مستند رقم (٥)

ASSETS MANAGEMENT DEPT

APPRAISAL REPORT

US$ 14.6 Million Lease Financing in Favour of The Government of Lebanon

for the

Expansion, Rehabilitation and Equipping the Quarantina Slaughter House Project.
Beirut.
Lebanon

Rabi'II, 1424H
June, 2003G

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EXECUTIVE SUMMARY

US$ 14.6 million Lease Financing in Favour of the Government of Lebanon for the Expansion, Rehabilitation and Equipping the Quarantina Slaughter House Project

Country:	Lebanon
Beneficiary:	Government of Lebanon
Executing Agency:	Council for Development and Reconstruction
Mode of Financing:	Lease Financing
Total Project Cost & Financing:	Total cost of the Project is US$ 16.1 million of which the Government of Lebanon will finance US$ 1.5 million, and the balance US$ 14.6 million is to be financed by IDB/AMD through IDB/Unit Investment Fund.
Mark-up:	2.75% p.a. over 1 year LIBOR
Tenor:	8 years inclusive 2 years of gestation period.
Rentals:	The Lessee will pay 12 semi-annual rental instalments.
Security:	Sovereign risk
Leased Equipment:	Slaughtering equipment.
Project Objective:	The project aims to expand, rehabilitate and equip the old Quarantina Slaughter House, which was constructed in 1965 to the latest technology available to meet the growing demand of the City of Greater Beirut. The existing slaughterhouse was constructed in 1965 and has not been operative since 1967 due to the civil war in the country.
Procurement:	The expansion and rehabilitation of the civil works and the procurement of the equipment will be procured in competitive bidding confined to IDB member countries.
Project Implementation:	The project implementation period will be 24 months.

The Executing Agency: The Council for Development and Reconstruction (CDR) which is the government agency responsible for the implementation of this project.

Project Justification

1. The financial internal rate of return is estimated at 14 %. The projected income and cash flow statement indicates the project's ability to generate adequate cash flow to meet the payment of installments .
2. The proposed project will create 430 new employment opportunities.
3. The proposed project will contribute to the development of a full hygienic slaughtering facilities complying with international standards and regulations that are imposed world-wide on livestock slaughtering operation.

Conclusion & Recommendation:

In view of the above, it is recommended that the President - IDB approves financing of the project by way of Leasing for an amount of US$ 14.6 million at a mark-up of 2.75% above 1 year LIBOR. The repayment would be semi-annually over a period of 6 years after 2 years of gestation.

The approval of IDB/UIF's financing by US$ 14.6 million is within the President's authority vide the BED's Resolution No. BED/06/04/420/(186)/29.

I- INTRODUCTION

1.1. The Government of Lebanon requested IDB to consider financing the expansion, rehabilitation and equipping the Quarantina Slaughter House hereafter called the Project. The Assets Management Department (AMD) mounted on May 2003 an appraisal mission to Lebanon and met with the Council for Development & Reconstruction (CDR) officials. The mission was composed of Br. Hisham Dafterdar, Br. Hafedh Maamouri (both from AMD) and Eng, Ali Jawhary, a civil engineer, an IDB retiree ex-COD-3

1.2. The proposed project is designed to expand, rehabilitate and equip the old Quarantina Slaughter House constructed in 1965 and is non operative due to war damages. The project is designed to meet the demand of slaughtered meet for greater Beirut up to the year 2020.

1.3. The total estimated cost of the project is US$ 16.1 million of which US$ 14.6 million is required for financing. It is proposed that the AMD through UIF, finance the project by way of leasing for a period of 8 years including 2 years of gestation. From the date of disbursement the rentals shall be payable in 12 semi-annual installments, and shall be composed of 1/12th of the purchase price plus a mark-up of 2.75 % p.a. above one year LIBOR.

II- BACKGROUND

A. THE ECONOMY

2.1 The Republic of Lebanon is situated in the Levant on the eastern most part of the Mediterranean Sea, with a shoreline extending 192 km from north to south. Lebanon greatest width from west to east is 85 km. The total land area of Lebanon is estimated at 10,452 km^2.

2.2 The total population of the country was estimated at 3.6 million in 1999 and growing at annual rate of 3%. The population density is 383 per km^2 and 10% of the population is concentrated in the Governorate of Beirut.

2.3 The GDP of Lebanon has risen substantially from US$ 4.5 billion in 1992 to US$ 16.4 billion in 2000 largely due to the reconstruction efforts undertaken after the civil war. The GDP for 2001 was approximately US$ 17.9 billion, with a GDP per capita of US$ 5,150. Lebanon is currently classified by the World Bank as a lower middle income country.

2.4 The structure of the Lebanese economy is heavily weighed in favor of trade and services. Trade and services accounted for over 70 percent of

GDP before the war. Measured at factor costs, this share has declined somewhat to about 61% in 1996 and risen once more in 1998 to 68.8%. Industry, including manufacturing formed 29.8% whereas agriculture formed 14% of GDP.

2.5 The main economic and financial indicators for Lebanon are presented in **Annex-1**.

2.6 Following the success of the Paris-II Conference, and within the context of helping the Government to reduce its debt servicing cost, commercial banks operating in Lebanon agreed to subscribe to US$ 4 billion in two-year non-interest bearing Treasury Bills and Euro Bonds. The Association Banks in Lebanon and the Central Bank reached an agreement whereby the banks will buy government paper in an amount equivalent to 10% of their aggregate deposits as at 31 October 2002. Banks will purchase zero interest Euro Bonds with two-year maturities.

2.7 In parallel, the Central Bank and other public institutions are expected to take similar refinancing steps to help reduce debt-servicing cost over the next two years. The Central Bank, which holds US$ 3.6 billion in Government paper, will re-subscribe to US$ 2.3 billion worth of Lebanese Pound-denominated Treasury Bills at a rate of 4% instead of the 12% on the current bills. Additionally, the National Social Security Fund, holder of US$ 2.3 billion in two-year domestic debt at rates 14.14%, is expected to swap its Treasury bills for paper carrying 8% interest rate.

2.8 Lebanese authorities estimates that these public-private sector agreements will result in aggregate interest savings of about US$ 1.1 billion in the coming two-years.

2.9 Since the end of the civil war in 1992, the Lebanese government has embarked on a comprehensive reconstruction program focused on rebuilding the infrastructure of the country.

2.10 Real GDP growth (measured at 1994 constant prices) has declined from 6.5% in 1995 to 4% in 1997. A further decline has been witnessed over the years 1998 and 1999 to 2% and –1% respectively. Overall growth in Lebanon has traditionally been driven by private consumption, which peaked at 102% of GDP in 1996 and formed 82% of GDP in 1998.

2.11 Although the Lebanese authorities have remained committed to tight monetary policy, fiscal policy has been less prudent. This is a result of the extensive reconstruction plan, which the Lebanese government embarked upon since the end of the war, which has resulted in excessive public spending. Over the period 1995-98, total government expenditure averaged approximately 34.65% of GDP. Rising from 32.5% in 1995 to 40% in 1997 and a gradual decline to 30.8% in 1998 and 30.2% in 1999. The dramatic increase in government expenditure in 1997 is attributable to the increase in debt service, which increased from LBP 2,693 billion in

1996 to LBP 3,380 billion in 1997. Although declining slightly in 1998 to LBP 3,300 billion and rising once more to LBP 3,900 billion in 1999.

2.12 In the first half of 2000, according to the figures of the Ministry of Finance, total public expenditure registered an annual rise of 20.44%, reaching LBL 4,564.23 billion. Compared to the same period of the previous year, this rise is attributed to three main factors:

i. An increase of 15.74% in debt service payments.

ii. A 17.74% growth in non-interest expenditure other than debt service payments.

iii. A significant rise of 37.93% in Treasury withdrawals, caused by new financial burdens assumed by Treasury ,such as the increasing deficit of the Electricte du Liban. On the other hand, the disbursement of funds due to municipalities registered a high increase, reaching LBP 159 billion in the first six months of 2000, against LBP 56 billion a year earlier.

2.13 Total government revenues have averaged 17% of GDP over the period 1995-97. Total revenues have declined from 17.2% of GDP in 1996 to 16.4% in 1997. This decline was largely due to the decline in indirect tax revenues. 1998 witnessed an increase in revenues by LBP 677 billion (equivalents to 17.5% of GDP) as a result of an increase in custom duties by LBP 382 billion. The increase in revenues continued into 1999, forming 18% of annual GDP. The budget deficit has averaged about 16% for the period 1992-98. The overall deficit has been fluctuating as a result of the inconsistency in domestic spending. The overall deficit for 1997 was 23.8% of GDP whereas for 1998 it was 13.2% and in 1999 it was 12.2%. The recent improvement in budget deficit is a result of increased revenues and reduced expenditures (Table-1).

Table-1 : Government Finance 1997-1999 (LBP billions)

	1997	1998	1999
Total Expenditures	9,162	7,816	8,360
% of GDP	40.0	30.8	30.2
Current Expenditures	7,695	6,549	-
% of GDP	33.6	26.7	-
Interest Payments	3,378	3,300	3,900
% of Total Expenditure	36.8	41.1	46.6
Total Revenues	3,753	4,430	4,990
% of GDP	16.4	18.1	18
Indirect Taxes	2,150	2,596	-
Of which, Custom Duties	1,722	2,104	-
Overall Deficit	-5409	-3386	3,370
% of GDP	-23.5	-13.3	-12.2

Source: Banque du Liban, *Monthly Statistical bulletin Mar 2000, Ministry of Finance*

2.14 In order to finance the reconstruction efforts of Lebanon after the war, the Government resorted to the domestic market to raise the required capital.

This has resulted in domestic public debt rising from 34% of GDP in December 1993 to 85% of GDP in December 1998 and 99% of GDP in Dec. 1999. The end result has been interest payments reaching 46% of total government expenditure in 1999 (Table-5).

2.15 The effect of this policy for improving public finances has been an increase in the stock of total external public debt in the region of US$ 4.2 billion by the end of 1998, which represents 25% of GDP (GDP estimated at US$ 16.8 billion for 1998) and 32% of GDP in 1999.

2.16 Inflation, measured as the percentage change in the consumer price index (CPI), has seen a marked decline over the period 1993-1997. The average annual CPI declined from 29% in 1993 to 13% in 1995. Further reductions to 3.8% in 1998 and 0.2% in 1999 have been achieved. This decline is attributable to the efforts of the Lebanese monetary to stabilize the economy.

2.17 According to the Central Bank of Lebanon, Banque du Liban, gross reserves (excluding gold) increased from US$ 4.53 billion in 1995 to US$ 7.7 billion in 1999 (see Table-8 below). This is the equivalent of 11 months import cover. Total reserves have also seen a consistent increase over the period 1995-99. Including gold reserves, the total net reserves of the Central Bank (excluding commercial bank deposits) for 1999 were in the region of US$ 10.35 billion.

TABLE-2 : RESERVES POSITION OF THE CENTRAL BANK OF LEBANON (US$ BILLION)

	1995	1996	1997	1998	1999
Gross fx Reserves (excl. gold)	**4.53**	**5.93**	**5.98**	**6.56**	**7.70**
(Commercial Bank fx Deposits)	1.41	-	3.02	3.30	-
Net fx Reserves	3.12	-	2.96	3.10	-
Gold Reserves (valued)	3.57	3.41	2.67	2.70	2.65
T Total Reserves	**8.10**	**9.34**	**8.65**	**9.10**	**10.35**

Source: Banque du Liban, Monthly Bulletin *May 2000*

2.18 Since the devaluation of the Lebanese pound in 1992, the Lebanese pound has seen a substantial appreciation against the US$, rising from LBP 1,741: US$ 1 in 1993 to LBP 1,539: US$1 in 1997 to LBP 1,506: US$1 in 1999. Representing an appreciation of almost 12% over the period 1993-1997 and an appreciation of 2.15% between 1997-99. Currently the pound exchange rate to the US$ is LBP 1,507: US$1.

B. THE SECTOR

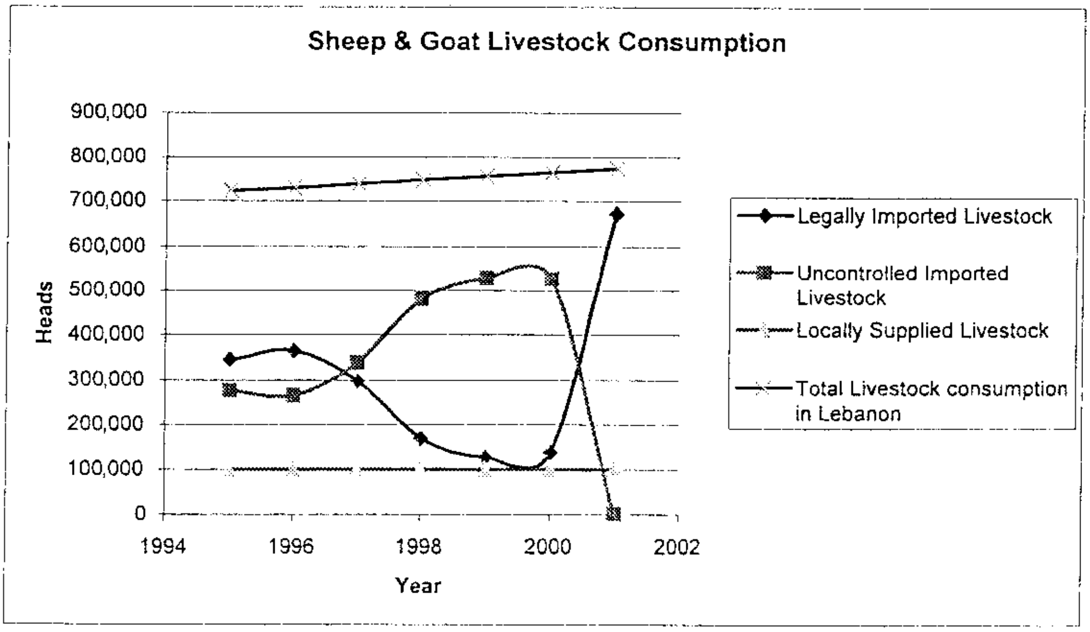
2.19 The Lebanese sheep and goat meat market depends on imported livestock to satisfy its needs. Based on the statistics provided by the Lebanese

Custom Authorities and the Union of Butchers and Livestock Traders, an average of 33 % of the Lebanese livestock market needs is imported from various countries while only 13 % is supplied locally. Accordingly, it is clear that during the past few years, up till year 2000, uncontrolled import across the borders has increased dramatically and has reached and average of 54% of the total consumed livestock.

Based on customs records, obtained from the custom authorities at Beirut Port, a major drop in the number of legally imported sheep and goats livestock is identified from 1995 to 2000. As of the beginning of year 2001, new custom regulations were implemented on imported livestock. The new regulations have excluded imported livestock from custom fees to encourage legal trading and consequently reduce uncontrolled import across the borders.

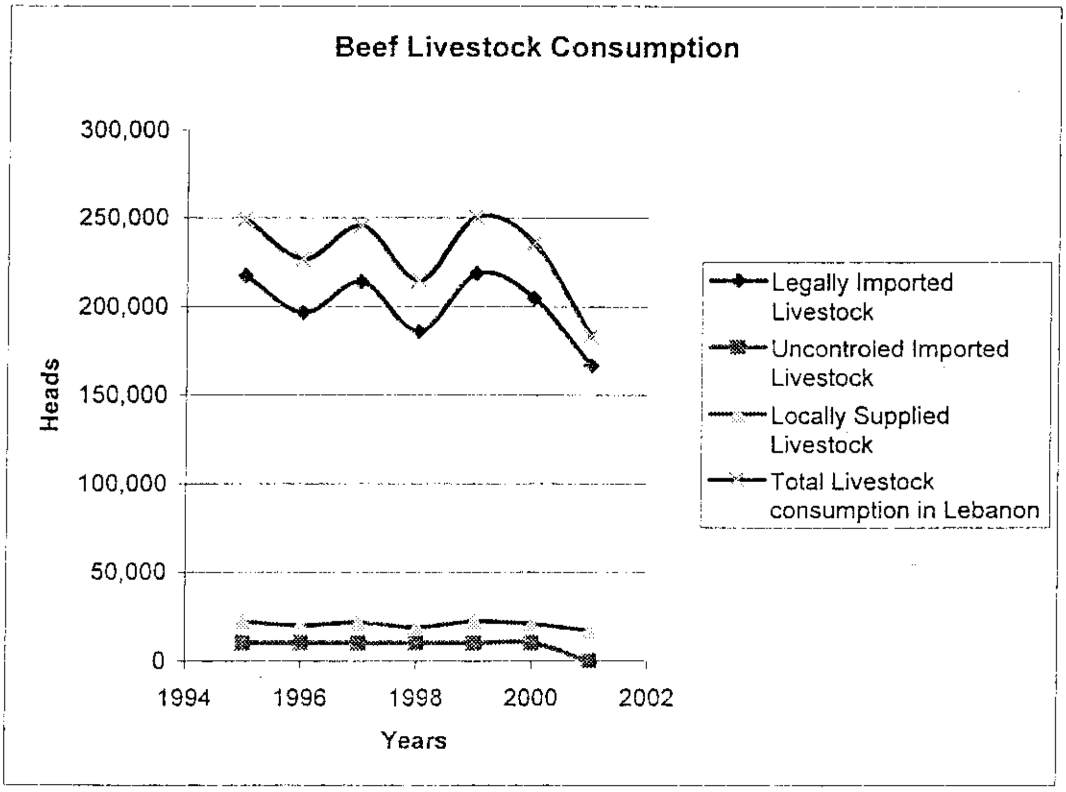
2.20 In **Annex-2**, the uncontrolled imported sheep and goat livestock are estimated by applying a 1.3% yearly decrease throughout the years 1995 to 2000 starting from year 2001, during which uncontrolled activity has almost ceased.

Statistics provided by the Union of Butchers and Livestock Traders, shows that the volume of local livestock supplied to the market forms around 13 % of the total market demand. There is around 100,000 heads of sheep and goats, locally raised and supplied to the market each year. The annual averages of imported sheep and goat heads for the years 2002 to 2020 are extrapolated starting from year 2001 with a yearly increase of 1.3%, as per World Bank sources and factors used for the Lebanese population growth and projection up till year 2020.



2.21 Most of the locally consumed beef is imported from various European countries. Statistics provided by The Union of Butchers and Livestock Traders shows that an average figure of 87% of the total market need is legally imported while 9 % only is raised locally. The remaining 4% of the yearly consumption of beef heads has been smuggled across the borders over the years 1995 to 2000. From statistics provided by the custom authorities at the Port of Beirut office, the annually average of legally imported beef between years 1995 and 2000 ranges between 218,481 and 196,752 heads. As for the year 2001, the annual average for imported beef heads is 166,467 heads. The drop in imported heads between the year 2000 and 2001 is due to the Mad Beef Disease, which has affected the beef market worldwide.

2.22 **Annex-3** shows the future annual beef market projections. For the years 1995 to 2000, fluctuates between a maximum of 218,481 and a minimum of 196,752 heads, the overall annual average through the whole period will be considered as a basis for a future extrapolation. The overall annual average is found to be 206,152 heads, which is very close to the year 2000 annual average. The annual averages of imported beef heads for the years 2002 to 2020 will be extrapolated starting from year 2000 annual average which is obtained by adding the legally imported livestock with the locally supplied and uncontrolled import of livestock for the year 2000. The new annual average projection factor is based on a yearly population growth of 1.3%.



2.23 Countries from which livestock is imported vary with the type of animals. For example 44 % of beefs are imported from France whereas 54 % of sheep are imported from Turkey. **Annex-4** summarizes the sources and percentages of imported live animals to Lebanon including their import price. All data represented is obtained from the Lebanese Customs Authority. This part of the analysis is based on data from the first six month of the year 2001, since there is no data available from previous years.

2.24 Current regulations for importing livestock are now inforced by the Government. Every category of livestock animals shall have a birth certificate, health certificate, identity number, and a certificate of origin. Moreover, blood samples are taken at random and sent to the Fanar Laboratory to be tested for various diseases. All blood tests must be approved by a veterinary committee appointed by the ministry of agriculture.

C. THE MARKET

2.25 Imported livestock is the main source of red meat supply to the Lebanese market. Local farms supply the market with limited quantities of red meat. Quantities of locally supplied red meat vary with the different types of animals. Livestock slaughtering facility is available on dispersed farmlands and selected sites either owned by livestock traders or various municipalities of major cities. The overall meat consumption in Lebanon for the year 2001 is in the order of 31,242 tons. For the present study and analysis, various assumptions were used as a basis for establishing the necessary link between the numbers of imported heads of animals and the net weight of consumed meat obtained. These assumptions are as follows:

- Average weight of sheep or goat is 50 kg
- Average net weight of sheep or goat meat per sheep (or goat) is 20 kg
- Average weight of a beef is 500 kg
- Average net weight of meat per beef is 200 kg

2.26 **Annex-5** shows the annual sheep and goat meat consumption which rates have been calculated from the total annual average of consumed livestock. The uncontrolled imported as well as the locally supplied livestock have been added up to the legally imported livestock to obtain the total annual average of consumed sheep and goat heads in Lebanon. Greater Beirut consumption rate is estimated at 60 % of the total yearly average livestock consumption in Lebanon. The daily peak consumption rate has been established by applying a factor of 150% on the average daily consumption rate. This is due to the fact that the slaughtering rate is not constant over the six days of the week, but it varies between a minimum and a maximum. Any projected slaughterhouse should be designed and equipped to handle the daily peak-slaughtering rate. The peak design daily slaughtering capacity required to serve Greater Beirut in the year 2020 is estimated to be 3000 heads of sheep or goats.

2.27 Annex-6 shows the annual beef meat consumption which rates have been calculated from the total annual average of consumed livestock. All uncontrolled imported and locally supplied heads are calculated and added to the total annual average. As for Greater Beirut consumption rate, it is estimated at 60 % of the total yearly average. The peak daily consumption rate is derived from the average daily consumption rate, by applying a factor of 105%. It is worth to note that the additional 50% of the total sheep meat and the 5% of beef meat are equivalent in weight. On the other hand, all peak daily consumption figures are the basis for design of the process lines. The daily slaughtering capacity required to serve Greater Beirut in the year 2020 is estimated to be 645 heads of beef.

Fresh Meat Consumption In Greater Beirut

		1995	1996	1997	1998	1999	2000	2001	2020
Sheep & Goat	Tons	8,666	8,763	8,862	8,961	9,062	9,164	9,268	11,846
	Heads	433,320	438,173	443,089	448,069	453,114	458,225	463,402	592,294
Beef	Tons	29,868	27,171	29,430	25,752	30,039	28,212	21,974	36,683
	Heads	149,340	135,856	147,149	128,759	150,197	141,060	109,868	183,416
Total	Tons	**38,534**	**35,935**	**38,292**	**34,713**	**39,102**	**37,377**	**31,242**	**48,529**

2.28 It is worth noting that the amount of imported chilled & frozen meat in greater Beirut will be 8.7 % of the total meat consumption in year 2020 as shown below.

Annual Consumed Meat Tons (2020)		
Beef Meat	11,846	69.0 %
Sheep & Goat Meat	36,683	22.3 %
Chilled Meat	1,986	3.7 %
Frozen Meat	2,656	5 .0%
Total	53,172	100.0%

III- THE PROJECT

Preamble:

3.1 The old Quanrantina Slaughterhouse was constructed in 1965 with a daily capacity of 2,040 heads of sheep and 240 heads of beefs. This capacity was sufficient for the market demand at that time and more than sufficient to cover the needs of Great Beirut area up till year 1975, when it was subjected to a major destruction and complete loss of its equipment and facilities due to the civil war. The project is envisaged now to satisfy the needs of greater Beirut up to the year 2020. Livestock traders own most of the private slaughterhouses in Greater Beirut. These slaughterhouses are mainly built within the traders' farms. There are no slaughtering fees imposed on users since the main source of income is based on live animal trade and not on slaughtering and skinning services. Most of the existing private slaughterhouses are not well equipped, and are limited to slaughtering surfaces with channel drainage and manual hoists. Slaughtering is performed by the butchers themselves. No veterinary control or check is allowed for, during the slaughtering process.

3.2 The Municipality of Beirut owns the Quarantina Slaughterhouse. The Quarantina Slaughter house consists of a livestock storage area barns, in steel structure, of around 3000m^2. There are also two steel structure halls with an area of 2000m^2 each; one of the halls is used for slaughtering, while the other one is used as a meat market show room. The slaughtering hall is not provided with any type of equipment, such as rails, powered cutting tools, conveyors and skinning machine. The administration is restricted to a 60 x 10 m area divided into two strips within one floor of concrete construction. The paved road area and the facility are about 3500m^2 with a parking capacity for 100 cars.

Project Objectives

3.3 The project aims at rehabilitation, expansion and equipping of the existing slaughter house in Quarantina district to satisfy the needs of greater Beirut up to year 2020.

Project Location:

3.4 The project is located in the Quarantina area in Northern Greater Beirut on a lot of land, an area which occupies approximately 27,000 m2, is adjacent to Beirut Port and is located between the sea (0.5 km), the Dora highway (0.65 km) and Beirut river (0.85 km), surrounded by industrial and residential areas, and the Quarantina hospital. At present the slaughterhouse is void of equipment and not functioning at all.

Project Scope:

3.5 The project consists of the following components:

a) Civil Works for the Rehabilitation & Expansion of the existing slaughter house which includes necessary barns to house daily animals capacity (sheep and beefs), two sheep lines, two beef lines, veterinary inspection station, offal extraction and carcass splitting stations, inspection and control mezzanine, cold rooms and freezers, meat market with an area of 2,500m^2, offices, meeting rooms, small cafeteria, clinic, and toilets, solid waste treatment plant, drainage works, waste treatment plant, a blood treatment plant, solid waste cookerr, a simple and modern laboratory, parking areas, water distribution, power generation, ventilating and air conditioning, hot water system and refrigeration system.

b) Procurement and equipping of the slaughter house mainly for sheep lines, beef lines, by product stations for both beef and sheep, hygiene requirements and hygiene tools and equipment.

c) Engineering services for design and supervision of works.

Project Cost:

3.6 The total project cost is estimated at US$ 16.1 million (cost details are shown in **Annex-7**) of which US$ 14.52 million is in foreign currency detailed as follows:

Item Description	L/C	F/C	Total
Civil Works	1.22	6.90	8.12
Machinery & Equipment	-	5.14	5.14
Consultancy Services	0.20	1.16	1.36
Sub Total	***1.42***	***13.20***	***14.62***
Physical & Price Contingencies	0.16	1.32	1.48
Grand Total	**1.58**	**14.52**	**16.10**

The proposed Financing Plan:

3.7 The following shows the proposed financing plan:

Sources of Funds	L/C	F/C	Total
Government Equity	0.22	1.28	1.50
AMD Proposed Financing	2.56	12.04	14.6
Grand Total	**2.78**	**13.32**	**16.1**

The **FIRR** of the project is estimated at 14%

AMD Involvement:

3.8 It is proposed that AMD may consider financing this project by way of Leasing operation for an amount not exceeding US$ 14.6 million. The Lease operation will be for a period of 8 years including 2 years of gestation with a mark-up of 2.75% above one year LIBOR. AMD proposed financing will cover the total cost of civil works and procurement of equipment. The Government of Lebanon will cover the total cost of engineering services.

Project Implementation:

3.9 The project implementation is anticipated to be 2 years after tendering process. The project implementation plan is shown in **Annex-8**

Procurement Procedure:

3.10 The Engineering services financed by the Government of Lebanon will be in conformity with the Lebaneese procurement procedures.
The civil works will be tendered on international competitive bidding confined between IDB member countries.
The equipment will be procured on the basis of international competitive bidding.

Environmental impact:

3.11 The meat industry generates large quantities of solid wastes and wastewater with high Biochemical Oxygen Demand (BOD) and suspended solids load. The wastewater is generated from washing cattle prior to slaughtering, washing carcasses, and cleaning (slaughter area, process equipment, barn, trucks, etc.). Solid wastes are produced in the slaughtering area by the cutting and dressing of carcasses. Other potential environmental concerns would be indoor and outdoor air quality, exhaust flue from waste cooking equipment, noise, and occupational health hazards.

3.12 Slaughtering usually requires large amounts of hot and cold water for sterilization and cleaning, thus generating a significant volume of wastewater estimated at 690 m^3/day (assuming, 90% of the water reaches the plant and taking a 10% peaking factor). A wastewater treatment plant will be provided at the slaughterhouse site for primary and secondary treatment of wastewater along with a dual drainage network, one for blood in the slaughtering and bleeding area and one for other liquid waste to separate between blood and wastewater.

3.13 Health risks are relatively high. They include bacteria from sick animals, occupational health hazards, pests, insects, rodents and personal hygiene.

3.14 The projected slaughterhouse will help to control the meat quality in Greater Beirut, and major negative impacts on the environment can be minimized if the mitigation measures are observed. It is also recommended that an Environmental Monitoring Unit (EMU) be established within the slaughterhouse management to control the adequate application and respect of the recommended mitigation measures. One of the main duties of the EMU is to keep contact with the residents of the neighbouring area for effective implementation of the mitigation measures.

Project risks:

3.15 The main risk anticipated is the delay in the project implementation which may effect the project estimated cost. However, the Government officials have assured AMD that funds for this project have been budgeted.

IV- THE EXECUTING AGENCY

4.1 The Executing Agency for the project will be the Council for Development and Reconstruction (CDR).

4.2 The proposed Lease Agreement will be signed between IDB and the Government represented by CDR (Beneficiary).

4.3 CDR is responsible for implementation of projects and for coordination with the financing organizations. They will prepare and call for all tenders and clear all payments to the contractors/consultants.

4.4 CDR was established by Decree Law No.5 dated 31 January 1977 followed by several decrees regulating the administrative and financial systems and the appointment of Board members and Management of the Council.

4.5 CDR reports directly to the Council of Ministers and enjoys a high degree of financial and administrative independence. The Government created CDR to replace the Ministry of Planning, and endowed it with extensive powers to prepare a general plan and programs for development and reconstruction; recommend appropriate economic, financial and social policies to the Council of Ministers; enter into international agreements for economic and technical assistance; establish project implementation units (with Council of Ministers' approval); extend concessionary loans to private and public sector development projects; finance any assigned project or program and contract both internal and external loans amounting up to 15 percent of the Government's total budget. Also, CDR is responsible for the coordination with all international organizations and other Governments with regard to any financial and technical assistance for development projects in the country.

4.6 CDR has both planning and execution authorities. With the return of normalcy and as line ministries are being rebuilt, CDR should work with the ministries to assist them to assume their customary roles. CDR is working closely with the relevant ministries and agencies, in particular, to:

a. Provide them with updated economic data and projections and medium-term goals for sectorial planning.

b. Identify the ministries' requirements for technical assistance, consultants, studies and computer equipment.

c. Initiate and develop a consensus on the criteria to be used in the selection of projects.

d. Formulate common guidelines and procedures for bidding, evaluation of bids, award of tenders and procurement; and provide models of bidding documents that are compatible with aid donors' requirements.

e. Agree on a standard periodic reporting system on financial and physical achievement in projects, technical assistance and studies, to help in monitoring and in design of follow-up actions.

f. Establish an audit system for reconstruction project financed through CDR.

4.7 CDR Board of Directors consists of 12 members appointed by the President of the Republic of Lebanon. Out of these members four are full time members appointed for five years, that constitute the Council Bureau for the Management of CDR. This Council Bureau is composed of President, two Vice Presidents and a General Secretary of CDR. The remaining eight members of the Board are appointed for three years term. CDR Organization Chart is shown in **Annex-7**.

4.8 CDR has gained good experience in implementing various projects and has acquired experienced staff to supervise projects with the assistance of qualified consultants.

V. PROJECT JUSTIFICATION:

Current Selling Prices

5.1 The current selling price to Customers for sheep meat ranges from 10,000LL to 15,000LL (Lebanese Pound) for one kilogram. Whereas the current selling price for beef meat ranges from 5,000LL to 10,000LL (Lebanese Pound) for one kilogram. The net meat price varies with the meat quality, which depends on the type of carcass part it has been taken from.

The average live stock price per 50 kg sheep or goat head, as obtained from the customs authorities, is around $75 including shipping and handling. The average selling price to the butcher is $2.35 per kg or $118 for a 50 kg sheep (or goat).

Since the average sheep or goat will produce 20 kg of net meat, then the meat obtained from one sheep can be sold at 20kg x 12,000 L.L. = 240,000LL or $160 (where12,000 L.L. is the average price for one kg of sheep meat). Butchers in Greater Beirut have to pay $ 3.3 for slaughtering

and $0.5 for handling. The butcher's gross margin will be [160 – (118 + 3.3 + 0.5)]/160 = 0.239 or 23.9 %. On the other hand the mark-up will be [160/(118+3.3+0.5)] = 1.313 or 31.3%
The average livestock price per beef (500 kg) as obtained from the customs authority is $550 including handling and transportation. The selling price to the butcher is around 1.6 per kg or $ 800 for a 500 kg beef.

Since the average beef will produce 200 kg of meat, then the meat obtained from one beef can be sold at 200 kg x 7,500LL = 1,500,000 or $1000 (where 7,500 L.L. is the average price for one kg of beef meat). Butchers in Greater Beirut have to pay $ 7 for slaughtering and $1 for handling. The butcher's gross margin will be [1000 – (800 + 7 + 1)]/1000 = 0.192 or 19.2 % while the mark-up will be [1000/(800+7+1)] = 1.237 or 23.7%.

5.2 **Annex-9** shows Manpower Requirements & Estimated Salaries and Operations costs

5.3 The net revenues are based on the following:
- Slaughterhouse is to handle the needs of Greater Beirut as they grow from year to year.
- Slaughtering charges are based on the current charges ($4.66 per sheep or goat and $ 16 per beef).
- All first and maintenance costs are divided equally between sheep and beefs investment

The net revenues are shown in **Annexes 10-11-12-13 and 14** and based on the above annexes, there is no return or investment if the current charges are adopted for the future slaughterhouse. At the end of the year 2020 the sum of net present value will be $ – 1,345,000.

5.4 The possibility of increasing the slaughtering charges is analyzed based on 15% rate of return, in order to increase the revenue to an acceptable level.

Required Rate of Return: RRR = 15%

Overall Project Life: n = 15

Capital Recovery Coefficient:

$$CRC = \frac{i(1+i)^n}{(1+i)^n - 1} = \frac{0.15(1+0.15)^{15}}{(1+0.15)^{15} - 1} = 0.17102$$

Annual Investment Cost = Total Investment Cost x CRC

= 8,060,938 x 0.17102

= 1,378,582

$$\text{Required Slaughtering Charges per type of Animal} = \frac{\text{AIC} + (\text{ARC} \times \text{OP})}{\text{Slaughterhouse capacity per Type of Animal}}$$

Where:

AIC: Annual Investment Cost

ARC: Annual Running Cost

OP: Overhead & Profit

For Sheep:

$$\text{Required Slaughtering Charges} = \frac{\text{AIC} + (\text{ARC} \times \text{OP})}{\text{Slaughterhouse capacity per Type of Animal}}$$

$$\text{Required Slaughtering Charges} = \frac{1{,}378{,}582 + (1{,}749{,}000 \times 1.4)}{592{,}294}$$

Required Slaughtering Charges = $ 6.46

For Beef:

$$\text{Required Slaughtering Charges} = \frac{1{,}378{,}582 + (1{,}749{,}000 \times 1.4)}{183416}$$

Required Slaughtering Charges = $ 20.8

Feasibility Based on New Slaughtering Charges

Based on the above-calculated slaughtering charges, the new slaughtering charges to be adopted for operating the future slaughterhouse are $6.5 for sheep or goat and $22 for beef. Accordingly the flow of revenues will become as follows:

Operate At Full Capacity From 2004 To 2020

Under this scenario the slaughterhouse is allowed to operate with the average capacity of the year 2020. This can be done if the animals consumed outside greater Beirut are brought in to the projected slaughterhouse.

Based on the new slaughtering of $6.5 for sheep or goat and $22 for beef, the fixed annual revenue becomes as follows:

Revenue From Sheep and Goat: 592,294 x 6.5 = $3,849,908

Revenue From Beef: 183,416 x 22 = $4,035,154

Revenue From Waste: $119,954

Total Revenue: $8,005,016

Table 7.11 Flow of Cost, Revenue Streams & Present Value – 1000 USD)

	Year	Capital Cost	Operating Cost	Revenues	Net Revenues	P.W.F. (8%)	PV
1	2002	8051	0	0	-8051	0.9259	-7455
2	2003	8051	0	0	-8051	0.8573	-6902
3	2004	0	3498	8,005	4507	0.7938	3578
4	2005	0	3498	8,005	4507	0.7350	3313
5	2006	0	3498	8,005	4507	0.6806	3067
6	2007	0	3498	8,005	4507	0.6302	2840
7	2008	0	3498	8,005	4507	0.5835	2630
8	2009	0	3498	8,005	4507	0.5403	2435
9	2010	0	3498	8,005	4507	0.5002	2255
10	2011	0	3498	8,005	4507	0.4632	2088
11	2012	0	3498	8,005	4507	0.4289	1933
12	2013	0	3498	8,005	4507	0.3971	1790
13	2014	0	3498	8,005	4507	0.3677	1657
14	2015	0	3498	8,005	4507	0.3405	1534
15	2016	0	3498	8,005	4507	0.3152	1421
16	2017	0	3498	8,005	4507	0.2919	1316
17	2018	0	3498	8,005	4507	0.2703	1218
18	2019	0	3498	8,005	4507	0.2502	1128
19	2020	0	3498	8,005	4507	0.2317	1044

Results

Pay Back Period: 7Years

Resulting IRR is: 14%

NPV after 6 years: $ +1,071,000

V- CONCLUSION AND RECOMMENDATION

Hesfibel gained the award of the best exporting company in Turkey for the year 2001 due to its success in penetrating markets all around the world with competitive offers and products. This project bode well with its strive for improvement and diversification. The company's management has proven its success in that field and are looking to maintain that edge in the region and elsewhere. In addition to the above the security provided is considered satisfactory

In view of the above, it is recommended that the President approves financing the project by way of Purchase and Leaseback for an amount of US$ 15 million at a mark-up of 3.50% above 1 year LIBOR and 0.5% flat management fee. The repayment would be quarterly and over a period of 6 years. The amount of AMD financing will be as follows:

	Amount (US$)
IDB / Unit Investment Fund	14,600,000
IDB / Specific Deposits	
Total	14,600,000

The approval of IDB/UIF's financing by US$ 14.6 million is within the President's authority vide BED's Resolution No. BED/06/04/420/(186)/29.

Annex - 1

Appendix 2

Appendix 3

In order to ensure a hygienic environment the following rules should be observed in the slaughterhouses.

a. The slaughtering lines should be fully mechanized with manual handling restricted to the minimum.
b. The slaughtering hall should be divided into dirty and clean areas. Workers from the dirty area should not be allowed to enter the clean area.
c. The off loading of carcasses should be mechanized.
d. Inside the clean area, the red offal such as heart and legs should be separated from the green offal such as intestines.
e. The slaughtering hall should be air conditioned down to a temperature of 25 deg C. and a relative humidity of 65%. This is to ensure that meat will not go stale easily.
f. Laborers or butchers should be well trained to operate quickly and efficiently and to observe strict hygiene rules. They have to put on sterilized aprons before entering the slaughter hall and to wash aprons after use.
g. Sterilization basin is to be ensured for all cutting and sawing tools. Knives are to be sterilized in 82 deg C water every time after cutting sheep and beef carcasses.
h. Meat dispatch area to be air-conditioned and rails to be at 2.4m from floor level to prevent dirty water from splashing on to the carcasses.

   Health veterinary inspectors will conduct meat inspection at critical stages of the process in order to ensure that hygiene standards and healthy meat is enforced in the slaughterhouse.

FOR ILLUSTRATION PURPOSE ONLY ANNEX-16

CARANTINA SLAUGHTERHOUSE, GOV'T OF LEBANON

MECHANISM FOR RENTAL CALCULATION

LEASE FINANCING TERMS & CONDITIONS :

TYPE OF FINANCING :	LEASING
AMOUNT OF FINANCING :	US$ 14,600,000
PERIOD OF FINANCING :	8 YEARS
GESTATION PERIOD :	2 YEARS ENDING 31-Aug-05
REPAYMENT PERIOD :	6 YEARS
REPAYMENT :	SEMI ANNUAL INSTALLMENTS
GROSS MARK UP :	6 Months LIBOR + 2.75%

GESTATION PERIOD :

Disbursements #	Amount	Date	# of Days	LIBOR	Mark up	F.Value
1	1,460,000	01-Sep-03	730	1.300%	4.05%	1,582,398.90
2	5,600,000	31-Dec-03	609	1.500%	4.25%	6,008,508.80
3	2,100,000	15-May-04	473	1.600%	4.35%	2,220,835.16
4	4,200,000	16-Jan-05	227	1.500%	4.25%	4,311,687.26
5	1,240,000	30-Apr-05	123	1.750%	4.50%	1,258,789.42
	14,600,000					**15,382,219.53**

REPAYMENT PERIOD :

(REPAYMENT ON A SEMI ANNUAL & DECLINING BALANCE BASIS)

INSTAL. No	REPAYM. DATES	PRINC. Bal	Mark up	P. REPAY	RENT	INSTALLMENT
1	February 27, 2006	15,382,219.53	4.5000%	1,281,851.63	346,099.94	1,627,951.57
2	August 26, 2006	14,100,367.91	4.5000%	1,281,851.63	317,258.28	1,599,109.91
3	February 24, 2007	12,818,516.28	4.3500%	1,281,851.63	278,802.73	1,560,654.36
4	August 26, 2007	11,536,664.65	4.5500%	1,281,851.63	262,459.12	1,544,310.75
5	February 24, 2008	10,254,813.02	4.5500%	1,281,851.63	233,297.00	1,515,148.62
6	August 25, 2008	8,972,961.39	4.7500%	1,281,851.63	213,107.83	1,494,959.46
7	February 23, 2009	7,691,109.77	4.6500%	1,281,851.63	178,818.30	1,460,669.93
8	August 25, 2009	6,409,258.14	5.0000%	1,281,851.63	160,231.45	1,442,083.08
9	February 23, 2010	5,127,406.51	5.0000%	1,281,851.63	128,185.16	1,410,036.79
10	August 25, 2010	3,845,554.88	5.2500%	1,281,851.63	100,945.82	1,382,797.44
11	February 23, 2011	2,563,703.26	5.2500%	1,281,851.63	67,297.21	1,349,148.84
12	August 25, 2011	1,281,851.63	5.2500%	1,281,851.63	33,648.61	1,315,500.23
		TOTALS		**15,382,219.53**	**2,320,151.45**	**17,702,370.98**

Annex - 8

Qarantina Slaughter House Project

Implementation Schedule

Monthes	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Civil Works	-------	-------	-------	-------	===	===	===	===	===	===	===	===	===	===	===	===	===	===	===	===	===	===	===	===
Procurement of Equipment							-------	-------	-------	-------	===	===	===	===	===	===	===	===	===	===	===	===	===	===
Consultancy Services	===	===	===	===	===	===	===	===	===	===	===	===	===	===	===	===	===	===	===	===	===	===	===	===

------- Tendering & Award of Works

=== Implementation of Works

Annex - 7

Slaughter House Project - Detailed Cost ('1000 US$)

	Built Area m2	LC	FC	Total	IDB	Government
Civil Works			85%			
Buildings						
Barns						
Rehabilitation	2,200	46	259	304	304	-
New Mezzanine	1,100	76	431	507	507	-
Process Floors including meat process & refrigiration						
Rehabilitation	10,750	650	3,686	4,336	4,336	-
Storage & Treatment						
New Constraction	600	4	24	28	28	-
Police Station & Housing						
New Constraction	350	11	62	73	73	-
Gaote Slaughtering						
New Constraction	500	2	12	14	14	-
Housing & Vet Directore						
New Constraction	350	1	8	10		
Water Power Station						
New Constraction	20	1	8	9	9	-
Pressing & Grinding Station						
New Constraction	40	2	9	11	11	-
Meat Market & Vet House						
New Constraction	2,700	224	1,270	1,495	1,495	-
Car Park						
New Constraction	4,000	111	627	738	738	-
Total Building Base Cost		1,129	6,396	7,525	7,525	-
Site Works						
Roads & Paving	12,800	42	235	277	277	-
Land Scaping	2,500	7	39	46	46	-
Secuirity House & Fencing		10	55	65	65	-
Environmental Works		31	176	208	208	-
Total Site Work Cost		89	506	595	595	-
Total Civil Works Cost		1,218	6,902	8,120	8,120	-
			100%			
Process Lines Equipment						
Sheep Lines (2)		-	1,291	1,291	1,291	-
Beef Lines (2)		-	1,291	1,291	1,291	-
Solid & Treatment Plant		-	761	761	761	-
Refrigeration Equipment		-	1,798	1,798	1,798	-
Total Equipment Cost		-	5,140	5,140	5,140	-
Base Civil Works & Equipment Cost		1,218	12,042	13,260	13,260	-
Contingency		123	1,217	1,340	1,340	-
Total Civil Works & Equipment Cost		1,341	13,259	14,600	14,600	-
			85%			
Consultancy Works (Design & Supervision)		204	1,156	1,360		1,360
Contingency		21	119	140		140
Total Consultancy Works Cost		225	1,275	1,500		1,500
Total Project Cost				16,100	14,600	1,500

		Revenues	Operating C.	IDB Rep.
1	2003			-8051
2	2004			-8051
3	2005	8,005.00	3,498.00	3227
4	2006	8,405.25	3,602.94	3104
5	2007	8,825.51	3,711.03	3010
6	2008	9,266.79	3,822.36	2903
7	2009	9,730.13	3,937.03	2793
8	2010	10,216.63	4,055.14	2665
9	2011	10,727.47	4,176.79	
10	2012	11,263.84	4,302.10	
11	2013	11,827.03	4,431.16	
12	2014	12,418.38	4,564.10	
13	2015	13,039.30	4,701.02	
14	2016	13,691.27	4,842.05	
15	2017	14,375.83	4,987.31	
16	2018	15,094.62	5,136.93	
17	2019	15,849.35	5,291.04	
18	2020	16,641.82	5,449.77	

		Revenues	Operating C.	IDB Rep.
1	2003	-8051		
2	2004	-8051		
3	2005	8,005.00	4,197.60	3,227.00
4	2006	8,405.25	4,323.53	3,104.00
5	2007	8,825.51	4,453.23	3,010.00
6	2008	9,266.79	4,586.83	2,903.00
7	2009	9,730.13	4,724.44	2,793.00
8	2010	10,216.63	4,866.17	2,665.00
9	2011	10,727.47	5,012.15	
10	2012	11,263.84	5,162.52	
11	2013	11,827.03	5,317.39	
12	2014	12,418.38	5,476.92	
13	2015	13,039.30	5,641.22	
14	2016	13,691.27	5,810.46	
15	2017	14,375.83	5,984.77	
16	2018	15,094.62	6,164.32	
17	2019	15,849.35	6,349.25	
18	2020	16,641.82	6,539.72	
			Inc. 20%	

Net Rev.
-8051
-8051
1280
1698.31
2104.484
2541.429
3000.098
3496.493
6550.671
6961.74
7395.869
7854.286
8338.282
8849.216
9388.518
9957.69
10558.31
11192.05
20.45%

Net Rev.			Revenues	Operating C.	IDB Rep.	Net Rev.
-8051	1	2003	-8051			-8051
-8051	2	2004	-8051			-8051
580.40	3	2005	6,404.00	3,498.00	3,227.00	-321.00
977.72	4	2006	6,724.20	3,602.94	3,104.00	17.26
1,362.28	5	2007	7,060.41	3,711.03	3,010.00	339.38
1,776.96	6	2008	7,413.43	3,822.36	2,903.00	688.07
2,212.69	7	2009	7,784.10	3,937.03	2,793.00	1,054.07
2,685.47	8	2010	8,173.31	4,055.14	2,665.00	1,453.17
5,715.31	9	2011	8,581.97	4,176.79		4,405.18
6,101.32	10	2012	9,011.07	4,302.10		4,708.97
6,509.64	11	2013	9,461.62	4,431.16		5,030.46
6,941.47	12	2014	9,934.71	4,564.10		5,370.61
7,398.08	13	2015	10,431.44	4,701.02		5,730.42
7,880.81	14	2016	10,953.01	4,842.05		6,110.96
8,391.06	15	2017	11,500.66	4,987.31		6,513.35
8,930.30	16	2018	12,075.70	5,136.93		6,938.77
9,500.11	17	2019	12,679.48	5,291.04		7,388.44
10,102.10	18	2020	13,313.46	5,449.77		7,863.69
17.41%			**Dec 20%**			**12.50%**

FOR ILLUSTRATION PURPOSE ONLY

BSHERI ROAD PROJECT, GOV'T OF LEBANON

MECHANISM FOR REPAYMENT CALCULATION

ISTISNA' FINANCING TERMS & CONDITIONS :

TYPE OF FINANCING :	ISTISNA'
AMOUNT OF FINANCING :	US$ 7,000,000
PERIOD OF FINANCING :	8 YEARS
CONSRUCTION PERIOD :	2 YEARS ENDING **31-Aug-05**
REPAYMENT PERIOD :	6 YEARS
REPAYMENT :	SEMI ANNUAL INSTALLMENTS
GROSS MARK UP :	FLAT 8.00%

CONSTRUCTION PERIOD :

Disbursements #	Amount	Date	# of Days		Mark up	F.Value
1	700,000	01-Sep-03	730		8.00%	818,227.34
2	2,150,000	31-Dec-03	609		8.00%	2,448,952.23
3	1,980,000	15-May-04	473		8.00%	2,190,686.80
4	1,200,000	16-Jan-05	227		8.00%	1,259,669.98
5	970,000	30-Apr-05	123		8.00%	995,844.47
	7,000,000					**7,713,380.82**

REPAYMENT PERIOD :

(REPAYMENT ON A SEMI ANNUAL & DECLINING BALANCE BASIS)

INSTAL. No	REPAYM. DATES	PRINC. Bal	Mark up	P. REPAY	RENT	INSTALLMENT
1	February 27, 2006	7,713,380.82	8.0%	513,342.25	308,535.23	821,877.49
2	August 26, 2006	7,200,038.57	8.0%	533,875.94	288,001.54	821,877.49
3	February 24, 2007	6,666,162.63	8.0%	555,230.98	266,646.51	821,877.49
4	August 26, 2007	6,110,931.65	8.0%	577,440.22	244,437.27	821,877.49
5	February 24, 2008	5,533,491.43	8.0%	600,537.83	221,339.66	821,877.49
6	August 25, 2008	4,932,953.60	8.0%	624,559.34	197,318.14	821,877.49
7	February 23, 2009	4,308,394.26	8.0%	649,541.72	172,335.77	821,877.49
8	August 25, 2009	3,658,852.54	8.0%	675,523.38	146,354.10	821,877.49
9	February 23, 2010	2,983,329.16	8.0%	702,544.32	119,333.17	821,877.49
10	August 25, 2010	2,280,784.84	8.0%	730,646.09	91,231.39	821,877.49
11	February 23, 2011	1,550,138.75	8.0%	759,871.94	62,005.55	821,877.49
12	August 25, 2011	790,266.81	8.0%	790,266.81	31,610.67	821,877.49
		TOTALS		**7,713,380.82**	**2,149,149.00**	**9,862,529.83**