

**NUTRIGROUP TANZANIA LIMITED
TANZANIA INVESTMENT CENTER
PROJECT PROFILE**

OVERVIEW

NutriGroup Tanzania Limited (“NutriGroup” or the “Company”) was incorporated on 28 December 2018. NutriGroup is owned by BlackIvy LLC and NutriGroup Africa Holdings LLC, both registered in the United States of America. On 6 August 2019, NutriGroup completed the acquisition of a poultry feed mill in Changombe, Dar es Salaam, Tanzania. At the time of the acquisition, the feed mill was not operating. To repair the mill and upgrade it to market standards, NutriGroup must commit significant resources. Given the importance of the animal feed sector to the growth of the Tanzanian economy, the resources and human capital required to make NutriGroup operational and the market challenges facing the feed industry, NutriGroup is seeking the assistance of the Tanzania Investment Center in the form of a Certificate of Incentives.

BACKGROUND

BlackIvy is the parent company of NutriGroup Tanzania Limited. BlackIvy is a values-driven company that builds and grows commercial enterprises in Sub-Saharan Africa that unlock new sources of growth with operations in Ghana, Kenya and Tanzania. BlackIvy builds and operates businesses in high-growth sectors, including logistics, real estate, food and healthcare, to serve essential needs in Sub-Saharan Africa. BlackIvy has three businesses built from inception – IndigoHomes, BigCold and LuccaHealth – that are market-leaders in their sectors. To date, two businesses are operating at break-even and three are projected to generate positive EBITDA in 2020. BlackIvy has been actively investing in Tanzania since 2014.

Once operational, NutriGroup seeks to establish itself as a leading producer of high-quality, competitively-priced chicken feed. By offering high-quality, affordable chicken feed, NutriGroup will help lower the cost of raising chicken, with agricultural households and consumers projected to benefit from increased incomes. Moreover, protein-deficiency remains a nutritional challenge in Tanzania and NutriGroup will seek to provide more affordable protein to the market.

This application provides the rationale for investing in the poultry sector and NutriGroup’s plans for entering the Tanzanian market.

OPERATIONS OVERVIEW

NutriGroup has recently acquired assets for milling and packaging of animal feed. The existing equipment was manufactured by Famsun, one of the world’s leading manufacturers of feed mills and installed in Tanzania in 2014. The mill was abandoned in 2016 due to challenges facing the chicken feed market in Tanzania. NutriGroup’s investment will revitalize one of Tanzania’s largest capacity feed mills. The mill has a nameplate capacity of 20MT / hour (mash feed). Currently, the mill only produces feed in mash form while the market demand is for both mash and pelleted feed. To produce a product that meets market standards, NutriGroup has acquired new equipment from Famsun that will produce pelleted feed at a capacity of 10MT / hour (pelleted feed).

Annex I and II include renderings and installation designs for NutriGroup’s feed mill. When commissioned, the mill and associated laboratory will offer state-of-the art formulation, production and testing capabilities that NutriGroup believes will enable it to produce market leading chicken feed.

MARKET OVERVIEW

Tanzania is one of the world’s most dynamic emerging markets, having achieved remarkably stable economic growth averaging c.7.0% per year over the past 10 years. Tanzania’s economic advantages

include its political stability, large population, central coastal location, natural resource endowment, diversified income base and favorable tax incentives with regional, EU and US markets. Situated at the center of one of the world's fastest-urbanizing regions, Tanzania is a gateway to East Africa's rapidly growing c.US\$150 billion consumer market. Expanding at c.4.0% per annum, East Africa's urban population is expected to surpass Europe's within the next 20 years and reach nearly 270 million by 2050. East Africa's economic growth, population growth, rapid urbanization and changing demographics and increasing discretionary spending power are increasing protein consumption.

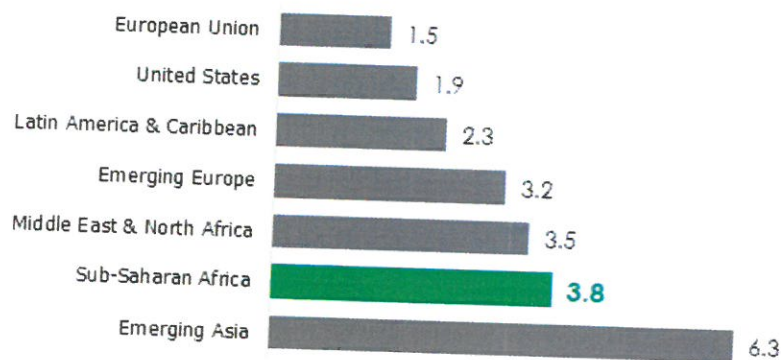
Five key factors are driving growth across sub-Saharan Africa and specifically in the East Africa.

Economic Growth

Africa will be home to some of the world's fastest-growing economies in the coming years. Ethiopia, Rwanda and Mozambique are set to record the fastest growth in real GDP terms, with Tanzania, Uganda and Kenya in the top ten; all with growth rates that are well above the global average. Africa's two largest economies, Nigeria and South Africa, account for nearly 50% of the continent's GDP in 2017. However, by 2030, these two countries will represent just 37% of Africa's total GDP, demonstrating the rising economic importance of Africa's emerging markets. Given the continent's large population and strongly increasing GDP, Africa is set to be a very dynamic region for many industries, including food, consumer electronics, and personal care products.

Projected Economic Growth 2017 to 2021

GDP, % constant USD



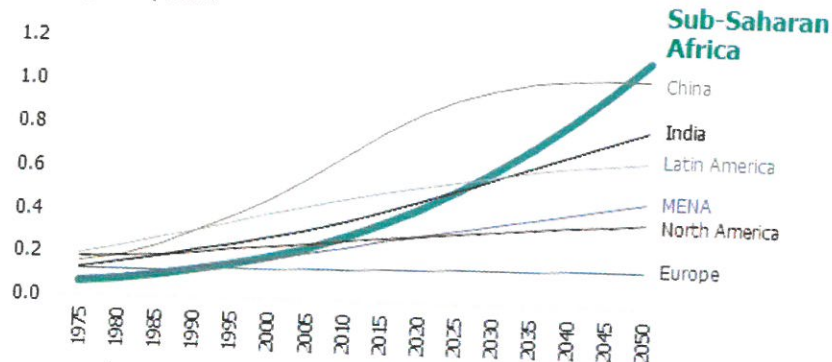
Source: IMF World Economic Outlook (Oct 2016)

Population Growth

It is predicted that by 2065 Africa will be home to approximately three billion people; more than the projected combined populations of India and China. Unlike Western populations, the African population is mainly made up of a younger demographic, with 70% of the population being under the age of 30. By 2035, it has been forecast that the working age population will exceed the rest of the world combined. This will be an enormous potential market for all industries across Africa.

Africa's Urban Population to be World's Largest

urban population, billions



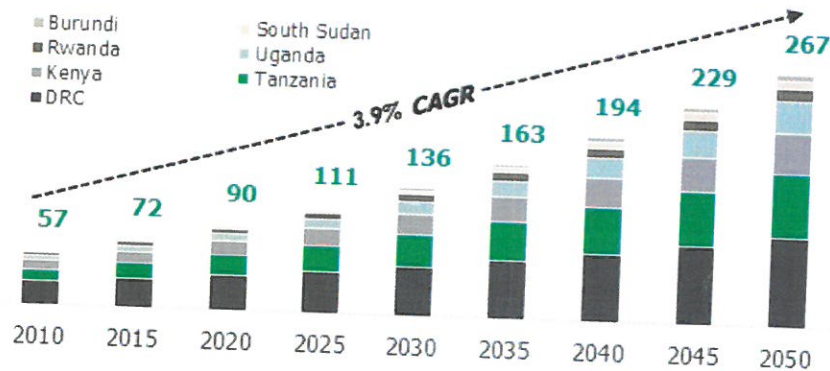
Source: UNDESA (2014)

Growing Middle Class and Increasing Urbanization

Over the past three decades, the middle class in Africa has tripled in size. It is estimated that there are now roughly 300 million middle class Africans. In Sub Saharan Africa alone, this number is set to reach one billion by 2060. It has been estimated that by 2030 Africa's top 18 cities, Dar es Salaam is in the top five, will have a combined spending power of c.US\$1.3 trillion. In 2017 it was projected that over 500 million Africans would reside in cities. Compared to more rural populations, consumer spending is significantly higher due to the career and job opportunities.

East Africa – Projected Urban Population to 2050

Urban Population (millions)



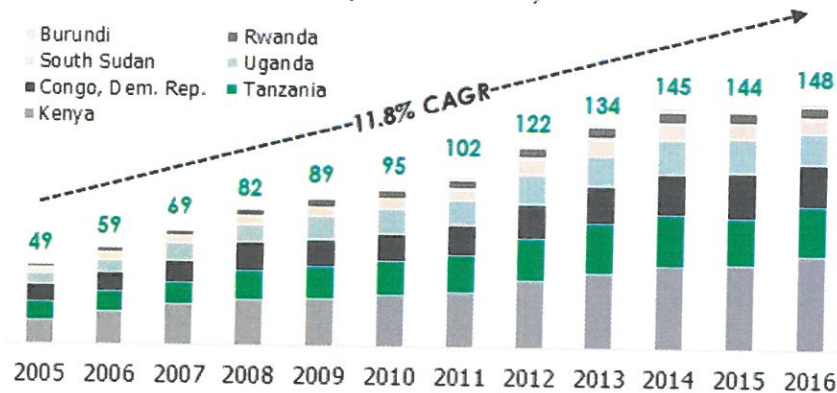
Source: United Nations, Population Division, Jun 2014 ; World Bank, Jan 2018

Increased Discretionary Spending

Africa's rise in disposable income can be attributed to the changing demographic profile. East Africa registered a 5-7% growth in the economy in the last decade alone and, despite a slight downturn in 2015, the trend for medium term growth prospects remains favorable. The Ugandan, Kenyan and Tanzanian economies are seeing a vast increase in middle-class incomes in line with population growth, modernization and urbanization. East Africa's per capita consumption of chicken is estimated 2-4kg per year, compared with global average of 14kg per year, demonstrating significant potential for growth.

East Africa – 10-Year Growth in Household Consumption

Household Consumption Expenditure (current USD billions)



Source: United Nations, Population Division, Jun 2014 ; World Bank, Jan 2018

East Africa's economic growth, population growth, rapid urbanization and changing demographics and increasing discretionary spending power are driving robust growth in demand for protein products.

Tanzania Poultry Market

Definitions:

- Broiler: A young bird of either sex that is bred and grown specifically for highly efficient meat production. Broilers are usually grown for five to seven weeks before harvesting
- Layer: Hens that have been bred to produce many eggs for consumption
- Day Old Chick ("DOC"): A newly-hatched chick. Most DOCs sold in the market are broiler chicks and are grown and harvested for meat, rather than eggs.

Chicken production takes place across Tanzania by smallholder farmers, medium-scale farms and large-scale commercial operations. Among the existing 4.7 million agricultural households in Tanzania, 3.7 million households raise chickens. The chicken population in Tanzania as of 2015 was estimated at 69 million, of which 37 million are indigenous (i.e., traditional or backyard chicken) and the remaining 32 million are commercial poultry, which include 24 million broilers and 8 million layers¹.

In Tanzania, there are three major poultry production systems: traditional production, specialized production, and commercial production. The traditional system entails free-range scavenging, with levels of low egg (50 eggs/year) and meat (1.5 kg for mature chicken) production. The specialized production system (with improved local/ imported tropical breeds) is a semi-intensive, semi-scavenging moderately high productivity (150 eggs/year; and 1.8 kg live weight at maturity) subsystem. The commercial chicken system is an intensive layers and broilers system with high productivity (2 kg live weight at maturity and 270 eggs/year)². The productivity differences among these three systems is largely driven by the use of manufactured chicken feed. High-quality, commercially-produced chicken feed is essential for increasing the productivity of Tanzania's chicken producers.

In July 2018, AGRA (Alliance for a Green Revolution in Africa) completed a study of the Tanzanian feed and poultry market. The study indicates that demand for DOCs is approximately 2.0-3.0m per week and growing. The current supply of DOCs is approximately 1.0m per week. Tanzania's per capita consumption

¹ Tanzania Country Report. South African Poultry Association. 2016

² Tanzania Livestock Masterplan, Brief 7. International Livestock Research Institute. October 2017.

of chicken is estimated at 2kg per year, compared with global average of 14kg per year. NutriGroup expects that chicken consumption in Tanzania will increase due to emerging socioeconomic fundamentals that drive increased protein consumption: rising incomes, urbanization and consumerism.

In 2018, global poultry producer Tyson Foods partnered with South Africa-based agricultural firm Irvine's to develop a breeder farm near Kilimanjaro and a hatchery in Dar es Salaam. Irvine's will produce approximately 250,000 DOCs per week in Phase I of its investment, doubling production in Phase II. Even with the Tyson / Irvine's investment there is still a 750,000 – 1.75m DOC per week supply gap. A number of other companies are evaluating investments in the sector. There is a significant supply gap that will be filled by organic growth of existing businesses or new investment. If DOC production increases by 500,000 DOC / week (significantly less than the 750,000 – 1.75m DOC per week supply gap), demand for feed will increase by 90,000MT / year.

According to Tanzania Feed Manufacturers Associate (TAFMA), Tanzania produces approximately 500,000MT of chicken feed per year³. There are approximately twenty commercial feed manufacturers in Tanzania who, based upon their capacity, represent approximately 50% of production. In addition, there are approximately 35 additional small-scale millers and an unknown number of farmers who mill feed for their own consumption.

NutriGroup's market research indicate the following production volumes:

Name	Capacity (MT / Day)
NutriGroup	80
Hill Animal Feeds & Agrovvet Supplies	175
Silverlands	100
Interchick Ltd.	80
Kijenge (Arusha)	80
Falcon Animal Feeds	80
Harsho Trading company	30
Kimvuli Animal Feed	30
MamweAnimal Feed	30
Brand Poultry Feed	30
Kitunda Animal Feed	20
Multivet Tanzania	20
Joshi (Moshi)	15
Marenga Animal Feeds (Moshi)	15
Shalom Animal Feed	15
Energy Millers	10
International Tanfeeds	10
Nassad Animal Feed	10
Benny Animal Feed	10
Farmers Centre Ltd / Quality Animal feed	10
Igo Animal Feed	10
Kerege Animal Feed	10
Total Production Per Day	870
Estimated Production Per Year	271,440

³ Capacity Development and Next Steps. Tanzania Feed Millers Association. January 2017.

Based upon current capacity, the existing feed mills in Tanzania cannot meet that increased demand, thereby creating opportunity for feed production in Tanzania. The market for NutriGroup's chicken feed will be smallholder producers, medium scale farms, large scale commercial operations and all chicken producers in between. NutriGroup will market its products across Tanzania in an effort to give all farmers access to high-quality, competitively-priced chicken feed. NutriGroup views the feed mill as an entry point to an attractive and growing market. The AGRA study supports NutriGroup's view and highlights growing demand for DOCs, eggs and feed.

Animal Feed Market

Based upon initial research, NutriGroup believes there are opportunities for horizontal integration in Tanzania and across East Africa.

Fish Feed

According to the World Bank, fish consumption in East Africa is approximately 1.3m MT per year based on relatively modest per capita consumption of 14, 10, 4 and 1.5 kg per capita for Uganda, Tanzania, Kenya and Rwanda, respectively. Assuming per capita consumption remains static, if fish consumption increases purely in-line with East African population growth, demand will grow to nearly 2.0m MT in the next ten years.

The FAO estimates East Africa's current production from wild capture fisheries (non-farmed) is approximately 1.0m MT per year. The remaining 300,000MT is predominantly imported, primarily from China. Aquaculture (farmed fish) in East Africa currently produces approximately 11,000MT per year. Due to poor resource management, fish populations in East Africa are stagnating or declining. Thus, there is a significant opportunity for aquaculture to meet the increasing demand.

Aquaculture in East Africa has healthy prospects for rapid growth, driven by a strong market for fish, excellent natural resources (including genetics and water), good potential for profitability and a nascent, fast growing segment of commercial farms. The biggest impediment to growth is access to reasonably-priced, quality feed. There are no commercial manufacturers of fish feed in East Africa. Locally produced feeds are generally low or inconsistent quality and imported feeds are very expensive. Msingi, a Gates Foundation funded NGO, estimates that the current demand for feed in East Africa is 20,000MT per annum.

Dairy Feed

The dairy sector is one of the fastest growing agricultural sub-sectors in East Africa, which has generated significant economic returns and employment opportunities along dairy value chains. According to the World Bank, annual per capita milk consumption in East Africa is 37 liters, compared with the global average of 104 liters. Kenya has a vibrant dairy industry with an estimated growth of domestic per capita milk consumption growing at over 6.0% per year. In recent years, demand for milk and dairy products has been accelerating, driven by expanding urbanization and a rising middle class. Growth in the sector is driving increased investment and transformation from small-scale producers and informal trade to commercial-scale producers and formal trade. Milk yields of small-scale producers in Kenya are about 5–8 liters per cow per day, while large-scale farmers typically reach yields of 17–19 liters per cow per day. There are a host of contributing factors in the yield differential, including genetics and husbandry techniques, but most critical is nutrition, feed.

The provision of supplementary feed for dairy cows is critical if milk production is to be increased. Yet, the feed supply chain in East Africa faces key bottlenecks, including low and variable quality of inputs, high cost of feed, reliance on imported feed ingredients and rampant trade malpractices in the feed industry.

Potential Acquisitions

Based upon its initial market assessment, NutriGroup believes there are opportunities to pursue strategic acquisitions in Tanzania and across East Africa.

The first such opportunity that NutriGroup is assessing is Kijenge Animal Products Limited (“Kijenge”). Kijenge is an integrated manufacturing facility in Arusha, Tanzania. Kijenge offers a maize mill, feed mill, oil extraction plant, corn-soya blend plant, wood pellet plant. Kijenge is currently in receivership and NutriGroup is in talks with the Administrator and the CRDB Bank, the lead creditor.

An acquisition of Kijenge would be a major investment for NutriGroup. While it is not yet clear that NutriGroup can agree to terms with the Administrator and the Creditors, it is included in this document to demonstrate the type of investments NutriGroup will seek to make. Following the launch of NutriGroup’s chicken feed business in Tanzania, the Management Team will assess in greater detail a number of potential strategies to scale-up via horizontal and vertical integration.

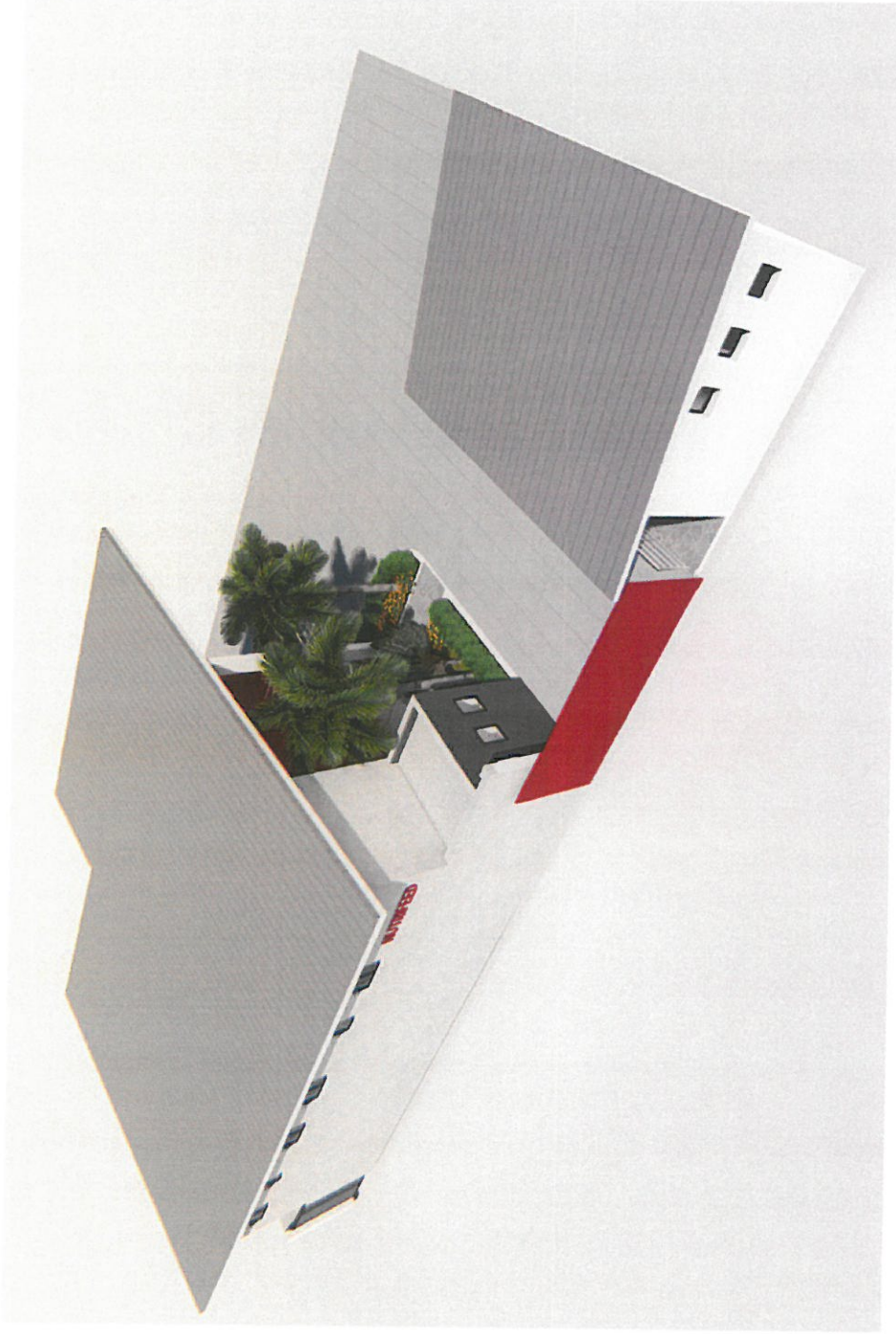
FINANCIAL PROJECTIONS

NutriGroup expects that it will face losses in at least the first two years of its operations. The Company aims to become profitable in year three and to recoup its investment by year six.

FINANCIAL MODEL	Units									
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Income Statement:	Period									
		1	2	3	4	5	6	7	8	9
Revenue:										
Broiler - Finisher	USD'000	700	2,400	4,800	6,000	7,201	7,201	7,201	7,201	7,201
Layer - Regular	USD'000	584	2,002	4,005	5,006	6,007	6,007	6,007	6,007	6,007
Total Revenue	USD'000	\$ 1,284	\$ 4,403	\$ 8,805	\$ 11,006	\$ 13,208	\$ 13,208	\$ 13,208	\$ 13,208	\$ 13,208
Cost of Goods Sold:										
Total	USD'000	(808)	(2,769)	(5,539)	(6,924)	(8,308)	(8,308)	(8,308)	(8,308)	(8,308)
Gross Profit	USD'000	\$ 476	\$ 1,633	\$ 3,266	\$ 4,083	\$ 4,899	\$ 4,899	\$ 4,899	\$ 4,899	\$ 4,899
Direct Opex:										
Staff Costs	USD'000		(837)	(1,221)	(1,233)	(1,385)	(1,385)	(1,385)	(1,385)	(1,385)
Packaging Costs	USD'000	(13)	(44)	(87)	(109)	(131)	(131)	(131)	(131)	(131)
Grid Power (TANESCO)	USD'000	(103)	(177)	(177)	(177)	(177)	(177)	(177)	(177)	(177)
Diesel Fuel (Generator)	USD'000	(20)	(37)	(39)	(41)	(41)	(41)	(41)	(41)	(41)
Delivery Costs	USD'000	(1)	(3)	(5)	(7)	(9)	(9)	(9)	(9)	(9)
Total	USD'000	\$ (788)	\$ (1,097)	\$ (1,530)	\$ (1,566)	\$ (1,741)	\$ (1,741)	\$ (1,741)	\$ (1,741)	\$ (1,741)
Operating Profit	USD'000	\$ (311)	\$ 536	\$ 1,736	\$ 2,516	\$ 3,158	\$ 3,158	\$ 3,158	\$ 3,158	\$ 3,158
Overheads:										
Management Team Costs	USD'000	(584)	(639)	(639)	(639)	(639)	(639)	(639)	(639)	(639)
Warehouse Lease Costs	USD'000	(56)	(96)	(96)	(96)	(96)	(96)	(96)	(96)	(96)
Land Lease Costs	USD'000	(106)	(106)	(109)	(113)	(116)	(123)	(127)	(131)	(135)
Accounting / Legal / Admin / Payroll	USD'000	(85)	(85)	(85)	(85)	(85)	(85)	(85)	(85)	(85)
IT & Communications	USD'000	(21)	(21)	(21)	(21)	(21)	(21)	(21)	(21)	(21)
Marketing	USD'000	(14)	(14)	(14)	(14)	(14)	(14)	(14)	(14)	(14)
Insurance and Security	USD'000	(35)	(35)	(35)	(35)	(35)	(35)	(35)	(35)	(35)
Travel	USD'000	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)
Miscellaneous	USD'000	(20)	(12)	(12)	(12)	(12)	(12)	(12)	(12)	(12)
Total	USD'000	\$ (928)	\$ (1,015)	\$ (1,018)	\$ (1,021)	\$ (1,024)	\$ (1,031)	\$ (1,035)	\$ (1,039)	\$ (1,043)
EBITDA	USD'000	\$ (1,240)	\$ (478)	\$ 719	\$ 1,495	\$ 2,133	\$ 2,126	\$ 2,123	\$ 2,119	\$ 2,115
D&A		109	116	118	120	122	124	126	130	132
EBIT	USD'000	\$ (1,349)	\$ (595)	\$ 601	\$ 1,376	\$ 2,012	\$ 2,006	\$ 1,995	\$ 1,989	\$ 1,983
Interest Expense		36	190	275	275	275	275	275	275	275
EBT	USD'000	\$ (1,385)	\$ (785)	\$ 326	\$ 1,101	\$ 1,737	\$ 1,731	\$ 1,720	\$ 1,714	\$ 1,708
Taxes		-	-	98	330	521	518	516	514	512
Net Income	USD'000	\$ (1,385)	\$ (785)	\$ 228	\$ 771	\$ 1,216	\$ 1,212	\$ 1,204	\$ 1,200	\$ 1,196
Profitability Margins:										
Gross Margin	%	37%	37%	37%	37%	37%	37%	37%	37%	37%
Operating Margin	%	(24%)	12%	20%	23%	24%	24%	24%	24%	24%
EBITDA Margin	%	(97%)	(11%)	8%	14%	16%	16%	16%	16%	16%
Net Income Margin	%	(106%)	(18%)	3%	7%	9%	9%	9%	9%	9%

APPENDIX I: PROPOSED RENDERINGS

Entrance and Site Overview



Entrance and Office Building



Office Building – Side



Office Building – Front

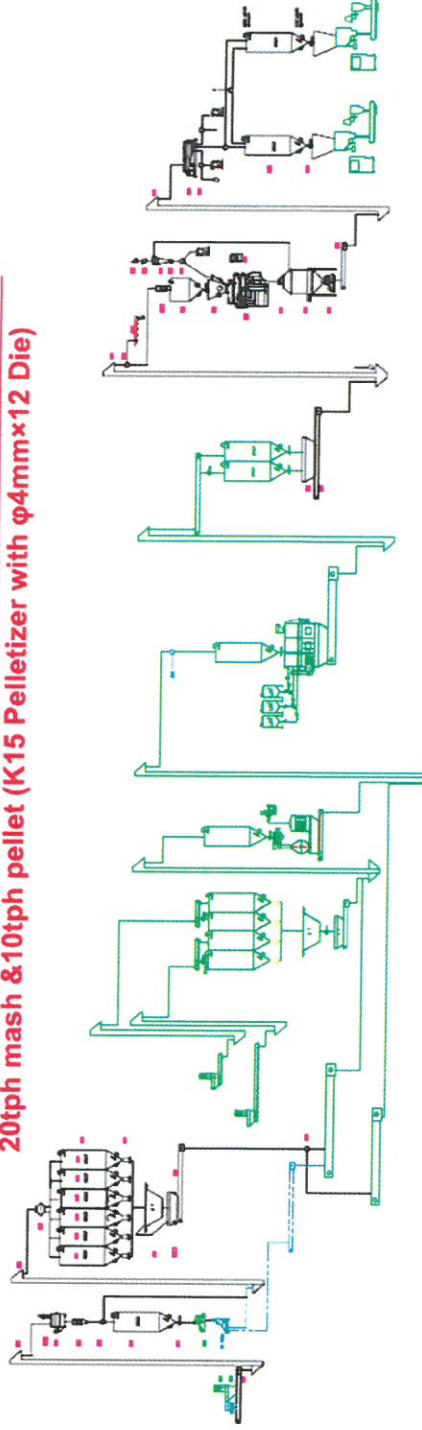


APPENDIX II: PROPOSED EQUIPMENT

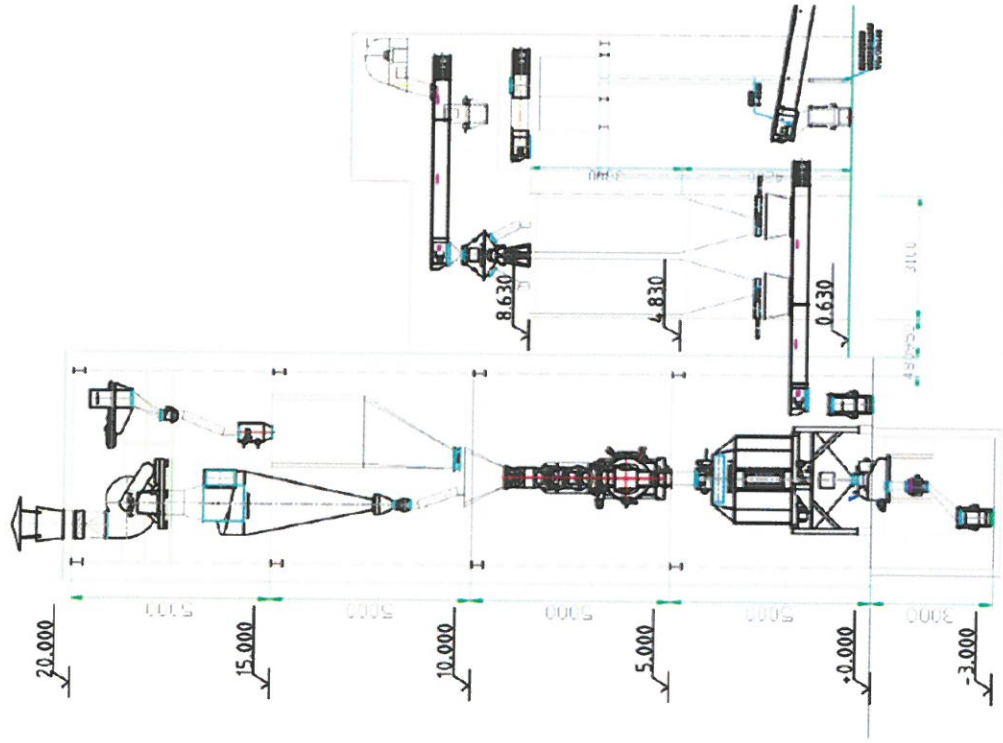
Famsun Flow Chart

PROCESSING LINE FOR POULTRY FEED

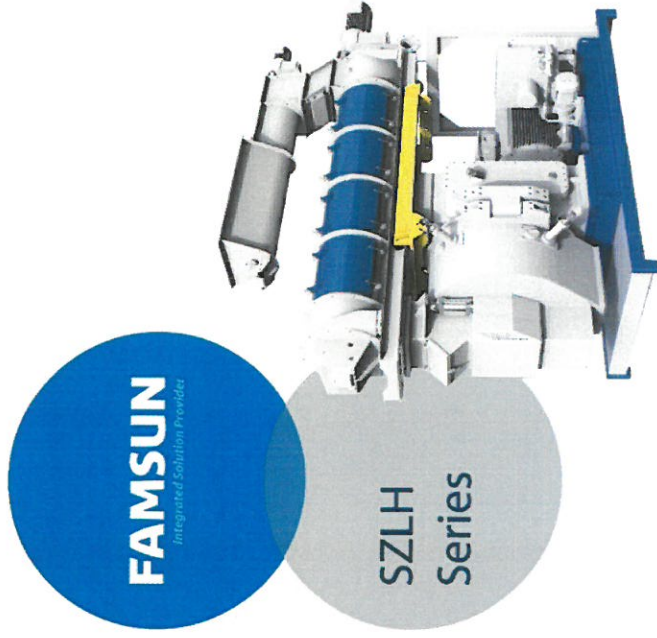
20tph mash & 10tph pellet (K15 Pelletizer with $\phi 4\text{mm} \times 12$ Die)



Famsun Pellet Mill



Famsun Pellet Mill



Gear-Drive Pellet Mill

Gear drives quality and reliable production without downtime.

- Gear drive for reliable production
- High output and energy-efficiency
- Smart control and easy operation
- User-friendly operation

Famsun Mixer

