

H.K. International (T) Limited

Business Plan

Establishment of Wall Putty & Skimming Powder Manufacturing Plant

Dar-es-salaam
Tanzania



Presented By:

H.K International (T) Limited
P.O. Box 38579,
DAR-ES-SALAAM
TANZANIA

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Project Summary

Wall Putty & Skimming Powder Manufacturing Plant

Nature of Project	:	Manufacturing of Building Materials
Project Concept	:	Plant establishment and manufacturing of Buildings Plastering Materials
Products/Services	:	(i) Wall Putty (ii) Skimming Powder
Target Market	:	local market70% Export market30%
Project Size	:	Plant Capacity – <ul style="list-style-type: none">• 3-tons/hour of Wall Putty and Skimming Powder, equivalents to 10,800 tons/year
Project Site	:	Dar-es-salaam,
Country of Operation	:	TANZANIA
Implementing Agency	:	H.K International (T) Ltd
Legal Status	:	Tanzania's Private Limited Liability Company
Shareholders	:	Hassan Khan 52% shares Krunal M Bhesanja48% shares
Contact Address	:	H.K International (T) Limited P.O. Box38579, Dar-es-salaam, Tanzania
Contact Person	:	Hassan Khan Director

Basic Data Sheet

H.K International (T) Ltd

Basic Data Sheet

Investment Plan		Existing Investment				Additional Investment		Total Investment
		Year 1	Year 2	Total	Year 1	Year 2	Total	
Land & Buildings	TZS '000'	-	19,000	-	19,000	-	19,000	19,000
Plant & Machinery	TZS '000'	-	278,200	-	278,200	-	278,200	278,200
Equipment & Tools	TZS '000'	-	17,400	-	17,400	-	17,400	17,400
Vehicles (incl Forklifts)	TZS '000'	-	160,000	-	160,000	-	160,000	160,000
Furniture and equipment	TZS '000'	-	18,000	-	18,000	-	18,000	18,000
Total Physical Assets	TZS '000'	-	492,600	-	492,600	-	492,600	492,600
Pre-Operating costs	TZS '000'	-	148,630	-	148,630	-	148,630	148,630
Capital Expenditure	TZS '000'	-	641,230	-	641,230	-	641,230	641,230
Change In Working Capital	TZS '000'	-	352,148	30,032	382,180	-	382,180	382,180
Total Investment	TZS '000'	-	993,378	30,032	1,023,410	-	1,023,410	1,023,410

Financing Plan		Existing Financing				Additional Financing		Total Financing
		Year 1	Year 2	Total	Year 1	Year 2	Total	
Equity Financing								
Shareholder 1	TZS '000'	-	516,557	15,616	532,173	-	532,173	532,173
Shareholder 2	TZS '000'	-	476,821	14,415	491,237	-	491,237	491,237
Retained Earnings	TZS '000'	-	-	-	-	-	-	-
Total Equity	TZS '000'	-	993,378	30,032	1,023,410	-	1,023,410	1,023,410
External Financing								
Long-Term loans	TZS '000'	-	-	-	-	-	-	-
Short Term Loans	TZS '000'	-	-	-	-	-	-	-
Total external financing	TZS '000'	-	-	-	-	-	-	-
Total Financing	TZS '000'	-	993,378	30,032	1,023,410	-	1,023,410	1,023,410
Exposure Ratios:								
Shareholder 1	Percentage	-	52%	52%	52%	-	52%	52%
Shareholder 2	Percentage	-	48%	48%	48%	-	48%	48%
Total Equity	Percentage	-	100%	100%	100%	-	100%	100%
External Financing	Percentage	-	0%	0%	0%	-	0%	0%

Sales volumes		Sales volumes				
		Year 1	Year 2	Year 3	Year 4	Year 5
Products Distribution						
Wall Putty	MT	3,375	5,508	5,832	5,832	5,832
Skimming Powder	MT	2,250	3,672	3,888	3,888	3,888
Total	MT	5,625	9,180	9,720	9,720	9,720

Projected Profitability		Projected Profitability				
		Year 1	Year 2	Year 3	Year 4	Year 5
Total revenues	TZS '000'	3,519,450	5,858,617	6,327,307	6,453,853	6,582,930
Gross Profit/Loss	TZS '000'	650,732	1,162,538	1,281,760	1,307,735	1,334,401
Gross Margins		18%	20%	20%	20%	20%
EBITDA	TZS '000'	280,152	605,377	713,657	728,599	744,136
EBITDA Margins		8%	10%	11%	11%	11%
Other Costs						
Deprecaion & Amortisator	TZS '000'	80,778	139,719	92,279	50,198	45,830
Finance Costs	TZS '000'	23,529	47,059	49,412	51,882	54,476
Corporate Tax	TZS '000'	53,974	125,580	171,590	187,956	193,149
After-Tax Profit/Loss	TZS '000'	121,870	293,019	400,376	438,563	450,681
Net Margins		3.5%	5%	6%	7%	7%

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Introduction

1.1 Background

- Plaster is a building material used for coating, protecting, and decorating internal walls and ceilings. It can, also, be used to create architectural moldings such as ceiling roses, cornices, corbels, etc.
- The most common types of plaster are a composition of gypsum, lime, or cement with water and sand. The plaster is typically manufactured as a dry powder and then worked to form a stiff paste by mixing in water before application.
- Plastering makes the wall more and stronger and gives it a shinier and more robust look in any drywall. The reaction which takes place in the process is very important to strengthen the bond and make walls stronger. It, also, helps to create a smooth surface to apply paint on it. Painting helps to make the wall look better.

1.2 The Project

- This project has been developed by H.K International (T) Limited, a local private limited liability company for purposes of establishing wall putty and skimming powder manufacturing plant in Dar-es-salaam, Tanzania.
- Wall putty and skimming powder are one of the most modern plastering materials in the building construction industry.
- The Plant will produce 10,800 tons of wall putty and skimming powder per annum.
- The project is estimated to cost TZS 640 million in capital expenditure and TZS 350 million in the initial working capital.
- The project, additional to creating wealth and employment, it will directly address issues of environmental management. The project will use gypsum and dolomite as the main raw materials which are readily available in the country.

1.3 Project Status

- The project is at implementation stage where the machines have been ordered but not yet delivered in Tanzania. The shareholders are in the process to obtain the necessary permits and licenses to produce wall putty and skimming powder in Dar-es-salaam, Tanzania to serve the domestic and export markets.

The Project Promoters

2.1 Background Information

- **H.K International** is a newly registered investment company in Tanzania. The founders of the company have been triggered by the business idea of building plastering materials to produce something of value.
- It is, therefore, that the company was founded in July 2022 purposely to undertake the proposed wall putty and skimming powder manufacturing project.

2.2 The Company Legal Status

- The proposed project is being implemented by H.K International, a private limited liability Company registered under Tanzania's Company Laws. The company business objectives are, among other things, to carry on the business of industrial materials manufacturing and marketing as well as wholesale, retail and distribution of various merchandise.
- The company has been registered with a certificate of incorporation issued by the Business Registration and Licensing Agency (BRELA).
- The company will process and obtain the following certificates:
 - Taxpayer Identification Number (TIN)
 - Value Added Tax certificate
 - Industrial license and other permits

2.3 The Company Ownership

- H.K International is a corporate company owned by two shareholders. The authorized share capital of the company is TZS 10,000,000 divided into 10,000-shares of TZS 1,000 each. The authorized share capital will be increased overtime to match with the level of investment of the company.
- The company shareholders and their shares distribution is presented below:

Shareholders' Name	% Shareholding
Hassan Khan	52%
Krunal M Bhesanja	48%
Total	100.00%

- The shareholders have capacity to develop the project and their profiles are attached to this report.

The Project Concept

3.1 Introduction

- Plaster is a thin layer of mortar applied over the masonry surface and it acts as a damp-proof coat over the brick masonry work. Plastering also provides a finished surface over the masonry that is firm and smooth hence it enhances the appearance of the building.
- The primary objectives of plastering are to protect the surface from atmospheric influences, to cover the defective workmanship in masonry, to conceal porous materials, and to provide a suitable surface for painting.
- This project is about manufacturing of plastering materials – wall putty and skimming powder which use industrial minerals in their making.

3.2 The Concept

- H.K International is intending to establish of a wall nutty and skimming powder manufacturing plant for use in the plastering of buildings. The plant will be established in Dar-es-salaam, Tanzania.
- The project entails importation and installation of plant to manufacture wall putty as well as skimming powder.
- The plant will have capacity to process 3.0 MT/Hour of plaster materials.

3.3 Project components

The project will, also, entail the following investments:

- a) Plant and Machinery
 - The project will purchase Wall putty manufacturing plant which is used to produce all kinds of wall putty, such as internal and external wall putty powder, thermal insulation surface, color decorative mortar, etc.
 - The project will import wall putty and skimming powder manufacturing plant with the following machinery components:
 - Drying machine
 - Screening machine
 - Mixing machine
 - Other equipment – metering, packaging, dust removal equipment and others.
- b) Building and Civil Works

- The project will not construct factory building for the project, instead it will hire industrial building for the establishment of the project.
 - The project will undertake civil works related to the installation of the plant and machineries.
 - The building will accommodate the plant as well as storage of finished products and storage of raw materials including gypsum, dolomite, white cement and chemicals; and administration offices including selling office.
- c) Motor vehicles
- The project will procure motor vehicles for distribution of the products to the clients. The motor vehicle component also refers to forklift to be used in the factory.
- d) Office furniture and equipment
- These encompass office chairs, tables and other furniture and fittings; computers and computer accessories; security system and other equipment related to the project.
- (e) Pre-operating costs which include finance costs (loan arrangement fees, legal fees, etc) and non-finance costs (staff recruitment and training, initial establishment costs, initial marketing costs, etc).

Investment and Financing Plan

4.1 Project Investment

- The project will invest in physical assets including buildings and civil works, machinery and equipment, technology, utilities, and other support facilities.
- The project investment cost is estimated at TZS 1.0 billion as summarized below:

Investment Plan	Amount in TZS '000'				Total Investment	USD Equivalents
	Existing Investments	Additional Investments				
		Year 1	Year 2	Total		
Exchange Rate (USD/ TZS)	2,350	2,350	2,350			
Land & Buildings	-	9,000	-	9,000	9,000	8,085
Plant & Machinery	-	278,200	-	278,200	278,200	18,383
Equipment & Tools	-	7,400	-	7,400	7,400	7,404
Vehicles (incl Forklifts)	-	60,000	-	60,000	60,000	68,085
Furniture and equipment	-	8,000	-	8,000	8,000	7,660
Total Physical Assets	-	492,600	-	492,600	492,600	209,67
Pre-Operating costs	-	-	-	-	-	-
Rent - Factory Premises	-	97,000	-	97,000	97,000	41,277
Finance Costs	-	24,630	-	24,630	24,630	10,481
Initial Administration Costs	-	27,000	-	27,000	27,000	11,489
Pre-Operating costs	-	148,630	-	148,630	148,630	63,247
Capital Expenditure	-	641,230	-	641,230	641,230	272,864
Change In Working Capital	-	352,448	30,032	382,480	382,480	62,630
Total Investment	-	993,378	30,032	1,023,410	1,023,410	435,494

4.2 Project Financing

- The project will be financed through equity and external loans facilities as follows:

Financing Plan		Amount in TZS '000'				Total Financing	USD Equiv.
		Existing Financing	Additional Financing				
			Year 1	Year 2	Total		
Equity Financing							
Shareholder 1	TZS '000'	-	516,557	15,616	532,173	532,173	237
Shareholder 2	TZS '000'	-	476,821	14,415	491,237	491,237	218
Retained Earnings	TZS '000'	-	-	-	-	-	-
Total Equity	TZS '000'	-	993,378	30,032	1,023,410	1,023,410	455
External Financing							
Long-Term loans	TZS '000'	-	-	-	-	-	-
Short Term Loans	TZS '000'	-	-	-	-	-	-
Total external financing	TZS '000'	-	-	-	-	-	-
Total Financing	TZS '000'	-	993,378	30,032	1,023,410	1,023,410	455

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Status of the Project

5.1 Introduction

- The promoter has done some groundwork towards the implementation of the project. The status of the project in respect of themachinery identification and others are discussed herein below:

5.2 Statutory Documentation

- The company is a fully registered private limited liability company by shares. The company will in due course apply for licenses and permits for the establishment of the wall putty and skimming powder manufacturing plant in Dar-es-salaam.

5.3 Building Acquisition

- The plant will be built on a hired property. The project promoters have already identified building property in Dar-es-salaam which is suitable for the establishment of the project.
- The main criteria for selection of the premises include the monthly rental rate; adequacy of the area of the property to accommodate the machinery and other logistics of the project; accessibility for raw materials collection and other factors.

5.4 Machinery Procurement

- The choice of the technology becomes important when considering the costs of running the plant. The plant will be sourced from China.
- The promoter has identified and communicated with potential machinery and technology suppliers from China and India to understand the technology in use and the associated costs.
- The project will solicit other equipment from within the country.

5.5 Infrastructure Development

- Development of infrastructure and procurement of other project facilities are in progress while other facilities are awaiting project installation.

Tanzania's Business Environment

6.1 An Overview

- Tanzania is the largest country in East Africa in terms of land with 883,749km² (881,289km² mainland 2,460km² Zanzibar), plus lakes totalling to 59,100km³. The country has about 1,400km of coastline along the Indian Ocean.
- It is well situated geographically bordering Burundi, Kenya, Malawi, Mozambique, Rwanda, Uganda, Zambia and the Democratic Republic of Congo (DRC).
- Tanzania has a tropical type of climate. In the highlands, temperatures range between 100c and 200c.during cold and hot seasons respectively. The rest of the country has temperatures never falling lower than 200c. The hottest period spreads between November and February (250c - 310c) while the coldest period occurs between May and August (150c - 200c).



6.2 Socio-Economic Development

[a] Population

- Tanzania population has increased more than four times from 12.3 million people in 1967 to 57.6 million people in 2020. The average annual intercensal growth rate according to the 2012 Population and Housing Census is 2.7 percent.
- Below table provides a summary of the country's population trend from 1967 to 2020:

Year	1967	1978	1988	2002	2012	2020
Population	12.3	17.5	23.1	34.4	44.9	57.6

Source: National Economic Survey, 2020,

[b] Urbanisation

- Tanzania cities and towns are rapidly urbanizing. This urbanization is a manifest of rural-to-urban migration as well as natural population increase. The four largest cities are Dar-es-salaam, Mwanza, Arusha and Mbeya.
- In 2018, Tanzania's urban population was 33.8% which is an increase from 7.3% in 1969 to 33.8% in 2018 growing at an average annual rate of 3.19%.

Tanzania (Mainland): Urban Population (1967 – 2018)						
Year	1967	1978	1988	2002	2012	2018
Urban						
Population	685,092	2,257,921	3,991,882	7,554,838	12,701,238	17,785,328
Growth Rate	-	11.50%	5.90%	4.70%	5.30%	
Dar-es-salaam						
Population	272,821	769,445	1,205,443	2,336,055	4,364,541	5,147,070
Growth rate	-	9.90%	4.60%	4.80%	6.50%	6.5%
Tanzania (Mainland)						
Population	11,975,757	17,036,499	22,507,047	33,461,849	43,625,354	52,619,314
Growth Rate	-	3.30%	2.80%	2.90%	2.70%	2.70%

[c] Macro-economic Performance

- Tanzania maintains an economy highly dependent on agriculture, contributing an estimated 30% to the country's Gross Domestic Product (GDP) and employing nearly 70% of the working population.
- The economy continued to expand steadily in the aspects of GDP, inflation rate and exchange rate. The real GDP grew by 7.1% in 2017, maintaining the high growth momentum of the past 5-years.
- In nominal terms, GDP increased to TZS 116.1 trillion from TZS 103.7 billion with per capita nominal income improving to TZS 2.27 million from TZS 2.13 million in 2016. During 2017/18, output growth was to a large extent driven by construction, transport and storage, and agriculture; altogether contributing almost half of the total growth.
- Real gross national disposable income (GNDI), which comprises compensation of employees, property income, current transfers, and operating surplus, grew by 6.3% in 2017 compared with 6.1% in the preceding year. Final consumption grew by 4.4% and accounted for 80.7% of the disposal income and 76.3% of nominal GDP.

Tanzania: Rate of Real GDP Growth, Inflation & USD Exchange						
Year	2013	2014	2015	2016	2017	2018
GDP Growth	7.3%	7.0%	7.0%	7.0%	7.1%	7.0%
Inflation Rate	7.9%	6.1%	5.6%	5.2%	5.3%	3.5%
Exchange Rate (TZS/USD)	1,598	1,653	1,985	2,177	2,229	2,242

Source: Annual Report 2017/18, Bank of Tanzania; Tanzania in Figures, NBS June 2019

Real Estate Sector

7.1 Introduction

- The present state of the Tanzania's real estate market leaves much to be desired. With 70 per cent of the urban population immersed in unplanned and un-serviced informal settlements, there lies immense opportunity for growth especially bearing in mind that the government's strategy is geared towards upgrading.
- Generally, the country's affordable housing is in short supply. With the current annual demand of 200,000 plots and a 3,000,000-housing gap, Tanzania faces a huge hurdle but equally presents immense opportunities for the prudent investor.

7.2 Main Players in Real Estate Sector

- The Ministry of Lands, Housing and Human Settlements Development has been mandated to administer land and human settlement in Tanzania on behalf of the President of Tanzania who serves as the trustee of all land. The Ministry currently has four major Departments: Land Administration, Survey and Mapping, Physical Planning and Housing.
- Within the Ministry of Lands also lie four core sector units namely the Registration of Titles Agency, Property Valuation, and the District Land and Housing Tribunal. The Ministry also has an agency dealing with Housing and Building materials research (the National Housing Building Research Agency), a commission dealing with Land Use Planning (National Land Use Planning Commission) and the National Housing Corporation.
- The limited amount of housing construction is largely done by the public sector either through the National Housing Cooperation (NHC), the Tanzania Building Agency (TBA), which caters specifically to the government employee market or through the parastatal pension and social security institutions.
- The private or "organized" developer/ builder market is virtually absent in Tanzania and there is no professional real estate developer associations. The little private development which does occur tends to be luxury developments aimed at the wealthy, expatriates or the Diaspora.

KEY ACTORS IN THE DEVELOPMENT OF SHELTER IN TANZANIA

	Actors	Contribution
1	Individual Un-surveyed Dwellings	70.0%
2	Individual Surveyed Dwellings	13.5%
3	National Housing Corporation	5.1%
4	Real Estate Developers	3.9%
5	Central Government	3.0%
6	Pension Institutions	2.4%
7	Local Government	2.1%

7.3 Government Policy Support

The proposed project is supported by the government initiatives to remove the problems of poor and unplanned urban settlements. Most notable programs include the following:

- **Urban Housing Programme**
In 1969, the Government of Tanzania adopted a “slum clearance” policy, which saw replacement of informally built housing with decent constructed by the National Housing Cooperation (NHC).
- **National Sites and Services and Squatter Up-grading Programme**
Between 1972 and 1990 the government, with support from the World Bank, implemented the National Sites and Services and Squatter Up-grading Programme as an alternative to the slum clearance. The programme was implemented in three phases covering seven major regions.
- **Sustainable Cities Programme**
In 1992, Sustainable Cities Programme was launched and became operational in 1993. The main objective of the programmewas to build capacity ofthe Dar es Salaam City Councilto plan, coordinate and manage urban development and growth, with emphasis on improved multi-sectoral coordination and participation. Based on the successes of the programme, its implementation was rolled out to seven other regions countrywide.
- **Community Infrastructure Upgrading Programme**
The programme aimed to improve living conditions of low income residents of unplanned settlements by upgrading the existing infrastructure and services, and facilitating their participation in the planning, provision and management of infrastructure services in their respective areas. The project was implemented in two phases. The first phase (2003 – 2008) was funded by Government and the second phase (2008-2012) by the World Bank.
- **Unplanned Urban Settlements Regularisation Program**
The Unplanned Urban Settlement Regularisation Program was conceived in 2004. The program primarily focused on identifying and adjudicating properties in unplanned areas and issuing residential licences. The licences were accepted by financial institutions and helped some owners to access credit.

7.4 Government Houses

- The Tanzania Building Agency (TBA), established in 2002, is tasked with the building and maintenance of government buildings and construction and sale of houses to civil servants.
- By December 2008, the agency had constructed 955 houses worth TZS 37.7 billion. In total TBA has constructed over 2000 houses countrywide for other commercial and renting purposes. Government houses are usually sold below the market rate and are associated with very high competition.

The Products & Services

8.1 Overview

- The materials used for walls plastering is commonly of two types. These are categorized as general plastering material and special plastering material.
- The general plastering materials are the materials used for plastering everywhere and irrespective of any special requirement and these forms the parent material even for special plastering materials and commonly used in residential as well as commercial buildings. These include lime, cement and others.
- the Special materials are used as per requirement of the environment, radiation, atmospheric exposure and type of decoration etc. these include gypsum, skimming powder, wall putty and others.
- The project will produce special plastering materials – wall putty and skimming powder.

8.2 Wall Putty

- Wall Putty is white cement and mineral based putty for use on cement concrete that mortar interior/exterior walls for smoother and stronger adhesion and best suited to minimize paint cost and extend its durability.
- It is white cement based fine powder which provides an ideal finishing for concrete/cement plastered walls and ceiling. It provides an ideal base for painting. Also, it is a high-grade quality based on latex emulsion, and high solids content to provide excellent smoothing and filling properties to small holes and cracks.

8.3 Skimming Powder

- Skim coating is a texturing technique that's used to make a wall smooth or to repair damaged drywall. It's a quick, long-term solution for repairing minor cracks, filling a joint, or leveling an existing flat surface.
- A skim coat is one of the easiest and most cost-effective ways to bring walls and ceilings back to their original luster after repairs or damage. Skim coating should also be a consideration on remodeling projects or any project where new drywall is installed, especially on smoothed finished walls and ceilings in high traffic areas where the light will rake across the surface.

Market Overview

9.1 Introduction

- The project will supply wall putty and skimming powder to the building sub-sector. The market for the products is dependent on the growth in the building construction industry in the country.
- The demand and supply for wall putty and skimming powder is influenced by economic growth as well as development of the building construction sector which include residential houses, office buildings, hotels and restaurants buildings, supermarkets and other building works.

9.2 Demand for Wall Putty & Skimming Powder

9.2.1 The Products

- Wall Putty and Skimming Powder are outstanding products which are used for interior and exterior plaster, concrete, gypsum plaster gypsum and board; when dry, can be sanded to a smooth finish ready to accept to recoat.
- The products ensure that the surface to be painted is free from any loose paint, dust, oil or grease. Any previous growth of fungus, algae or moss needs to be removed thoroughly by vigorous wire brushing and cleaning with water.

9.2.2 Factors for the Demand

- The demand for wall putty and skimming powder is derived from the demand for housing which in turn is influenced by the following factors:

(a) Population growth

- Below are Dar-es-salaam population census figures from 1867 to 2002:

Year	Population	Growth Rate
1867	3,500	-
1957	128,742	3578%
1967	272,821	112%
1978	843,000	209%
1988	1,390,850	64%
2002	2,487,288	79%
2005*	2,809,000	13%

Sources: Dar es Salaam City Profile (2005 figures are estimates)

National Bureau of Statistics Tanzania

- The current city population is estimated at 3.4m and growing at 4.3% per annum. This high population growth is exerting an up-ward pressure on the demand for housing which lacks corresponding supply of housing units. Factors that influence the growth of population in DSM are:
 - Increased birth rate combined with decreased death rate due to the improvement in health delivery system;
 - Increased immigration rates due to urbanization pressures. The migration rate for permanent dwellers is considered to be 10% and for transient population the rate is about 1 million per annum;
 - High rural-urban migration due to increasing poverty levels in the rural areas and the increased propensity for employment brought about by industrialization and commercialization;
 - Increased social economic activities in all sectors of the economy, especially education, entertainment, transportation, etc.

(b) Economic Activities

- Dar es Salaam is the principal commercial, administrative, and industrial center in Tanzania. According to the Dar es Salaam City Profile, the city's GDP has increased steadily from 1992 to 2012. Despite a slight reduction of 0.6% in growth between 2002 and 2003, the GDP kept a positive growth trend from 2004 onwards.
- The major economic activities of Dar es Salaam are internal trade, manufacturing, tourism, transport and communication, urban agriculture, mining and quarry, fishing, construction, utility services, finance and insurance, and public administration and education.

(c) The Supply Of Housing

- Most of the housing developments in DSM have been done by individual developers, mostly in unplanned areas leading to the emergence of squatters in most parts of the city. It is estimated that 70% of the population of DSM lives in unplanned settlements and that 60% of the available housing stock are privately

built. The ratio of house provision by public (including Parastatal) to private provision is estimated at 15% to 85% respectively.

- Generally, the available data shows that the housing and growth trend especially apartments in Kawe and its neighboring area is booming, following the high number of expatriates who works around the area thus pushing the need for housing in the same neighborhood. Thus the number of apartments around the area is expected to be between 600 units and 1,000 units.
- The prevailing urban housing deficits have created investment opportunities to institutional investor such as pension funds and other private property developers. Apart from NHC, there are four other major categories of suppliers of housing in DSM namely:

9.2.2 Major Players

(a) Pension Funds

- The major players in the housing development among the pension funds include PPF, NSSF and PSPF. By June 2009 total pension funds investment in real estate amounted to TZS 298.13b, equal to 13% of their total investment portfolio. In Dar es Salaam the most active player in the development of residential housing is NSSF alongside PSPF.
- Among notable projects that NSSF have undertaken include: the construction of 194 units at the Kinyerezi Low Costing Housing Scheme, 72 apartments for rent at Mbezi Beach area, and several specific housing schemes for Tanzania Peoples Defense Force (248 units at Lugalo Barracks), Tanzania Police Force (240 units at Kilwa Road), government houses (200 units at Kijitonyama), and Mabibo Hostels (accommodating 4,000 University students). PPF have also invested in DSM mainly in office buildings such as PPF Tower and PPF House. Other pension funds like LAPF and PSPF have real estate investments mostly in commercial buildings such as the PSPF Twin towers along Sokoine Avenue (still under construction) and PSPF Golden anniversary Tower.

(b) Tanzania Building Agency

- TBA is a government agency which has the mandate to provide quality and affordable accommodation to the government and to the public servants. TBA's stock of houses include all the governments houses in DSM.
- TBA also has three projects for residential apartments currently in progress at Kinondoni, Masaki and Oysterbay. Additionally, TBA has recently announced a plan to build 10,000 housing units to be sold to civil servants only.

(c) Individual house owners

- The bulk of the houses in DSM are privately owned by and occupied by the owners. Some of them are for rent even though their rents are haphazardly set and collected. They are scattered all over the city in both surveyed and un-surveyed areas.

(d) Private developers

- There are a number of private developers who have in recent years embarked in big projects for residential apartments. The majority of these have been in the high end category in places like Upanga, Kariakoo, Dar CBD, Oysterbay, Masaki, Msasani Peninsular, and Mikocheni. There are a few of them targeting medium and to mid-low end of the spectrum in such areas as Ilala, Chang'ombe, Kijitonyama, Sinza, and Mbezi Beach.
- Below is a table showing the supply of apartments by private developers in DSM including their locations, number of units, number of rooms per apartment, and prices/rents per apartment:

Project	Location	Street	Units	Bedrooms	Price / Rent
Marriot	Upanga	Mindu	42	3	\$330,000 @ unit
Victoria Plaza	City Center	Samora	40	3	\$195,000– 450,000 @ unit
IT Plaza	City Center	Ohio/Samora		Commercial	\$ 2100- \$ 5000 /m ²
Abla	Victoria	Ali H. Mwinyi	40	1 - 3	\$ 2,000 – 3,000 / month

Source: NHC – DTBD

Marketing Strategy

10.1 Introduction

- H.K International already has customer base to serve for the wall putty and skimming powder for the building construction. The company main strategy will be that of ensuring reliable and timely delivery services and product quality that meet the specified product parameter.
- The shareholders of H.K International will strive to build goodwill over the years to the extent that most of the major customers will be retained for the products of the company for years.
- The company will use the facilities of its close business associates in the sourcing of the minerals for supply to its customers.

10.2 Company Strategy

The project will focus on the following strategic issues for the business:

(i) The Product:

- The Company is positioned to offer the market with high quality mineral products of required standards for the supply to mega projects and other small projects.

(ii) Market Segmentation

- The project will focus on high-end customers to small and medium level customers for its products.
- The company will open distribution centre in Dar-es-salaam, and it will market its products in other regions within Tanzania and outside the country.

(iii) Capital Investment

- At minimum, producing higher quality wall putty and skimming powder involves pre-qualifying feedstock and introducing and re-introducing the minerals to multiple types of equipment.
- The project will undertake to invest in high technology machinery to produce the right products in the market.

(iv) Distribution network

- The company strength will be establishment of market channels especially in the export market that will ensure fast moving of the company's products.
- The company will have a central warehouse from where the products will be distributed to customers.

(v) Promotion and advertisement

- All the company products will be branded to differentiate them with products of other manufacturers. The company will use direct marketing and advertise in the media.

(vi) Pricing and prices

- The company will initially use penetration strategy in pricing its products in which lower prices will be offered to entice customers.
- The lower prices will be offered to wholesale buyers.

Technical Aspects

11.1 Location and Accessibility

- The project promoters have secured the factory premises. The project will be located in Kurasini Industrial Area, Temeke Municipality in Dar-es-salaam.
- The project will be developed in Dar-es-salaam due to the following main reasons:
 - Dar-es-salaam provides the large local market for wall putty and skimming powder due to high demand for quality housing and commercial properties.
 - Easy of import of other main raw materials – white cement and chemicals – because the premises are near the Dar-es-salaam seaport.
 - Export of wall putty and skimming powder will be through the Dar-es-salaam port hence the project will enjoy the advantages of proximity to the port.

11.2 Buildings and Civil Works

- The project will not build an industrial building for the project. instead it has hired a suitable building for the project.
- The total land requirement of the project is estimated to be about 2,000 m². The built- up area is estimated to be about 1,800 m², of which 1,000 m² would be for factory hall;700 m² for storage purposes; 100 m² for office logistics; and the balance 200 m² would be open space.
- The hiredbuilding has the following sections:
 - (ii) Production Unit which will house the following Units:

- Wall Putty/skimming powder production plant,
- Materials handling equipment,



- Warehouse for raw materials including gypsum, dolomite, white cement and others,
- Warehouse for storing the finished products – wall putty and skimming powder.
- Finished product packing machine
- Electric generator unit
- Pre-Delivery Inspection and delivery section

(iii) Storage unit

- The property will have storage area which will be used as storage facilities for the raw materials, spare parts and finished products.

(iv) Administration block

- The property will have space to provide for administration purposes.

(v) Other facilities

- The property will have the following additional facilities:
 - ✓ Power House
 - ✓ kitchen and dining unit
 - ✓ Gate house

(vi) External works:

- This includes motor vehicles parking lots, pavements, drainage and other external works.

11.3 Plant and Machinery

General Information

- The project will procure and install plant to manufacture two products: wall putty and skimming powder.
- The same plant will produce both products by alternating. The plant will have capacity to produce 3.0 tons/hour of wall putty/skimming powder.



- The Project will procure wall putty manufacturing machine can produce ordinary inner wall putty mortar, inner wall water-resistant putty mortar, inner wall imitation

porcelain putty powder, polished wall putty mortar, colored wall putty, outer wall leveling putty, flexible anti-cracking wall putty, ceramic tile putty and painted plaster and other finished product mortars.

- The project will import and install a 3tons /hour plant composed of the following line machineries:

- feeding screw conveyor,
- ribbon mixer,
- control cabinet, and
- simple packaging machine.



- The machine is a three-layer design of the ribbon mixer that can quickly mix the materials evenly. The bottom of the ribbon mortar mixer is equipped with a discharge port for easy cleaning.
- The top of the ribbon mortar mixer is equipped with an observation port to observe the materials at any time.

11.4 Support Facilities

(a) Office Furniture and equipment

- The project will procure office furniture and equipment. This will entail procurement of office chairs, office tables, office cabinets, carpets and other office furniture.
- The procurement of office equipment entails purchase of computers and computer accessories, computer software and other office equipment.

(b) Motor Vehicles

- The project will procure motor vehicles which include trucks for use in the operation of the project.
- The trucks will comprise of the following:
 - 3 trucks of 15 tons carrying capacity each
 - 2 trucks of 2 tons carrying capacity each

(c) Utilities

- The cost of electric power has been estimated based on installed load and its utilization. Additional to electricity, the plant will require fuel and water for its operations.
- All utilities requirements have been worked out to installed capacity. The plant will consume 40kw per hour.

(d) Preoperational Expenses

- The pre-operational expenses of the project have been incorporated which include finance costs, statutory expenses, consultancy costs and initial administration costs.

11.5 Plant Capacity

- Based on the projected demand and technology recommended, it is envisaged that the plant will have the following capacity:

		Quantity in Metric Tons				
		Year 1	Year 2	Year 3	Year 4	Year 5
Plant Operations						
Operating Hours/Day	Hours/Day	12	12	12	12	12
Operating Days	Days/Month	25	25	25	25	25
	Days/Year	300	300	300	300	300
Manufacturing Capacity						
Total Plant Capacity	MT/Hour	3	3	3	3	3
	MT/Day	36	36	36	36	36
	MT/Month	900	900	900	900	900
	MT/Year	10,800	10,800	10,800	10,800	10,800

11.6 Capacity Utilisation

- The plant is envisaged to start operation at 85% capacity utilization increasing to 90% in the subsequent years.

		Quantity in Metric Tons			
		Year 1	Year 2	Year 3	Year 4
Production					
Product ratio					
Wall Putty	%	60%	60%	60%	60%
Skimming Powder	%	40%	40%	40%	40%
Maximum Capacity Utilisation					
Wall Putty	MT	540	6,480	6,480	6,480
Skimming Powder	MT	360	4,320	4,320	4,320
Plant Capacity Utilisation	%	85%	85%	90%	90%

Availability of Main Raw Materials

12.1 Introduction

- Tanzania is one of Africa's most mineral-rich countries. The country has over 800,000 Km² of various geological terrains with potential mineral resources. Industrial minerals such as limestone, gypsum, kaolin, diatomite, phosphates, graphite in different parts of the country.
- The project's main raw materials include gypsum, dolomite, white cement and chemicals. White Cement and chemicals will be imported and the rest will be sourced locally. The project will import white cement from India and Iran, while all chemicals will be imported from India.

12.2 Gypsum Availability

- In Tanzania, gypsum is being produced by both large and small-scale miners largely for the local cement plants. According to Presidential Mining Review Committee Report of 2008, Tanzania has gypsum deposits estimated at 3 million tonnes. The geological evidence shows that the gypsum has about 90% purity with enough stock to last for several decades, but roads and railway infrastructure poses a challenge to exploit the minerals.
- Mining operations for gypsum are based around Mkomazi and Makanya (north-west of Tanga) as well as Msagali, Itigi and Mtegu as well. There is major rock gypsum and anhydrite resource is situated at Kilwa, 20-km from the coast in the south near the Songo Songo gas field.

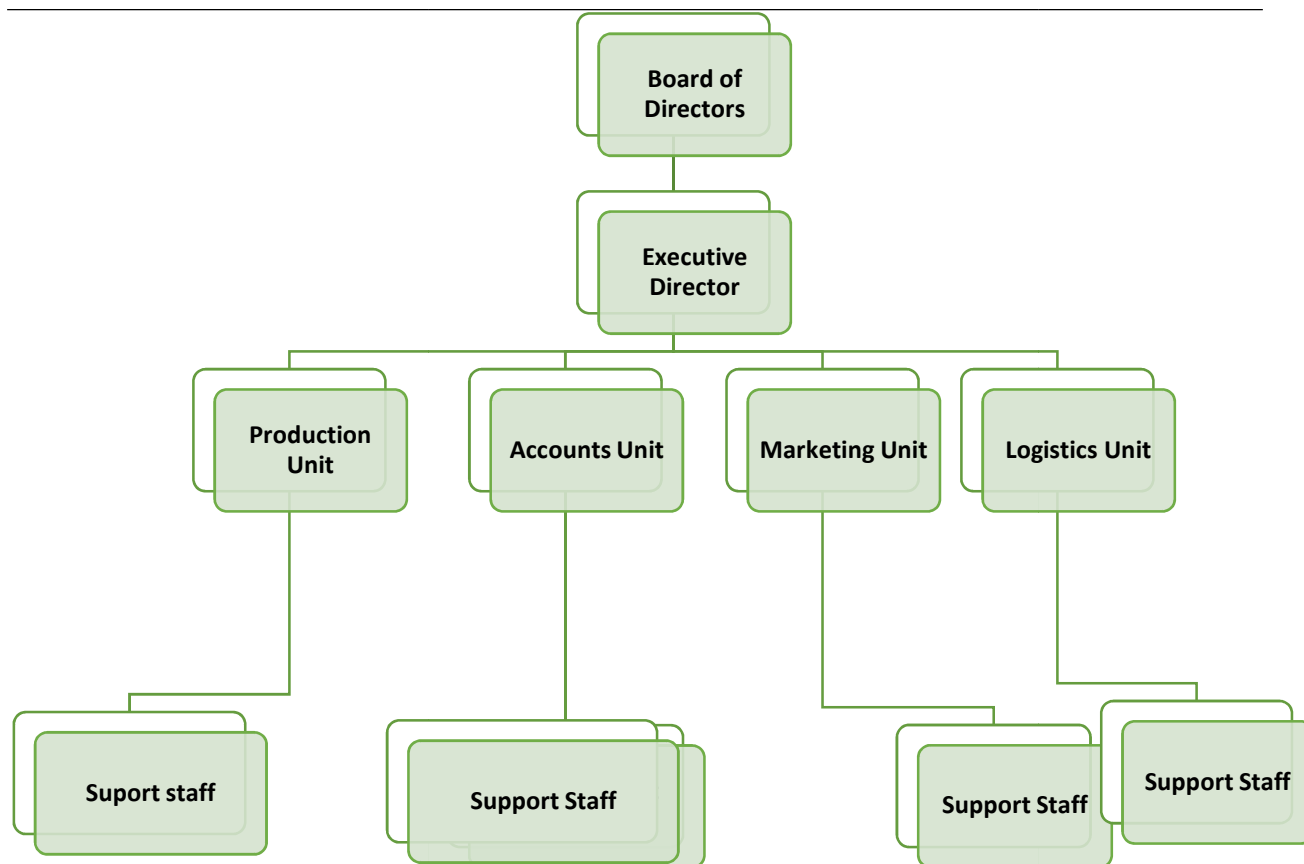
12.3 Dolomite Availability

- Dolomite is a type of limestone rock. Limestone is a sedimentary rock consisting of 50% or more of the mineral's calcite and dolomite, with calcite predominating. High-calcium limestone consists of at least 95% calcite, CaCO_3 . On the other hand high purity dolomite contain 87 to 94% of the mineral dolomite, $\text{CaMg}(\text{CO}_3)_2$.
- The coastal areas extending from Tanga in the north to Mtwara in the south has extensive limestone occurrences of high quality that can be used for lime and cement production as well as for other industrial uses.

Management And Organisation

13.1 Organisation Structure

- The project will be under the general management of H.K International. The company will have a Board of Directors responsible for the major policy and strategic issues of the business. The Board is comprised of members representing the shareholders and other non-shareholders.
- The project will have a flat organization structure to reduce the communication barriers. The daily management issues will be under the Executive Director who will be in-charge of all matters of the project. The Executive Director will report to the Board of Directors.
- The Executive Director will be assisted by different functional staff in Production, Finance and Marketing, and Logistics. The company's Organisation Chart is presented below:



13.2 Staffing

- The company is projecting to employ a total of 29-staff contingent excluding casual labourers. The staff contingent will comprise of the following:

Number and Composition of Staff					
	Year 1	Year 2	Year 3	Year 4	Year 5
Direct Labour					
Production Manager	1	1	1	1	1
Quality Analysts	1	1	1	1	1
Tank Farm Operators	1	1	1	1	1
Production Lines Attendants	6	6	6	6	6
Packing Hall Supervisors	1	1	1	1	1
Packing Line Attendants	4	4	4	4	4
Electrical Engineer	1	1	1	1	1
Drivers - for deliveries and forklifts	5	5	5	5	5
Office Drivers	1	1	1	1	1
Sub-total	21	21	21	21	21
Indirect Labour					
Company CEO	1	1	1	1	1
Executive Secretary	1	1	1	1	1
Receptionists	1	1	1	1	1
Accounts Assistants	1	1	1	1	1
Cashiers	2	2	2	2	2
Marketing & Sales Manager	1	1	1	1	1
Marketing Representatives	1	1	1	1	1
Sub-total	8	8	8	8	8
Grand Total	29	29	29	29	29

13.3 Remuneration

- The project will pay salaries and wages to the workers at competitive rates as shown in the attached Annex 11 (i) and (ii).
- Additionally, the project will provide the workers with other benefits including lunch at work place, transport services and other benefits.

13.4 Manpower Training on Factory Operation

- The management will mostly employ experienced workers so that they can easily adopt the system and good practices involved in efficient running of the plants.
- The management will identify the training needs of all the technical staff and will install systematic and focused training programs and refresher courses.

13.5 Human Resources Development

- H.K International in collaboration with other relevant stakeholders will provide training programs to workers on issues such as:
 - Production and quality control
 - Plant maintenance
 - Warehouse management
 - Marketing and logistics
 - And other training courses

Implementation And Operational Plan

14.1 Implementing Agency

- The project will be implemented by H.K International. The management of the company will undertake to organize all the aspects of the project including the following:
 - Undertake to supervise the renovation of the buildings and civil works
 - Ordering and procurement of assembling plants.
 - Procurement of office equipment, furniture and fittings, utilities and motor vehicles.
 - Pre-operating expenses and initial working capital for the proposed project.
 - Provide working capital for the variable and fixed costs of the project.
 - Finance all cost over-runs resulting from the project.

14.2 Implementation Plan

- The company has already obtained the Proforma Invoices from suppliers of the main plant and machinery and has already paid for the machinery to the supplier.
- The buildings and civil works are subject to delivery of the machinery on site from China.
- The ordering, delivery, installation and commissioning of the plants is estimated to take period of not more than 3-months.
- Except for the plants, the rest of the physical assets will be procured locally.

14.3 Operational Plan

- Upon completion of the implementation, H.K International will undertake to manage and operate the project.
- The shareholders of the company will provide strategic and policy directives to the project.

Risks And Uncertainties

15.1 Delays in Project Implementation

- A number of factors may lead to delays in project commissioning including statutory documentations, funds mobilisation and timely ordering of the machinery as well as machinery delivery and installation works.
- The shareholders will follow closely with the government technocrats to reduce delays in the project implementation. The shareholders have already paid for the machinery and other equipment. The buildings are already in place. On the machinery procurement and installations, the risks are minimised by the choice of the turnkey structure.

15.2 Products Quality

- In general, high quality wall putty and skimming powder means low fiber content (less than 0.5% of total weight), low metal content (less than 0.1 percent) and high consistency. The accepted level of maximum moisture content is about 1% by weight. Excess moisture content limits wall putty use in many applications, especially

molded and extruded products. Excess heat during processing can also degrade the wall putty.

- The project will invest in high quality plant technology that will produce wall putty and skimming powder that meet the market demand.

15.3 Political risks

- The government may from time-to-time issue new directives (on issues such as regulations of recycled materials, tendering, etc.) which may negatively impact on the project implementation and operations. This risk is strongly addressed by the fact that the Tanzania government has maintained long-term commitment of involving the private sector in policy decisions. The factory will adhere to international standards on emissions and other environmental issues.

15.4 Managerial risks

- The management of recycling industry requires close supervision and expertise in production and marketing. The company will employ personnel with experience in the manufacturing industry in the fields of production and marketing. Additionally, the shareholders of H.K International will be part of the management team to drive the finance and marketing department.

Financial And Economic Evaluation

16.1 Introduction

- This section presents the financial plan.
- The main objective of the financial analysis is to examine both commercial profitability and economic viability of the proposed project.
- The financial projections are divided into the following sections:
 - (i) Investment and Financing Plans – shows the initial capital expenditure and working capital costs and the corresponding sources of finance.
 - (ii) Financial Results Section - presents the financial outcomes of the project including the project profitability, cashflows and balance sheets statements
 - (iii) Operations Assumptions – presents the production, revenues and operating costs assumptions as well as the loans and working capital projections.

16.2 Financial Goals

The immediate financial goals of the company are as follows:

- Finance the investment costs through equity financing and external financing. The shareholders are seeking for external working capital loan to develop the proposed investment.
- Obtain funds from lending institutions to part-finance additional working capital.

16.3 Financial Assumptions

(i) General Financial Assumptions

- The currency of accounting is Tanzania Shilling (TZS)
- The exchange rate of TZS to USD is assumed at TZS 2,350 to 1 USD.
- Financial projections for the first 10-years of operation have been worked out.
- Project Commissioning is within 4-month of project implementation.
- The project entails procurement and installation of wall putty and skimming powder manufacturing plant.

(ii) Investment Plan

- Projected Investment costs and financing plan are presented in Annex 1
- The total investment costs are estimated at TZS 1.0 billion. Currently, there is no investment which has been done.
- The investment will be on the fixed assets, pre-operating costs and initial working capital as summarized below:

Investment Plan	Amount in TZS '000'				Total Investment	USD Equivalents
	Existing Investments	Additional Investments				
		Year 1	Year 2	Total		
Exchange Rate (USD/ TZS)	2,350	2,350	2,350			
Land & Buildings	-	9,000	-	9,000	9,000	8,085
Plant & Machinery	-	278,200	-	278,200	278,200	18,383
Equipment & Tools	-	7,400	-	7,400	7,400	7,404
Vehicles (incl Forklifts)	-	60,000	-	60,000	60,000	68,085
Furniture and equipment	-	8,000	-	8,000	8,000	7,660
Total Physical Assets	-	492,600	-	492,600	492,600	209,67
Pre-Operating costs	-	-	-	-	-	-
Rent - Factory Premises	-	97,000	-	97,000	97,000	41,277
Finance Costs	-	24,630	-	24,630	24,630	10,481
Initial Administration Costs	-	27,000	-	27,000	27,000	11,489
Pre-Operating costs	-	148,630	-	148,630	148,630	63,247
Capital Expenditure	-	641,230	-	641,230	641,230	272,864
Change In Working Capital	-	352,148	30,032	382,180	382,180	62,630
Total Investment	-	993,378	30,032	1,023,410	1,023,410	435,494

(iii) Financing Plan

- The proposed financing structure of the project include shareholders' equity and external financing. The capital investment will be financed through equity.
- The external financing shall finance the initial working capital of the project and it is proposed to be form of short-term loan facility.
- The proposed financing structure is as follows:

Financing Plan	Amount in TZS '000'				Total Financing	USD Equivalents
	Existing Financing	Additional Financing				
		Year 1	Year 2	Total		
Exchange Rate (USD/ TZS)	2,350	2,350	2,350			
Equity Financing						
Ordinary Share Equity	-	-	-	-	-	-
Shareholders' Funds						
Shareholder 1	-	56,557	6,66	532,173	532,173	226,457
Shareholder 2	-	476,821	14,46	491237	491237	209,037
Retained Earnings	-	-	-	-	-	-
Total Equity	-	993,378	30,032	1023,410	1023,410	435,494
External Financing						
Long-Term loans	-	-	-	-	-	-
Sub-total	-	-	-	-	-	-
Short Term Loans						
Short-term Loans	-	-	-	-	-	-
Other Loans Facilities	-	-	-	-	-	-
Sub-total	-	-	-	-	-	-
Total external financing	-	-	-	-	-	-
Total Financing	-	993,378	30,032	1023,410	1023,410	435,494
Exposure Ratios:						
Equity Financing						
Shareholder 1	-	52.0%	52.0%	52.0%	52.0%	
Shareholder 2	-	48.0%	48.0%	48.0%	48.0%	
Total Equity	-	100%	100%	100%	100%	
External Financing	-	0%	0%	0%	0%	
Total	-	100%	100%	100%	100%	

16.4 Operating Assumptions

(i) Depreciation Assumptions

- The Depreciation Schedules are presented in Annex 6.
- The depreciation and amortization rates are as indicated in the schedule.

(ii) Production Assumptions

- The Production Assumptions are presented in Annex 7. The plant is assumed to operate for 12-hours per day and 25-days in a month and it will produce wall putty and skimming powder.
- The plant will have capacity to produce about 3.0 tons of wall putty and skimming powder per hour and it is assumed that wall putty will be 60%; and skimming powder will be 40% of the total production.
- The plant, at full capacity, will produce 900 tons of wall putty and skimming powder equivalents to 10,800 tons per annum.

		Quantity in Metric Tons				
		Year 1	Year 2	Year 3	Year 4	Year 5
Plant Operations						
Operating Hours/Day	Hours/Day	12	12	12	12	12
Operating Days	Days/Month	25	25	25	25	25
	Days/Year	300	300	300	300	300
Manufacturing Capacity						
Total Plant Capacity	MT/Hour	3	3	3	3	3
	MT/Day	36	36	36	36	36
	MT/Month	900	900	900	900	900
	MT/Year	10,800	10,800	10,800	10,800	10,800

- In the first year, the plant will operate for 9-months after the first 3-month of project implementation.
- The plant capacity utilization is assumed to increase from 85% in the first year increasing to 90% in the 5th year.
- At 85% capacity utilization, the project will produce 5,508 tons of wall putty and 3,672 tons of skimming powder per annum.

		Quantity in Metric Tons				
		Year 1	Year 2	Year 3	Year 4	Year 5
Production						
Product ratio						
Wall Putty	%	60%	60%	60%	60%	60%
Skimming Powder	%	40%	40%	40%	40%	40%
Maximum Capacity Utilisation						
Wall Putty	MT	540	6,480	6,480	6,480	6,480
Skimming Powder	MT	360	4,320	4,320	4,320	4,320
Plant Capacity Utilisation	%	85%	85%	90%	90%	90%
Products Produced						
Daily Average Production						
Wall Putty	MT/Day	18	18	19	19	19
Skimming Powder	MT/Day	12	12	13	13	13
Total Products	MT/Day	31	31	32	32	32
Monthly Average Production						
Wall Putty	MT/Month	459	459	486	486	486
Skimming Powder	MT/Month	306	306	324	324	324
Total Products	MT/Month	765	765	810	810	810
Annual Production						
Wall Putty	MT/Year	3,375	5,508	5,832	5,832	5,832
Skimming Powder	MT/Year	2,250	3,672	3,888	3,888	3,888
Total Products	MT/Year	5,625	9,180	9,720	9,720	9,720
		52%	85%	90%	90%	90%

(iii) Prices Assumptions

- The product selling prices are presented in Annex 8.
- The products (wall putty and skimming powder) will be packaged and sold in 25-kg bags.
- The selling prices are first presented in TZS currency.
- The prices are assumed to increase at a rate of 2% annually. The projected products prices are as follows:

		Year 1	Year 2	Year 3	Year 4	Year 5
Products Packaging						
Packaging Bags Sizes						
Wall Putty	Kg/Bag	25	25	25	25	25
Skimming Powder	Kg/Bag	25	25	25	25	25
Bags Produced						
Wall Putty	Bags	135,000	220,320	233,280	233,280	233,280
Skimming Powder	Bags	90,000	146,880	155,520	155,520	155,520
Products Prices						
Change in Products Prices	%	0%	2%	2%	2%	2%
Wall Putty	TZS/Bag	17,000	17,340	17,687	18,041	18,401
Skimming Powder	TZS/Bag	14,000	14,280	14,566	14,857	15,154

(iv) Revenues Assumptions

- The projected revenues assumptions are presented in Annex 8.
- The projected revenues are a function of the products produced and the projected selling prices.
- The project has assumed about 70% of the sales revenues will be from exports and the balance of about 30% will be from domestic market.
- About 65% of the project revenues will be generated from sale of wall putty and 35% will come from skimming powder.
- The summary of the project revenues are as follows:

		Amount in TZS '000'				
		Year 1	Year 2	Year 3	Year 4	Year 5
Projected Revenues						
Wall Putty	TZS	2,295,000	3,820,349	4,125,977	4,208,496	4,292,666
Skimming Powder	TZS	1,260,000	2,097,446	2,265,242	2,310,547	2,356,758
Revenues	TZS	3,555,000	5,917,795	6,391,219	6,519,043	6,649,424
% Growth		-	66%	8%	2%	2%
Market Segments						
Export Revenues	%	20%	30%	30%	30%	30%
	TZS	711,000	1,775,339	1,917,366	1,955,713	1,994,827
Domestic Revenues	%	80%	70%	70%	70%	70%
	TZS	2,844,000	4,142,457	4,473,853	4,563,330	4,654,597

(v) Operating Costs Assumptions

- The projected operating costs assumptions include direct and indirect operating costs.
- The projected direct operating costs have presented in Annexes 9 (i), (ii) and (iii); and the projected indirect operating costs are presented in Annex 10.

(a) Production Costs –

- The production costs presented in Annex 9 (i) relate to main raw materials and Annex 9 (ii) presents Other Direct Operating costs including electricity, packaging materials, waste management costs, direct labour and maintenance and repair expenses.
- The main raw materials for production of wall putty and skimming powder and their associated costs are as presented below:

			Amount in TZS '000'				
			Year 1	Year 2	Year 3	Year 4	Year 5
Main Raw Materials							
Wall Putty							
Quantities							
Dolomite	30.0%	MT	1,013	1,652	1,750	1,750	1,750
White Cement	30.0%	MT	1,013	1,652	1,750	1,750	1,750
RD Powder	1.4%	MT	47	77	82	82	82
Chemicals	0.4%	MT	14	22	23	23	23
Unit Costs							
Change in Costs		%	0%	2%	2%	2%	2%
Dolomite		TZS/kg	250	255	260	265	271
White Cement		TZS/kg	640	653	666	679	693
RD Powder		TZS/kg	1,500	1,530	1,561	1,592	1,624
Chemicals		TZS/kg	1,400	1,428	1,457	1,486	1,515
Raw Materials Costs							
Dolomite		TZS	253,125	421,362	455,071	464,172	473,456
White Cement		TZS	648,000	1,078,687	1,164,982	1,188,281	1,212,047
RD Powder		TZS	70,875	117,981	127,420	129,968	132,568
Chemicals		TZS	18,900	31,462	33,979	34,658	35,351
Wall Putty Materials Costs		TZS	990,900	1,649,492	1,781,451	1,817,080	1,853,422
% of Wall Putty Revenues		%	43%	43%	43%	43%	43%
Skimming Powder							
Quantities							
Gypsum Powder	30.0%	MT	675	1,102	1,166	1,166	1,166
Dolomite	30.0%	MT	675	1,102	1,166	1,166	1,166
White Cement	25.0%	MT	563	918	972	972	972
Chemicals	1.5%	MT	34	55	58	58	58
Unit Costs							
Change in Costs		%	0%	2%	2%	2%	2%
Gypsum Powder		TZS/kg	300	306	312	318	325
Dolomite		TZS/kg	250	255	260	265	271
White Cement		TZS/kg	640	653	666	679	693
Chemicals		TZS/kg	1,500	1,530	1,561	1,592	1,624
Raw Materials Costs							
Gypsum Powder		TZS	202,500	337,090	364,057	371,338	378,765
Dolomite		TZS	168,750	280,908	303,381	309,448	315,637
White Cement		TZS	360,000	599,270	647,212	660,156	673,359
Chemicals		TZS	50,625	84,272	91,014	92,834	94,691
Skimming Powder Materials Costs		TZS	781,875	1,301,540	1,405,664	1,433,777	1,462,452
% of Skim Powder Revenues		%	62%	62%	62%	62%	62%
Raw Materials Costs		TZS	1,772,775	2,951,032	3,187,115	3,250,857	3,315,874
% of Revenues		%	50%	50%	50%	50%	50%

- The raw materials costs for wall putty are projected to account for about 43% of the wall putty revenues; and skimming powder raw materials costs are projected to account for 62% of the skimming powder revenues.
- The raw materials for both wall putty and skimming powder are projected to account for 50% of the project total revenues.
- Other direct operating cost items including electricity, direct labour, packaging materials, maintenance and repairs, waste management and

other costs are projected to account for about 17% of the project total revenues.

- The direct operating costs are projected to account for about 67% of the total revenues.

(b) Distribution Costs

- The projected distribution costs are presented in Annex 9 (iii)
- The distribution costs have assumed the export market and the domestic market. The distribution costs for the export market account for about 14% of the project revenues and the local market distribution costs account for about 2% of the revenues.
- The distribution costs for the export market have considered the following costs items per 20-foot container of plaster materials:

	TZS/20" Container
Stuffing	100,475
VGM	59,372
Port handling	180,399
Wharfage (0.5% of Invoice)	5,709
Certificate of origin	54,805
BL Fee	114,176
SUMATRA	11,418
Freight	1,255,941
Other Clearing Charges	4,000

- The distribution costs for the local market have considered the following costs as a percentage of domestic revenues:

Costs as % of Domestic Revenues	
Transport costs	2.0%
Bagging Costs	2.0%
Warehouse expenses	0.00%
Motor vehicles running costs	4.00%
Insurance on Goods	0.60%
Direct Labour	1.00%
Repair & maintenance	1.00%
Other expenses	0.50%
Local Distribution Costs	11.10%

- The total direct operations costs which include the production and distribution expenses account for about 67% of the project revenues.

(c) Indirect Operating Costs

- The Indirect Operating costs are presented in Annex 10. The indirect operating costs include three cost components:
 - Staff salaries and benefits
 - Statutory costs, and
 - Administration expenses.
- The projected indirect operating costs account for about 9% of the project revenues and the Total Operating Costs are projected to account for 80% of the revenues as summarized below:

Indirect Operating Costs		Year 1	Year 2	Year 3	Year 4	Year 5
Staff Costs	TZS '000'	233,845	318,029	324,265	330,501	336,737
Statutory Costs	TZS '000'	16,336	17,552	17,827	18,108	18,394
Administration costs	TZS '000'	120,399	221,581	226,011	230,528	235,134
Sub-total	TZS '000'	370,580	557,162	568,103	579,136	590,265
% of Total Revenues	Percentage	10%	9%	9%	9%	9%
Total Operating Costs	TZS '000'	2,967,273	4,800,417	5,124,600	5,226,423	5,329,987
% of Total Revenues	Percentage	83%	81%	80%	80%	80%

(d) Staff Salaries and Benefits

- The projected Salaries Schedules are presented in Annex 11 (i) for the direct labour and Annex 11 (ii) for the indirect labour costs.
- The project will employ 21-direct labour and 8-indirect labour whose salaries and benefits will account for about 7% of the project revenues as summarized below:

Total Salaries & Benefits		Year 1	Year 2	Year 3	Year 4	Year 5
Basic Salary	TZS '000'	472,703	630,270	630,270	630,270	630,270
Add: Staff Benefits	TZS '000'	70,905	94,541	94,541	94,541	94,541
Other staff costs	TZS '000'	9,454	12,605	12,605	12,605	12,605
Inflation Adjustment	TZS '000'	-	11,748	29,497	44,245	58,993
Staff Salaries & Benefits	TZS '000'	553,062	752,164	766,913	781,661	796,409
% of revenues	Percentage	16%	13%	12%	12%	12%

(e) Working Capital Assumptions

- The projected working capital schedule is presented in Annex 12.
- The working capital schedule presents the current assets and current liabilities of the project.
- The schedule shows that the project will require about TZS 352 million at the commissioning to cover for the initial operating costs of the project.

16.5 Financial Results

- The financial results are presented in the Profit and Loss Statements and Cash-flow Statements and Balance Sheets.

(i) Projected Profitability

- Profitability of the project has been carried out and presented in Annex 2.
- The analysis of the profitability of the overall project indicates that the project is a profitable undertaking with short-term returns to the investors.
- The project has assumed 30% corporate tax from the first year of operations and no dividends distributions.
- The overall gross margins are projected to average 20%; EBITDA Margins at 11%; and the net margins are projected to increase from 5% to 7% during the first 10-years of operation.
- The summary of the projected Profit and Loss Statements for the first 10-years of operation is presented.

Projected Profit & Loss Statements

	Amount in TZS '000'				
	Year 1	Year 2	Year 3	Year 4	Year 5
Sales Revenues					
Wall Putty	2,295,000	3,820,349	4,25,977	4,208,496	4,292,666
Skimming Powder	1,260,000	2,097,446	2,265,242	2,310,547	2,356,758
Gross Revenues	3,555,000	5,917,795	6,391,219	6,519,043	6,649,424
Less: Provision for Agents Allowance (%)	35,550	59,178	63,912	65,190	66,494
Total revenues	3,519,450	5,858,617	6,327,307	6,453,853	6,582,930
Direct Operating Costs					
Main Raw Materials	1,772,775	2,951,032	3,87,115	3,250,857	3,315,874
Other Production Costs	679,779	10,34,342	10,90,871	112,348	114,084
Distribution Costs					
Export Costs	10,479	250,892	270,964	276,383	281,911
Local Distribution Costs	315,684	459,813	496,598	506,530	516,660
Total Direct Costs	2,868,718	4,696,079	5,045,547	5,146,117	5,248,529
Gross Profit	650,732	1,162,538	1,281,760	1,307,735	1,334,401
Gross Margins	18%	20%	20%	20%	20%
Indirect Operating Costs					
Staff Costs	233,845	318,029	324,265	330,501	336,737
Statutory Costs	6,336	17,552	17,827	18,118	18,394
Administration costs	10,399	22,1581	226,011	230,528	235,14
Total Indirect Costs	370,580	557,732	568,103	579,146	590,265
EBITDA	280,152	605,377	713,657	728,599	744,136
EBITDA Margins	8%	10%	11%	11%	11%
Less: Depreciation	43,621	65,404	55,121	50,198	45,830
Amortisation	37,568	74,315	37,168	-	-
Profit Before Int. & Tax	199,374	465,657	621,378	678,401	698,306
Loss/ Profit on disposal of Property	-	-	-	-	-
Less: Interest on Loans					
Long-Term Loan 1	-	-	-	-	-
Short-term Loans	16%	23,529	47,059	49,412	51,882
Other Loans Facilities	-	-	-	-	-
Sub-total: Interest expenses	23,529	47,059	49,412	51,882	54,476
Profit Before Tax	175,844	418,599	571,966	626,519	643,830
Taxable Incomes	175,844	418,599	571,966	626,519	643,830
Corporation Tax	30%	53,974	125,580	171,590	193,149
Profit/ (loss) after tax	121,870	293,019	400,376	438,563	450,681
Net Margin	3%	5%	6%	7%	7%
Dividends	-	-	-	-	-
Retained Income	121,870	293,019	400,376	438,563	450,681
Cumulative Retained Income	121,870	414,889	815,266	1,253,829	1,704,510

(ii) Projected cash flow Statements

- The projected cash flows statements are presented in Annex 3. The sources of finance to the project include shareholders' equity, the company sales revenues and short-term finances to cover the cash flow deficit.
- Funds applications include capital expenditure, working capital expenses, and project operating expenses, finance costs, loan repayment and corporate tax. Capital expenditure includes physical assets (i.e. buildings and civil works, machinery and equipment, office furniture and equipment and motor vehicles) and pre-operating costs.
- The company will have cashflow deficit of up to TZS 100 million in the first year of operations which will be financed by a proposed short-term loan facility. The projected cashflows statements are as flows:

Projected Cash Flow Statements

		Year 1	Year 2	Year 3	Year 4	Year 5
Cash Inflows						
Equity Financing						
Ordinary Share Equity	TZS'000'	-	-	-	-	-
Shareholders' Funds	TZS'000'	-	-	-	-	-
Shareholder 1	TZS'000'	5,6,557	5,616	-	-	-
Shareholder 2	TZS'000'	476,821	14,45	-	-	-
Retained Earnings	TZS'000'	-	0	0	0	-
Equity financing	TZS'000'	993,378	30,032	0	-	-
External Financing						
Long-Term loans						
Short-Term Loans	TZS'000'	-	-	-	-	-
Short-term Loans	TZS'000'	-	-	-	-	-
Other Loans Facilities	TZS'000'	-	-	-	-	-
External Funds	TZS'000'	-	-	-	-	-
Revenues						
Wall Ruddy	TZS'000'	2,295,000	3,820,349	4,125,977	4,208,496	4,292,666
Skimming Powder	TZS'000'	1260,000	2,097,446	2,265,242	2,310,547	2,356,758
Gross Revenues	TZS'000'	3,555,000	5,917,795	6,391,219	6,519,043	6,649,424
Les: Provision for Agents Allowance (%)	TZS'000'	35,550	59,178	63,912	65,90	66,494
Sales revenues	TZS'000'	3,519,450	5,858,617	6,327,307	6,453,853	6,582,930
Total Cash Inflow	TZS'000'	4,512,828	5,888,649	6,327,307	6,453,853	6,582,930
Cash Outflows						
Capital Expenditure						
Land & Buildings	TZS'000'	9,000	-	-	-	-
Plant & Machinery	TZS'000'	278,200	-	-	-	27,820
Equipment & Tools	TZS'000'	7,400	-	-	1740	-
Vehicles (incl Forklifts)	TZS'000'	160,000	-	-	6,000	-
Furniture and equipment	TZS'000'	8,000	-	-	1800	-
Pre-operating costs	TZS'000'	18,630	-	-	-	-
Sub-total	TZS'000'	641,230	-	-	19,540.00	27,820.00
Change in Net Working Capital	TZS'000'	600,634	30,032	31533	33,110	34,765
Direct Expenses						
Main Raw Materials	TZS'000'	1772,775	2,951,032	3,187,115	3,250,857	3,315,874
Other Production Costs	TZS'000'	679,779	10,34,342	10,90,871	112,348	114,084
Distribution Costs						
Export Costs	TZS'000'	10,479	250,892	270,964	276,383	281,911
Local Distribution Costs	TZS'000'	315,684	459,813	496,598	506,530	516,660
Indirect Expenses						
Staff Costs	TZS'000'	233,845	318,029	324,265	330,501	336,737
Statutory Costs	TZS'000'	6,336	17,552	17,827	18,108	18,394
Administration costs	TZS'000'	20,399	221,581	226,011	230,528	235,114
Loan Interest Payments						
Long-Term Loan 1	TZS'000'	-	-	-	-	-
Short-term Loans	TZS'000'	23,529	47,059	49,412	51,882	54,476
Other Loans Facilities	TZS'000'	-	-	-	-	-
Sub-total: Interest expenses	TZS'000'	23,529	47,059	49,412	51,882	54,476
Loan Principal Payment						
Long-Term Loan 1	TZS'000'	-	-	-	-	-
Other costs						
Corporate Taxation	TZS'000'	53,974	25,580	17,1590	87,956	103,419
Dividend Payment	TZS'000'	-	-	-	-	-
Total cash Outflow	TZS'000'	4,558,666	5,455,911	5,866,185	6,017,742	6,119,005
Surplus (Deficit)	TZS'000'	(45,838)	432,738	461,122	436,111	433,925
Opening Cash Balances / (short-term loans)	TZS'000'	0	(45,838)	386,901	848,023	1284,114
Closing Balance/ (Short-term loans)	TZS'000'	(45,838)	386,901	848,023	1284,114	1718,039

(iii) Projected Balance Sheets

- The projected balance sheet is presented in Annex4.
- The projected balance sheet shows that the net physical assets are decreasing overtime due to depreciation. The total net assets increase overtime due to increased net current assets over time.
- The project is projected to have positive net current assets throughout the project life-time.

(iv) Other Economic Benefits

- Tax Income – the project will pay income taxes, property taxes, corporate taxes and other taxes to the government.
- Dividends – the shareholders will receive dividends from the project.
- Jobs Creation – the project will create more than 30 direct jobs and over 100 indirect employments.
- Generation of foreign currency- the project will export wall putty and skimming powder to the neighbouring countries.
- Industrial development - The project will add to the stock of industries to the economy. Tanzania is in a great need for industrial development, an important factor for the country's economic growth and development.

(v) General Comments

- The project financial and economic analysis suggests that the project is financially viable and economically feasible. The project will be able to meet its financial obligations from internally generated incomes.
- The project will be able to pay-back to the equity investors from the incomes generated from sale of its finished products.

Finance Requirements

17.1 Introduction

- H.K International is investing in the industrial project for manufacturing of Wall Putty and Skimming Powder.
- The project requires capital expenditure worth TZS 641 million and revolving working capital of up to TZS 352million for the purchase of raw materials and other associated operating expenses.
- H.K International will seek for working capital loan to the tune of TZS 100 million from shareholders' loans.

17.2 Proposed Shareholders' Loan

- The proposed shareholders' working capital loan will part-finance operating expenses as well as the current assets of the project. The facility may be in the form of a revolving working capital loan.
- The following are the proposed Terms and Conditions of the shareholdersloan:

Type of facility	Short-term Loan
Loan Currency	➤ Tanzania Shillings Currency (TZS)
Loan Amount	➤ 100,000,000
Moratorium period	➤ None
Mode of disbursement	➤ Direct disbursement to the account of the company
Loan tenure	➤ One-year, renewable
Mode of repayment	➤ Payments from sale of the products
Interest rate	➤ None

17.3 Cost Overruns

- The shareholders of the company will undertake to finance any cost overruns of the project from own sources of finance.

Conclusion And Recommendations

- The project entails manufacturing of Wall Putty and Skimming Powder. The project is geared to contribute the development of the construction industry in Tanzania. The construction sector is in an interesting phase of its evolution, not yet quite global in nature, but with some players active in more than one national market and the largest players becoming involved in multiple projects in Africa, Europe, North America, and Asia.
- The building materials sector, which is extremely diverse and constitutes a sizable chunk of the industrial base of developed countries, tends to produce materials to cater for the global market. The sector includes a highly diverse range of suppliers, from cement manufacturers to specialty glass and steel manufacturers, as well as providing a large market for white goods manufacturers, furniture manufacturers, paint and wiring manufacturers, and a host of other related industries.
- The project analysis suggests that the project is financially viable and technically feasible. The project will be in a position to meet its financial obligations from the project sales revenues. The preliminary assessment of the viability of the proposed project demonstrates the project is a short-term investment and a profitable venture.
- It is recommended that implementation of the project should observe the timeframe to capture the window of opportunity for the increased working capital requirements for the Wall Putty and Skimming Powder manufacturing project.