



AGRIFINANCE DIGEST

A PUBLICATION OF THE AGRICULTURAL FINANCE CORPORATION





AGRICULTURAL FINANCE CORPORATION

The Agricultural Finance Corporation (AFC) is providing their customers with a platform to conduct a number of financial transactions through mobile devices.

Lipa na **M-PESA**

PAY BILL NUMBER
358150

MAKING DEPOSIT THROUGH AFC PAYBILL

1. Go to M-Pesa
2. Go to Lipa na Mpesa
3. Paybill
4. Enter AFC business number **358150**
5. Enter loan servicing account number WITHOUT the prefix or hyphens e.g. A/C LS1-2-201-01533 should be entered as **220101533**
6. Enter Amount
7. Enter your MPESA secret PIN and Press OK.

mobilebanking

HOW TO ACCESS

1. Dial *356# on your keypad



2. Enter your PIN Number in order to proceed



HOW TO ACCESS





CONTENTS

CASE STUDY
Value Chain Financing.....2-4

CORPORATION FOCUS
Importance of loan collection in Agricultural lending.....5

FEATURE STORY
Ensuring its future sustainability growth.....6-7
Risk Management in Agriculture.....8-9

COLUMN BY AN INDUSTRIAL EXPERT
Robust planning is critical in our institutions.....10
Trade Unions.....11

INSTRUCTIONS OR HOW - TOs
Production of French beans.....12-14

CONTACT US



www.agrifinance.org



<http://www.facebook.com/AgriculturalFinanceCorporation>



https://twitter.com/Agri_FinanceKe



<http://www.youtube.com/user/AgriculturalFinance>

The Huge Success of Agricultural Value Chain Funding: Mara Beef Limited



Some cows bought from farmers for fattening in Narok

By Samuel Ochieng

As part of refocusing the Corporation's strategic direction, the Managing Director Mr. Lucas Meso initiated funding of high impact projects by the Corporation. The Corporation then started to identify such projects under the concept of agricultural value chain funding. This has had positive impact not just on the individual farmer funded, but also on the communities where such projects are being undertaken. It has also repositioned AFC as a leading player in agricultural funding for agricultural development in Kenya.

The Mara Beef Limited is one such project which is about 10 kms from the Masai Mara Game Reserve. The project is on 1,000 acre piece of land. Mara Beef buy cattle from the local community comprising of about 2,000 pastoralists in the Enonkishu Conservancy area, Olchoro Oirowua and parts of neighbouring Transmara sub- county, and improve the breeds by cross breeding indigenous cattle with imported Zebu breed, and thereafter fatten the same.

The model of agricultural Value chain herein is known as Buyer Driven Model. Mara Beef Ltd are **the buyers,**

processors, wholesalers who are selling to retailers. They have a slaughter house and cold rooms to enable them meet the needs of retailers

In addition, they have a truck which transports meat to the market in Nairobi as well as Mt. Mall on Thika road, Naivas supermarket in Narok, Nyali Supermarket in Mombasa and Syokimau Mall.

They have an assured supply of cattle to slaughter from the 2,000 local farmers and can meet demand specifications for their customers. Going forward, they plan to set up storage and cold room facilities in Nairobi targeting direct retail market.

The project is of benefit to the local communities as they are able to buy the cattle from the local pastoralists who therefore do not need to travel to far flung markets to sell their cattle thus improving their living standards. They also have a long term plan to improve the local breeds of the said pastoralists.

One key element in agricultural value chain is that there must be linkages from producer to retailer

CONTINUED ON NEXT PAGE

increase in the price of the product, which is why it is called value chain. Anything short of that is not agricultural value chain.

A great advantage of agricultural value chain is that there is no excuse of market related issues since they are assured at every level including the price stability because they are not based on market forces. But on what is negotiated at the level of the grower to processing up to wholesale level, it is only at the retail where price conforms to market forces.

Agricultural value chain leaves every player with a good cash flow and this is the Corporation's greatest interest

as lenders, to see how to recover the money from investment. The 2,000 pastoralists are assured of instant payments from Mara Beef Ltd upon delivery of their livestock and they go home smiling.■



Truck that transports meat to the market outside the abattoirs

Value Chain Financing

By Charles Nyamu



Workers Milling the maize

The term value chain refers to the order of processes and linkages through which raw materials and resources are converted into final products for the consumer. Value chain finance in agriculture is an approach to financing that uses an understanding of the production, value added and marketing processes to best determine financial needs and how best to provide financing to those involved.

The Corporation had a goal of reaching 1.5 million clients. This could only be achieved by having a great business model. This led to the decision to pursue Value Chain Finance Model which would enable the linking of a group of small scale farmers (suppliers) to buyers of the resulting commodity in a contracted arrangement. Mr. Mathiu is one of the many clients that attempted this and succeeded.

He approached the Corporation for a facility to construct a cow shed and buy cows to enable him grow his dairy cow business into a success. This enterprise grew and he was able to venture into wheat, maize and

cereal production as well as running a posho mill. On the side, he also engages animal/ dairy feeds production.

He got additional financing to expand his milling plant which enhanced his capacity to produce



Constructed shed and the dairy cows

CONTINUED ON PAGE 7

Importance Of Loan Collection In Agricultural Lending

By Denis Olayo

The Corporation has a target of maintaining the delinquency rate below 10% mark. If this is to be achieved without compromising the quality and variety of financing programs offered to farmers, it must be anchored in an elaborate loan collection model. Strategic defaulting on loans is a common phenomenon among those who may consider Government sponsored loans more as gift than as debt that has to be paid back. General statistics point to higher default rates among those who borrow from Government sponsored sources than those who borrow from banks and other informal lenders.

The incidence of over dues in the agricultural credit system has been increasing over the years eroding the willingness of many players to venture into the sector and compromising the financial soundness and fitness of the financial institutions financing the sector. This has been so despite the existence of various economic reform programs put in place by government to develop agricultural sector. In part, we can attribute the unsatisfactory levels of loan repayment to low levels of commercialization in farming business and the problem of asymmetry information, which make formal lenders unable to properly screen and monitor use of advanced loans.

However, whereas it is beset by these strong challenges, loan recovery remains the most critical determinant of the Corporation's profitability and viability. Poor recovery hampers the Corporation's capability to recycle funds and adversely affects the effective management of its resources, and ultimately its profitability. Unless the over dues are substantially brought down, the impact of various measures to improve the viability of the Corporation would not be visible.

Observed over time, it has been noted that the farmers' income, farm size, age of the farmers, farming experience and the level of formal education of the farmers were key factors in loan repayment. Equally, the amount of money borrowed, major occupation of the farmers, household size, loan duration, value of output, interest on loans, value of farm assets, distance to loan source, were other variables influencing loan delinquency. On further analysis, it has been identified that delays in loan disbursement, prolonged drought and unexpected family expenses are key reasons why farmers default. Non-performance of loans can also be attributed to poor credit worthiness and lack of collateral security on the part of the farmers.

The Corporation's delinquency management strategies play a key role ranging from supervision, viability of farm, acceptable collateral, appropriate sanctions, proper farm appraisal and insurance. Sanctions are particularly important in eliciting the willingness of individuals to repay loans. The corporation opts from the start to have a good default prevention plan, which provides farmers with a unique, long-term solution to the problem of loan default. A properly developed and executed default prevention plan, will identify the unique root causes of default by farmers and lay out, in accountable, objective and measurable ways, the steps, which the corporation and farmers will take to address the identified problems. Proper loan delinquency management can make farmers to recuperate and effectively meet obligations.

The lending sector as a whole requires systemic, persistent and coordinated use of collection policy and tools in loan management. These tools include having an effective loan servicing and collection system, ability to generate and disseminate timely and accurate report on loan portfolio status and past due payments. In the United States of America (USA), **Altman** et al. (2004) in their study of Default Recovery Rates in Credit Risk Modeling noted that as the default rate increases, so does the debt recovery rate. It therefore calls for measures to be put in place to ensure that credit risk is quickly reviewed to reduce or lower default rate. In India, **Visaria** (2009) confirms that judicial arbitration is supportive in debt recovery strategy. He acknowledged that legal (judicial) enforcement is slow in assisting in debt recovery.

In Kenya, studies have been undertaken regarding non performing loans which shows clearly that debt recovery is still a challenge (Nyaoke, 2007 and Africa Economic Outlook, 2005). Generally, financial institutions still struggle with debt collection as many of the loans go into default.

In a conventional lending institution, a key reason for lending is to make a good margin from funds lent in order to provide a return on investment to the shareholders. It has been difficult for AFC to adopt this traditional model with ease as the market is bedeviled with risks that cannot be fully mitigated. These are credit risk measurements, credit rating evaluation, relationship lending, determinant of Corporation loan performance, Corporation behavior based on internal credit ratings and credit securitization and credit derivatives. ■

"Ensuring Its Future Sustainability By Charting New Pathways To Growth"

By Daniel Alela

Founded in 1963, the Agricultural Finance Corporation is a Development Finance Institution whose mandate revolves around the provision of credit to players in the agricultural and related industries.

In essence, it serves as an interventionist policy tool through which the Government of Kenya, in order that it provide for the welfare of its citizens, is able to exercise a degree of control on the interest rates levied on credit provided to players in the sector.

In the years since its founding, the Corporation has played a crucial role in empowering small scale farmers who would otherwise have been unable to access credit, thus contributing to their socio-economic growth & the overall development of Kenya's agricultural sector. The Corporation, has enjoyed boom & bust cycles in terms of growth & development.

The period between the 1960's to the early 90's were boom years during which the Corporation grew rapidly as it expanded access to credit to those in the agricultural sector.

The Corporation fortunes declined significantly in the years between 1995 to 2002. The reasons for this included, the deregulation of both the agricultural & financial sectors and a decline in Government budgetary support owing to various competing needs.

In the years since 2002, the AFC's fortunes experienced a renewal of sorts as Government support resumed by way of infusions of capital, write off of bad debt as well as other policy interventions.

That said, the Corporation continues to face challenges with regard to competition from private, public and non governmental entities in the financial services sector who are not constrained by the bureaucracy that bedevils public sector institutions and have greater financial capability. This, coupled with a significant decline in subsidies from the Government by way of capital infusions because of the competing needs of other sectors in the economy, the Corporations internal inefficiencies with regard to its business process & other factors, have further imperiled the Corporations future financial sustainability.

In the year 2013, the current administration, recognizing that the demand posed by the public sector wage bill on the exchequer had in effect

become unsustainable because of the competing demands posed on it by the creation of newly birthed administrative & constitutional offices, established The Presidential Task Force on Parastatal reform , with the objective, inter alia, reforming all public sector entities & charting a way forward with regard to their viability and future sustainability.

The principal thrust of its various findings & recommendations were that, going forward, it was imperative that the predominant majority of the various state agencies operating across the various sectors would have to be scrapped, or alternatively, for those with a modicum of financial health, be merged into a single special purpose vehicle, referred to hereafter by the acronym "Government Own Enterprises (GOE)", if they were to continue operating while concurrently remaining sustainable.

Though originally identified as one of the parastatals to be merged with other public owned financial sector players, the Government, premised on the presentations made to it by the current management team & and a not too insignificant debate amongst policy makers , made a conscious decision to allow for the Corporations continued existence as a separate entity .

In doing so, it confirmed two very important things.

Foremost amongst this was the intrinsic & deeply held belief in the ability of the management team as currently constituted to turn around the Corporation's fortunes , premised in large part on the road map they had drawn up.

Closely following this was the Government's own belief in the strategic role played by AFC as a special purpose vehicle through which it could exert a considerable control with regard to access to credit by players in the agricultural sector.

The Corporation's future is in essence therefore premised upon its innate ability to justify its continued existence & relevance by identifying and traveling upon a path of financial sustainability, while also ensuring that it remains relevant as a vital tool of government policy in as matters agrifinance.

How this process is managed is of vital importance and is the principal reason I have ventured to give my own thoughts on the same.

In doing, so I remain cognizant of the contributions made by colleagues within the Corporation, past and

CONTINUED ON NEXT PAGE

present, and many of who are my betters.

Over and above the development of new products and services, it is in my opinion, of vital importance that the Corporation develops a Resource Mobilization Strategy that would allow it to tap into the multiple sources of donor funding while concurrently lessening its reliance on Government subsidies.

It is worth noting that, in line with current politically correct dogma, the Government, has over the last several years embarked on the creation of multiple agencies, targeting different demographic segments and or special interest groups.

Included here are public sector agencies such as The Uwezo, Women's and Youth Fund, all of which currently compete with Corporation for Government funding.

Arising from the above, the Corporation, in developing a resource mobilization strategy, might want to consider focusing on fusing agricultural finance with relevant and in vogue thematic policy issues, more specifically, environmental sustainability.

Environmental sustainability as well as its subcomponents of climate change are amongst the biggest recipients of donor funding in the world today Fusing them with agricultural finance would not present much difficulty as agriculture is in essence "already green", being as it is that land and water are key to its successful practice.

In addition to this, twinning agricultural finance with environmental sustainability would serve to open up the avenues of urban agriculture, fused with a credit component and laced with themes evolving around climate change, urban renewal, environmental sustainability and the development of product lines targeting the youth demographic who are the predominantly , the unemployed majority in urban areas

Undertaking the above would by implication lead to our engagement with multiple public, private sector and non governmental agencies

It is therefore imperative that the Corporation develop guidelines that would serve as rules of engagement as it partners & works with private, public sector and non governmental entities

These guidelines should be designed such that they are broadly premised on the Government's guidelines on Private Public sector Partnerships while also remaining tailored to the Corporation's unique need so as to

safeguard its interests.

The Corporation's continued participation & vital role in the Bura and Hola irrigation schemes, a key component of Vision 2030 & vital cog of the current Governments socio economic policy agenda is proof enough of its strategic importance.

These guidelines would be in addition to those it is already utilizing but which , owing to one reason or another, might not be well suited to the more recent & innovative financial models

They are in essence reflections and are meant to initiate a conversation on the Corporation's future sustainability.

They represent what are in my humble opinion, areas worthy of further inquiry and are representative in part of my overall contribution to the Corporation,s future well being.■

Value Chain Financing

Continuation from page 4

2,000kgs of maize flour per week. The earlier machines were converted to produce Cow and poultry barn feeds. He has since managed to break-even with a weekly production of more than 10,000kgs of maize four per week and buy a truck which he uses to supply Kiirua market. He also supplies products to Meru, Isiolo and Marsabit County.

By financing such projects, the Corporation will reach its target and fill the gap that exists owing to the lack of collateral required to secure loans advanced to farmers.



Geoffrey Mathiu outside the milling plant

By Richard Singa

Risk management in agricultural finance



Financing farming in arid areas

As the regional and global population increases, agricultural development is becoming critical to meet rising food demand. This is more challenging with the onset of global warming which has brought with it unpredictable weather patterns.

Globally 1.2 billion people are extremely poor, 75% of world poor population live in rural areas where they depend on agriculture (directly or indirectly) for their livelihoods. There are approximately 1 billion people living in Africa, of whom 863 million live in sub-Saharan countries. 30% of this population experience chronic hunger and malnutrition making Africa the largest recipient of food aid from developed countries like USA and Europe. In sub-Saharan Africa inclusive of East Africa, agriculture generates on average, 34% of GDP and 64% of the workforce making it the largest single source of employment. (FAO report 2011) **World Bank report on population and food security 2011** .

As a poverty reduction tool, agriculture is twice as effective compared to other sectors and is therefore crucial in the achievement of millennium Development goals (MDG). It does this directly by raising farm incomes and indirectly through generating employment at both farm and industry levels and reduction in food prices, which in turn prevent food riots. Agriculture supplies raw materials to manufacturing sector hence promoting agribusiness and strengthening service industries involved in the sector and can be a tool to reduce rural urban migration by the youths in search of better

opportunities

Africa is the second largest continent in the world with 27.4% of the world's arable land. In Kenya only 20% of the land is arable depending mainly on rain fed agriculture, while 80% of the land surface is arid and semi-arid which can only be exploited through irrigation. The potential land for irrigation in Kenya is over 500,000ha, land already under irrigation is slightly over 150,000ha, which is about 19%.

This potential remains largely unexploited because as long as the factors listed below are not addressed, Africa in general and Kenya in particular will remain food deficient and therefore have diminished economic growth. Some of the key impediments slowing down the growth of Agriculture include;

- a) Lack of capital (lack of credit)
- b) Slow pace in research and development and general.
- c) Lack of human capacities and general slow uptake in integrating technology in farming, poor infrastructure, lack of proper Legal and Regulatory



Ox plough

frame work and inconsistent government support.

The Agricultural Finance Corporation seeks to address one of these key concerns, access to finance. This is the key to unleashing Kenya's agricultural potential and economic growth. Most financial institutions have feared to venture into financing agricultural sector largely due to the inherent risks

CONTINUED ON NEXT PAGE

involved.

These risks are broadly categorized into: Specific, Principal and Political risks.

Specific risks are either production or marketing risks. Production risks are related to vagaries of weather, pest and disease outbreak, use of low quality inputs while Marketing risks are related to price changes, access to market information, and seasonality of agricultural production and geographical span of supply chains.

Principal risks are categorized into three; Financial, Institutional and Human Resource. Financial risks include uncertainty in interest, inflation rates and prices, Institutional risks include poor infrastructure, poor legal and regulatory framework, information asymmetry while Human resource risks involve Labour and management levels, moral hazards, illness, death, generational transfer of farm properties.

Political Risks arise from varying government policies on Food security and major cash Crops for export and employment and in some instances popular interventions such as debt relief and write offs which creates bad debt culture.

The Interdependence between risks leads to complexities in Agricultural Risk Management.

To effectively manage these risks, we first have to identify that risks occurs at three different levels namely, Farm (individual) level, also known as micro or idiosyncratic level, Community (society) level – also referred to as meso or covariant level, regional or county level-also referred to as macro or systemic level.

Several approaches then can be adopted to eliminate the founded fears by lending institutions and attract more funding to the agricultural sector. First, organizing agricultural financing along specific value chains. This will involve understanding the actors along the value chain from input suppliers through farmers, processors, traders and exporters. This can only be achieved by developing appropriate financial products and implementing structured financing

through the linkages with all stakeholders. In addition, the financier must understand at what level he should enter the production value chain.

The second approach would involve recruiting and training Credit officers with an agricultural background. This is important for proper selection of



Officers in a training session

clients with experience in agricultural activities and proper appraisal of the loans applied for (i.e. professional evaluation of the borrower, looking at his character, cash flows and repayment capacities). Flexible loan repayments should be designed to comply with the cash flows, i.e. monthly, quarterly, half-yearly and annual payments. Due to seasonality of agricultural produce, reasonable grace period should be given.

Use of combined collateral other than relying only on land can be adopted as a third way. This will involve using pay slips, insurance policies, share certificates, warehouse receipts, chattels (including household items) personal and group guarantees.

In addition, while it may be undesirable, avoiding to financing subsistence farmers whose immediate needs are food shelter and clothing and going for experienced farmers with diversified incomes or well-managed farmer based organizations can greatly reduce the risk. In the alternative, it is advisable to encourage farmers to form formal groups like cooperative societies, companies, associations; this will enable them to carry out collective marketing of their produce and acquisition of inputs. This will also assist the institution to reduce costs on loan

Robust planning in our institutions

By John Mungai

There is a growing concern about the wastage of resources. Besides corruption and plunder, the hottest issue in town, another factor though ignored but contributing wastage is poor planning or lack of it all together. In his book *The Seven Habits of Highly Effective People*, Stephen R Covey stresses the need to do "First things first". Maslow in his book *Motivation and personality* ranks needs from the very basic to "not so basic" to describe the pattern that human motivations generally move through hierarchy of needs. In economics, there is classification of needs; the basic needs (food, clothing and shelter) and other needs. Even among the basic needs there are 'more basic needs' than others. Imagine being hungry, naked and homeless, presented with food, clothes and a room (to sleep for that day) all of the same value and given a choice of a single item. What would you choose? How does this relate to planning? That comes to my point.

An observation across Kenyan leaves me worried. The number of public schools, especially public secondary schools, acquiring school buses and implementing 'school bus projects'. If you sample a number of them in your rural area for example, whether day or boarding school you will notice that they either have a (new) bus, have a bus project, or are planning a harambee to buy one. Always thank God if your former school doesn't trace and send you a card requesting your 'to give back to the society that made you who you are'.

Further analysis on reveal somehow comical findings; most of these schools lack 'basic needs' including food supplies, furniture, buildings and laboratories. Those with laboratories have buildings with few pipettes, burettes and some few litres of sulphuric acid. What is more basic in a secondary school? A 'souped-up' modern bus or a science laboratory? What informs the school bus project prioritization and rationale?

I have two theories that seek to explain the reasoning. First, is the hot issue, plunder! It is easier concealed in Ksh 4 million bus project than in procurement of bunsen burners and test tubes worth few thousands. In fact some 'bus projects' spill over to several years in future repaying the financier. Isn't that also a good a guarantee for steady future 'income'? Most astounding is that even Constituency Development Fund (CDF) finance buses in schools lacking basic facilities. What is the challenge here? Pre-project planning and analysis.

Second explanation relates to our culture. The value we attach to other people's opinion and judgement. The need to impress others and feel better than them. As such students are brought up with the mindset of being 'hotter than them'. The key values of inculcating

responsibility, hard work and honesty are no longer important. As long as we are seen to be on top, the rest takes a back seat.

Then what would be the solution? Though not a silver bullet, planning and prioritizing coupled with integrity would appropriate in addressing the problem. The fundamental questions before a project is undertaken should therefore be; which is the most pressing need currently? Do the expected benefits of the project outweigh its costs in a most favourable way as compared to all other alternatives? Are the returns the highest among all other proposed projects? If implemented, does the project contribute to the organization's growth agenda and future sustainability?

If information is acquired continuously and planning done pre projects implementation, then such a school for example can be more progressive compared to its peers. In the agricultural sector for instance, how can schools be pro-active in acquiring beneficial information for planning and implementing sustainable yet non-costly projects?

In the second medium plan (MTP II) of Kenya Vision 2030, under the flagship projects, the country aims at engaging students in 35,000 primary schools and 7,000 secondary schools in irrigated agriculture to impart agricultural skills. Schools and other institutions can leverage on existing institutions to turn around their fortunes. The Agricultural Finance corporation for example has special financing products -attracting very unimaginably low interests and very flexible on repayment terms-designed specifically for schools which can strategically liberate and turn a school into a self reliant food producing institution. Questions that lingers are: As a school head, how do you gather and utilize information for your school's growth and benefit? How can you use such information to plan and be among the top where others always learn from?

It is either we fail to plan due to lack of knowledge of accruing benefits or we do so by design so that we can reap the 'benefits' thereof.

Lastly, on the question of choice as noted above, I would take the clothes, walk to the market, get food (by begging or working for it) and then spend the night with watchmen. That to me would be a rational choice.

The writer is planning officer, Agricultural Finance Corporation, an Economist and Deputy Secretary General of The Economists Society of Kenya. Views expressed in the article does not reflect those of Agricultural Finance Corporation or The Economist Society of Kenya.

Trade union a third eye in an organization

By Eric Wanjala

The relationship between unions and employers is central to ensuring the successes of the organizations. More often than not unions are viewed by employers as irritants, abusive and unreasonable. They are perceived as irrational out to cause confusion and inconveniences at work places in trying to raise staff issues. On the contrary, unions play key roles by safeguarding and ensuring that the interests of employees are taken care of. This brings motivation amongst workers and hence assuring success of the very organizations. In places where the unions and employers work at cross purposes very little is achieved. Disruptive activities are witnessed and hence slowing down the drive for success and development.

The role of employer is to plan for overall survival of the organization which includes innovating strategies, resource mobilization, benchmarking and ensuring that it operates in an environment of legality. With these major responsibilities, some employee welfare issues are overlooked either intentionally or otherwise by the employers. In such circumstances, the unions come in as a third eye seeing what employers may not be seeing or simply what the employers are ignoring. The union then steps in to remind the employer of its obligations towards fulfilling some of the employee needs. Such kind of engagements between employers and unions are structured through negotiations leading to the signing of the Collective Bargaining agreements which binds the parties involved. Negotiations are carried out on issues that employees feel are instrumental to their welfare within the organization. This is normally done by elected representatives.

Managing employees then becomes much easier and hence improving on productivity by limiting conflicts. Major issues that employers normally feel uncomfortable to undertake are matters touching on terms of service. Most employers would wish to spent very little to employees if they had their way. For someone to enjoy work, personal needs which include better pay and a host of other benefits such as loans at lower rates, medical benefits and social welfare activities just to mention a few are necessary.

Employers all over the world have similar characteristics when it comes to issues concerning employees' welfare. Terms such as austerity measures, restructuring etc are commonly used by employers to deny or derail efforts by unions while agitating for better terms for workers. In organizations where unions operate, there exist structures of engagements. Mob psychology is minimized because not everybody is allowed to face the employer to raise concerns. Unstructured mob can be very disruptive. Damages to property and injuries caused by such mobs are likely and could be very severe and costly to employers and workers alike.

Being guided by trade union rules and labour relations legislations, unions engage with decorum. The rule of law is a guiding principle. Where there is stalemate, clear channels are available which must be followed to reach amicable settlements of emerging issues.

In our organization for example, the employer and the union have achieved so much together. Before the entry of the union in AFC, there was a lot of uncertainty within the work force. Morale was at its lowest. Employees saw no future in the Corporation. Threats of shut down were the order of the day.

Salary adjustments were a mystery. It was an organization filled with hopelessness.

The advent of the union together with the new management teams that came on board brought a new lease of life in the organization. For over ten years now, the union and the Corporation have been able to put structures in place in form of Collective Bargaining Agreements which have seen terms of service for workers improve, level of motivation sky rocket and above all there has been harmony and industrial peace within the organization. The union occasionally has engaged its own members who appear to be drifting away from the common good of the organization bringing them back to the right path desired by the Corporation and the union. ■



Production of french beans



FRENCH BEANS (*Phaseolus vulgaris*)
FAMILY: Leguminosaceae
Other Names: Green beans, snap beans, string beans

INTRODUCTION

The production of French beans, one of Kenya's most important export vegetable crops, is steadily rising. The crop is grown mainly for the fresh export market. However, processing of the beans, including canning and freezing, is steadily increasing. French beans from Kenya are exported to the EU market.

ECOLOGICAL REQUIREMENTS

Agro-ecological Zones

The most suitable areas for the production of French beans fall within the lower Midland to Lower Highland zones at an altitude between 1,500 and 2,100m above sea level. The ideal temperature should range between 18 to 28°C depending on the variety.

Rainfall

Humid areas with regular rainfall and a limited dry season are not suitable for production of French beans. Heavy rainfall adversely affects pollination. Moderate rainfall of 900 to 1,200 mm per annum is adequate.

Soils

French beans can be grown in a wide range of soil types, ranging from light sandy loams to clay. They however grow best on friable, medium loam soils that are well drained and have a lot of organic matter. The optimum soil pH is 6.5 to 7.5, but beans can tolerate a low pH of 4.5 to 5.5. Below pH 4.5, plant growth is impaired through limitation of development of the Rhizobium bacteria that are responsible for the nitrogen fixation in the galls formed on the bean roots. It is therefore advisable to carry out a soil test.

Land Preparation and Planting

The land should be ploughed and harrowed to a fine tilth before planting. Planting for the main export season for fresh produce which is usually from

CONTINUED ON NEXT PAGE

October to May should be scheduled as such so that the bulk of the crop is ready during that period.

In warm areas, the beans take about 45 to 50 days from planting to time of first picking. It is, therefore, recommended that farmers plant from mid-August to mid-October and then start planting again in early December.

It is advisable to stagger the planting so that a manageable proportion of the crop is ready for picking at any one time and that harvesting is continuous. For instance, the land may be divided into quarter hectare / acre plots and planted at two to three-weeks intervals.

The beans are planted in rows at spacing of 30cm between the rows and 8-15cm within the row. The spacing within rows will depend on the variety, soil fertility, water availability as well as climate. It is advisable to plant in blocks of about four rows separated by a path of about 50 cm. The seed rate required is 25 to 30 kg/ha (10-24k/acre) of certified seeds depending on the variety.

Fertilizers and manure application

Apply 200 kg/ha (80kg/acre) Di-ammonium phosphate (DAP) along the rows before planting. Contact between



picked pods

fertilizer and seed should be avoided by mixing the fertilizer thoroughly with the soil in the planting furrow.

Apply 200-kg/ha (80kg/acre), Calcium ammonium nitrate (CAN), as a top dressing in a split application. First split is applied when two to three leaves appear and the second at the beginning of flowering. Excessive nitrogen should be avoided as it may promote vigorous vegetative growth at the expense of pod production. Foliar feeds are recommended to boost crop development and production. The choice of the fertilizer depends on the fertility of the soil and variety requirements.

Use of farmyard manure is also recommended, especially on the heavy clay and sandy soils. It should be applied before planting at a rate of 10t/ha.

Crop rotation

This practice is recommended to avoid pest and disease build up. Rotation is mainly done with cassava, maize, sorghum or any other non - leguminosae family member crop.

Weed control

Keep the field free of weeds at all times by proper weeding. This should be done very carefully to avoid damaging the shallow roots.

Irrigation

Constant supply of water is very essential because soil moisture affects yield, uniformity and quality of French beans. Water stress during flowering and podding causes flower abortion and curved pods leading to reduced yields. French beans are also very sensitive to waterlogged conditions. Therefore, where the soils are not well drained such as the black cotton soils, it is advisable to grow them on ridges. In such soils, furrow irrigation with the beans planted on the ridges is a better practice than the common system of basin irrigation. Either furrow or an overhead system of irrigation may be used.

The irrigation regime is based on crop water requirement at various stages of growth as well as the soil and weather conditions.

The recommendation is as follows:

CONTINUED ON NEXT PAGE

Production of french beans

Maturity/ Harvesting

Picking of pods begins six to eight weeks after planting, depending on the area and variety, and continues for about one month. The pods are carefully picked and not pulled from the plants and must have the stalk attached to them. Picking should be at regular intervals, as per buyer specifications. Harvesting under rain or wet conditions is not recommended. If this practice cannot be avoided, the produce should be placed on a clean cloth, under shade, to dry before packing. If the pods are soiled, they should be immersed in clean water and placed on a clean dry cloth to dry.



Harvested pods

Yields

Yields of 9 to 12t/ha (4.4t/acre) are attainable. 1kg of seeds may produce 200-600 kg of produce depending on the variety and crop management.

Field handling

The harvested pods should be carefully placed in clean plastic containers and protected from direct sun. The containers should be covered with moist clean cloths (preferably white cotton) to maintain low temperatures. Clean harvesting equipment must be used and workers must maintain personal hygiene. In cases of soiled pods, clean by immersing them in clean water and handle gently to avoid bruises.■

Risk management in agricultural finance

CONTINUED FROM PAGE 9

administration.

Collection and availability of reliable data for use by the financial institutions is crucial. These includes, climatic data, farm management guidelines, Credit Reference Bureau (CRB), marketing information industrial performance information this eliminates information asymmetry and encourage all actors to work together.

To enhance better performance, there is need to adopt new farming technologies through vibrant research and development; revitalize extension services to encourage farmers to increase production both in quality and quantity. Train farmers on the importance of record keeping and improve their financial literacy.

Developing supportive legal and regulatory policies including government coordination through various interlinked ministries such as Agriculture, Finance and well-functioning judicial system goes a long way in inspiring lenders to venture into Agricultural lending. This will enhance production and minimize risks.

The risk management factors discussed here are not exhaustive, but when the listed ones are adopted, we will realize Food security, poverty alleviation, economic growth, creation of employment, peace and stability because the lending institution will be less averse to agricultural financing and will be more willing to bear the risks.■