Building an Integrated Agriculture-focused Business in Africa

The Story of Mahgoub Sons Group

African Hidden Champions

Africa Foresight Group KFW DEG

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Executive Summary

Sudan is one of the least-developed countries in Africa and one of the most vulnerable states to climate change and climate variability, as most of its land is arid and desert[1]. The country's major economic sector is vulnerable to climate change. Challenges that exacerbate this reality include endemic poverty; the unstable political situation and corruption; a lack of systematic managerial institutions; limited access to capital, including markets, infrastructure, and technology; ecosystem degradation and complex social issues and conflicts. These challenges, in turn, have negatively affected the population and weakened their adaptive capacity, hence increasing their vulnerability to projected climate change[2].

Mahgoub Sons Group Background

Formally established by Merghani Mahgoub in 1969, Mahgoub Sons Group (MSG) has been creating systems to benefit the agricultural sector within Sudan. Driven by a desire to see Sudan prosper and her people thrive, MSG has focused on creating the most value where it matters – in local markets.

Despite the company operating throughout Sudan's challenging and tumultuous political, social, and economic upheavals, Mahgoub Sons Group has grown into a multi-division giant that focuses on internal integration just as efficiently as it focuses on supplying services and products to an external market.

A Never-Ending Journey of Growth and Expansion

Mahgoub Sons Group has been laser-focused on creating their own ecosystems of societal development that bridges infrastructure gaps with technological advancement. Their stratospheric rise in agri-business was hard won by careful decision-making, considered risk-taking and a genuine desire to see Sudan thrive.

Growth Strategy

The founder's belief was that agriculture is the key to Sudan's economic and social development, and this belief underpinned the founding of MSG. The African Plantation Company (APCO) is the oldest and largest company in the group, and today, APCO is Sudan's prime leader in crop production. The founder's successor and current CEO, Wagdi Mahgoub, knew that the key to becoming a market leader lay in diversifying the company not only in Sudan, but globally. With APCO being at the forefront, the group has over 6 decades grown into more than 20 companies operating across the agriculture, manufacturing, food packaging, transport, and media industries.

Leveraging Local Knowledge with Mechanisation as a Strategy

MSG has been hands-on in their agricultural production and has over the years accumulated a wealth of knowledge both internally within the group and externally with their contract farmers. This knowledge, coupled with the ambition to mechanise as rapidly and effectively as possible, has been key to their stable crop and processing outputs.

The Future Is Focused on Food Security

MSG understands too well that Sudan is a country rich in natural wealth and resources and as such,

[1] Elasha, Elhassan et al. 2005

[2] Boko 2008

could well be vital in ensuring food security on the continent and beyond.

1. Introduction

For over five decades, the Mahgoub Sons Group has dominated the agri-business market in Sudan. Despite facing many hurdles, internal and external, the group has managed to not only survive but thrive in a challenging socio-political environment.

From humble beginnings as a single product Agri-focused business, the group has since grown into more than 20 companies in multiple industries with an estimation of more than USD100million from exports only. Mahgoub Sons Group exports food products extensively into neighbouring countries. Their cotton and oils are exported to Asia, Turkey, India, Bangladesh, and Europe.

With an almost single-minded focus on dividing and growing, they have staked their claim in the Sudanese agri-business sector as business leaders. Through focused growth strategies that took its cues from the political, social, and economic climate, the group expanded into goods and services that did not only assist other branches of the business to function optimally, but also provided relevant services as a revenue generator to other players within the agricultural value chain.

MSG's passion and vision remain true to the vision of its founder– the upliftment and prosperity of the Sudanese economy coupled with the development and nurturing of its people. True to this vision, the group is responsible for bringing in necessary talent, building infrastructure and creating environments that allow communities to thrive.

The purpose of this case study is to share the incredible story of the Mahgoub Sons Group. From how they have managed to institutionalise to how they have navigated challenges that plagued the industry for decades, this document proves that this African Hidden Champion is formidable, ambitious, and inspiring.

Takeaways for various stakeholder groups from this case study:

For Academia, this document will prove useful in terms of understanding the political, social, and economic landscape of a country with as complex a history as Sudan.

Corporate stakeholders will find that the study delves deeply into business strategies that were focused on massive growth and the potential of the Agri-sector in Sudan.

Policymakers and regulators will find in depth information on what policies worked and what did not as well as future-looking opportunities which favourable policymaking might facilitate.

For potential investors, an in-depth overview of the market size and potential is expanded on with information that will lead to astute decision making.

Outline of the case study

Chapter 2 focuses on the origin story of the group, from the conceptualisation of the first company to its growth into various divisions.

Chapter 3 outlines their rapid progression into value addition and how this operates within the greater group.

Chapter 4 investigates what the future holds for the group and what they are doing to secure that future.

2. The Origin Story

5 Decades of Growth: Towards Becoming Sudan's Prime Leader in Farming and Agribusiness

2.1 Agriculture is Key to Sudan's Economic and Social Development

Agriculture has always been the mainstay of the Sudanese people. From Nomadic farming to pastoral communities, the passage of time, political influence and economic evolution has changed the face of this noble industry.

Historically, there have been many reasons why this industry has been hamstrung. Presently, this negative trend is changing and this change – whilst not as rapid as industry players might want – presents great opportunities for expansion and innovation.

2.2 Fifty years of Pioneering: The Founding of MSG

In a tumultuous, politically fraught Sudan, the late Mr. Merghani Mahgoub believed that the key to Sudan's economic and social development would be to focus on building the agricultural sector. Through such development, Mr. Merghani Mahgoub believed that the growth of the country would be bolstered. Feeding the nation and exporting the overshoot was where he saw the best value to contribute to his country. Among his many achievements, Mr. Mahgoub was elected to represent the state of New Halfa in parliament in 1966 and established Sudan's first agricultural consultancy.

The Beginning: Emboldened by his dream, Mr. Merghani Mahgoub completed his studies at Gordon College, now known as University of Khartoum, with a degree in Agriculture in the 1950s and subsequently started the Mahgoub Sons Group in 1955.

The company's primary activities were focused on sorghum plantations in El Gedarif State, located in the east of Sudan. Sorghum was at this point a major export product in Sudan as well as a staple food crop.

The Birth Of APCO: In 1969, Mr. Merghani Mahgoub expanded his activities by establishing the African Plantation Company (APCO) which focused mainly on the production of cotton, sunflower, and sesame seeds. This was at the time the oil industry found a footing in Sudan and the battle for the survival of the agricultural industry began.

Nestling among his many visionary goals was a defined goal of becoming an agricultural leader in Sudan with the aim of empowering Sudanese people to contribute towards a better developed Sudan. He envisioned a nation that was well out of poverty, producing enough to feed themselves and the world. Ultimately, he wanted Sudan to be considered an agricultural leader on the continent.

At that initial stage all those years ago, amongst Sudan's many challenges – political, social, and economic – was an excessive reliance on cotton as an economic driver.

APCO's Growth: The founder's vision has continued under the stewardship of the current CEO, Mr. Wagdi Mahgoub, to create Sudan's largest agri-business company. The CEO realised that reliance on a monocrop i.e., cotton which was at the mercy of a very volatile market would not be a driver of growth for MSG. There was a need for bulk dry-packaged goods as well as foods with a long shelf and he saw this as an opportunity to expand into a repackaging business.

True to his vision, he went on to build Sudan's largest and most successful agriculturally focused company.

APCO currently operates on more than 200,000 acres of arable land across Sudan[3] and continues to grow its foothold. It provides all the necessary raw inputs for the rest of the Group's divisions for exporting and further processing.

APCO's approach to farming is collaborative in nature. They have adopted the approach of joint venturing with local small-scale farmers. The farmers provide land, water, and the requisite labour, APCO then provides world-class agricultural inputs like seeds, fertilizers, and chemicals, all of which are ethically sourced and imported from various countries.

In keeping with this collaborative partnership, APCO supplies farmers with machinery, technical and management advice as well as farming implements that helps to achieve better yields.

2.3 Building a Diversified Business Conglomerate

1969- *The African Plantation Company (APCO)*

Politically, Sudan was undergoing immense socio-political flux, having emerged from the political unrest of the 1950s, and proceeding right into another coup. As turmoil loomed, the goal of creating civil peace was at the forefront of the government's developmental agenda. The Gezira Cotton Scheme, one of the largest irrigation systems in the world, was perhaps the most important agriculturally focused project of the time. It began under British administration and was eventually handed over to the Sudanese Government. With its construction spanning from 1925 to 1957, the project would eventually cover over 840,000 hectares of land[4]. It was around this time that smallholder farmers and entrepreneurs expressed the interest of investing in their own mechanised farms to tap into the irrigation facility provided by the government. And so began the growth of the sorghum industry as the first mechanised crop in Sudan. Between 1960 and 1969, macroeconomic policy was stable, focusing primarily on the expansion of cotton production and export. Whilst policy did not necessarily favour the private sector during this period, the increased governmental budget on agriculture was helpful in growing the sector.

The Deciding Factor: Mr. Mahgoub, being an astute young businessman at the time, recognised the opportunity to build a company that would focus on cash crops and thus established the African Plantation Company (APCO).

This flagship company had concerned itself primarily with sorghum farming and soon moved into other cash crop production.

How is APCO Different: APCO has a focus on zero-tillage, rain-fed agricultural farming because of the intensive expenditure and significant public sector intervention that accompanies irrigation-farming. Additionally, contrary to the norm in Sudan, APCO has a laser-like focus on mechanising all their processes and extensively uses technology imported from Europe to assist them in their production requirements.

By changing from labour intensive systems to technology driven automation, with systems such as vertical farming integration, APCO does not necessarily have the same labour retention issues that plague most of the industry. That is not to say the business is not without any labour issues at all. Being dependant on seasonal migrant labour from neighbouring Eritrea, for instance, means that they are dependent on the State to allow the free movement of migrants. It also meant, that during the worst of the Covid 19 pandemic, they faced severe labour shortages. Currently, the business faces a 'labour drain' with more people migrating from rural areas to urban ones.

How Has APCO Developed: Very recently, APCO introduced precision farming – a management concept based on observing, measuring, and responding to variability in crops. This move has increased their productivity, bringing them on a par with other successful international agricultural companies.

As the oldest and most important division in the MSG group, APCO is responsible for crop harvesting and

[3] https://mahgoubsons.com/divisions/agriculture/apcompany/
[4] https://webcache.googleusercontent.com/search?q=cache:Zr1AF-YMRUoJ:https://media.africaportal.org/documents/Sudan.pdf+&cd=3&hl=en&ct=clnk&gl=za

subsequent supply to the other divisions within the MSG group for value addition and further processing.

The bulk of their crop cycling and harvesting is fully mechanised except for cotton – here, the process is at 95% mechanisation. From APCO, the value chain extends downward to the other divisions.

APCO's farms are spread quite vastly throughout Sudan, due to the climate variabilities associated with the reliance on rain-fed agriculture, and logistically, it is far more efficient for them to localise into regions. Each farm is equipped with warehouses, stores, staff housing and workshops. This means that post-harvest processing can take place at source to a point before products are transported to the next destination.

This modern farm management system was first implemented at APCO's largest farm in Gedarif State. Once the management system proved fruitful and successful, it was rolled out further to all the other farms.

APCO's productivity drivers sees cotton as the most important cash crop, representing 59% of the total production. The company also plants and harvests sorghum, soybeans, sunflower, maize, and millet while outsourcing the farming and harvesting of sesame.

Sesame once accounted for the highest revenue, however, it proved to be very labour-intensive and was thus replaced by APCO's cotton operations.

Sesame is a crop best fit for small scale farmers and the current strategy is for APCO to source sesame from the best growers in all parts of Sudan.

Dividing to Conquer

With many branches of the business outside of Khartoum there was no real structure; often, these branches lacked a clear setup, hierarchy, and job titling, amongst others. The many moving parts required a focused vision of unifying the operational side of MSG starting with HR and IT.

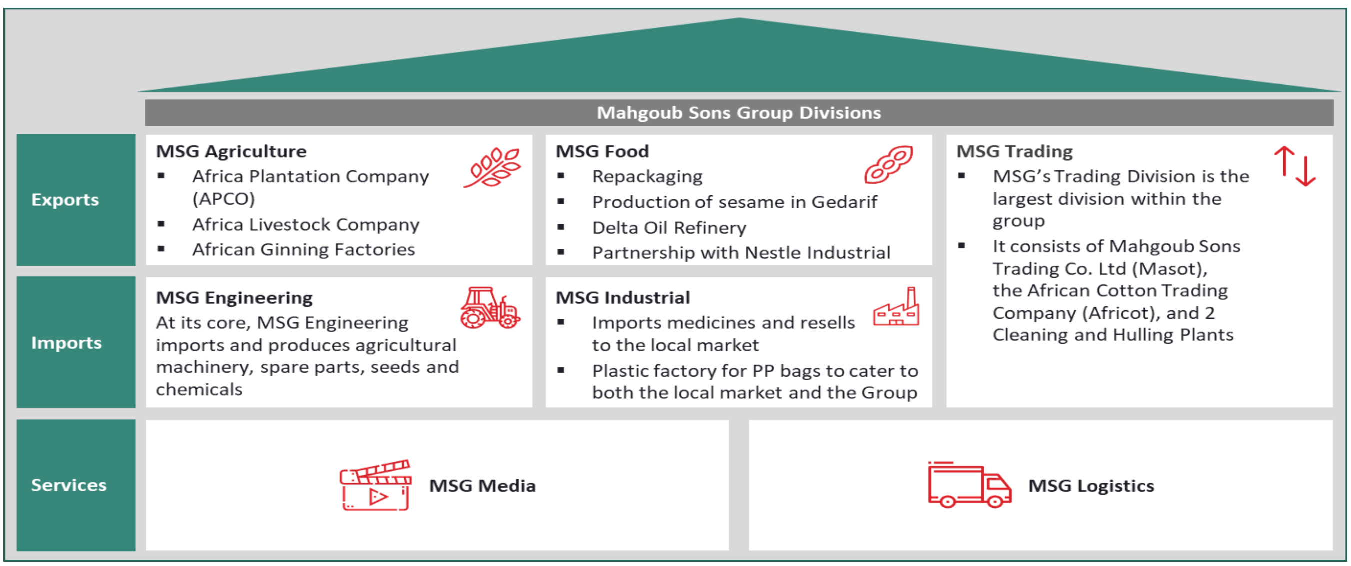

Figure 1: Divisions of Mahgoub Sons Group

Growth into The Various Divisions

The various divisions that were created to service APCO's specific needs and later, the needs of the industry in general, were:

➡ Agricultural Division (1969)

This is the second largest division within the group. This division houses APCO and is responsible for crop output that feds the Trading Company. The group currently operates 9 farms countrywide and owns one farm in the El Gedarif state. This farm has been under the ownership of the company since the 1950s. The number of farms they contract with fluctuates each season due to a variety of factors.

Engineering Division (1979)

Between 1969 and 1981, Sudan was undergoing what was arguably the worst period of its economic history. The focus on building parastatals by government to the exclusion of the private sector hamstrung the growth of the economy quite severely. With constrained ability to produce and move goods due to deficits in infrastructure, this division, which is third largest within the group, grew out of a direct need for technology, machinery, parts, and labour for MSG's own agriculture division. As a company determined to use technology to advance their own growth, see better crop yields, and add further value to their own outputs, management realised quite early on that the only way forward was to mechanise wherever possible. Today, MSG Engineering is the preferred partner of several European and Asian machinery and engineering companies.

MSG Engineering is proving to be one of the most promising divisions in terms of growth. Most of the other agricultural players within Sudan do not necessarily want to, or are unable to, invest in their own machinery and MSG Engineering has become a leading supplier of agricultural machinery, parts, servicing labour and mechanical workshops for repairs in this market.

Management believes that this division underpins the success of the previous agriculture and trading divisions. This division's revenue success is seasonal due to the nature of seasonal agriculture.

Trading Division (1990)

The early 1990s witnessed a continuation of the civil war in Sudan. Continuous violence, coupled with famine and disease outbreaks saw the Sudanese economy wither away further. With severely reduced spending power, Sudanese people were looking for ways to stretch their money, and bulk-buying was a good option. Furthermore, the Central Bank liberalised its spending focus from agriculture to retail during this time as well. This policy, among other considerations, led to the formation of the trading companies of MSG.

Today, the trading division is the largest division in the group. It contributes approximately 60% of the group's total revenue. This division operates by exporting the products that the agricultural division produces. They export the outsourced sesame, sorghum, cotton, sunflower, and lentils and import sugar, wheat, gas, oil, chemicals, and fertilizer.

After the lifting of trade sanctions against Sudan by the United States of America (USA), many companies in Sudan found themselves capable of expanding a little further, and MSG found a niche in manufacturing packaging materials for both the group and complimentary industries within Sudan through Afriplast. Also, because of robust export practises to China, India, Egypt, Turkey, Europe and Pakistan, MSG could further expand on the varieties of cotton they grew through Africot. Presently, plans are well advanced to acquire a cotton processing plant as well as a textile manufacturing plant to further add value to MSG's cotton production. Management believes the efficiency in cotton production makes it easy for the cotton processing plant to be sited in Sudan whilst the textile manufacturing plant is envisaged to be built in Ethiopia, due to favourable human capital conditions in addition to the availability of low cost electricity.

Logistics Division (1992)

At this point in its history, Sudan was highly saddled with external debt. The currency was devalued by the government to encourage the exportation of goods like sugarcane, cotton, peanut, sorghum, sesame, and gum Arabic, along with livestock. This, among other factors, hindered the development of the services, logistics and industrialisation sectors in Sudan. Most markedly, history points to the British colonial rule which preferred to keep Sudan as a source of raw materials and a market for British manufactured goods[5].

In this era of Sudan's developmental history, inadequate infrastructure, like the scant availability of reliable railways and tarred roads, made taking advantage of the devalued currency with exportation a challenge.

[5] Agricultural Science Research Journal Vol 1(1) pp. 1 – 29., February 2011

The logistics division of MSG emerged out of a dire need to get products to market in a timely and reliable manner. Amid fuel and power shortages, the Commodore Transport Company began by investing in one truck. Presently, the company possess a fleet of 150 trucks which do not only service the group's logistical needs, but those of the general market as well. The creation of this division allowed MSG to control the narrative around the timing of their internal logistics and their speed to market. In the face of the general challenge of logistics in Sudan, MSG will continue to expand this division too as this division provides 52% of its overall servicing capacity to the group itself and 48% for the external market. The plan is to expand the fleet of trucks to 1,000 in the short-to-medium term and invest in river transportation and storage facilities in Sudan and Egypt.

➡ Food Division (1994)

During the escalating violence of the civil war, displacement of people, bombings and general strife, the local market for lower-priced processed Sudanese goods was gradually growing. The Food division, a relatively new one, has a focus on the importation and repackaging of foods like sugar and wheat.

The four subsidiaries in the food division are responsible for:

1. ***Value Addition to Sesame:*** *T*here is the primary task of adding value to sesame production through further processing of the sesame into oil, tahini and halwa at MSG facilities in Southeast Khartoum. Halwa is one of the top ten foods consumed in Sudan. Management is looking forward to expanding the production of Halwa and considering introducing three other sesame-based products in the fourth quarter of 2021.

   Cleaning and Hulling- After the sanctions imposed by the USA came into full effect, the company realised that the only way the sesame division could further grow would be to focus on adding integrated value, with a focus on the local market and exports to the Sahel region. In line with the company vision, MSG added this division to further process the sesame crops they were purchasing from farmers. This included hulling and cleaning equipment which facilitated a rapid move along the value chain to the next link.

2. ***Repackaging:*** This subsidiary focuses on repackaging imported foodstuff like sugar, lentils, rice, and milk for reselling within Sudan and neighbouring countries. Consumer behaviour led to the establishment of this division. At one stage, consumers only wanted dry bulk products because it suited their buying power. This later changed after the oil boom. As purchasing power increased, consumers now wanted smaller pre-packaged items and they wanted a bit more variety in the items they bought. This led to growth in the retail and supermarket sector. Consumers subsequently wanted canned and pre-packaged goods and were willing to pay more for it. This change in market circumstances facilitated the decision to re-introduce and re-invent MSGs packaging facility called Delta Food Processing. In 2011, the company began by repacking dry goods specifically and created a local distribution network which helped to better forge ahead with the value-added sesame product.

3. ***Expanding edible oil refining***- MSG's goal is to grow this division significantly in the next two years. Management is focusing on creating value from crop production streams with oil nuts like cottonseed, peanut, and soya in addition to sesame. The refinery development has been delayed because of the revolutionary civil action and Covid 19 but management is confident the plant will be fully operational by Q4 2021. This refinery sits apart from that of the major competitor, Savola. The management of the food division intend to have an element of circularity within the refinery operation, where the waste products such as nut meal is added to the feed of the animals in their fledgling animal husbandry operation.

4. ***Developing partnerships-*** The division recently partnered with Nestlé International for the distribution of their dry packaged goods with a view to adding an element of local manufacture to Nestlé's meat alternative product in Sudan. Despite meat being quite abundant in Sudan, it is beyond the reach of most local people in that

it is quite expensive. Nestlé has a long legal border trading history with the country and the partnership between MSG and Nestlé was born out of a need from the MSG side to partner collaboratively with an FDI. This partnership comes with transfer of knowledge, training, investment, and equipment. The food division is a promising division for the MSG group and management plans to expand their processing activities into oil refinery on a grand scale.

➡ MSG Industrial (2014)

This relatively new division, founded on the Al Mahgoub Pharmaceuticals Company, is a small contributor to the group's top line. It was founded out of Central Bank of Sudan's policy to dedicate 10% of export proceeds to the import of medicine. The growth that is required in this division is heavily dependent on the equitable and just creation of laws and policies by Sudanese lawmakers - laws that would aid the importation of scheduled medication into the country. However, the direction is likely to be in supporting livestock projects and expanding into veterinary medicine.

➡ Media Division (2015)

The media business was set up primarily to educate and change the narrative around how agriculture is perceived in Sudan. The media division also serves as a revenue generator from the sale of advertising space and airtime. There are two media companies set up within this division: Sudania 24 TV and Blue Nile Media.

2.4 Where Mahgoub Sons Group stands today

Since its inception, MSG has remained a family-oriented and driven enterprise. From having started out with just the African Plantation Company in 1969, the company has now grown well across various sectors and industries, from food packaging, manufacturing and logistics to media production and engineering.

MSG currently owns over 20 companies in multiple industries. These companies directly feed revenue into the MSG portfolio, supplying services and/or goods to the company as well as to external industries.

Sitting at the helm of this company is Dr. Wagdi Mahgoub, son of the late Mr. Merghani Mahgoub.

MSG currently employs 1,500 people across all their divisions, with this number fluctuating somewhat during harvesting peak seasons. During the harvest season, the company engages with approximately 3,000 seasonal labourers from neighbouring Ethiopia.

Currently the executive board primarily comprises members of the Mahgoub family, with key decision-making positions solely held by the family. They also recognise the need to change this structure for their next chapter of growth and are undergoing restructuring which includes expanding the board to non-family members and moving to more corporate structures. Family values, quick decision-making capabilities and a willingness to see their country thrive is what makes this group of companies one of Africa's hidden champions.

Key Takeaways

- MSG has always had a focus on social and economic development
- The political climate has not always proved favourable to the growth of the private sector in Sudan but that did not stop MSG from dominating the sector
- Growth into various divisions was out of a need to diversify their holdings and was quite often driven by socio-political factors
- The group is passionate about value addition, mechanising and automating processes to increase productivity and that sets them apart from their competitors
- MSG has a healthy appetite for considered risk-taking which has been pivotal to their success

Figure 2: Mahgoub Sons Group Timeline

1969
- African Plantation Co.

1978 – 1985
- ERCP

1979
- MSG Engineering

1990 -1993
- NESP

1990
- MSG Trading

1992
- Commodore

1994
- MSG Food

1998
- Cleaning & Hulling

2007
- Liberty Steel

2009
- The Gum Arabic Act of liberalised trade
  - This had a major impact on improving production and benefits to smallholder farmers.

2010
- A new Seed Act.
  - To upgrade the National Seed Administration to ensure plant breeders' rights and provide regulation of the seed production chain.

2011
- The Agricultural and Livestock Professional Organisation Act of 2011
  - Replaced existing laws on farmers, producers, and pastoral unions and establishes the legal basis for new producers' organisations.

2012 – 2014
- Economic Salvation Programme
  - Respond to challenges of the secession, a reform programme was created to address deterioration of the country's economic situation via exchange rate reform, tax increase and imposing higher import tariffs.

2013
- A Comprehensive Food Security Policy was formulated (with technical support of FAO) and is awaiting official endorsement.
  - Incorporates actions on food security and nutrition policy, identifying players, timings, and synergies to already ongoing food security-related endeavours.

2015
- MSG Media

2016
- Cotton Ginning

2017
- African Livestock Co. & Sesame Processing Plant

2018
- Africot
- Sudan National Drought Plan

2021
- Delta Oil

Highlights

1997
Economic sanctions imposed.

2011
Secession of the South

2017
US lifts sanctions (in theory)

2019
Sudanese revolution and regime change

Transitional government formed with Dr. Abdalla Hamdok as Prime Minister.

3. Pioneering an Integrated Value Chain

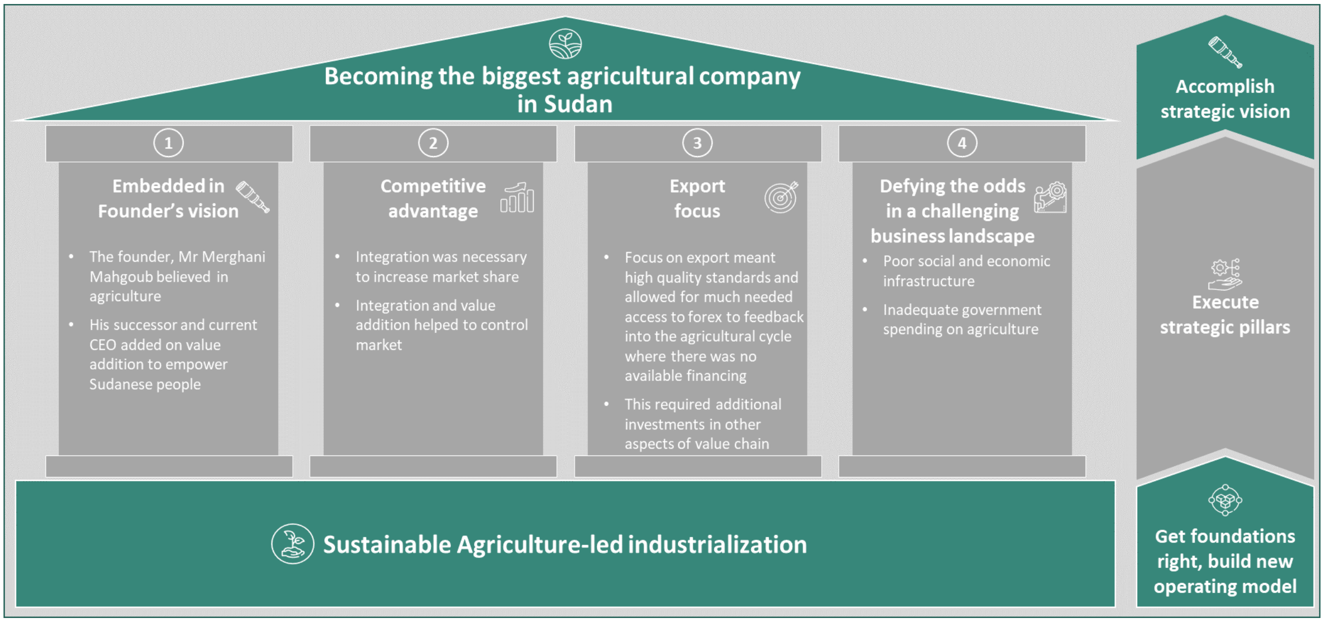

Figure 3: Factors behind Mahgoub Sons Group's growth into a diversified agri-business

Boldness in business stems from the very roots of MSG's foundation, with the founder having stepped out of the comfort zone that most players in the agricultural industry found themselves in. He dared to think past sorghum and cotton and envisioned a highly mechanised way of farming that to this day, makes MSG a formidable company in Sudan. Mahgoub Sons Group is, in terms of revenue and volume, among the largest agricultural business in Sudan. According to Dr. Wagdi Mahgoub, the Group CEO, the market is in dire need of more competition to encourage growth in the sector. In the cotton value chain, MSG accounts for 40%-50% of the total export volume out of Sudan. In the sorghum value chain as well, MSG accounts for 60%-80% of total exports, depending on season.

There are four pillars that have underpinned MSG's integrated growth journey to becoming one of the biggest agri-business companies in Sudan. They are:

- ***Founder vision***
- ***Competitive advantage***
- ***Export focus and value addition***
- ***Defying the odds in a challenging business landscape***

3.1 Founder Vision

As a family-founded company, the founder's values are the mainstay of the group's growth.

Merghani Mahgoub believed that contributing to the empowerment of the Sudanese people would take place through a positive contribution to the economy. This is the driving force behind the value-addition strategies at every step of the group's growth.

Nestled within their strategies around value-integration lays a complex blueprint that enfolds practically all the groups' divisions.

Value Addition to Crop Outputs

The Reason: MSG, very early on in the game, recognised that adding value to the crops that were native to Sudan assisted them in both local and international distributions.

The Method: Through a systemic approach to processing, they addressed each crop output.

Cotton

Initially, the value chain ended at baling, but in 2016 they invested in their own ginning plants. The Cotton is sent on to the Africa Ginning Company to be ginned and from there sent to the trading division for export. The Cotton is then exported to the Far East, Turkey, Bangladesh, Egypt, Ethiopia, India, and Pakistan.

In 2018, Africot was created to further expand on the value chain. To ensure that their cotton meets international standards, MSG has an internal team of experts overseeing the final quality standards and they also send their samples for testing to labs in Liverpool and Bremen.

Sesame

Sesame seeds are cleaned and hulled at a group-owned company in the Gedarif State and then sent onward to one of three destinations: Almahgoub Factory for Sweets, Tahniya and Tahini, where it covers 100% of the factory's needs, or is sent onto the Delta Oil Refinery to produce sesame oil. There are plans afoot for several new sesame-based processed products to be marketed within 2021.

Sorghum

Sorghum is cleaned, packaged, and exported through the MSG trading division.

Value Addition to Human Capital

The Reason: In their mission to empower people, MSG takes the task of upgrading the skills of people very seriously. In recent times, Sudan has experienced a serious brain drain and has lost a lot of talent to Europe and other African countries.

The Method: As an integral part of their internal growth strategy, MSG established partnerships with local Technikons and trade schools and uses this as a resource pool from which talent is fished.

Some divisions within the group run a three-month internship program together with these educational institutions and find gems within the pool of interns that pass through their doors.

Historically, the government expenditure on research and training in agriculture has always been low. Training usually happens in-house and there are plans to launch the Merghani Mahgoub Institute for Rainfed Agriculture in Gedarif.

MSG is also looking to establishing a research institute in El Gedarif. This facility will focus on two areas:

a. Training and development in advanced machinery and modern smart-farm management

b. Research which will include seed development, crop disease solutions, etc

Employees benefit from an in-house bonus system. In addition, staff also receive cash in hand to assist them in covering expenses over the two major festivals in the Islamic calendar. The company also facilitates the subscription of employees to a health insurance scheme.

The group has been keen to impart knowledge across the various generations of engineers and farmers since 1969, based on the belief that adopting new knowledge and technologies in the agricultural field is a continual journey of self-education which rests on a strong foundation of values.

This extended technical and practical experience transferred through multiple generations has been an effective contribution to MSG's exponential growth over the past 50 years. The group has proved that it can adapt to change, and in many cases, they lead the change themselves.

3.2 Competitive Advantage

Staying relevant by staying ahead of the competition has come with highly focused investments and partnerships for MSG. Apart from integrated value-addition being core to their company principles, the principle has also been employed as a competitive strategy.

Sustainable Mechanisation

Climate change mitigation is one of the key areas of focus for MSG. It is a well-known fact that the Global South is experiencing the worst effects of climate change. The reasons for this situation vary from an over reliance on early mechanised irrigation systems to the downstream negative effects from the developed North.

Countries in the Global South that rely on agriculture as an economic driver are the unintended victims of climate change and its accompanying effects of extreme weather changes, poor crop yields, disruptions in rainfall, and labour-loss through climate migration. APCO is one of the very few agri-business companies in Sudan that fully exploits the benefits that automation can bring to the company's bottom line and the country's sustainability goals.

It extensively uses technology to help its agricultural outputs, making use of:

- Climate adaptive practices and training their contract farmers in these practices
- High tech planters that plant automatically - with more precision and speed
- Land preparation equipment from Australia that focus on zero-tillage and soil preservation
- Aerial sprayers for herbicides, pesticides, and fertilizers from Europe
- Efficiency-driven cotton pickers that are for cotton harvesting
- Cotton strippers from Argentina
- Cotton pre-cleaning machines to ensure speed and accuracy during the cleaning process
- Specialised machinery imported from China to create blocks from the cleaned cotton for ease of transportation
- Specialised cotton trailers for transporting imported from China

MSG's aim is to procure more machinery and mechanised systems for further automation in their production operations. They are also on a mission to mitigate the effects of climate disruption to the agricultural landscape in Sudan and currently employ several methods to overcome water wastage. The group is in the process of implementing a 5-year long project for water harvesting and land levelling that will help combat the downstream effects of climate change in Sudan by minimising the effects of heavy rainfall that causes crop damage. In addition, the water harvesting project will give them the ability to maximise the captured water and thus plant twice in the year and double their production.

Collaborative Contract Farming

MSG is considered a pioneer in the contract farming model in Sudan as they were the first company to introduce this system in 2013. This model is based on providing all the inputs of the agricultural process like the seeds, fertilizers, and pesticides to the farmer free of charge. In return, upon harvest, MSG buys the crop back at a fair value less the cost of the inputs. Any excess products are sold to whomever the farmer chooses.

This contract-farming model has been extremely valuable and mutually beneficial for both parties. This model of knowledge, technology and skill transfer has been revolutionary in changing agricultural practises in Sudan. This system caused a revolution in the irrigated agriculture sector because unavailability of agricultural inputs was a constant threat to the agricultural seasons in Sudan, either because of the lack of adequate financing or because of the poor quality of the inputs. MSG is focused on the rain-fed sector and in Sudan, rain-fed agriculture accounts for 90% of raw agricultural products. The reasons for the focus on rain-fed agriculture are climate-friendliness, the relatively more expensive nature of artificial irrigation, and existing government investment for most of the irrigation projects in Sudan.

This contract farming model has provided the company with strong experience in this field despite the great difficulties and risks. Amongst these risks are the total absence of governing law or policy that would protect the company in the event of any breaches to the contracts concluded with the farmers, and the lack of banking infrastructure that would allow for monitoring of funds and control of transfers for operations.

3.3 Export Focus

Access to global markets is considered a major advantage in this industry. This has enabled MSG to foster strong global partnerships directly with their customer base, avoiding the ubiquitous raw crops exportation. For this strategy to be effective, MSG has established contact offices which are distributed strategically in the East and the West.

MSG has been hyper-focused on meeting international quality standards. This has meant more than adequate investment in creating systems around the products they export. From developing their own packaging plant to guarantee standardisation and visual appeal for their finished products, to ensuring timeous deliveries, MSG looked at the value chain quite holistically and remedied any gross inefficiencies.

More recently, they have been undergoing a series of training in Halal, HAACP, ISO 9001 and ISO 22000 international quality standard certifications. This is vital in terms of capturing a broader export audience.

International Talent Sourcing

The group is heavily invested in procuring international skills and talent to train their own staff members and teams. The knowledge and skill transfer programs run by the group span from South Africa outward, and this provides the ever-growing divisions with new knowledge inputs.

3.4 The Challenging Business Landscape

Sudan has long had its fair share of political, social, and economic woes. A civil war, sanctions and multiple coups have interrupted the economic growth of the country and hindered the ability of many businesses to thrive within a country as rich in natural resources as Sudan.

Over the decades, various governmental administrations rotated in and out of power, each with their own economic priorities and agendas.

A High-Level Political Overview

1969 – 1981: President Jaafar Nimeri came into power under a military regime. Under his leadership, all production was state controlled. Companies such as the Oilseeds Company and Cotton Company were set up to buy local crops and export them. There was a strict ban on exports, and anyone who dared to export had their export proceeds confiscated by the government. This led to decreased income for farmers and a reduction of investors in Sudan.

1981-1998: In 1983, President Nimeri introduced the Shariah law which changed the financing policies of the banking sector to Islamic finance. In 1985, however, Sudan experienced a second revolution which replaced Nimeri with a democratic government that lasted until 1989. This government was characterised by political conflict and disagreements.

1989 saw another military coup, with President Omar Al-Bashir in alliance with the Muslim brotherhood, locally known as “Inqaz”. Inqaz implemented a free-market policy which led to hyperinflation and currency devaluation. Prices of inputs went up drastically, making it difficult for farmers to produce.

1998-2011: Petroleum was discovered in Sudan in 1998. However, the secession of the South eventually led to Sudan’s loss of petroleum. In 2005, the Comprehensive Peace Agreement (CPA) was signed to mark the beginning of the road to secession. In those years, there was a 5-year program that addressed Agriculture Revival. This increased government focus on agriculture, but there was no actual implementation of the program.

2011-Current: The Agriculture Revival Program was extended, leading to tax exemption on agricultural inputs and machinery. There was increased government interest and spending on agriculture. However, the government had an increased trade balance deficit and lifted subsidies on several occasions.

In 2019, the Sudanese revolution occurred. A transitional government was put in power. In 2020, the government cancelled the 10% of export proceed deduction. Currency in Sudan, however, continues to devalue (currently 500SDG/1USD).

The intricate political history of Sudan, as described above, has seen several failed reform programmes and multiple stop-start development initiatives.

The political and societal unrest has made investors wary about Sudan, but this rhetoric is slowly changing. Most recently China, as a part of their South-South Investment Initiative, injected USD1.5million towards enhancing productivity and competitiveness within the crops and livestock sectors. This is a positive gesture that indicates to other potential investors that Sudan is ready to move forward economically.

Trade sanctions and being on the USA SSTL (State Sponsors of Terrorism List) had crippled Sudan's ability to economically compete in the international arena. Their complex history of civil unrest and economic sanctions severely hamstrung export companies in terms of procuring agricultural inputs, forex, and skilled labour.

However, with the sanctions being lifted in 2017 and the finalisation of the removal from the terrorism watchlist in 2020, Sudan could begin building investor confidence to grow the agricultural sector.

Unfavourable policy decisions which have had direct significant negative effects on MSG's business growth included:

- Fuel price hikes which led to increased cost of production
- The Central Bank policy of a 10% reduction in export proceeds to support the health sector which led to reduced margins at the official exchange rate at the time
- Onerous registration process for seeds and chemicals is required to register new variants which has led to an inability to diversify crop varieties
- Increased taxation at various levels within the supply/value chain which leads to an increased cost of production and uncompetitive products in the export market
- Liberalised Central Bank policy to support retail financing in the 1990s to the exclusion of production which naturally led to decreased productivity due to an inability to access financing

Meeting Challenges Head-On

Mahgoub Sons Group has navigated a series of complexities within the Sudanese political and economic climate. They have managed to control a complex business environment internal to MSG and have cemented themselves as an integral part of the Sudanese economy.

Internal Challenges: As with all companies experiencing growth, MSG has experienced its own difficulties associated with its expansion.

The nature of these challenges is purely associated with the growth of the internal structures of management within the company.

Some of the challenges highlighted are:

1. ***The wide range of operations throughout the country:*** The group had multiple operations outside of Khartoum.

   Management solution to challenge: Consolidation with the aim of cohesive communication was a necessary step in integrating the group.

2. ***Increasing production:*** With this comes the challenges of skilled labour, investment, and quality assurance.

   Management solution to challenge: An investment in QC training, setting up training facilities for staff, a focus on incorporating international quality standards, and the hiring of international talent to facilitate training of local staff.

3. **Introduction of organisational cohesion and proper management structures**: From being a family-run company to being an integrated

group with an executive board, the learning curve was quite steep.

Management solution to challenge: Communication strategies that focus on the family constitution and their corporate governance project.

External Challenges

As the top agricultural company in Sudan, remaining at the top requires constant vigilance especially with respect to competitor activity and growth as well as having control over the image of the company and the brands the company holds within the external marketplace.

Some of the challenges highlighted are:

1. ***Logistics*** – Sudan, as a developing economy, still does not have adequate road infrastructure that supports the ease of movement between ports and production sites. There was also a distinct lack of logistic companies that were reliable enough for MSG.

   Management solution to challenge: The Commodore Transport Company was created to mitigate first, the risk of delayed timelines of deliverables and second, to generate revenue from external players.

2. ***Availability of forex*** – Exchange rate fluctuation is a key risk for any company that spends in foreign currency while earning revenue in local currency, and MSG is no exception. In Sudan, such companies are at the mercy of the extreme fluctuations of the exchange rate daily, a situation that specifically affects the Trading Division.

   Management solution to challenge: By having their own reserves of forex as well as the satellite offices globally, MSG is are able to make contingency plans internally for their forex needs. They also prioritised export sales to avail forex for themselves.

3. ***Access to adequate agriculturally focused funding*** - Sudanese banks' ability to finance agricultural projects is diminishing day by day. Local banks provide minimal financing mostly for some inputs or small purchases due to governmental regulation and fluctuations in foreign currency. Within Sudan, CAPEX is heavily regulated by the government, but agricultural machinery is exempt from this. Externally, all financing options possible during the first part of the 21st century became impossible as a result of the embargo.

   Management solution to challenge: MSG mainly focuses on retained earnings to finance CAPEX.

Funding Challenges in More Detail

The Agricultural Bank of Sudan is the leading institution in terms of agri-finance, but their investment capacity has dwindled by more than 60% over the years. By reinvesting retained earnings, MSG mitigates the worst of the systemic challenges that exist in the funding sector. Local banks usually offer very short funding cycles which does not necessarily facilitate the commissioning of large scale, drawn out projects. For this reason, MSG uses its international offices to help facilitate external financing.

Under normal circumstances, MSG ploughs back 100% of retained earnings into the business, however, with the restructuring processes, this is no longer a feasible approach for expansion.

Key Takeaways

- Challenges from politicking, social and economic arenas have hamstrung processes of growth within MSG
- Each challenge required out-of-the box thinking and solutioning that did not always make immediate sense
- MSG has had to circumvent governmental laxity by investing heavily in the agricultural sector themselves

Key Takeaways

- The investment into the sector has allowed them to carve a niche in the industry as veritable leaders and changemakers
- They have heavily reinvested their retained earnings into their business to be able to grow unhampered by external factors
- An effective method of circumventing policies and funding challenges was the opening of satellite offices abroad which allowed them access to markets and funds not ordinarily available

4. Future Proofing an Age-Old Tradition

Institutionalising Transformation

As a company which is serious about becoming the biggest agricultural company in the region, Mahgoub Sons Group have their road carved out for them.

They are well positioned to achieve exactly the level of success they aspire to. The company's stratospheric growth happened only with thoughtful consideration and with the taking of well-calculated risks.

With each growth spurt that APCO experienced, a clearly defined need emerged. The idea to transition from a family-owned and run business to a more corporatised structure was pitched by Hind Wagdi Mahgoub, a third generation Mahgoub who joined the company in 2010. The idea was well received, and the transition began with the lowest hanging fruit at that stage– the HR and IT departments.

Hind, who is currently the Group Finance Manager and Amel, who is the Head of the Food Division, worked together in centralising the operations of the company. They began by ensuring that the IT systems run on ERP integration which helped them to draw various elements of the business together onto one platform.

Ambitious planning, quick-thinking and innovative ways of accessing much-needed funding are the tools they need to continue employing to help them grow.

The internal change from a family-owned business to a corporatised structure was their Rubicon moment, signalling their intense focus on becoming leaders within the industry in Sudan.

Overarching Reasons for Restructuring to address some internal challenges.

1. The group has witnessed significant growth over the last ten years and this exponential growth necessitated a change in structure to improve management and mitigate growth risks.

2. The journey to digital transformation began by introducing an ERP system (and other management systems) in 2018 which meant the company needed to put in place certain structures and personnel to facilitate this transformation.

3. MSGs operations span 11 states and 7 divisions, so the business needed to centralise some operations and divisions to streamline operation and reduce costs.

4. Business continuity and sustainability is a main priority. As a family-owned business, MSG is determined to make the transition from a family business to a corporate structure to ensure business sustainability. To do so, there needed to be a governance system in place as well as clear business processes and planning.

Perched quite comfortably amongst the 3 biggest agri-business players in the Sudanese market, they have faced and continue to face challenges both internal and external.

Healthy Competition

The competition that MSG faces comes from several sources. Threats lay both internally, in terms of system inadequacies and earnings and externally, in terms of competitor market share and policy/governance.

There are competitors such as Savola Oil, Alwatania Halwa and small traders within the repackaging industry. Alone, they do not make much of a difference, but together they could pose a threat.

Savola and Alwatania have an advantage in that they are well established, older brands with a bigger production capacity. However, MSG considers competition to be good for the market. Furthermore, being better than their competitors is their motivation.

Currently, there are three major projects they have in the pipeline:

1. ***Increasing Agri Outputs through the El Gezira, Sharg Al Nile Project:*** This is an MSG farming initiative that will involve 65% of MSG's direct farming and 35% contract farming. In addition to growing cotton, soybeans, and sunflower, they will also be establishing basic infrastructure. There is huge potential to further expand their cotton activities here because of the proximity to a nearby industry for medical cotton processing.

   As it stands, MSG is in line with the country's 10-year strategy regarding food production. Should the current agricultural policy within Sudan change, this project would be at risk of incompletion, something that history has proven can be endemic to the governance of Sudan. A potential method of mitigating any risk that might come from governmental externalities would be a reliance on internal funding and FDI.

   With an increased focus on organic, GMO-Free, Fairtrade certified options in the market, opportunities exist to benefit from these certifications. MSG food is currently undergoing international standards food management standards training like Halal, HAACP, ISO 9001, 22000 - this will propel them forward to better export opportunities.

2. ***Wading into a Broader Market with Edible Oils:*** There are two plants that are under construction. Plant A for groundnut, cotton seed and sunflower oil. Plant B for cold pressed sesame. The capacity of both these plants are more than 300 MT per day.

   Savola Oil are the leaders within the MENAT (Middle East, North Africa, Turkey). They are heavily backed by foreign investors and do pose a serious threat to the Delta Oil company. More partnerships and collaborations with international partners and FDI could give MSG a chance to compete sustainably in this sector.

3. ***Supporting The Promotion of Sudanese Meat Through a Proposed Livestock & Meat Processing Project:*** The group already owns livestock and are in the process of developing localised breeding practices and husbandry techniques. They collaborate with local farmers in the company tradition of collaborative contract farming. This step, MSG believes, is logical for the group as it completes the agriculture cycle. Their future goals are:

   - To grow their current cattle herd to 50,000 within two years
   - The introduction of artificial insemination to improve the breeding techniques for their cattle
   - To establish a learning and development program for veterinarians and husbandry professionals to increase competence
   - The establishment of ranches to encourage a move to more sustainable and productive methods of livestock farming

The outputs from this division are for local consumption and their vision is to begin export in earnest. The drawback of contract farming is that farmers may be tempted to let the highest bidder win when trying to divest themselves of their output. Disease outbreaks are a continual threat when it comes to livestock farming.

Growth Beyond the Sudanese Market: As a country fortuitously situated near major ports, with shipping routes and easy access into the Middle East, MSG is in a great position to tap into markets outside of Sudan for exporting not only their products, but their services, machinery, and knowledge to the landlocked countries that neighbour Sudan on multiple sides.

Politically, there seems to be a renewed sense of hope and vision for the future. The lifting of the sanctions and the removal from the terrorism watchlist will most certainly see a trickling in of investment into the country. The risk of extremism and religious-based conflict is still quite prevalent and that remains a shadow over unfettered business growth in Sudan.

Strategically, Sudan is well placed to thrive at being the breadbasket of East Africa. They are surrounded by 7 landlocked countries who all but depend on Sudan for produce and imports, whether it is regulated or not.

MSG has built a set of principles that they adhere to, and to which they attribute their success.

- Giving Sudan access to great quality, affordable products
- The intentional use of all their resources in its totality
- Ensuring the stability of their production by ensuring the wellbeing of their human resources

As the rest of the globe starts to seriously consider food security as a matter of urgency, Sudan is well positioned to take its place as a valuable contributor to the world's plate. Mahgoub Sons Group has been at the helm of change and innovation since 1955 and they continue to challenge the thinking and practises of the industry.

5. Discussion Points

- What are the critical areas of policy reform in the post sanction and post-US SSTL Sudan that are required for agribusinesses like MSG to thrive?

- Labour migration is a big problem within Sudan. What sort of labour reforms are needed to retain local talent within Sudan?

- What untapped economic growth prospects are there for MSG within the SAHEL, MENA and MENAT regions? How can the Group further position itself to capture these markets?

- What can be done further to mitigate the negative effects of climate change in Sudan? How can MSG work to help mitigate downstream environmental degradation?

- What strategic decisions can MSG take to navigate the risks of becoming too big, and spreading too thin?

- What alternative financing arrangements are available outside of Sudan that MSG could take advantage of to finance capital intensive projects?