRODUCTS - TOTAL
US.Dollars

	Production 1998	Production 1999	Production 2000	Production 2001	Production 2002	Production 2003	Production 2004
Capacity utilization (%)	41.88	41.94	41.67	41.67	41.67	41.67	41.67
Supplies	54,270.00	54,360.00	54,000.00	54,000.00	54,000.00	54,000.00	54,000.00
Utilities	87,700.00	80,700.00	73,600.00	66,500.00	59,500.00	52,500.00	45,500.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spare parts consumed	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Repair, maintenance, material	0.00	40,000.00	40,000.00	67,500.00	67,500.00	67,500.00	67,500.00
Royalties	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Labour	12,540.00	12,540.00	12,540.00	12,540.00	12,540.00	12,540.00	12,540.00
Labour overhead costs (taxes etc.)	252,000.00	228,000.00	228,000.00	228,000.00	228,000.00	228,000.00	228,000.00
Mine overhead costs	829,125.00	830,500.00	825,000.00	825,000.00	825,000.00	825,000.00	825,000.00
FACTORY COSTS	1,235,635.00	1,246,100.00	1,233,140.00	1,253,540.00	1,246,540.00	1,239,540.00	1,232,540.00
Administrative costs	268,918.75	379,308.33	377,750.00	377,750.00	377,750.00	377,750.00	377,750.00
Staff accomodation, social activities	48,000.00	48,000.00	48,000.00	48,000.00	48,000.00	48,000.00	48,000.00
OPERATING COSTS	1,552,553.75	1,673,408.33	1,658,890.00	1,679,290.00	1,672,290.00	1,665,290.00	1,658,290.00
Decrease in value of unexploited ore	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Depreciation	86,649.97	88,149.88	86,399.93	86,399.93	86,399.93	85,999.93	85,999.93
Financial costs	134,661.67	51,800.00	16,000.00	0.00	0.00	0.00	0.00
TOTAL PRODUCTION COSTS	1,773,865.39	1,813,358.21	1,761,289.93	1,765,689.93	1,758,689.93	1,751,289.93	1,744,289.93
Direct marketing costs	301,500.00	302,000.00	300,000.00	300,000.00	300,000.00	300,000.00	300,000.00
COSTS OF PRODUCTS	2,075,365.39	2,115,358.21	2,061,289.93	2,065,689.93	2,058,689.93	2,051,289.93	2,044,289.93
Foreign share (%)	19.46	17.63	17.74	17.35	17.07	16.79	16.51
Variable share (%)	75.43	80.88	82.20	83.01	82.95	82.91	82.85

PRODUCTION AND SALES PROGRAMME - TOTAL
US.Dollars

	Production 1998	Production 1999	Production 2000	Production 2001	Production 2002	Production 2003	Production 2004
Stock brought forward	0.00	32.00	33.33	33.33	33.33	33.33	33.33
Quantity produced	201.00	201.33	200.00	200.00	200.00	200.00	200.00
Stock carried over	32.00	33.33	33.33	33.33	33.33	33.33	33.33
Quantity sold	169.00	200.00	200.00	200.00	200.00	200.00	200.00
Gross unit price (average)	15,000.00	15,000.00	15,000.00	15,000.00	15,000.00	15,000.00	15,000.00
Gross sales revenue	2,535,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00
Less sales tax	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net sales revenue	2,535,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00
Subsidy	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SALES REVENUE	2,535,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00
Foreign share (%)	100.00	100.00	100.00	100.00	100.00	100.00	100.00

FINANCIAL FLOW - TOTAL
US.Dollars

	Total inflow	1997	1998	1999	2000	2001	2002	2003	2004
Equity capital	600,000.00	600,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ordinary capital	600,000.00	600,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Preference capital	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subsidies, grants	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Long-term loans	320,000.00	320,000.00	-106,666.67	-106,666.67	-106,666.67	0.00	0.00	0.00	0.00
TOTAL LONG-TERM FINANCE	920,000.00	920,000.00	-106,666.67	-106,666.67	-106,666.67	0.00	0.00	0.00	0.00
Total short-term loans	752,930.12	0.00	213,188.73	-170,317.28	-178.73	58.66	-19.44	-19.44	-19.44
Short-term loans	710,000.00	0.00	180,000.00	-180,000.00	0.00	0.00	0.00	0.00	0.00
Accounts payable	42,930.12	0.00	33,188.73	9,682.72	-178.73	58.66	-19.44	-19.44	-19.44
TOTAL FINANCIAL FLOW	1,672,930.12	920,000.00	106,522.06	-276,983.94	-106,845.39	58.66	-19.44	-19.44	-19.44
Foreign share (%)	27.02	48.91	1.91	0.05	0.03	-30.31	100.00	100.00	100.00

FINANCIAL FLOW - TOTAL
US.Dollars

	Scrap 2005
Equity capital	0.00
Ordinary capital	0.00
Preference capital	0.00
Subsidies, grants	0.00
Long-term loans	0.00
TOTAL LONG-TERM FINANCE	0.00
Total short-term loans	-42,693.06
Short-term loans	0.00
Accounts payable	-42,693.06
TOTAL FINANCIAL FLOW	-42,693.06
Foreign share (%)	4.24

DEBT SERVICE - TOTAL
US.Dollars

	Total inflow	1997	1998	1999	2000	2001	2002	2003	2004	Scrap 2005
Total long-term loans										
Disbursement	320,000.00	320,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Repayment	320,000.00	0.00	106,666.67	106,666.67	106,666.67	0.00	0.00	0.00	0.00	0.00
Debt balance	0.00	320,000.00	213,333.33	106,666.67	0.00	0.00	0.00	0.00	0.00	0.00
Exchange rate adjustments	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Capitalized interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest payable	96,000.00	0.00	48,000.00	32,000.00	16,000.00	0.00	0.00	0.00	0.00	0.00
Other financial costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total short-term loans										
Disbursement	710,000.00	0.00	710,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Repayment	710,000.00	0.00	530,000.00	180,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Debt balance	0.00	0.00	180,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exchange rate adjustments	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Capitalized interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest payable	106,461.67	0.00	86,661.67	19,800.00	0.00	0.00	0.00	0.00	0.00	0.00
Other financial costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL DEBT SERVICE										
Disbursement	1,030,000.00	320,000.00	710,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Repayment	1,030,000.00	0.00	636,666.67	286,666.67	106,666.67	0.00	0.00	0.00	0.00	0.00
Debt balance	0.00	320,000.00	393,333.33	106,666.67	0.00	0.00	0.00	0.00	0.00	0.00
Exchange rate adjustments	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Capitalized interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest payable	202,461.67	0.00	134,661.67	51,800.00	16,000.00	0.00	0.00	0.00	0.00	0.00
Other financial costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

CASH FLOW FOR FINANCIAL PLANNING - TOTAL
US.Dollars

	Construction 1997	Production 1/1998-1/1998	Production 2/1998-2/1998	Production 3/1998-3/1998	Production 4/1998-4/1998	Production 5/1998-5/1998	Production 6/1998-6/1998
TOTAL CASH INFLOW	920,000.00	634,233.75	155,178.75	150,000.00	272,335.50	240,000.00	240,906.00
Inflow funds	920,000.00	559,233.75	5,178.75	0.00	32,335.50	0.00	906.00
Total equity	600,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Total long-term loans	320,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Total short-term loans	0.00	559,233.75	5,178.75	0.00	32,335.50	0.00	906.00
Inflow operation	0.00	75,000.00	150,000.00	150,000.00	240,000.00	240,000.00	240,000.00
Sales revenue	0.00	75,000.00	150,000.00	150,000.00	240,000.00	240,000.00	240,000.00
Interest on short-term deposits	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other income	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL CASH OUTFLOW	910,875.00	631,987.29	-31,956.87	80,201.25	350,731.25	119,623.50	137,225.00
Increase in fixed assets	834,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Fixed investments	704,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Pre-production expenditures (net of interest)	130,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase in current assets	76,875.00	508,923.54	-145,101.04	-31,331.25	212,666.25	-40,617.50	-840.00
Operating costs	0.00	115,563.75	79,682.50	80,682.50	114,065.00	114,065.00	114,065.00
Marketing costs	0.00	7,500.00	15,000.00	15,000.00	24,000.00	24,000.00	24,000.00
Income (corporate) tax	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Financial costs	0.00	0.00	18,461.67	0.00	0.00	0.00	0.00
Loan repayment	0.00	0.00	0.00	15,850.00	0.00	22,176.00	0.00
Dividends	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equity capital refund	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SURPLUS (DEFICIT)	9,125.00	2,246.46	187,135.63	69,798.75	-78,395.75	120,376.50	103,681.00
CUMULATIVE CASH BALANCE	9,125.00	11,371.46	198,507.08	268,305.83	189,910.08	310,286.58	413,967.58
Foreign surplus (deficit)	-290,875.00	-309,820.83	413,612.50	130,375.00	220,795.00	217,960.00	223,000.00

CASH FLOW FOR FINANCIAL PLANNING - TOTAL
US.Dollars

	Production 7/1998-7/1998	Production 8/1998-8/1998	Production 9/1998-9/1998	Production 10/1998-12/1998	Production 1999	Production 2000	Production 2001
TOTAL CASH INFLOW	240,840.00	240,000.00	240,000.00	908,000.00	3,004,403.45	3,000,000.00	3,000,058.66
Inflow funds	840.00	0.00	0.00	188,000.00	4,403.45	0.00	58.66
Total equity	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total long-term loans	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total short-term loans	840.00	0.00	0.00	188,000.00	4,403.45	0.00	58.66
Inflow operation	240,000.00	240,000.00	240,000.00	720,000.00	3,000,000.00	3,000,000.00	3,000,000.00
Sales revenue	240,000.00	240,000.00	240,000.00	720,000.00	3,000,000.00	3,000,000.00	3,000,000.00
Interest on short-term deposits	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other income	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL CASH OUTFLOW	141,064.93	726,365.00	138,065.00	1,036,031.44	2,661,414.09	2,457,172.98	2,364,045.90
Increase in fixed assets	2,999.93	0.00	0.00	2,999.93	2,999.93	2,999.93	2,999.93
Fixed investments	2,999.93	0.00	0.00	2,999.93	2,999.93	2,999.93	2,999.93
Pre-production expenditures (net of interest)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase in current assets	0.00	0.00	0.00	108,000.00	-3,666.55	-3,046.37	8,031.94
Operating costs	114,065.00	114,065.00	114,065.00	414,195.00	1,665,990.00	1,658,890.00	1,679,290.00
Marketing costs	24,000.00	24,000.00	24,000.00	72,000.00	300,000.00	300,000.00	300,000.00
Income (corporate) tax	0.00	0.00	0.00	274,269.85	357,624.05	375,484.03	373,724.03
Financial costs	0.00	58,300.00	0.00	57,900.00	51,800.00	16,000.00	0.00
Loan repayment	0.00	530,000.00	0.00	106,666.67	286,666.67	106,845.39	0.00
Dividends	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equity capital refund	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SURPLUS (DEFICIT)	99,775.07	-486,365.00	101,935.00	-128,031.44	342,989.37	542,827.02	636,012.76
CUMULATIVE CASH BALANCE	513,742.66	27,377.66	129,312.66	1,281.22	344,270.59	887,097.60	1,523,110.37
Foreign surplus (deficit)	222,160.00	221,320.00	221,320.00	541,293.33	2,745,294.51	2,704,064.65	2,711,144.72

CASH FLOW FOR FINANCIAL PLANNING - TOTAL
US.Dollars

	Construction 1997	Production 1/1998-1/1998	Production 2/1998-2/1998	Production 3/1998-3/1998	Production 4/1998-4/1998	Production 5/1998-5/1998	Production 6/1998-6/1998
Local surplus (deficit)	300,000.00	312,067.29	-226,476.88	-60,576.25	-299,190.75	-97,583.50	-119,319.00
Foreign cumulative cash balance	-290,875.00	-600,695.83	-187,083.33	-56,708.33	164,086.67	382,046.67	605,046.67
Local cumulative cash balance	300,000.00	612,067.29	385,590.42	325,014.17	25,823.42	-71,760.08	-191,079.08
Net flow of funds	920,000.00	559,233.75	-13,282.92	-15,850.00	32,335.50	-22,176.00	906.00

CASH FLOW FOR FINANCIAL PLANNING - TOTAL
US.Dollars

	Production 7/1998-7/1998	Production 8/1998-8/1998	Production 9/1998-9/1998	Production 10/1998-12/1998	Production 1999	Production 2000	Production 2001
Local surplus (deficit)	-122,384.93	-707,685.00	-119,385.00	-669,324.77	-2,402,305.15	-2,161,237.64	-2,075,131.96
Foreign cumulative cash balance	827,206.67	1,048,526.67	1,269,846.67	1,811,140.00	4,556,434.51	7,260,499.17	9,971,643.89
Local cumulative cash balance	-313,464.01	-1,021,149.01	-1,140,534.01	-1,809,858.78	-4,212,163.93	-6,373,401.56	-8,448,533.52
Net flow of funds	840.00	-588,300.00	0.00	23,433.33	-334,063.21	-122,845.39	58.66

CASH FLOW FOR FINANCIAL PLANNING - TOTAL
US.Dollars

	1997	1998	1999	2000	2001	2002	2003
TOTAL CASH INFLOW	920,000.00	3,278,188.73	3,009,682.72	3,000,000.00	3,000,058.66	3,000,000.00	3,000,000.00
Inflow funds	920,000.00	743,188.73	9,682.72	0.00	58.66	0.00	0.00
Total equity	600,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Total long-term loans	320,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Total short-term loans	0.00	743,188.73	9,682.72	0.00	58.66	0.00	0.00
Inflow operation	0.00	2,535,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00
Sales revenue	0.00	2,535,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00
Interest on short-term deposits	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other income	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL CASH OUTFLOW	910,875.00	3,218,867.85	2,733,858.02	2,457,172.98	2,364,045.90	2,349,208.40	2,345,168.40
Increase in fixed assets	834,000.00	5,999.85	2,999.93	2,999.93	2,999.93	2,999.93	2,999.93
Fixed investments	704,000.00	5,999.85	2,999.93	2,999.93	2,999.93	2,999.93	2,999.93
Pre-production expenditures (net of interest)	130,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase in current assets	76,875.00	539,256.07	68,777.38	-3,046.37	8,031.94	-2,625.00	-2,625.00
Operating costs	0.00	1,374,513.75	1,665,990.00	1,658,890.00	1,679,290.00	1,672,290.00	1,665,290.00
Marketing costs	0.00	253,500.00	300,000.00	300,000.00	300,000.00	300,000.00	300,000.00
Income (corporate) tax	0.00	274,269.85	357,624.05	375,484.03	373,724.03	376,524.03	379,484.03
Financial costs	0.00	134,661.67	51,800.00	16,000.00	0.00	0.00	0.00
Loan repayment	0.00	636,666.67	286,666.67	106,845.39	0.00	19.44	19.44
Dividends	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equity capital refund	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SURPLUS (DEFICIT)	9,125.00	59,320.88	275,824.70	542,827.02	636,012.76	650,791.60	654,831.60
CUMULATIVE CASH BALANCE	9,125.00	68,445.88	344,270.59	887,097.60	1,523,110.37	2,173,901.97	2,828,733.57
Foreign surplus (deficit)	-290,875.00	2,127,531.03	2,719,778.49	2,704,064.65	2,711,144.72	2,718,105.56	2,725,105.56

CASH FLOW FOR FINANCIAL PLANNING - TOTAL
US.Dollars

	2004	Scrap 2005
TOTAL CASH INFLOW	3,000,000.00	931,019.03
Inflow funds	0.00	0.00
Total equity	0.00	0.00
Total long-term loans	0.00	0.00
Total short-term loans	0.00	0.00
Inflow operation	3,000,000.00	0.00
Sales revenue	3,000,000.00	0.00
Interest on short-term deposits	0.00	0.00
Other income	0.00	931,019.03
TOTAL CASH OUTFLOW	2,337,968.47	42,693.06
Increase in fixed assets	0.00	0.00
Fixed investments	0.00	0.00
Pre-production expenditures (net of interest)	0.00	0.00
Increase in current assets	-2,625.00	0.00
Operating costs	1,658,290.00	0.00
Marketing costs	300,000.00	0.00
Income (corporate) tax	382,284.03	0.00
Financial costs	0.00	0.00
Loan repayment	19.44	42,693.06
Dividends	0.00	0.00
Equity capital refund	0.00	0.00
SURPLUS (DEFICIT)	662,031.53	888,325.97
CUMULATIVE CASH BALANCE	3,490,765.09	4,379,091.06
Foreign surplus (deficit)	2,732,105.56	106,294.44

CASH FLOW FOR FINANCIAL PLANNING - TOTAL
US.Dollars

	1997	1998	1999	2000	2001	2002	2003
Local surplus (deficit)	300,000.00	-2,068,210.14	-2,443,953.78	-2,161,237.64	-2,075,131.96	-2,067,313.96	-2,070,273.96
Foreign cumulative cash balance	-290,875.00	1,836,656.03	4,556,434.51	7,260,499.17	9,971,643.89	12,689,749.44	15,414,855.00
Local cumulative cash balance	300,000.00	-1,768,210.14	-4,212,163.93	-6,373,401.56	-8,448,533.52	-10,515,847.48	-12,586,121.43
Net flow of funds	920,000.00	-28,139.60	-328,783.94	-122,845.39	58.66	-19.44	-19.44

CASH FLOW FOR FINANCIAL PLANNING - TOTAL
US.Dollars

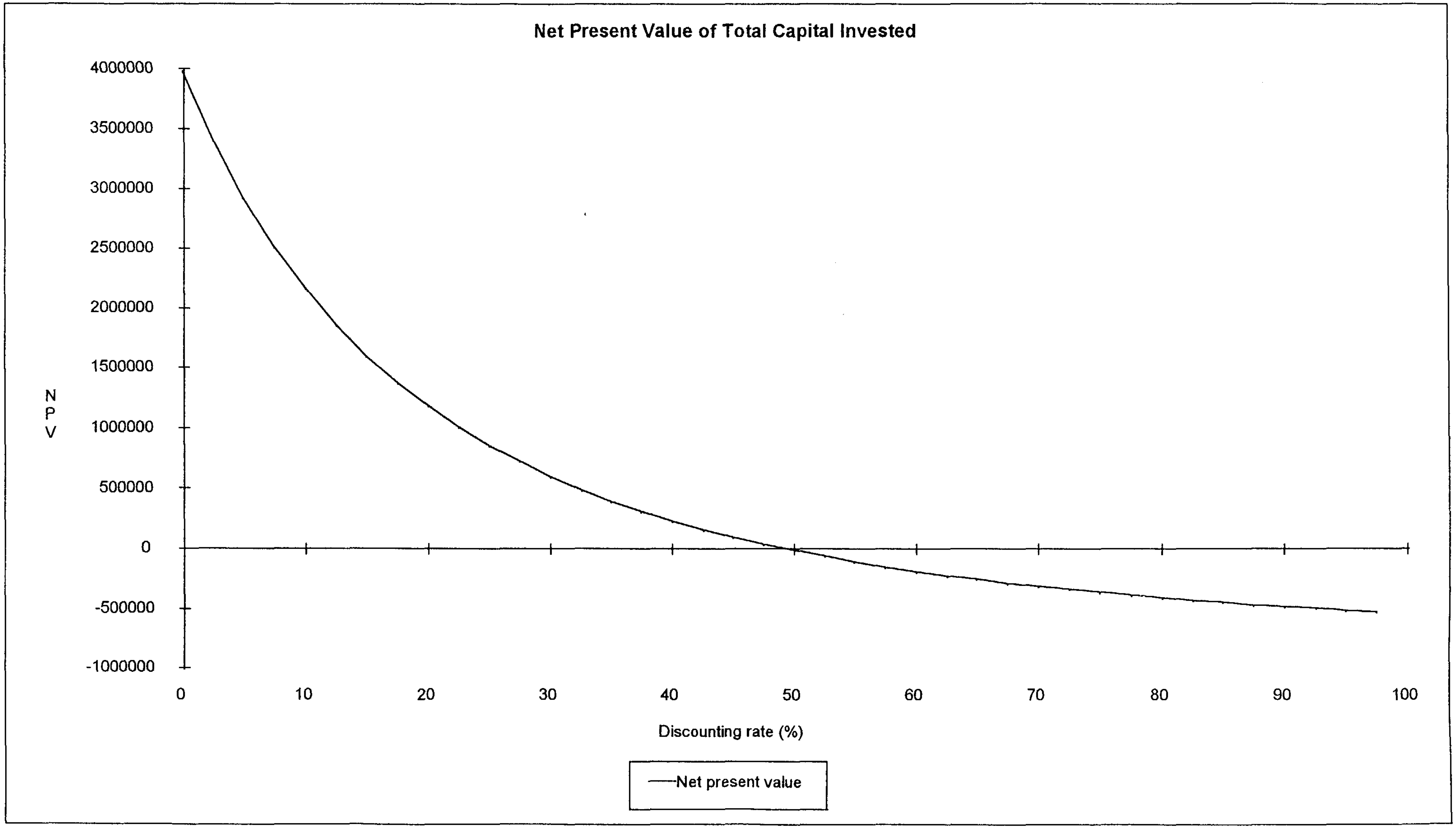
	2004	Scrap 2005
Local surplus (deficit)	-2,070,074.03	782,031.53
Foreign cumulative cash balance	18,146,960.56	18,253,255.00
Local cumulative cash balance	-14,656,195.46	-13,874,163.94
Net flow of funds	-19.44	-42,693.06

DISCOUNTED CASH FLOW - TOTAL CAPITAL INVESTED
US.Dollars

	1997	1998	1999	2000	2001	2002	2003	2004
TOTAL CASH INFLOW	0.00	2,535,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00
Inflow operation	0.00	2,535,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00
Sales revenue	0.00	2,535,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00
Interest on short-term deposits	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other income	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL CASH OUTFLOW	910,875.00	2,414,350.78	2,385,708.63	2,334,506.32	2,363,987.24	2,349,208.40	2,345,168.40	2,337,968.47
Increase in fixed assets	834,000.00	5,999.85	2,999.93	2,999.93	2,999.93	2,999.93	2,999.93	0.00
Fixed investments	704,000.00	5,999.85	2,999.93	2,999.93	2,999.93	2,999.93	2,999.93	0.00
Pre-production expenditures (net of interest)	130,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Increase in net working capital	76,875.00	506,067.34	59,094.66	-2,867.64	7,973.28	-2,605.56	-2,605.56	-2,605.56
Operating costs	0.00	1,374,513.75	1,665,990.00	1,658,890.00	1,679,290.00	1,672,290.00	1,665,290.00	1,658,290.00
Marketing costs	0.00	253,500.00	300,000.00	300,000.00	300,000.00	300,000.00	300,000.00	300,000.00
Income (corporate) tax	0.00	274,269.85	357,624.05	375,484.03	373,724.03	376,524.03	379,484.03	382,284.03
NET CASH FLOW	-910,875.00	120,649.22	614,291.37	665,493.68	636,012.76	650,791.60	654,831.60	662,031.53
CUMULATIVE NET CASH FLOW	-910,875.00	-790,225.78	-175,934.41	489,559.27	1,125,572.03	1,776,363.63	2,431,195.23	3,093,226.76
Net present value	-910,875.00	100,541.01	426,591.23	385,123.66	306,719.12	261,538.55	219,301.78	184,760.85
Cumulative net present value	-910,875.00	-810,333.99	-383,742.76	1,380.90	308,100.02	569,638.57	788,940.35	973,701.20
NET PRESENT VALUE	at 20.00 %	1,180,297.42						
INTERNAL RATE OF RETURN	49.13 %							
MODIFIED INTERNAL RATE OF RETURN	49.13 %							
NORMAL PAYBACK	at 0.00 %	4 years						
DYNAMIC PAYBACK	at 20.00 %	4 years						
NPV RATIO	0.85							

DISCOUNTED CASH FLOW - TOTAL CAPITAL INVESTED
US.Dollars

	Scrap 2005
TOTAL CASH INFLOW	888,325.97
Inflow operation	0.00
Sales revenue	0.00
Interest on short-term deposits	0.00
Other income	888,325.97
TOTAL CASH OUTFLOW	0.00
Increase in fixed assets	0.00
Fixed investments	0.00
Pre-production expenditures (net of interest)	0.00
Increase in net working capital	0.00
Operating costs	0.00
Marketing costs	0.00
Income (corporate) tax	0.00
NET CASH FLOW	888,325.97
CUMULATIVE NET CASH FLOW	3,981,552.73
Net present value	206,596.23
Cumulative net present value	1,180,297.42
NET PRESENT VALUE	
INTERNAL RATE OF RETURN	
MODIFIED INTERNAL RATE OF RETURN	
NORMAL PAYBACK	
DYNAMIC PAYBACK	
NPV RATIO	

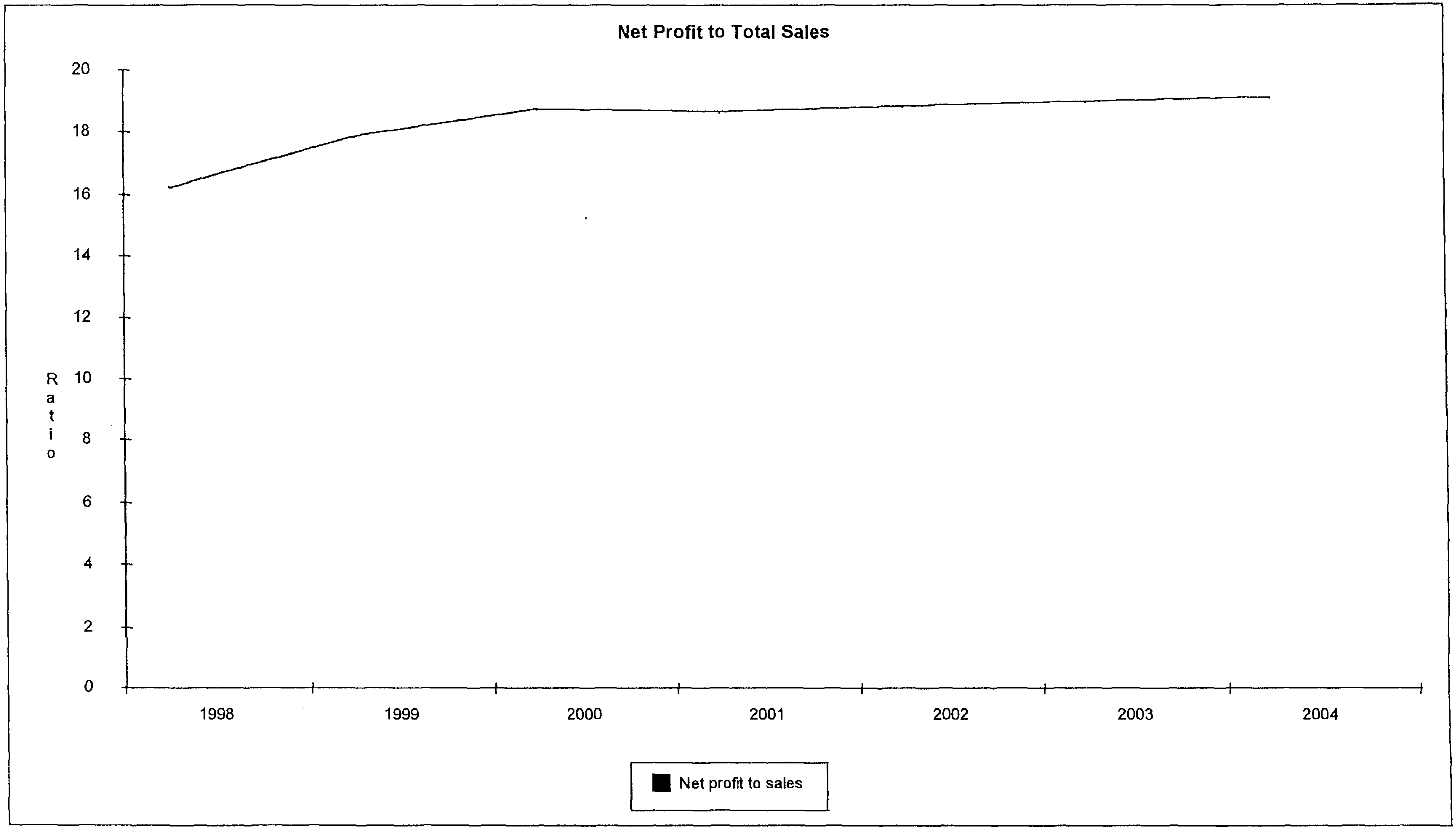

Net Present Value of Total Capital Invested
4000000
3500000
3000000
2500000
2000000
1500000
1000000
500000
0
-500000
-1000000
NPV
0
10
20
30
40
50
60
70
80
90
100
Discounting rate (%)
Net present value

NET INCOME STATEMENT
US.Dollars

	Production 1998	Production 1999	Production 2000	Production 2001	Production 2002	Production 2003	Production 2004
Sales revenue	2,535,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00
Less variable costs	1,339,473.75	1,701,450.00	1,694,350.00	1,714,750.00	1,707,750.00	1,700,750.00	1,693,750.00
Material	109,330.00	110,700.00	103,600.00	96,500.00	89,500.00	82,500.00	75,500.00
Personnel	48,000.00	48,000.00	48,000.00	48,000.00	48,000.00	48,000.00	48,000.00
Marketing (except personnel)	253,500.00	300,000.00	300,000.00	300,000.00	300,000.00	300,000.00	300,000.00
Other variable costs	928,643.75	1,242,750.00	1,242,750.00	1,270,250.00	1,270,250.00	1,270,250.00	1,270,250.00
VARIABLE MARGIN	1,195,526.25	1,298,550.00	1,305,650.00	1,285,250.00	1,292,250.00	1,299,250.00	1,306,250.00
in % of sales revenue	47.16	43.29	43.52	42.84	43.08	43.31	43.54
Less fixed costs	375,189.97	352,689.88	350,939.93	350,939.93	350,939.93	350,539.93	350,539.93
Material	24,000.00	24,000.00	24,000.00	24,000.00	24,000.00	24,000.00	24,000.00
Personnel	264,540.00	240,540.00	240,540.00	240,540.00	240,540.00	240,540.00	240,540.00
Marketing (except personnel)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Depreciation	86,649.97	88,149.88	86,399.93	86,399.93	86,399.93	85,999.93	85,999.93
Other fixed costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPERATIONAL MARGIN	820,336.28	945,860.12	954,710.07	934,310.07	941,310.07	948,710.07	955,710.07
in % of sales revenue	32.36	31.53	31.82	31.14	31.38	31.62	31.86
Interest on short-term deposits	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Financial costs	134,661.67	51,800.00	16,000.00	0.00	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	685,674.61	894,060.12	938,710.07	934,310.07	941,310.07	948,710.07	955,710.07
in % of sales revenue	27.05	29.80	31.29	31.14	31.38	31.62	31.86
Extraordinary income	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GROSS PROFIT	685,674.61	894,060.12	938,710.07	934,310.07	941,310.07	948,710.07	955,710.07

NET INCOME STATEMENT
US.Dollars

	Production 1998	Production 1999	Production 2000	Production 2001	Production 2002	Production 2003	Production 2004
Investment allowances	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TAXABLE PROFIT	685,674.61	894,060.12	938,710.07	934,310.07	941,310.07	948,710.07	955,710.07
Income (corporate) tax	274,269.85	357,624.05	375,484.03	373,724.03	376,524.03	379,484.03	382,284.03
NET PROFIT	411,404.77	536,436.07	563,226.04	560,586.04	564,786.04	569,226.04	573,426.04
in % of sales revenue	16.23	17.88	18.77	18.69	18.83	18.97	19.11
Dividends	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RETAINED PROFIT	411,404.77	536,436.07	563,226.04	560,586.04	564,786.04	569,226.04	573,426.04
Ratios (%)							
Net profit to equity	68.57	89.41	93.87	93.43	94.13	94.87	95.57
Net profit to net worth	40.68	34.66	26.68	20.98	17.45	14.96	13.09
Net profit+interest to investment	38.38	39.61	39.00	37.47	37.74	38.03	38.37


Net Profit to Total Sales
20
18
16
14
12
10
8
6
4
2
0
Ratio
1998
1999
2000
2001
2002
2003
2004
Net profit to sales

BREAK-EVEN ANALYSIS - TOTAL
US.Dollars

	Production 1998	Production 1999	Production 2000	Production 2001	Production 2002	Production 2003	Production 2004
Sales revenue	2,535,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00
Variable costs	1,339,473.75	1,701,450.00	1,694,350.00	1,714,750.00	1,707,750.00	1,700,750.00	1,693,750.00
Variable margin	1,195,526.25	1,298,550.00	1,305,650.00	1,285,250.00	1,292,250.00	1,299,250.00	1,306,250.00
Variable margin ratio (%)	47.16	43.29	43.52	42.84	43.08	43.31	43.54
Including cost of finance							
Fixed costs	375,189.97	352,689.88	350,939.93	350,939.93	350,939.93	350,539.93	350,539.93
Financial costs	134,661.67	51,800.00	16,000.00	0.00	0.00	0.00	0.00
Break-even sales value	1,081,092.03	934,480.49	843,120.11	819,155.63	814,718.34	809,405.25	805,067.77
Break-even ratio (%)	42.65	31.15	28.10	27.31	27.16	26.98	26.84
Fixed costs coverage ratio	2.34	3.21	3.56	3.66	3.68	3.71	3.73
Excluding cost of finance							
Fixed costs	375,189.97	352,689.88	350,939.93	350,939.93	350,939.93	350,539.93	350,539.93
Break-even sales value	795,554.74	814,808.55	806,356.81	819,155.63	814,718.34	809,405.25	805,067.77
Break-even ratio (%)	31.38	27.16	26.88	27.31	27.16	26.98	26.84
Fixed costs coverage ratio	3.19	3.68	3.72	3.66	3.68	3.71	3.73

PROJECTED BALANCE SHEET
US.Dollars

	1997	1998	1999	2000	2001	2002	2003	2004
TOTAL ASSETS	920,000.00	1,437,926.83	1,697,378.96	2,153,759.61	2,714,404.32	3,279,170.92	3,848,377.52	4,421,784.12
Total current assets	86,000.00	684,576.95	1,029,179.04	1,568,959.69	2,213,004.39	2,861,170.99	3,513,377.59	4,172,784.12
Inventory on materials & supplies	76,875.00	13,456.25	6,291.67	6,250.00	6,250.00	6,250.00	6,250.00	6,250.00
Work in progress	0.00	51,484.79	51,920.83	51,380.83	52,230.83	51,939.17	51,647.50	51,355.83
Finished product	0.00	260,262.96	277,665.00	276,481.67	279,881.67	278,715.00	277,548.33	276,381.67
Accounts receivable	0.00	271,335.63	327,665.00	326,481.67	329,881.67	328,715.00	327,548.33	326,381.67
Cash-in-hand	0.00	19,591.44	21,365.95	21,267.92	21,649.86	21,649.86	21,649.86	21,649.86
Short-term deposits	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cash surplus, finance available	9,125.00	68,445.88	344,270.59	887,097.60	1,523,110.37	2,173,901.97	2,828,733.57	3,490,765.09
Total fixed assets, net of depreciation	834,000.00	753,349.88	668,199.93	584,799.93	501,399.93	417,999.93	334,999.93	249,000.00
Fixed investments	0.00	704,000.00	709,999.85	712,999.78	715,999.70	718,999.63	721,999.55	724,999.48
Construction in progress	704,000.00	5,999.85	2,999.93	2,999.93	2,999.93	2,999.93	2,999.93	0.00
Total pre-production expenditures	130,000.00	130,000.00	130,000.00	130,000.00	130,000.00	130,000.00	130,000.00	130,000.00
Less accumulated depreciation	0.00	86,649.97	174,799.85	261,199.78	347,599.70	433,999.63	519,999.55	605,999.48
Less depreciation allowance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Accumulated losses brought forward	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loss in current year	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL LIABILITIES	920,000.00	1,437,926.83	1,697,378.96	2,153,759.61	2,714,404.32	3,279,170.92	3,848,377.52	4,421,784.12
Total current liabilities	0.00	213,188.73	42,871.45	42,692.73	42,751.39	42,731.94	42,712.50	42,693.06
Accounts payable	0.00	33,188.73	42,871.45	42,692.73	42,751.39	42,731.94	42,712.50	42,693.06
Bank overdraft	0.00	180,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Total long-term loans	320,000.00	213,333.33	106,666.67	0.00	0.00	0.00	0.00	0.00
Total equity	600,000.00	600,000.00	600,000.00	600,000.00	600,000.00	600,000.00	600,000.00	600,000.00
Ordinary capital	600,000.00	600,000.00	600,000.00	600,000.00	600,000.00	600,000.00	600,000.00	600,000.00

PROJECTED BALANCE SHEET
US.Dollars

	1997	1998	1999	2000	2001	2002	2003	2004
Preference capital	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subsidies, grants	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reserves, retained profit brought forward	0.00	0.00	411,404.77	947,840.84	1,511,066.88	2,071,652.93	2,636,438.97	3,205,665.02
Net profit after tax	0.00	411,404.77	536,436.07	563,226.04	560,586.04	564,786.04	569,226.04	573,426.04
Net worth	600,000.00	1,011,404.77	1,547,840.84	2,111,066.88	2,671,652.93	3,236,438.97	3,805,665.02	4,379,091.06
Ratios (%)								
Equity to total liabilities	65.22	41.73	35.35	27.86	22.10	18.30	15.59	13.57
Net worth to total liabilities	65.22	70.34	91.19	98.02	98.43	98.70	98.89	99.03
Long-term debt to net worth	0.53	0.21	0.07	0.00	0.00	0.00	0.00	0.00
Current assets to current liabilities	0.00	3.21	24.01	36.75	51.76	66.96	82.26	97.74

EFFICIENCY RATIOS

	Production 1998	Production 1999	Production 2000	Production 2001	Production 2002	Production 2003	Production 2004
Sales to total capital investment	1.78	2.02	2.02	2.01	2.00	2.00	2.01
Investment to personnel cost	4.55	5.15	5.15	5.19	5.19	5.19	5.18
Inventory to sales	0.13	0.11	0.11	0.11	0.11	0.11	0.11
Net cash flow to total sales	0.05	0.20	0.22	0.21	0.22	0.22	0.22

SUMMARY SHEET

Depreciation allowances	0.00	0.00	0.00
GROSS PROFIT	514,208.24	727,741.08	751,281.08
Investment allowances	0.00	0.00	0.00
TAXABLE PROFIT	514,208.24	727,741.08	751,281.08
Income (corporate) tax	205,683.30	291,096.43	300,512.43
NET PROFIT	308,524.95	436,644.65	450,768.65

RATIOS

Net present value	at 20.00 %	666,452.67
Internal rate of return on investment (IRR)	34.85 %	
Modified IRR on investment	34.85 %	
Internal rate of return on equity (IRRE)	36.35 %	
Modified IRRE on equity	36.35 %	

SUMMARY SHEET

Project title:	UGA/109/M/95-08 Granite Quarrying in Uganda
Project description:	Sensitivity Case Production Costs +10%
Date and time:	August, 1996
Project classification:	New project Joint-venture project
Construction phase:	1/1997 - 12/1997
Length:	1 years
Production phase:	1/1998 - 12/2004
Length:	7 periods
Accounting currency:	US.Dollars
Units:	Absolute
Reference currency:	
Exchange rate:	

INVESTMENT COSTS

	Total construction	Total production	Total investment
Total fixed investment costs	704,000.00	20,999.48	724,999.48
Total pre-production expenditures	130,000.00	0.00	130,000.00
Increase in net working capital	84,562.50	618,696.07	703,258.57
TOTAL INVESTMENT COSTS	918,562.50	639,695.54	1,558,258.04

SUMMARY SHEET

SOURCES OF FINANCE

	Total inflow
Equity capital	600,000.00
Long-term loans	320,000.00
Total short-term loans	844,752.30
TOTAL SOURCES OF FINANCE	1,764,752.30

INCOME AND COSTS, OPERATIONS

	First year 1998	Reference year 2001	Last year 2004
SALES REVENUE	2,535,000.00	3,000,000.00	3,000,000.00
Factory costs	1,204,494.50	1,378,894.00	1,355,794.00
Administrative overhead costs	307,470.63	468,325.00	468,325.00
OPERATING COSTS	1,511,965.13	1,847,219.00	1,824,119.00
Depreciation	86,649.97	86,399.93	85,999.93
Financial costs	134,661.67	0.00	0.00
TOTAL PRODUCTION COSTS	1,733,276.76	1,933,618.93	1,910,118.93
Marketing costs	278,850.00	330,000.00	330,000.00
COSTS OF PRODUCTS	2,012,126.76	2,263,618.93	2,240,118.93
Interest on short-term deposits	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	522,873.24	736,381.07	759,881.07
Extraordinary income	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00

SUMMARY SHEET

GROSS PROFIT	522,873.24	736,381.07	759,881.07
Investment allowances	0.00	0.00	0.00
TAXABLE PROFIT	522,873.24	736,381.07	759,881.07
Income (corporate) tax	209,149.30	294,552.43	303,952.43
NET PROFIT	313,723.94	441,828.64	455,928.64

RATIOS

Net present value	at 20.00 %	732,804.77
Internal rate of return on investment (IRR)	37.40 %	
Modified IRR on investment	37.40 %	
Internal rate of return on equity (IRRE)	39.60 %	
Modified IRRE on equity	39.60 %	

SUMMARY SHEET

Project title:	UGA/109/M/95-08	Granite Quarrying in Uganda
Project description:	Sensitivity Case Production Costs +10% Investment Costs +10%	
Date and time:	August, 1996	
Project classification:	New project Joint-venture project	
Construction phase:	1/1997 - 12/1997	
Length:	1 years	
Production phase:	1/1998 - 12/2004	
Length:	7 periods	
Accounting currency:	US.Dollars	
Units:	Absolute	
Reference currency:		
Exchange rate:		

INVESTMENT COSTS

	Total construction	Total production	Total investment
Total fixed investment costs	774,400.00	23,099.42	797,499.42
Total pre-production expenditures	143,000.00	0.00	143,000.00
Increase in net working capital	84,562.50	618,696.07	703,258.57
[illegible]	1,001,962.50	641,795.49	1,643,757.99

SUMMARY SHEET

SOURCES OF FINANCE

	Total inflow
Equity capital	681,962.50
Long-term loans	320,000.00
Total short-term loans	843,323.79
TOTAL SOURCES OF FINANCE	1,845,286.29

INCOME AND COSTS, OPERATIONS

	First year 1998	Reference year 2001	Last year 2004
SALES REVENUE	2,535,000.00	3,000,000.00	3,000,000.00
Factory costs	1,204,494.50	1,378,894.00	1,355,794.00
Administrative overhead costs	307,470.63	468,325.00	468,325.00
OPERATING COSTS	1,511,965.13	1,847,219.00	1,824,119.00
Depreciation	95,314.97	95,039.92	94,599.92
Financial costs	134,661.67	0.00	0.00
TOTAL PRODUCTION COSTS	1,741,941.76	1,942,258.92	1,918,718.92
Marketing costs	278,850.00	330,000.00	330,000.00
COSTS OF PRODUCTS	2,020,791.76	2,272,258.92	2,248,718.92
Interest on short-term deposits	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	514,208.24	727,741.08	751,281.08
Extraordinary income	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00

SUMMARY SHEET

Project title:	UGA/109/M/95-08 Granite Quarrying in Uganda
Project description:	Sensitivity Analysis Production Costs +20%
Date and time:	August, 1996
Project classification:	New project Joint-venture project
Construction phase:	1/1997 - 12/1997
Length:	1 years
Production phase:	1/1998 - 12/2004
Length:	7 periods
Accounting currency:	US.Dollars
Units:	Absolute
Reference currency:	
Exchange rate:	

INVESTMENT COSTS

	Total construction	Total production	Total investment
Total fixed investment costs	704,000.00	20,999.48	724,999.48
Total pre-production expenditures	130,000.00	0.00	130,000.00
Increase in net working capital	92,250.00	674,941.17	767,191.17
TOTAL INVESTMENT COSTS	926,250.00	695,940.64	1,622,190.64

SUMMARY SHEET

SOURCES OF FINANCE

	Total inflow
Equity capital	606,250.00
Long-term loans	320,000.00
Total short-term loans	998,770.37
TOTAL SOURCES OF FINANCE	1,925,020.37

INCOME AND COSTS, OPERATIONS

	First year 1998	Reference year 2001	Last year 2004
SALES REVENUE	2,535,000.00	3,000,000.00	3,000,000.00
Factory costs	1,313,994.00	1,504,248.00	1,479,048.00
Administrative overhead costs	335,422.50	510,900.00	510,900.00
OPERATING COSTS	1,649,416.50	2,015,148.00	1,989,948.00
Depreciation	86,649.97	86,399.93	85,999.93
Financial costs	134,661.67	0.00	0.00
TOTAL PRODUCTION COSTS	1,870,728.14	2,101,547.93	2,075,947.93
Marketing costs	304,200.00	360,000.00	360,000.00
COSTS OF PRODUCTS	2,174,928.14	2,461,547.93	2,435,947.93
Interest on short-term deposits	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	360,071.86	538,452.07	564,052.07
Extraordinary income	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00

SUMMARY SHEET

GROSS PROFIT	360,071.86	538,452.07	564,052.07
Investment allowances	0.00	0.00	0.00
TAXABLE PROFIT	360,071.86	538,452.07	564,052.07
Income (corporate) tax	144,028.75	215,380.83	225,620.83
NET PROFIT	216,043.12	323,071.24	338,431.24

RATIOS

Net present value	at 20.00 %	285,312.11
Internal rate of return on investment (IRR)	26.49 %	
Modified IRR on investment	26.49 %	
Internal rate of return on equity (IRRE)	26.47 %	
Modified IRRE on equity	26.47 %	

SUMMARY SHEET

Project title:	UGA/109/M/95-08	Granite Quarrying in Uganda
Project description:	Sensitivity Analysis Production Costs +20%	
Date and time:	August, 1996	
Project classification:	New project Joint-venture project	
Construction phase:	1/1997 - 12/1997	
Length:	1 years	
Production phase:	1/1998 - 12/2004	
Length:	7 periods	
Accounting currency:	US.Dollars	
Units:	Absolute	
Reference currency:		
Exchange rate:		

INVESTMENT COSTS

	Total construction	Total production	Total investment
Total fixed investment costs	704,000.00	20,999.48	724,999.48
Total pre-production expenditures	130,000.00	0.00	130,000.00
Increase in net working capital	92,250.00	674,941.17	767,191.17
TOTAL INVESTMENT COSTS	926,250.00	695,940.64	1,622,190.64

SUMMARY SHEET

SOURCES OF FINANCE

	Total inflow
Equity capital	606,250.00
Long-term loans	320,000.00
Total short-term loans	998,770.37
TOTAL SOURCES OF FINANCE	1,925,020.37

INCOME AND COSTS, OPERATIONS

	First year 1998	Reference year 2001	Last year 2004
SALES REVENUE	2,535,000.00	3,000,000.00	3,000,000.00
Factory costs	1,313,994.00	1,504,248.00	1,479,048.00
Administrative overhead costs	335,422.50	510,900.00	510,900.00
OPERATING COSTS	1,649,416.50	2,015,148.00	1,989,948.00
Depreciation	86,649.97	86,399.93	85,999.93
Financial costs	134,661.67	0.00	0.00
TOTAL PRODUCTION COSTS	1,870,728.14	2,101,547.93	2,075,947.93
Marketing costs	304,200.00	360,000.00	360,000.00
COSTS OF PRODUCTS	2,174,928.14	2,461,547.93	2,435,947.93
Interest on short-term deposits	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	360,071.86	538,452.07	564,052.07
Extraordinary income	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00
Depreciation allowances	0.00	0.00	0.00

SUMMARY SHEET

GROSS PROFIT	360,071.86	538,452.07	564,052.07
Investment allowances	0.00	0.00	0.00
TAXABLE PROFIT	360,071.86	538,452.07	564,052.07
Income (corporate) tax	144,028.75	215,380.83	225,620.83
NET PROFIT	216,043.12	323,071.24	338,431.24

RATIOS

Net present value	at 20.00 %	285,312.11
Internal rate of return on investment (IRR)	26.49 %	
Modified IRR on investment	26.49 %	
Internal rate of return on equity (IRRE)	26.47 %	
Modified IRRE on equity	26.47 %	

SUMMARY SHEET

Project title:	UGA/109/M/95-08 Granite Quarrying in Uganda
Project description:	Sensitivity Analysis Production Costs +20% Investment costs +20%
Date and time:	August, 1996
Project classification:	New project Joint-venture project
Construction phase:	1/1997 - 12/1997
Length:	1 years
Production phase:	1/1998 - 12/2004
Length:	7 periods
Accounting currency:	US.Dollars
Units:	Absolute
Reference currency:	
Exchange rate:	

INVESTMENT COSTS

	Total construction	Total production	Total investment
Total fixed investment costs	844,800.00	25,199.37	869,999.37
Total pre-production expenditures	156,000.00	0.00	156,000.00
Increase in net working capital	92,250.00	674,941.17	767,191.17
TOTAL INVESTMENT COSTS	1,093,050.00	700,140.54	1.793,190.54

SUMMARY SHEET

SOURCES OF FINANCE

	Total inflow
Equity capital	773,050.00
Long-term loans	320,000.00
Total short-term loans	993,038.35
TOTAL SOURCES OF FINANCE	2,086,088.35

INCOME AND COSTS, OPERATIONS

	First year 1998	Reference year 2001	Last year 2004
SALES REVENUE	2,535,000.00	3,000,000.00	3,000,000.00
Factory costs	1,313,994.00	1,504,248.00	1,479,048.00
Administrative overhead costs	335,422.50	510,900.00	510,900.00
OPERATING COSTS	1,649,416.50	2,015,148.00	1,989,948.00
Depreciation	103,979.96	103,679.91	103,199.91
Financial costs	134,661.67	0.00	0.00
TOTAL PRODUCTION COSTS	1,888,058.13	2,118,827.91	2,093,147.91
Marketing costs	304,200.00	360,000.00	360,000.00
COSTS OF PRODUCTS	2,192,258.13	2,478,827.91	2,453,147.91
Interest on short-term deposits	0.00	0.00	0.00
GROSS PROFIT FROM OPERATIONS	342,741.87	521,172.09	546,852.09
Extraordinary income	0.00	0.00	0.00
Extraordinary loss	0.00	0.00	0.00

SUMMARY SHEET

Depreciation allowances	0.00	0.00	0.00
GROSS PROFIT	342,741.87	521,172.09	546,852.09
Investment allowances	0.00	0.00	0.00
TAXABLE PROFIT	342,741.87	521,172.09	546,852.09
Income (corporate) tax	137,096.75	208,468.84	218,740.84
NET PROFIT	205,645.12	312,703.25	328,111.25

RATIOS

Net present value	at 20.00 %	152,607.91
Internal rate of return on investment (IRR)	23.09 %	
Modified IRR on investment	23.09 %	
Internal rate of return on equity (IRRE)	22.62 %	
Modified IRRE on equity	22.62 %	

ANNEX 2

SUMMARY OF THE MINING LAW AND REGULATIONS OF THE REPUBLIC OF UGANDA

ANNEX

SUMMARY OF THE MINING LAW AND REGULATIONS OF THE REPUBLIC OF UGANDA

Mining in Uganda is governed by law published as the *Mining Act*, Chapter 248, Laws of Uganda 1964.

Mining Regulations are made under section 126 of the Act. Regulations are usually issued as Statutory Instruments.

The Sections of the Act and Regulations quoted below deal with relevant details about which potential investors, or mineral exploration entrepreneurs usually wish to be informed.

Section 3:	All minerals are owned and controlled by the GOU except where there has been recognition of title or express grant.
Section 5 & 6:	Mineral oils or bituminous products are governed by the Petroleum Exploration and Production Act.
Section 12:	All minerals mined in Uganda are liable to royalties.
Section 15:	Certain minerals may be declared "restricted" in which case a special licence is required e.g. Diamonds.
Section 30:	Prospecting can be done only under a prospecting or mining right.

For prospecting, there are available:

Section 32 (i)	A prospecting licence issued for one calender year. Holder may carry on prospecting in the whole of Uganda and for any minerals which are not "restricted". Minerals won during prospecting can only be disposed off by special permission from GOU.
Section 32 (3)	"A prospecting licence shall not be granted to a company or partnership as such but may be granted to an individ ual as agent of the company or partnership.
Reg. 37:	A river location shall be granted in respect of river or swamp. The area shall not exceed 1.800 yds. along the river or swamp and 100 yds. on each side of the course.
Section 35(ii)	An Exclusive Prospecting Licence (EPL) may be granted to a holder of a prospecting licence or an employer of a prospecting licence holder. The EPL is valid for one calendar year with a possibility of renewal. It is granted in respect of a specified mineral only and may cover an area not exceeding 8 square miles.
Section 36:	This licence gives the sole right to prospect for minerals on the land within the area of his licence and the right to apply for mining on finding the minerals.
Section 38(iii)	A Special Exclusive Prospecting Licence (SEPL) applies to an area normally not less than 30 square miles and the conditions and terms are negotiated with the Ministry of Natural Resources.

Mining may be carried out under the grant of a location or mining Lease.

Section 42:	A Location may be granted to a holder of a prospecting licence or his employer.
Reg. 34:	Locations other than river locations shall not exceed the following dimensions: Class I Lode location for precious metals 1,500 ft. along the strike and 600 ft. wide. Class II Precious stones locations other than alluvial, 40 acres. Class III Lode locations for non-precious minerals, 40 acres. Class IV Alluvial locations for precious metals or precious stones 40 acres. Class V Locations for limestone and chalk 20 acres.
Section 47:	The Minister may, at his discretion grant a mining lease to a holder of a prospecting licence or an EPL.
Section 50:	Mining lease is granted one specific mineral.
Section 51:	A mining lease is granted for a period not less than five or more than 21 years subject to renewal for another period of up to 21 years.
Section 52:	The mining lease gives the holder the exclusive right to mine on such land and the right to remove and dispose of the minerals specified in the lease.
Reg. 40:	The shape of the mining Lease shall be rectangular width not less than one third of the length. Its areas shall not be less than five and not more than 650 acres.
Section 57:	A special mining lease may be granted on terms and conditions negotiated with GOU. The shape and area are as the Minister will allow.
Section 59:	A water permit is required for use of natural water for mining purpose.

Mining (Royalty) Regulations S.I.248-4.

Reg. 2:	These regulations apply to miners who keep books to the satisfaction of the Commissioner of Income Tax.
Reg. 4:	Royalty paid on gold, tin, wolfram, copper and all associated minerals and metals shall be 15% of the profits. Royalties payable on all minerals and metals by the holder of a special mining lease shall be such as the Minister may approve.

Mining Regulations S.I.248-3.

Reg. 4:	Royalties shall be paid by: (i) the holder of a prospecting or mining right under which such mineral was obtained; and (ii) a banker or licensed mineral dealer.
Reg. 35:	The shape of a location other than a river location shall be rectangular with the length of the longer side not exceeding three times the length of the shorter side.
Reg. 5:	The following royalties shall be paid: (i) on precious metals 5% of value; (ii) on precious stones, 10% of gross value; (iii) on non-precious stones, 10% of gross value; and (iv) on limestone or chalk, USh. 50/= per mt. or USh. 2/= per mt. of lime manufactured.

ANNEX 3

THE INVESTMENT CODE OF UGANDA (1991)

THE INVESTMENT CODE, 1991.

ARRANGEMENT OF SECTIONS.

Section.

Section.

No. 1 25th January, 1991

STATUTE SUPPLEMENTS

to the Uganda Gazette No. 4 Volume LXXXIV dated 25th January, 1991

Printed by the Government Printer, Entebbe, by Order of the Government.

THE INVESTMENT CODE, 1991.

A Code to make provision in the law relating to local and foreign investments in Uganda by providing more favourable conditions for investment, to establish the Uganda Investment Authority, to repeal the Foreign Investment (Protection) Act and the Foreign Investment Decree 1977 and to provide for other related matters.

DATE OF ASSENT: 21st January, 1991.

Date of commencement: 25th January, 1991.

BE IT ENACTED by the President and the National Resistance Council as follows—

PART I—PRELIMINARY.

1. This Code may be cited as the Investment Code, 1991. Short title.

2. In this Code— Interpretation.

"agreement" in relation to the transfer of foreign technology or expertise includes an agreement registered under this Code in respect of a licence, know-how, commercial purchase, conditional purchase, commercial franchise or hire purchase involving the importation into Uganda of technology or expertise;

"Authority" means the Uganda Investment Authority established under section 3;

"Board" means the Board of the Authority established under section 4;

"business enterprise" includes a manufacturing enterprise, a tourist enterprise and a commercial or agricultural venture;

"Executive Director" means the person appointed Executive Director under section 4;

"foreign investor" shall be construed in accordance with section 10;

"investment" means the creation of new business assets and includes the expansion, re-structuring or rehabilitation of an existing business enterprise;

"manufacture" means the transforming on a commercial scale of raw materials into finished or semi-finished products, and includes the assembling of inputs into finished or semi-finished products;

"member" means a member of the Board;

"Minister" means the Minister responsible for Planning and Economic Development.

PART II—INVESTMENT AUTHORITY.

Establishment of Uganda Investment Authority.

3. (1) There is established a body to be called the Uganda Investment Authority.

(2) The Authority shall be an agency of the Government and shall be under the general supervision of the Minister.

(3) The Authority shall be a body corporate with perpetual succession and a common seal and, in its own name, capable of—

(*a*) acquiring, and holding property;

(*b*) suing and being sued; and

(*c*) doing and suffering all acts and things as bodies corporate may lawfully do or suffer.

4. (1) The governing body of the Authority shall be the Board which shall be responsible for the discharge of the business and functions of the Authority. The Board.

(2) The Board shall consist of the following—

(*a*) a Chairman of the Board appointed by the Minister on such terms and conditions as the Minister may determine;

(*b*) an Executive Director appointed by the Board on such terms and conditions as the Board may determine;

(*c*) five members with sound knowledge or practical experience in investments who shall be appointed by the Minister after consultation with the relevant bodies.

(*d*) a representative of the Governor of the Bank of Uganda;

(*e*) a representative elected by the Uganda Chamber of Commerce and Industry;

(*f*) a representative elected by the Uganda Manufacturers' Association;

(*g*) the Commissioner for Economic Affairs, Ministry of Finance, *ex-officio;*

(*h*) the Chief Government Development Economist, Ministry of Planning and Economic Development, *ex-officio;*

(*i*) the Commissioner for Technology, Ministry of Industry, *ex-officio;*

(*j*) Commissioner for External Trade, Ministry of Commerce, *ex-officio;*

(*k*) the Commissioner for Immigration, Ministry of Internal Affairs, *ex-officio.*

(3) All members, other than the Executive Director, appointed by the Minister shall hold office for a term of not more than three years and shall be eligible for re-appointment.

(4) A member appointed by the Minister may in writing addressed to the Minister resign his office.

Secretariat, Executive Director and other staff.

5. (1) The Authority shall be serviced by a Secretariat consisting of an Executive Director and other officers and staff.

(2) There shall be appointed to the service of the Authority an Executive Director and other officers and staff as may be required for the performance of the functions of the Secretariat of the Authority and all persons appointed under this section shall hold public office.

(3) The Executive Director shall be responsible for the supervision of the Secretariat.

Remuneration of members of Authority.

6. The Executive Director, the members, officers and other staff of the Authority shall be paid such remuneration or allowances as the Minister may determine.

Functions of the Authority.

7. The functions of the Authority are—

(*a*) to promote, facilitate and supervise investments in Uganda;

(*b*) to receive all applications for investment licences for investors intending to establish set up business enterprises in Uganda under this Code and issue licences and certificates of incentives in accordance with this Code;

(*c*) to secure all licences, authorisations, approvals and permits required to enable any approval granted by the Authority to have full effect;

(*d*) to recommend to the Government national policies and programmes designed to promote investment in Uganda;

(*e*) to provide information on matters relating to investment in Uganda;

(*f*) to assist potential investors in identifying and establishing investment projects in Uganda;

(*g*) in accordance with the provisions of this Code, to determine the terms and conditions which may be imposed in relation to the operation of a business enterprise;

(*h*) to deal with complaints received by it;

(*i*) to supervise the implementation of this Code;

(*j*) to do all other acts as are required to be done under this Code or are necessary or conducive to the performance of the functions of the Authority.

8. (1) The provisions of the First Schedule to this Code shall have effect in relation to the proceedings of the Authority. Proceedings of the Authority.

(2) The Minister may, by statutory instrument, amend the provisions of the First Schedule.

9. A member, or officer or other member of staff of the Authority shall not in his personal capacity be liable in civil or criminal proceedings, in respect of an act or omission done in good faith in the exercise of his functions under this Code. Immunity of members and staff.

PART III—PROCEDURES FOR INVESTORS.

10. (1) In this Code, "foreign investor" means— Definition of foreign investor.

(*a*) a person who is not a citizen of Uganda;

(*b*) a company, other than a company referred to in subsection (2) in which more than fifty per-cent of the shares are held by a person who is not a citizen of Uganda;

(*c*) a partnership in which the majority of partners are not citizens of Uganda.

(2) The following shall be deemed not to be foreign investors—

(*a*) a company registered under the Companies Act in which the Government holds a majority of the shares, whether directly or indirectly; Cap. 85.

(*b*) a body corporate established in Uganda by law;

(*c*) an international development agency approved by the Authority for the purposes of this section;

(*d*) a co-operative society registered under the Co-operative Societies Act;

Cap. 93.
Cap. 199.

(*e*) a trade union registered under the Trade Unions Act.

(3) In any other case not expressly provided for in this section, the Authority shall determine whether or not a person is a foreign investor.

Regulation of foreign investment.

11. (1) A foreign investor shall not operate a business enterprise in Uganda otherwise than in accordance with an investment licence issued under this Code.

(2) No foreign investor shall carry on the business of crop production, animal production or acquire or be granted or lease land for the purpose of crop production or animal production:

Provided that a foreign investor may—

(*a*) provide material or other assistance to Ugandan farmers in crop production and animal production; or

(*b*) lease land for purposes of manufacturing or carrying out the activities set out in the Second Schedule and the Third Schedule.

(3) The provisions of this section shall not be construed so as to deprive a foreign investor of any land acquired by or granted to him or of any interest in land accrued to him before the commencement of this Code.

(4) The Minister may, on the advice of the Authority and with the approval of Cabinet, by statutory instrument, exempt any business enterprise or class of business activities from the provisions of this section where, in the opinion of the Minister, it is necessary that for the purpose of ensuring a regular supply of raw materials the enterprise should lease land.

Application for an investment licence.

12. (1) An application for an investment licence shall be made in writing to the Executive Director and shall contain the following information—

(*a*) the name and address of the proposed business enterprise, its legal form, its bankers, the name and address of each director or partner as the case may be, and the name, address, nationality and shareholding of any shareholder who is not a citizen of Uganda;

(*b*) the nature of the proposed business activity and the proposed location where that activity is to be carried on;

(*c*) the proposed capital structure, amount of investments and the projected growth over the next five years or more;

(*d*) the estimated number of persons to be employed;

(*e*) the qualifications, experience, nationality and other relevant particulars of the project management and staff;

(*f*) the incentives for which the applicant expects to qualify and the details of such qualifications;

(*g*) any other information relating to the viability of the project or other matter as the applicant considers relevant to his application.

(2) Where an application under subsection (1) does not provide all the relevant information or if clarification is necessary, the applicant may be called upon to provide that information or clarification to complete the application.

Appraisal of applications.

13. The Authority shall in considering an application for an investment licence under this Code, carry out an appraisal of the capacity of the proposed business enterprise to contribute to the following objectives—

(*a*) the generation of new earnings or savings of foreign exchange through exports, resource-based import substitution or service activities;

(*b*) the utilisation of local materials, supplies and services;

(*c*) the creation of employment opportunities in Uganda;

(*d*) the introduction of advanced technology or upgrading of indigenous technology;

(*e*) the contribution to locally or regionally balanced socio-economic development; or

(*f*) any other objectives that the Authority may consider relevant for achieving the objects of this Code.

Priority areas.

14. (1) Subject to subsection (2) of section 11, an investor may engage in any type of business enterprise.

(2) The categories of business activities specified in the Second Schedule are priority areas of investment and an applicant for a licence to engage in any of those activities shall be accorded additional benefits under this Code.

(3) The Minister may, by statutory instrument, amend the Second Schedule.

Processing of application.

15. (1) The Authority shall within thirty days after receipt of an application, or of the additional information or clarification referred to in subsection (2) of section 12 investigate and prepare a detailed report in respect of each application.

(2) The Authority may for the purpose of considering and making a report on an application under this section appoint a committee of three or more members.

(3) The Authority shall within fourteen days after the period referred to in subsection (1) consider the application and the report on the application and shall approve the application if it is satisfied that—

(*a*) the application is in accordance with the provisions of the Code and should be granted; and

(*b*) the activity intended to be undertaken by the business enterprise is not unlawful or contrary to the interests of Uganda.

(4) The Authority shall within seven days after its decision under subsection (3)—

(*a*) inform the applicant of its decision; and

(*b*) in the case of the Authority refusing to grant a licence, refer that application, the report on the application and the reasons for the refusal to the Minister and provide the applicant with a copy of the report and the reasons for the refusal of the application.

(5) An applicant for an investment licence who has not been notified of the decision of the Authority within ninety days from the date of submitting his application, may lodge a complaint in that behalf to the Minister who shall within thirty days, investigate the complaint and inform the complainant of the results of the investigation.

Investment licence.

16. (1) When the applicant for an investment licence and the Authority have agreed on the terms and conditions of the investment licence and the incentives, if any, the Authority shall issue to the applicant an investment licence which shall—

(*a*) authorise the holder of the licence to make all arrangements necessary for establishing the business enterprise described in the licence;

(*b*) contain the terms and conditions of the investment licence and incentives, if any;

(*c*) have a validity of not less than five years from the date of issue; and

(*d*) contain any other information or details as may be prescribed.

(2) The Executive Director shall liaise with Government Ministries and departments, local authorities and other bodies as may be necessary in order to assist an investment licence holder in complying with any formalities or requirements for obtaining any permissions, authorisations, licences, land and other things required for the purpose of the business enterprise.

Extension of validity of investment licence.

17. (1) Where the holder of an investment licence is unable to commence operating on the date of the commencement of the validity of his investment licence or within the period of validity of the licence, he may, giving reasons, apply to the Authority for the extension of the period of validity of the licence.

(2) The Authority shall, if satisfied with the reasons given under subsection (1), extend the validity of the licence by a period it considers reasonable.

(3) Where the holder of an investment licence, for any reason, ceases to operate the business enterprise to which the licence relates, he shall notify the Authority in writing and shall be entitled to all rights and be liable to all obligations accrued under this Code up to the date he ceases to operate the enterprise and his licence shall be deemed to have expired on that date.

(4) Where a holder of an investment licence does not commence operations within the period of validity of his licence and—

(*a*) no application has been made for its extension under subsection (1); and

(*b*) the licence has not been surrendered under sub-section (3),

the Authority may, subject to the rights of innocent third parties, declare anything done or any benefit obtained under the licence to be void ab initio and notify the holder of the licence accordingly.

Variation of licence.

18. (1) A holder of an investment licence shall accordingly inform the Authority in writing whenever—

(*a*) a person, other than the person to whom the licence was issued has succeeded to the business enterprise;

(*b*) the name or description of the business enterprise has changed; or

(*c*) there is an enlargement of or substantial variation in the business enterprise.

(2) Notwithstanding the provisions of subsection (1) a person other than the holder of a licence who is affected by or interested in a change or variation under subsection (1) may so inform the Authority if the holder of the licence fails to inform the Authority within a reasonable time.

(3) Whenever the Authority is satisfied that a change or variation has occurred as provided in subsection (1) in

respect of a licence issued under this Code the Authority shall amend the licence to take account of the change or variation.

Implied terms and conditions of investment licence.

19. (1) An investment licence may also contain any of the following undertakings by the investor—

(*a*) to maintain proper financial and accounting records, returns, samples and data relating to the operations of the business enterprise; or

(*b*) to permit the Authority or its employees or agents reasonable access to monitor the operations of the business enterprise.

(2) Subject to any agreement between the Authority and the investor, a licence may contain any of the following undertakings by the investor—

(*a*) to invest not less than a specified amount whether in cash or in relation to the value of machinery, buildings or other assets;

(*b*) to employ and train citizens of Uganda to the fullest extent possible with a view to the replacement of foreign personnel as soon as may be practicable;

(*c*) to purchase goods or services produced or available in Uganda if in terms of price, quality or availability, those goods and services are competitive with similar imported goods and services used in the business enterprise; or

(*d*) to take necessary steps to ensure that the operations of his business enterprise do not cause injury to the ecology or environment.

Register of investment licence.

20. The Authority shall maintain a register of all investment licences issued under this Code.

Revocation of licence.

21. (1) No investment licence shall be revoked except as provided in this section.

(2) Where an investment licence has been issued and it is subsequently found that it was issued as a result of a materially false or fraudulent representation or in consequence of incorrect information supplied to the Authority by the

investor, the Authority shall give written notice to the investor requiring him to show cause within a reasonable time why the licence should not be revoked.

(3) Where an investor is in breach of any provision of this Code or the terms and conditions of his investment licence, the Authority may give written notice to the investor requiring him to show cause within a reasonable time why the licence should not be revoked.

(4) If an investor fails to comply with a notice given under this section and the cause shown is deemed inadequate by the Authority, the Authority may, with the approval of the Minister, revoke the licence.

PART IV—FACILITIES AND INCENTIVES.

Exemption of investors from import duties and sales tax.

22. (1) An investor intending to make a new investment in Uganda and for that purpose importing any plant, machinery or construction material which is not available in Uganda shall be exempt from import duties and sales tax otherwise payable on those goods:

Provided the plant, machinery or construction material is not more than five years old.

(2) For the purpose of this section, where the new investment involves two or more phases, all those phases shall be treated as forming part of the new investment.

Enterprises which qualify for incentives.

23. (1) An investor in a business enterprise who commences operation after the coming into force of this Code shall qualify for incentives under this part if—

(*a*) he satisfies three or more of the objectives specified in section 13;

(*b*) in the case of a foreign investor, that investor makes a capital investment or an equivalent in capital goods worth at least five hundred thousand United States dollars by way of capital invested; or

(*c*) in the case of an investor who is a citizen of Uganda, the value of his investment is at least fifty thousand United States dollars.

(2) A foreign investor who engages in any activity specified in the Third Schedule shall not enjoy the incentives provided for in section 25 and paragraphs (*b*) and (*e*) of subsection (1) of section 33.

(3) The Minister may, by statutory instrument, amend the Third Schedule.

Certificate of incentives.

24. (1) An investor intending to avail himself of incentives under this Part may, if qualified in accordance with section 23, apply to the Authority for a certificate of incentives.

(2) A foreign investor shall not be required to make a separate application under this Part if in his application for an investment licence made under Part III he provides the relevant information relating to incentives.

(3) An application under this section shall be in the prescribed form and shall—

(*a*) state the category or categories of qualifications under which the applicant qualifies; and

(*b*) give particulars in support of those qualifications.

(4) Where an application under this section does not provide all the information required or if clarification is required on any matter, the applicant may be required to provide that further information or clarification.

(5) The Authority shall within thirty days after the receipt of a completed application, issue a certificate of incentives covering those incentives for which the applicant qualifies.

(6) Every investor who qualifies for incentives and whose application for a certificate of incentives has been approved by the Authority, shall be issued by the Authority a certificate of incentives covering those incentives for which he qualifies.

Common incentives.

25. A holder of a certificate of incentives shall be entitled to the following—

(*a*) exemption from corporation tax, withholding tax and tax on dividends—

(i) for a period of three years, in the case of an investment of a value not less than fifty thousand United States Dollars but not more than three hundred thousand United States Dollars; and

(ii) for a period of five years, in the case of an investment of a value greater than three hundred thousand United States Dollars;

(*b*) exemption from the taxes provided for under paragraph (*a*), for an additional one year respectively, in the case of an investor operating in any of the priority areas specified in the Second Schedule.

First arrival privileges.

26. A foreign investor who holds an investment licence and his expatriate staff shall be exempt from the payment of import duty and sales tax payable on the following items imported within twelve months from the date of first arrival—

(*a*) one motor vehicle for his personal use; and

(*b*) personal and household effects.

Additional incentives for certain exporters.

27. A holder of a certificate of incentives shall be entitled to a drawback of duties and sales tax payable on imported inputs used in producing goods for export as provided in any law imposing such duties or taxes.

Obtaining credit from domestic sources by foreign investors.

28. (1) A foreign investor who holds an investment licence may in relation to the business enterprises to which the licence relates, obtain credit from domestic financial institutions up to the limit established by the Bank of Uganda in consultation with the Authority, having regard to the amount of foreign capital invested in the business enterprise.

(2) A foreign investor who obtains credit in accordance with subsection (1) shall ensure that the proceeds of that credit are used solely for the purpose of carrying out the activities specified in the investment licence.

(3) The Authority may for the purposes of this section appoint its officer or agent to verify the due application of the credit obtained under subsection (1).

PART V—PROTECTION OF FOREIGN INVESTMENTS.

Protection in case of compulsory acquisition.

29. (1) The business enterprise of an investor which is licenced under this Code, or an interest or right over any property or undertaking forming part of that enterprise shall not be compulsorily taken possession of or acquired except in accordance with the provisions of the Constitution of Uganda.

(2) Where a licenced business enterprise, of an investor or an interest or right over property forming part of that enterprise is compulsorily taken possession of or acquired, compensation in respect of the fair market value of the enterprise specified in the enterprise or an interest or right over property forming that enterprise shall be paid within a period not exceeding twelve months from the date of taking of possession or acquisition.

(3) Compensation paid out to the investor under subsection (2) shall be freely transferable out of Uganda and shall not be subject to exchange control restrictions under the Exchange Control Act or any law made thereunder. Cap. 158.

Settlement of disputes.

30. (1) Where a dispute arises between a foreign investor and the Authority or the Government in respect of a licenced business enterprise, all efforts shall be made to settle the dispute through negotiations for an amicable settlement.

(2) A dispute between a foreign investor and the Authority or the Government in respect of a licenced business enterprise which is not settled through negotiations may be submitted to arbitration in accordance with the following methods as may be mutually agreed by the parties—

(*a*) in accordance with the rules of procedure for arbitration of the International Centre for the Settlement of Investment Disputes, or

(*b*) within the framework of any bilateral or multilateral agreement on investment protection to which the Government and the country of which the investor is a national are parties; or

(*c*) in accordance with any other international machinery for the settlement of investment disputes.

(3) The licence in respect of an enterprise may specify the particular mode of arbitration to be resorted to in the case of a dispute relating to that enterprise and that specification shall constitute the consent of the Government, the Authority or their respective agents and the investor to submit to that mode and forum of arbitration.

(4) Where the parties to a dispute do not agree on the mode or forum for arbitration, the party aggrieved by a

compulsory acquisition or possession or the amount of compensation payable, or in respect of any other matter relating to the business enterprise may apply to the High Court for the determination of any of the following—

(*a*) his interest or right;

(*b*) the legality of the taking of the possession or acquisition of the property, interest or right; or

(*c*) the amount of compensation to which he is entitled and the prompt payment of that compensation;

(*d*) any other matter in dispute relating to the business enterprise.

PART VI—AGREEMENTS FOR THE TRANSFER OF FOREIGN TECHNOLOGY AND EXTERNALISATION OF FUNDS.

Registration of agreements for the transfer of technology.

31. (1) Every agreement for the transfer of foreign technology or expertise shall be registered with the Authority by the beneficiary of that transfer as soon as it is made and it shall not be effective unless it has been registered.

(2) A person who applies for an investment licence under Part III which investment licence involves an agreement for the transfer of foreign technology or expertise shall not be required to make a separate application under this Part if he provides the relevant information relating to the regulation of agreements for the transfer of technology or expertise required under this Part.

(3) The Executive Director shall register every agreement for the transfer of foreign technology or expertise which—

(*a*) is included in an investment licence; or

(*b*) complies with section 32.

(4) The Executive Director shall maintain a register in which shall be recorded all agreements for the transfer of foreign technology or expertise.

Conditions in agreements for the transfer of foreign technology or expertise.

32. (1) Every agreement for the transfer of foreign technology or expertise shall be subject to the following conditions—

(*a*) any royalties or fees charged shall bear a reasonable relationship to the use of that technology or expertise;

(*b*) any liability to pay royalties or fees shall cease upon the lawful termination of the agreement or if that technology or expertise becomes public knowledge otherwise than through the fault of the licensee;

(*c*) there shall be a reduction in royalties or fees if a third party acquires and uses that technology or expertise otherwise than through the fault of the licensee;

(*d*) any technical assistance shall, where necessary include technical personnel as well as full instructions and practical explanations expressed in clear and comprehensive English on the operation of any equipment involved;

(*e*) the transferor shall provide technical assistance in connection with marketing programmes and purchasing equipment involving the use of that technology or expertise;

(*f*) the transferee shall acquire the right to continued use of that technology or expertise after the termination of the agreement; and

(*g*) the transferor shall, if the transferee so requires, continue to supply spare parts and raw materials for a period of up to five years following the termination of the agreement.

(2) An agreement for the transfer of foreign technology or expertise shall not contain a condition which—

(*a*) restricts the use of other competitive techniques;

(*b*) restricts the manner of sale of products or exports to any country;

(*c*) restricts the source of supply of inputs; or

(*d*) limits the ways in which any patent or other know-how may be used.

(3) The Authority may exempt an investor from any of the provisions of subsection (1) or (2).

Externalisation of funds.

33. (1) An investor in a business enterprise to which a certificate of incentives relates, is entitled to externalise his funds for the following purposes—

(*a*) repayment of foreign loans or interest on those loans;

(*b*) payment of dividends of shareholders who are not citizens of Uganda or to citizens of Uganda resident abroad;

(*c*) payment of royalities or fees in respect of an agreement for the transfer of foreign technology or expertise;

(*d*) payments of emoluments and other benefits to foreign personnel empolyed in Uganda in connection with the business enterprise; or

(*e*) externalisation of profits or proceeds on disposal of assets.

(2) A foreign investor who applies for an investment licence under Part III shall not be required to make a separate application under this section if in his application under that Part he provides the relevant information relating to externalisation of funds.

(3) An investor entitled under subsection (1) may apply to the Authority which shall, if satisfied that the application is for a *bona fide* purpose and is in compliance with this Code and any other law in force, grant the permission to externalise funds.

(4) The Executive Director shall issue a certificate of approval to externalise funds in the case of every approval to externalise funds which is—

(*a*) contained in an investment licence; or

(*b*) approved by the Authority under subsection (3).

(5) The Executive Director shall maintain a register in which shall be recorded all the certificates of approval to externalise funds together with such other particulars as the Authority may direct

Effect of certificate of approval to externalise funds.

34. A holder of a certificate of approval to externalise funds is entitled to apply to the Bank of Uganda to externalise the funds to which the certificate relates, subject to the law or procedure then prevailing.

PART VII—MISCELLANEOUS.

Service of documents.

35. A document may be served on the Authority by delivering it to the office of the Authority or by sending it by registered post to the Executive Director.

Regulations.

36. The Minister may, on the advice of the Authority, by statutory instrument make regulations for giving effect to the provisions of this Code.

Offences.

37. A person who—

(*a*) knowingly or negligently gives false or misleading information; or

(*b*) refuses or neglects to provide information which the Authority may reasonably require for the purposes of the enforcement of this Code;

(*c*) refuses without lawful excuse to admit an officer or an agent of the Authority into the premises of his business enterprise or otherwise obstructs any inspection by an officer or agent of the Authority,

commits an offence and is liable on conviction, to a fine not exceeding three million shillings or to imprisonment for a term not exceeding two years or both.

(2) Where an offence is committed by a body of persons then—

(*a*) in the case of a body corporate other than a partnership, every director or officer of the body shall be deemed also to have committed that offence; and

(*b*) in the case of a partnership, every partner or officer of that body shall be deemed to be guilty of that offence.

Repeal of Cap. 16 and Decree No. 18 of 1977 and transitional provisions.

38. (1) The Foreign Investment (Protection) Act and the Foreign Investment Decree, 1977 are repealed.

(2) Notwithstanding the repeal of the Foreign Investments (Protection) Act and the Foreign Investments Decree, 1977, on the coming into force of this Code, a certificate for

an approved business enterprise under those laws shall continue in force in accordance with its terms and conditions and may be reviewed by the Authority upon the application of the investor for that purpose.

SCHEDULES.

FIRST SCHEDULE.

s. 8.

PROCEEDINGS OF THE BOARD.

1. (1) The Board shall, for the transaction of its business meet at least once every month at such time or place as the Chairman may determine.

(2) There shall preside at a meeting of the Board—

(*a*) the Chairman; or

(*b*) in the absence of the Chairman, such member as the members present may elect to preside.

(3) Questions proposed at a meeting of the Board shall be determined by a simple majority of votes of the members present and in the case of equality of votes the person presiding at the meeting shall have a casting vote in addition to his deliberative vote.

(4) Where a member of the Board is for any reason unable to attend a meeting of the Board, the authority which appointed him may, in writing appoint another person to attend the meeting in his stead and that person shall be deemed to be a member for the purpose of that meeting.

(5) The Board may invite a person who is not a member to any of its meetings for consultations and that person may participate in the deliberations but shall have no right to vote.

Quorum.

2. Eight members of the Board shall form a quorum at every meeting of the Board.

Minutes of meetings.

3. The Executive Director shall keep minutes of every meeting of the Board and every meeting of a committee established by it.

Disclosure of interest.

4. (1) If a person is present at a meeting of the Board at which a matter is the subject of consideration and in which matter that person or his spouse is directly or indirectly interested in a private capacity, he shall as soon as practicable after the commencement of the meeting disclose that interest and shall not, unless the Authority directs otherwise, take part in any consideration or discussion, or vote on any question relating to that matter.

(2) A disclosure of interest made under this section shall be recorded in the minutes of the meeting at which it is made.

SECOND SCHEDULE.

s. 14.

PRIORITY AREAS.

(1) Crop processing.

(2) Processing of forest products.

(3) Fish processing.

(4) Steel industry.

(5) Chemical industries.

(6) Textile and leather industry.

(7) Oil milling industry.

(8) Paper production.

(9) Mining industry.

(10) Glass and plastic products industry.

(11) Ceramics industry.

(12) Manufacturing of tools, implements, equipment and machinery.

(13) Manufacture of industrial spare parts.

(14) Construction and building industry.

(15) Meat processing.

(16) Tourism industry.

(17) Real estate development industry.

(18) Manufacture of building materials industry.

(19) Packaging industry.

(20) Transport industry.

(21) Energy conservation industry.

(22) Pharmaceutical industry.

(23) Banking.

(24) High-technology industry.

THIRD SCHEDULE.

ACTIVITIES WHERE A FOREIGN INVESTOR IS NOT ELIGIBLE FOR INVESTMENT INCENTIVES.

s. 23(2).

1. Wholesale and retail commerce.
2. Personal services sector.
3. Public relations business.
4. Car hire services and operation of taxis.
5. Bakeries, confectioneries and food processing for the Ugandan market only.
6. Postal and telecommunication services.
7. Professional services.

(b) by substituting for the stabilisation tax on exports of coffee appearing in the fifth schedule thereof the tax appearing in the fifth schedule to this Statute.

ndment ... of

21. The Investment Code 1991 is amended—

(a) in section 11, by inserting after subsection (4), the following new subsections (5), (6), (7), (8) and (9).

"(5) A foreign investor who is intending to engage in trade only, shall not be required to comply with the provisions of subsection (1) but shall—

(a) incorporate a company with the Registrar General as is required by law;

(b) deposit a sum of one hundred thousand United State dollars or its equivalent in Uganda shillings at the Bank of Uganda, which shall be specifically used for importation or direct purchase of goods for the business.

(6) Upon compliance with the provisions of subsection (5), Bank of Uganda shall issue a certificate of remittance to the foreign Investor.

(7) A foreign investor who obtains a certificate of remittance under sub-section (6) shall lodge an application, in writing, to the Immigration Department which shall contain the certificate of remittance and other information that may be required by the Department.

(8) Subject to compliance with the provisions of this section and the immigration laws, the Immigration Department may issue an entry permit to the foreign Investor.

(9) A foreign Investor who obtains an entry permit under subsection (8) shall lodge an application, in writing, to the local authority, where the business will principally be carried out for a trade licence.

(b) in section 22 by substituting subsection (1) as follows—

"(1) An investor importing any plant, machinery, equipment, vehicles or construction materials for an investment project shall benefit from the concessional rates of import duty and other taxes as may be specified in the Finance Statutes from time to time." ;

(c) by substituting section 25 as follows—

"25. A holder of a certificate of incentives shall be entitled to the following—

(a) exemption from tax on corporation profits earned from the project, and exemption from withholding tax on dividends on shares issued by the holder, on royalties paid under an agreement registered with the UIA, and on interest paid on loan capital—

(i) for a period of three years, in the case of an investment of a value not less than fifty thousand United States dollars; and

(ii) for a period of five years, in the case of an investment of a value greater than three hundred thousand United States

(b) exemption from taxes provided for under (a) for an additional one year respectively, in the case of an investor operating in any of the priority areas specified in the Second Schedule."

Amendment of East Africa, Cap. 28.

22. The East African Excise Management Act is amended in the Fourth Schedule by—

(a) Substituting for subparagraph (1) of paragraph (1) the following—

"(1) the value of any excisable goods shall be the normal ex-factory price, exclusive of excise duty, sales tax or any other taxes.";

(b) Substituting for subparagraph (2) (b) the following—

"(b) that the manufacturer shall include raw material costs, manufacturing costs, labour costs, profit margin, bank charges and interest and all other costs charges and expenses incidental to the factory, but shall not include any transport charge for delivery from the factory".

Amendment to Act 38 of 1970.

23. The Traffic and Road Safety Act, 1970, is amended in section 24 by adding at the end of subsection 1, the following *proviso*—

"Provided that in case of an unregistered motor vehicle, trailer or engineering plant entering Uganda and is to be registered in Uganda, the Commissioner-General of the Uganda Revenue Authority shall issue a temporary road license at the point of entry".

Amendment of Schedules to Customs Tariff Act, etc.

24. (1) Schedule 1 to the Customs Tariff Act, 1970, the Sales Tax Act, 1970 and Excise Tariff Act respectively are amended in the manner specified in the sixth schedule to this Statute.

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