



Fair & Sustainable
Consulting



Potential of the
professionalisation of an Insect
Association in Kenya

A summary of the background of the
existing association with recommendations
and next steps in order to propel the insect

Nairobi, 30-3-2023
Laura Stanford – The Bug Picture

1.1 Executive Summary

Over the past 3 years, there has been progress made by members of the black soldier fly larvae farming community in Kenya to formalise into an association. Currently, a legal association is under registration with finalisation expected within the next few months. This progress has been driven by only a few dedicated members who are pursuing this work on a purely voluntary basis which has been identified as a challenge.

It is proposed that the structure of the association be a platform where members can gain direct value as well as playing a networking/matchmaking role where funding opportunities are driven through a strategic 5 year plan including securing donors interested in specific elements.

In order to bring the association to a fully functioning state that can propel the sector forward which is a core objective, the following elements are proposed as next steps:

- Finalise registration process for the legal association
- Institute on the governance elements of the association
- Create immediate value to members through the development of a website with embedded open source learning library to increase access to validated and organised information for those working in the sector
- Development of a strategic 5 year plan in order to attract funding to the sector in Kenya

It is important to note that the current executive committee was engaged throughout this research and agrees with the recommendations of this report.



1.3 Research Methodology

Research scope and objective

This report will concentrate on BSF as part of the larger insect industry with specific focus on the progress and organisation of the existing association, and proposed next steps based on interviews with founders of other associations to establish clear lessons learnt, as well as a comparison of needs assessments from 2021 to 2023 of stakeholders within the BSF industry in Kenya. This work was executed in close consultation with the existing association executive committee to ensure alignment and combined ownership of this work.

Data collection methods

- Expert interviews: Executive committee of the Association for Insect Producers and Its Products including research advisor, Founding Chairman of other associations, Prominent insect producers in Kenya
- Member and industry stakeholder needs assessment via online survey
- Desk research
- Personal experiences from The Bug Picture Kenya and Fair & Sustainable Insect Farms Nekesa Ltd.

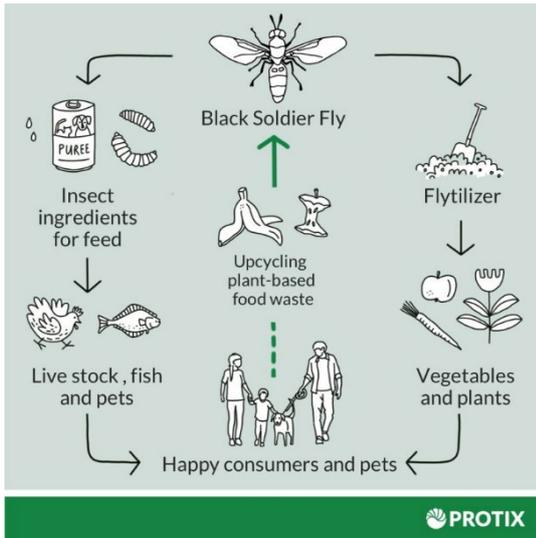
Review by executive committee of the association

The draft report was shared with the key members of executive committee for their review with all comments incorporated to ensure alignment and adoption of this work by the association.

1.4 Introduction to insects for production in Kenya

Global population growth, increasing demand for animal products, scarcity of conventional feed ingredients and, consequently, high production costs drive the global search for sustainable and less costly alternative protein sources for animal feed. Additionally, there is a move towards organic fertiliser especially in the face of global shortages and associated price increases of fertilisers due to the Ukrainian war, which is directly impacting food security and cost of living in countries such as Kenya.

Black soldier fly (BSF), *Hermetia illucens*, is a cosmopolitan species, distributed widely throughout the world and native to the equatorial band of the world (including Kenya) and increasingly used as a protein and fat (lauric acid) source for animal and human nutrition. By-products from BSF rearing may also be used as a plant (frass) fertiliser. Momentum is



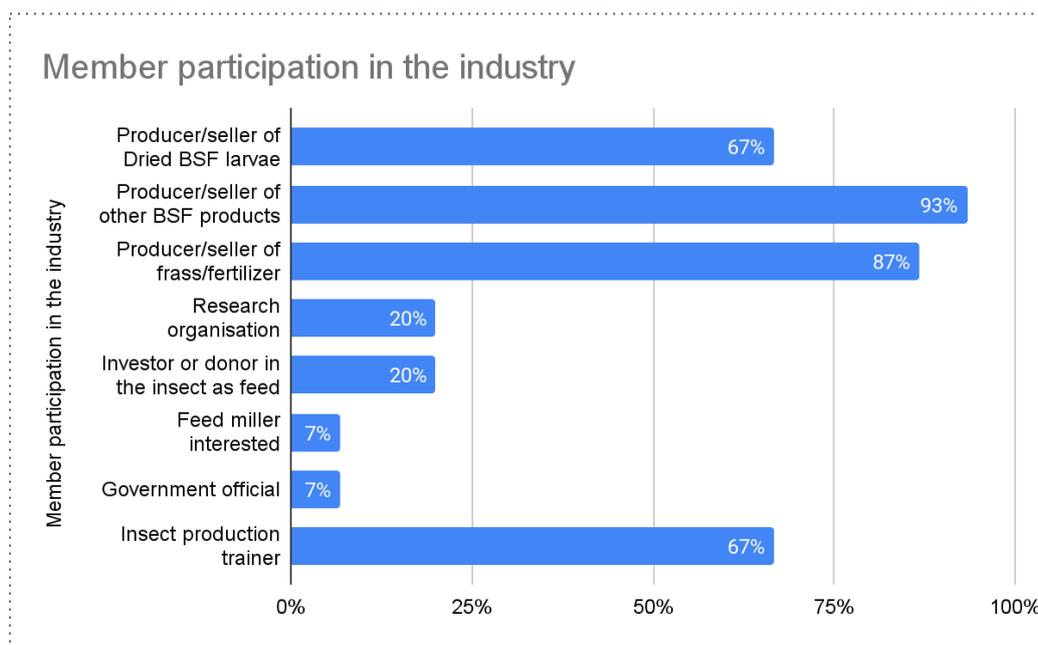
gathering around the potential for a number of insect-based products and technologies in agricultural production (particularly circular economies), waste management and animal feed production.

International Centre for Insect Physiology and Ecology (icipe) is an internationally renowned academic research organisation located in Nairobi, Kenya which has played an integral role in the growth of and interest that the insect industry has gained.

The vast majority of individuals/organisations that operate in the insect industry in Kenya work with BSF. Other insects where work is ongoing is Crickets (for human consumption) and Desert Locusts (alternative and innovative response mechanisms).

The Kenyan BSF landscape includes 3 larger scale producers (Sanergy, Insectipro and Ecodudu) who have attracted donor and/or investment funding. Additionally there are hundreds of small to medium scale producers.

Despite large progress over the past decade, the industry is still nascent which has seen industry players playing multiple roles outside of their core business of production of BSF products in order to generate additional income as seen below in the survey executed in January-February 2023 as part of this report.



1.5 Association of insect farmers and its products (AIFIP)

1.5.1 Background

Based on a growing number of black soldier fly (BSF) larvae farmers in Kenya and through the promotion of Dr. Tanga of ICIPE, David Kiguru (Vice Chairman) facilitated the creation of a WhatsApp group which was set up on 10 January 2020 called “Association of BSF farmers”. All interested parties within the BSF industry were invited to join this open WhatsApp group in order to increase collaboration between members, and propel the industry forward.

The first in-person meeting was organised through the “Association of BSF farmers” WhatsApp group and held in February 2020 in Nairobi. At this meeting, numerous topics were discussed with the primary output being to take the first steps to register an association in order to formalise the industry.



The “Association of BSF farmers” WhatsApp group became the primary platform for inter-industry discussion and is still being used today with 183 current participants which operate at different scales throughout Kenya. This group is actively managed by Rosanne Mwangi (The Insectary) and used by participants to ask questions of other BSF farmers, as well as being an informal marketplace for BSF products (eggs, 5 day-old-larvae, etc) and secondhand equipment.

In March 2020, Kenya reported its first COVID-19 case and progress on the establishment of a formal association was stalled. This said, 4 association meetings were held online during COVID-19 lockdown with no progress made to the registration of an association.

1.5.2 June 2021 Stakeholder Meeting: Findings and Recommendations

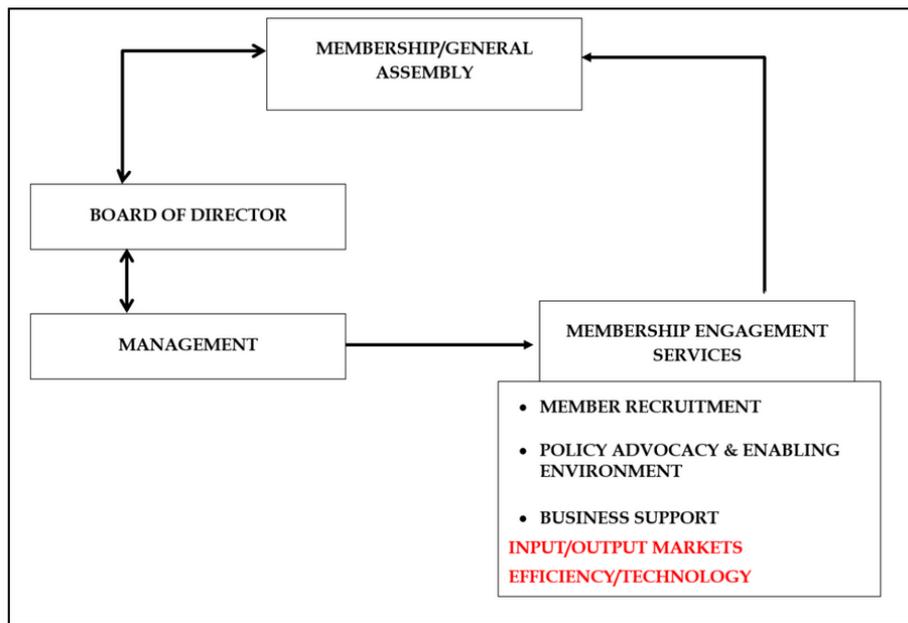
This momentum of the association shifted during the June 2021 meeting (sponsored by Rockefeller Foundation and ICIPE, facilitated by the East Africa Grain Council) which brought together 30 stakeholder individuals/organisations from the BSF value chain in Kenya.

Additionally, the exercise including the comparison of different associations (East African Grain Council, Kenya Association of Manufacturing and the Kenya Private Sector Alliance) to provide guidance on the structure and governance of a potential future association for insects in Kenya.

Several findings were obtained from the Stakeholder Mapping exercise as follows:

- BSF farmers were identified as having the highest influence and strongly supporting the BSF farming process and all related activities in Kenya.
- Research institutions such as International Centre of Insect Physiology and Ecology play a crucial role of providing and overseeing knowledge transfer related training activities targeting all stakeholders along the BSF Value Chain.
- Development partners such as Rockefeller and other NGOs were acknowledged as supporting research and funding BSF farming trainings and activities. Additionally, there also exists credit facilities such as Banks which readily provide funding for BSF related activities.
- There exists competition among the feed millers, BSF farmers and feed retailers exemplified by the fact that BSF larvae as a source of protein animal feed provides a valuable alternative to the conventional feed provided by feed millers and retailers.
- Mainstream media (television and radio programs), Websites and Social Media pages namely Facebook, Twitter and You-Tube have popularised BSF farming and its accrued benefits with the streamed information providing knowledge on BSF farming as well as marketing it as a promising sustainable solution for organic waste management.
- Despite strongly supporting waste processes for BSF farming for their own good businesswise, brokers carry out the oversight function at a political standpoint hence informally controlling the waste processes.
- The Ministry of Environment (MoEnv), Ministry of Health (MoH), Department (Dept.) of Public Health, National Environment Management Authority (NEMA) were identified as having the overarching authoritative role in the waste processes for BSF farming in Kenya.
- Existence of weak connection/linkage between all government agencies and the identified BSF stakeholders attributed to the lack of specific legislative framework, policies and regulation to generally guide the BSF farming process in Kenya has resorted to reliance on associated environmental and public health laws such as Environmental Management & Coordination Act (EMCA) 1999 and its subsequent amendments in 2015, Public Health Act Cap 242, Occupational Safety & Health Act, 2007 among others.

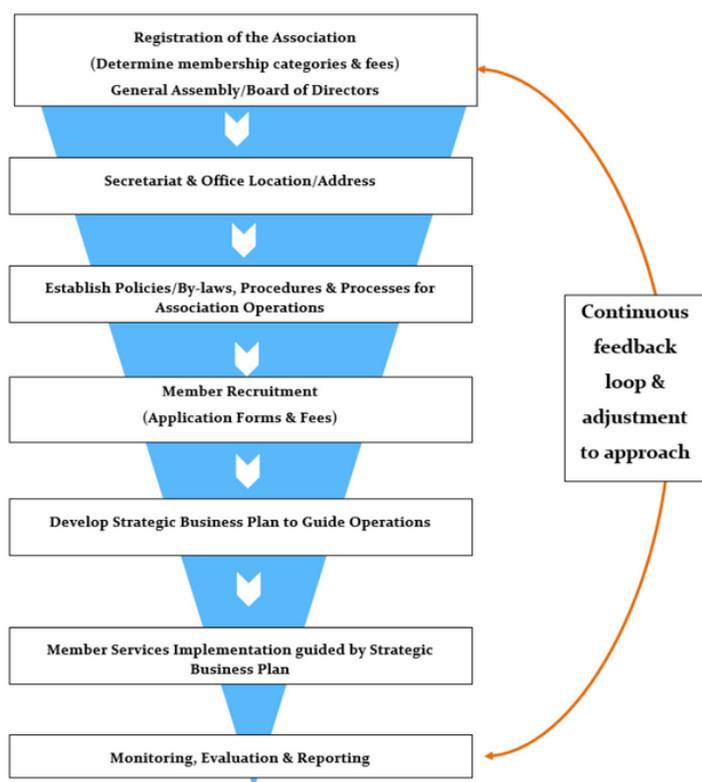
The below Business Association Institutional and Governance Structure was recommended through the June 2021 Stakeholder Meeting which has been adopted by the association executive committee and members:



Based on these findings, the analysis recommended the following for the success and sustainability of BSF farming and related activities in Kenya:

1. Formation of Black Soldier Fly Association in Kenya to guide the BSF farming processes, market BSF products and other related activities.
2. Establish a liaison with policy makers, researchers and other stakeholders to develop a clear and comprehensive legal framework specific to BSF farming and associates activities.
3. BSF Association should forge new strategic partnerships with investors who will continue to fund research and trainings with the resultant information feeding into the development of specific legislative framework clearly stating the regulatory and compliance requirements for the BSF value chain in Kenya.
4. Scaling up insect-based technologies for BSF farming.
5. Investment in research on BSF and dissemination of information to all the BSF Value Chain stakeholders.
6. Creation of platforms where various stakeholders can engage and share information without compromising their market position.
7. Networking to market BSF farming and its associated products as a better alternative to the available conventional feed.
8. Advocacy strategies to counter brokers who control especially the waste procurement processes making it hard for the BSF farmers.

The below was proposed as the next steps in order to move forward with an association for insects in Kenya.



As a result of this meeting, in July 2021 a separate Whatsapp group (“Registered BSF Association”) was established which included members that had paid a membership fee which accounts for 24 members (currently). The association communications are facilitated through this group currently.

The full report from this June 2021 meeting is provided as a separate document.

1.5.3 Formation and registration of the legal association

The 2022 AGM was held in October and it was decided by the paying members of the informal association that it was the right time to commence the registration of an association based on the findings of the June 2021 stakeholder meeting. Research on different legal structures were evaluated for their suitability to the goals of the association. The following legal entities were evaluated: association, society, council and company.

It was decided that the most appropriate option was an association and the name **“Association of insect producers and its products”** was proposed as the priority name by the members. The decision was made for the association to include all insects in Kenya to allow for future expansion of both the society and industry without disruption or lengthy legal changes. As the production of different insects becomes prominent in Kenya, the association will be restructured to better represent each insect species through different pillars. Currently,

the predominant insect under production is the black soldier fly with few individuals and organisations working with crickets, desert locusts and mealworms.

The application to legally register in Kenya was commenced in November 2022 to the Registrar of Societies. This process takes a minimum of 6 months as there is in-depth vetting of key position holders in accordance with the Societies Act of Kenya. The below executive committee was democratically elected by the members at the AGM and are the individuals being vetted:

First	Other Names	Position	Company
Micheal	Lwoyelo	Chairman	Sanergy
David	Kiguru	Vice Chairman	Galliforms
Jannifer	Muthike	Secretary	DuduMasters
Frederick	Owiyo	Vice Secretary	Secteriat
Roseanne	Mwangi	Treasurer	The Insectary
Joshua	M. Maina	Vice Treasurer	Individual
Chris	Tanga	Technical & Advisory Committee Chairman	ICiPE

There are no paid roles within the association - all members are executing their responsibilities on a purely voluntary basis in addition to their full time employment within the BSF industry which is a challenge identified by all executive committee members.

Fred Owiyo (Vice Secretary of the association at the time) was commissioned and partially paid for the drafting of the association constitution (see appendix 1) and completed registration of the association. Fred has ceased involvement in the association due to a “difference of opinion” as instructed by Rosanne Mwangi (Treasurer).

1.5.3.1 Current Association Finances

The association has been receiving membership fees from members since the decision was made during the June 2021 stakeholder meeting that an association bank account should be set up. The first deposit was made on 8 July 2021. This bank account was opened in the name of three members of the association in trust as we await the formal documentation that will allow the change of name to the association's official name. The trustees are Rosanne Mwangi, Proscovia Alando and George Muturi.

Membership fees are stated as the below:
 Once off registration fee - 2,000/-
 Annual membership fee - 5,000/-

To date there have been 24 member contributions made with no registration fees collected to the total value of 120,000/-. These membership fees have been paid as a dedication by members to the association and should be seen as a once off with official structured membership fees being implemented on the completion of the registration of the association.

The below costs have been incurred through the formation of the association to date which have been paid from the company account of The Insectary. These costs will be reimbursed through the association bank account once it has been transferred.

Costs incurred	-75,000
Consultant for drafting of constitution and registration of the association	-40,000
Government fees for registration	-10,000
Facilitation	-15,000
Miscellaneous	-10,000

1.5.4 Emerging Insects Technology Hub

The Emerging Insect Technology Hub (EIT Hub) aims to develop a space for collaborative networking and knowledge-sharing to deliver mutual benefits and knowledge exchange opportunities between Australian and East African industry and science partners in the area of emerging insect technologies.

It forms part of the AgriFutures Emerging Industries Program helps grow up-and-coming rural industries for which there is a clear interest in their products but whose pathway for growth is uncharted. We do this through research that explores opportunities for growth and through skills development for industry leaders. Our goal is to sustainably grow developing rural industries and help them reach new markets.

Project partners:

AgriFutures Australia, an Australian Commonwealth statutory Research and Development Corporation (RDC), the Australian Centre for International Agricultural Research (ACIAR), a statutory authority in the Australian Government Foreign Aid program, and the International Centre for Insect Physiology and Ecology (icipe). The EIT Hub will be chaired and overseen by Project Manager, Mr Duncan Rowland (Australia), with Dr Chrysantus Tanga (Kenya) as secretary, a group of stakeholders will guide the strategic direction.

The main objective of the EIT Hub is to enhance the collaborative and knowledge sharing opportunities between East African and Australian industry partners on newly emerging technologies to promote black soldier fly, and other valuable insects, as a food/feed/fertiliser.

Specific activities, whilst separately procured and funded, will sit within the EIT Hub under specific Working Groups. Activities will be, in part, guided by the EIT Hub members, as well as other internal AgriFutures/ACIAR (or other) opportunities.

Based on interviews, this hub should be seen as a complementary initiative where there can be additional flow of information to association members.

1.6 Interviews and learnings from other associations

To better understand and learn from other associations, interviews were conducted with members of the current Executive Committee of the Insect Association of Kenya (Michael Lwoyelo, Rosanne Mwangi, Jannifer Muthike), the current chairman and founding member of the Association of Kenyan Feed Manufacturers (AKEFEMA), Joe Karuri and a founding member of the Australian Tea Tree Industry Association (ATTIA), Craig Chapman.

Below are the main lessons that were mirrored across the interviews:

Vision and Value Proposition

A clear and appropriate vision that is directly linked to the value proposition for members is essential in order to drive membership, increase association revenue and drive projects that meet the expectations of the members.

As the industry increases in size, there will be significant increase in business opportunities which members will be able to leverage to increase their businesses and associated revenue. “Bringing sanity, order and industry stability” according to Joe Karuri.

If members see that there is a clear value proposition being executed, they will willingly pay membership fees. This directly drives the sustainability of the association.

Member driven, industry research is critical

As a nascent industry, research is predominantly academic in nature therefore, not directly supporting the needs of the farmers. This means that commercial players are left to research their own best practices in a Kenyan context which are privately funded and therefore, the findings not shared with other farmers.

This mirrors the ATTIA in the 1980’s when Craig Chapman initiated the formation of the association. Craig was one of the companies in Australia that initiated the creation of the tee tree association. It started in 1987 through the first AGM with 30-40 members. At this time it was non commercial players known as bush cutters which grew from approximately 20 MT per year to 500MT in 10 years through commercialisation which was aided by research and development through the association.

Craig said: “Research and development is the most important element of an association that is in the phase of the tea tree industry in the 1980/90’s and insects in Kenya now. This research should be decided on by members, and remain incredibly easy to access by members so that farming practices can progress from “bush cutting” to commercial and financially viable farming operations - this is the same for insect industry.”

It is through member needs driven research that the industry can leapfrog and through industry growth, so individual members will be “dragged behind” to prosperity.

Member participation is voluntary (unpaid)

Financial sustainability should be a long term goal for the association (5-10 years) and even then association tasks will be on a volunteer basis only (including executive committee). Expenses incurred in the tasks of members for the association should be claimed back from the association.

The ATTIA was fully voluntary and projects funded by members for the first 10 years of its existence until it was officially recognised by the Australian government which took on 75% of the costs of the association on an annual basis.

Joe Karuri said: “An association should be viewed as a philanthropic venture (giving your time for the betterment of the industry) and not a business”. For the first 15 years of the association (registered in 2004), all work executed through the association was on a voluntary basis. This changed in the past 5 years when a CEO and administrator were hired on a full time basis.

Strategic 5 year plan linked to attracting project funding to the industry

Linked to the Vision and Value Proposition, this plan summarises and highlights the priorities of the association for the coming 5 years in line with the sectoral (industry) agenda, an action plan of the association to achieve member expectations. Through this plan, the association will be in a position to attract external funding in order to implement projects that drive the value proposition of the association and overall growth of the sector.

Joe reflects that he wishes that AKEFEMA had prioritised the design and writing of a 5 year strategic plan earlier on/at the beginning because this would have been an effective tool to bring the association's vision to life for its members - members would have seen/felt the value proposition sooner. 90% of the activities that are executed through AKEFEMA are funded externally and Joe Karuri accounts this to the existence of a 5 year strategic plan for the association.

For ATTIA, research and development fell outside of the direct costs of the association which

was still heavily funded by members and universities. Research and development was fundraised by the association through the 5 year strategic plan which attracted interested parties for the industry growth including government and aid funding with subsidies from universities.

The challenge of balancing member voices

Associations are made up of a multitude of members from different backgrounds and roles in the value chain. It is a significant challenge for members to all feel that their agenda is being heard and driven especially if they are in the minority, and conversely larger, wealthier players tend to drive the agenda of the association to a larger degree.

One of the biggest challenges that an association faces is the “bullying” of larger players that had increased financial contribution to control the direction of the association which was not always in the best interest of the different sized players, according to Craig Chapman. Craig could not provide a mitigation mechanism for this risk as “money talks”.

This sentiment was mimicked by Joe Karuri who suggested that the implementation of 1 vote for 1 paid membership assisted in reducing this risk however, it is impossible to eradicate completely.

Government recognition is key

Both ATTIA and AKEFEMA clearly outlined that their existence and work was only possible through a close relationship with their respective governments. Government officials welcome close collaboration as this enables their offices to liaise with the full industry through 1 group that is representative of the all. The government should be seen as a member of the association.

Examples of AKEFEMA’s successful association collaboration with government:

- In 2013 the government introduced a bill to shift animal feed from a zero rated VAT (VAT on inputs claimed back from government) goods to a fully VATable good (essentially representing an increase in price of 32% - 16% x 2). Through the lobbying of the association and direct discussions with the government, the bill was amended based on the negotiated compromise of animal feed being VAT exempt representing a 16% increase
- In the current drought (and previous droughts as the precedent was set in the past), the association has lobbied the government to import increased quantities of maize as the local market is unable to meet the demand. When importing from COMESA this is not a challenge as there are no import taxes imposed however, when importing from outside of COMESA there is a 50% import duty imposed by the Kenyan government.

Through lobbying, the association has this import duty scrapped to ensure that there is no impact on the price of animal feed (any increased prices would be passed onto the end consumer). This success is applied across the industry therefore, non-member millers also benefit from this which is then motivating for them to join the association - this does not always happen. Joe also outlined that challenges associated with non-members in these times as the government will commit to a certain quantity which is based on data from members + an estimate for those outside of the association - this is incredibly challenging to get right.

Full notes from all interviews can be seen in Appendix 2 - Interviews with Association Founders

1.8 Member needs assessments

In order to gain a better understanding of the members as well as their challenges and association expectations, a needs assessment was conducted from January-February 2023 through both the “Association of BSF farmers” and the “Registered BSF Association” (17 respondents) which was duly analysed against a 2021 needs assessment (62 respondents). The 2023 was executed in order to incorporate new farmers to the industry as well as understand how member needs and challenges have changed over the past two years.

The results form the foundation of the need for coordinated action from members through the Administration and Match-Making Pillar.

It is noteworthy that the 3 of the largest players in the landscape did not complete the survey and only 1 accepted the invitation for an interview (Sanergy) which was rolled out in conjunction with the initial meeting with the executive committee of the association.

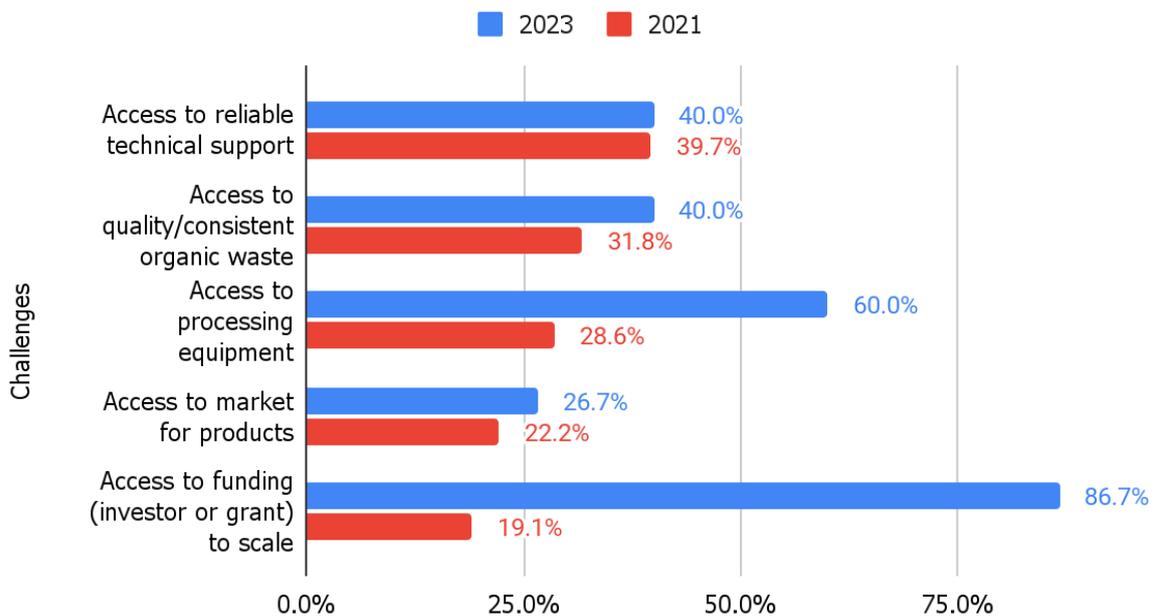
In this interview, Michael Lwoyelo (Managing Director of Sanergy and chairman of the association) shared the following insights:

- The greatest challenge that Sanergy still faces despite their long track record working with BSF as well as the financial standing that they have, is access to applicable research for the mass production of insects. He used the example of feedstock formulation (the recipe or mixture of organic waste inputs that make up the diet for the larvae) and the resulting impacts still being a significant challenge with specific reference to the organic waste that is accessible in the areas that they collect.
- He outlined his sensitivity that the larger players (either by size of organisation or influence within the sector) will have a louder voice in the association therefore, there is a need to drive for a democratic structure. This concern mimics lessons learnt from ATTIA and AKEFEMA.
- Michael shared his desire for government support in accessing better local sources of organic waste as their production unit is beyond the limits of Nairobi therefore, the cost of transport is a significant portion of their costs.

1.8.1 Member and industry challenges

Through the needs assessment of 2021 and 2023, 6 key challenges were identified by sector players, all of which should be considered significant with the lowest impact being 19% of respondents.

Main challenges faced by stakeholders



Access to reliable technical support

Technical support can be considered research that supports small and medium scale BSF farmers. In the current association, there is limited collaboration and sharing of ideas between members through the WhatsApp groups. When information is shared through the groups, this information is not validated and in many instances, there is mistrust of the information. The result is that each farmer is left to learn their own lessons in the “how” of BSF production.

Over the past 2 years, this challenge has reduced by 13% which can be attributed to the increase in farm level capacity from lessons learned on the farm. This said, this is still a significant challenge which should be addressed by the association in order to bring about increased quality of products as a result of better farming practices.

Access to quality and consistent organic waste

There is significant amount of organic waste available however, this organic waste does not necessarily meet the requirements for inclusion in BSF feedstock (diet) due to the following risks and challenges:

Organic and non-organic waste mixed together: This is common when waste is obtained through municipal waste removal as households and businesses do not separate their waste. For the BSF farmer, this is a time consuming task, and an expensive task which still maintains the risk of chemical contamination of the waste which may affect the insect colony.

Cost and competition for organic waste: Organic waste has a value in countries such as Kenya as livestock farmers (especially swine). This creates a natural competition of good quality, unmixed organic waste and a resulting cost.

This is different to developed countries where organic waste is seen as a hassle and large producers see the value in paying for the removal which becomes an additional revenue stream for BSF farmers in these areas.

This challenge affects 1 in 3 BSF farmers which is significant and there is an opportunity for the association to assist in this element through government (national and county) lobbying. This would be seen as an advantage for the government for whom waste management is an ongoing portfolio that attracts unfavourable attention due to the environment and health impacts of using landfills.

Access to processing equipment, Access to market for products and Access to funding (investor or grant)

These three challenges are directly linked.

The primary product from the production of BSF is the larvae as a protein source in animal feed. In order to include BSF in a formulated feed, the BSF needs to be dried to less than 10% and milled to a flour in order to be uniform with the other products included in the feed. There is significant demand for protein for animal feed as local supply of traditional sources of protein (soy and fishmeal) does not meet the demand therefore, Kenya is a large importer of these inputs annually.

The challenge that BSF farmers face is primarily access to the market which is driven by their lack of access to the equipment and machinery required in order to make their products market ready, which is as a direct result of lack of the necessary funding to purchase said equipment and machinery.

As a result, BSF farmers try to create a market for their undried larvae with local chicken and pig farmers however, the shelf life for this product (live or dead larvae) is approximately 2 days before the larvae go rancid (if dead) or pass the life stage for sale as feed as they begin to pupate (convert into a fly). The market for these products becomes a limit to these farmers' ability to scale further.

The solution is unfortunately, also not so clear. There is very little equipment and machinery that is purpose made for BSF farming at a small and medium scale available both globally and locally in Kenya. This means that farmers that do have access to funding are left to design and fabricate their own machinery - this includes both Sanergy and Insectipro.

Additionally, the current processing requirement of drying has a significant impact on the cost of production of the the output of dried larvae for animal feed:

- Capital required for the purchase of the machinery imported from outside of Kenya
- Challenges associated with sizing the machinery - Should this be sized to current production or a scaled version of the farmers production?
- The running costs (especially electricity) for the machinery especially if this is sized for a scaled version of the farmers production.

The result is that the selling price of dried larvae is lower than the cost of producing the same larvae as BSF farming is a mass volume industry and economies of scale are essential for profitability.

Thus far in Kenya, donor-funded projects have mostly focused either on centralised BSF models with one or two main beneficiaries or on 'backyard farmers' that produce to fulfil own feed, fertiliser, or waste management needs. These bigger commercial players tend to operate in isolation from the rest of the sector, and for the home-producer the the incentive to optimise their production and/or commercialise their operations remains limited. For example, larger players have access to industrial processing equipment without necessarily having to calculate operational costs back into the prices of the end product, making it impossible for mid-scale commercial BSF farms to compete. A consequence of this distinct funding focus is that inclusive sector-wide development remains limited and the potential of a large range of players hugely underutilised.

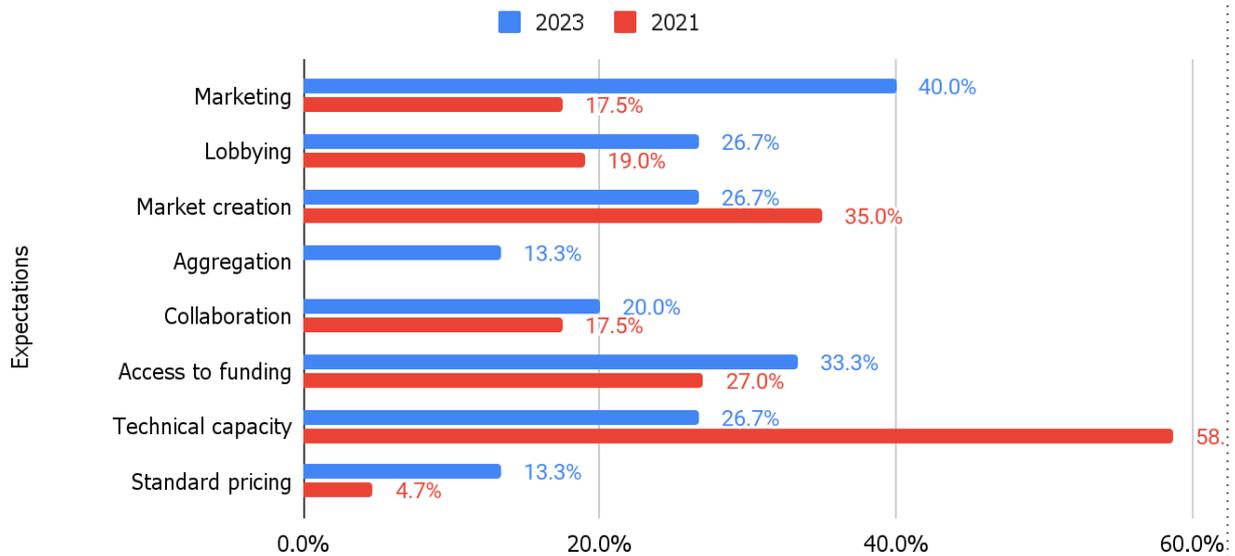
Access to funding is by far the largest challenge faced by BSF farmers, affecting more than 80% in the 2023 needs assessment, closely followed by Access to processing equipment affecting more than half of respondents.

1.8.2 Member expectations of an association

As part of the needs assessment, respondents were asked about what they would expect to be included in the value proposition of a paid association in Kenya. The respondents are not necessarily members of the current association.

These expectations are linked in the potential to implement.

Summary of expectations of members



Marketing/Public awareness of the industry

The insect industry is still in a very early stage in Kenya with many people feeling an “ew” factor towards insects in general. There is an opportunity to change this perception through public awareness campaigns which will directly impact on the demand for insect based products in the market, contributing to a natural economy.

Lobbying

As a new industry in Kenya, there is ongoing work for the establishment of standards and regulations for BSF farmers. At this point there is confusion amongst members on the real processes and required licences in order to legally farm the insects in Kenya. Accordingly, there is work to be done with the government in order to clarify these aspects as well as promote the overall industry within the region in order to create a larger market.

This extends to opportunities to export the insects outside of Kenya which attract a far higher price.

Collaboration

Current collaboration levels are low within the sector. The cause for this is unclear but there is a potential that there is no push for this from a trusted association therefore, this is an opportunity for the association to lead by example.

Creating and promoting collaboration was a key success of the ATTIA according to Carig Chapman. Membership fees of the association included invitation to quarterly farm visits to see other farmers in action with guest speakers on new research findings (expert consultants),

access to the association-created market, and extension officer visits to discuss best practices for farming on individual farmer land outside of larger meetings.

Access to funding and/or Aggregation

Both of these expectations speak to the desire for BSF farmers to scale their operations in order to access the market. The primary reason for funding would be to acquire the equipment and machinery required to make products market-ready (eg. a drier) and in the absence of this funding, there is an expectation of some to aggregate products in order to become more attractive to buyers.

As discussed earlier, the intersection of funding and access to processing equipment is complicated as there is no simple solution to the challenge, but rather an overall need to guide the industry through additional research in processing approaches in order to create affordable Kenyan products for the Kenyan market.

Technical capacity

This element is closely linked to the expectations of Collaboration and Standard Pricing as there is an expectation that members will be exposed and trained in better farming practices in order to elevate their businesses.

The execution of the expectation can be executed in a magnitude of approaches which will be discussed as part of the recommendations.

Market creation and Standard pricing

The pricing of products in the current market are driven by the invisible hand of Adam Smith - market dynamics such as demand and supply reaching an equilibrium. This is a natural mechanism for price setting however, due to low market access by the players in the BSF market, unguided pricing often results in lost sales and revenue for farmers and distrust within the sector by fellow farmers.

This expectation is linked to improving the quality of member products through the establishment of a code of conduct for members which includes farming best practices. Through working with members to meet this code of conduct, the association will increase the overall quality of member products for the market in order to meet the standard prices of the association.

Self regulation is one of the key elements of AKEFEMA's current 5 year strategic plan which concentrates on the continued work on and implementation of code of conduct for all members to increase the overall quality of animal feed in Kenya. This 2022 project is being executed through a consultant to audit all members on the code of conduct and increase capacity for those millers that did not meet the requirements. It is noteworthy that the rating

received by millers takes their size into consideration - larger millers are not audited and trained on the same level as large scale feed manufacturers.

Despite the reasonably low ranking of importance by potential members, the introduction of a code of conduct and the associated farming best practices linked to standard pricing in the industry will positively impact not only members but all BSF farmers in the industry, as well as creating trust from buyers and therefore, a ready market for BSF products in the local market.

1.10 Recommendations

The association has made some progress over the past few years however, there are definitely aspects that should be improved in order for the association to strive towards increased membership, drafting of a clear vision and value proposition and execution towards financial sustainability and value for its members.

The following are recommendations for the association in order to propel the industry forward.

1.10.1 Finalise the registration of the association

The process is underway for the association to be registered with the Registrar of Societies in Kenya. It is unclear how long this process will take as there is in-depth due diligence executed on the executive committee members - estimated 6 months total from date of application which was November 2022.

On completion of this process, the certificate of registration should be obtained which will allow the association to register with the Kenya Revenue Authority (KRA) which is compulsory as associations attract a 30% corporate tax on profits earned on an annual basis.

The bank account of the association should be set up with the current bank account closed and all remaining funds moved across to this account to be administered in accordance with the governing laws of the association.

1.10.2 Draft and institute association governance

There is a need to drive for the institution of association governance in order to build a solid foundation for future growth based on transparency and trust. These elements will drive increased membership as there will be a clear vision and value proposition of the association as well as clarity on the roles of the executive committee and what they are working towards for the association.

The following activities should be prioritised in order to create transparency for all members:

- Drafting of the official vision and value proposition for presentation to the executive committee and all members
- Drafting of the association code of conduct for presentation to the executive committee and all members with the long term goal of driving improved quality for members of the association through member audits and associated training
- Policies and Procedures including but not limited to drafting of the roles and responsibilities of the different players within the association from the executive committee positions down to the independent accountant
- Financial management practices: In line with the constitution, independent accountants and auditors should be selected through a tender process at executive

committee level which is to be defined and instituted for this process. These accountants should be instructed to draft the financial governance documents for the association. This will enable the association to set up transparent accounting practices from the onset of the association to prevent any financial governance challenges in the future.

- Evaluation of potential strategic executive committee members that area aligned to the vision and value proposition in order to drive the necessary implementation

It is recommended that external consultants with experience in association set-up are commissioned with this body of work to ensure timeous conclusion of these elements.

1.10.3 Drive immediate value for members

In order to promote the existence of the registered association and drive membership, it is key that a website is developed. This will showcase that the current executive committee is driven to implement the value that has been promised to members since early discussions in 2020.

Recommended elements in the website include:

- Background on the insects for food and feed industry in Kenya with BSF as the priority insect at this point
- Provide a platform for potential members to learn about the association including the vision, value proposition and membership fees as well a5s access to all association documents to increase and promote transparency
- Provide a platform for knowledge transfer in the form of a “Learning Library” which is an open source folder structure of validated information which is the first step in providing members (and non-members) with technical and applicable guidance on farming practices
- Centralised area dedicated to current calls for proposals within the sector (Match-Making Pillar)

1.10.4 Institute association priority pillars

The current executive committee has a functioning membership structure for the association. In order to compliment this structure, the below pillars are proposed which will form the foundation of work executed through the association.

Full member	5,000	6,000				
Full member: SME Scale			9,000	12,000	12,000	12,000
Full member: Large Scale			18,000	24,000	24,000	24,000
Associated members		12,000	18,000	24,000	24,000	24,000

Year 1 kicks off at the 2023 AGM when the association is officially launched to its members.

Increase the fees (overall)

Current fees will not allow for financial sustainability of the association to cover the administrative costs alone. Additionally, other association membership fees are significantly higher therefore, showing an opportunity to increase membership without losing existing members. This balance is essential as many members are small scale producers.

Joe Karuri (Chairman of AKEFEMA) recommends a minimum membership fee of 12,000/- per person or organisation per annum. This is important to ensure that the members are aligned and able to meet quality standards which impacts the perspective that outside entities have of the association and its members.

Introduce tiered membership fees

Mimic the fee structure of AKEFEMA through the introduction of an “Associated Member” which allows stakeholders in the insect value chain that are not producers to have the opportunity to be members. These members are charged a premium to “Full Members” due to the business opportunities created through sale of products and services, or access to member products and this tier should be introduced from Year 1.

Associate members are Raw/Input material suppliers (eg. organic waste producers), Off-takers of insect products (eg. feed millers and fertiliser distributors), Donor and development partners, Research organisations, Equipment suppliers and other insect value chain actors

Further tiering is recommended that will differentiate between the different scales of BSF producers operating in Kenya currently. This tier is recommended to be implemented in Year 2 to all for an increased membership base during the course of Year 1. The distinction of the different tiers of SME to Large scale was complicated due to the multiple aspects of the definition of scale, however, all accept organic waste to feed their insect colonies therefore, quantity of organic waste input was selected as the measurement metric.

Full members are individuals and organisations that produce insect products in Kenya

SME Scale = BSF producers that process less than 5,000kg of organic waste per day

Large Scale = BSF producers that process more than 5,000kg of organic waste per day

Allow for various payment terms

Based on several discussions, members outlined that cash flow and liquidity was a concern for members therefore, it should be possible for members to pay fees on a monthly, quarterly or annual basis dependent on their unique circumstance

5 year financial forecast

In the event that all of the above recommendations are implemented by the association, the below 5 year financial forecast would apply. This forecast applies to the administration pillar only - it does not take into account any projects that are externally funded that benefit the members of this association.

	Year 1	Year 2	Year 3	Year 4	Year 5
Number of members					
Full member: SME Scale	40	39	41	44	47
Full member: Large Scale		3	4	4	4
Associated members	3	3	3	4	4
Revenue - Member contributions	310,000	463,000	677,800	721,780	759,780
Registration	34,000	-1,400	10,600	10,660	12,660
Full member	240,000	0	0	0	0
Full member: SME Scale	0	351,000	492,000	528,000	564,000
Full member: Large Scale	0	54,000	96,000	96,000	96,000
Associated members	36,000	59,400	79,200	87,120	87,120
Costs	302,000	302,000	362,000	362,000	362,000
Accounting software	5,000	5,000	5,000	5,000	5,000
Accountant	120,000	120,000	120,000	120,000	120,000
Audit (annual)	100,000	100,000	100,000	100,000	100,000
Website - Annual domain and hosting subscriptions	5,000	5,000	5,000	5,000	5,000
Website - Annual development/maintenance	12,000	12,000	12,000	12,000	12,000
Annual General Meeting (AGM)	60,000	60,000	120,000	120,000	120,000
Gross	8,000	161,000	315,800	359,780	397,780
Tax @ 30%	2,400	48,300	94,740	107,934	119,334
Nett (KES)	5,600	112,700	221,060	251,846	278,446
Nett (Euro)	40	800	1,570	1,788	1,977

Assumptions and notes

- *Membership will increase significantly after the AGM 2023 and thereafter at a steady 5% per year up to 60 members at which time growth will stagnate (based on AKEFEMA membership)*
- *ICIPE can host events up to 60 pax therefore year 1+2 can be hosted here. Only charges will be for refreshments and bitings*
- *Current inflation will be applied in each year therefore, no inflationary increases have been applied here*
- *USD 1 = 125 KES as this affects consulting contracts and software subscriptions*
- *Euro 1 = 141,12 as this affects the Nett (Euro) value*

Other income/revenue

There is an option for donors to find one or more of the sub-pillars within the Administration Pillar of the association attractive for funding of its activities.

Examples would include but are not limited to:

- Facilitation of farm visits by members in order to increase the level of collaboration within the sector, drive increased knowledge transfer between parties and play an integral role in the growth of individual businesses.
- Facilitation of executive committee members to have in person meetings in the event that one or more of the members are not based in Nairobi

Government Lobbying

This is a critical element as identified by members, as well as one prioritised by other associations in order to ensure alignment and continuous liaising with government (national and county) - a single voice for the industry which the government can rely on as a reliable source for collaboration.

Marketing/Public Awareness Creation

As the insect industry is nascent in Kenya (and globally), there is significant work to be done on sensitising all stakeholders within the value chain as well as the overall public about the insect industry, its players, benefits of its products and more. Through documented additional demand, it will be possible for producers to raise additional capital in order to scale their operations.

Member collaboration

There is a general consensus amongst industry members that there is a lack of collaborative spirit currently however, this is of critical importance to members and the success of the association. Collaboration should be stemmed through initiatives such as farm visits, expert presentations on best practices and annual general meetings (AGMs) that provide tangible value to members.

1.10.4.2 Match-Making Pillar

This pillar should be seen as a platform to facilitate funding to the sector and its players through the match-making of donors/funding to specific needs of the sector as identified through a strategic 5 year plan, and then match-making of funding opportunities by these donors to members of the sector to independently apply. It is important to note that it is not within the scope of the association to directly attract funding and implement projects but rather to create the enabling environment for members to thrive in their business including being a conduit to opportunities that are shared with the association.

Learning from other associations, it is recommended that the association draft a Strategic 5 year plan. It is through this plan that projects will be implemented by association members through collaboration and support with other stakeholders within the industry. The 5 year plan will outline the priorities for the association for the subsequent 5 years as well as addressing the sectoral agenda which are very intertwined in this situation.

This plan will be promoted to donors in order to obtain interest in the different elements with the hope that these donors will share the vision and take on portions of the plan to implement with local partners. These opportunities will be shared through the association website with members in order to submit proposals in line with the donor guidelines.

There is additional work to be done on defining aspects of the handling of money by and through the association as well as the handling of conflict of interest by executive committee members that submit proposals for projects which have been identified as risks, and should be clearly defined in the 5 year strategic plan.

1.11 Proposed Next Steps

Based on the recommendations, the below is seen as the most immediate next steps in order to propel the association forward to enable value addition for the sector.

1.11.1 Website Design and Development

A website will provide the required visibility for the association in order to attract additional members through the value of validated and accessible information through the Learning Library - A consistent expectation of members is access to validated technical information. Through this work, existing research will be evaluated, summarised and filed into accessible folders on the website for members to access. Examples of folders include Feed Formulation, Academic Research however, these will be finalised through the process.

At this point it is proposed that all information on the website be free and open to all, and not just the paid members of the association.

The annual fees for maintaining a website have been included in the 5 year forecast for the Administration Pillar.

1.11.2 Strategic 5 Year Plan

Bringing together stakeholders throughout the insect value chain to bring their voice to the drawing up of a vision for the future which will be presented to all members at the 2023 AGM with donors invited, an opportunity for members to share their past, ongoing and proposed organisational projects.

1.11.2.1 Phase 1: Scoping

Background work for the initial engagement of stakeholders in the insect industry, building on this report

1.11.2.2 Phase 2: Association Stakeholder engagement meeting

A full stakeholder meeting should be planned and held in order to bring all players in the insect value chain together to form the foundation of the strategy for the association for the next 5 years. These stakeholders should include insect producers, off takers of their products, government officials from the Agricultural and Waste Management Ministry, regulators, researchers and others.

This event should be well facilitated by an independent consultant that does not stand to gain from driving their own agenda. This approach will allow for clear outcomes in order to drive the analysis in phase 3.

1.11.2.3 Phase 3: Further research, analysis and drafting

Based on the outcomes from the stakeholder engagement meeting, further research and analysis will be executed in order to draft the resulting 5 year strategic plan to support the growth of the overall insect industry in Kenya.

The drafting of this document should be driven from the perspective of attracting long term funding through clearly defined focal areas which could be interesting to donors to take on.

Additionally, it is recommended that recommendations be included for completion as part of this phase:

- Finalise legal registration of association
- Association governance

1.11.2.4 Phase 4: 2023 AGM

Proposed date: October/November 2023 dependent on finalisation of Strategic 5 Year Plan

This AGM will be a priority with additional publicity as it will be the platform to officially launch the legal association to all of its members. It is through this meeting that the completed Strategic 5 year plan will be presented to members as well as invited donors who have expressed interest in funding the insect industry in Kenya - a meeting of "Minds and Money". Additionally, an area will be allocated for members to showcase their past/current/proposed work for industry stakeholders (increasing opportunities to collaborate) and to increase potential access to funding.

Other actions:

- Voting for the new executive committee will take place
- Only paid up members will be invited to participate in this meeting.
- The 5 year strategic plan will be uploaded to the website and the executive committee will work towards realising it.

1.13 Project Partners

1.13.1 Fair & Sustainable (F&S)

F&S has extensive research as well as implementation experience in the Black Soldier Fly value chain. In 2020, F&S developed a business case for commercial mid-scale BSF farms owned by young entrepreneurs (of which the majority are women) to harness the potential of the BSF sector to tackle youth unemployment rates in Kenya. A pilot farm was set up in 2021 in Eldoret, Kenya to test and further develop the business model. F&S has furthermore been involved in (research) projects on BSF for various organisations, including ongoing work for the FAO.

1.13.2 The Bug Picture

The Bug Picture (TBP) is a Kenyan registered company that uses insects as the solution to challenges in Kenya, East Africa and the world. TBP has over 3 years experience working with insects (predominantly black soldier fly larvae) in East Africa, having successfully run projects in Kenya and Rwanda.



1.14 Appendixes

1.14.1 Appendix 1: Constitution

CONSTITUTION OF AIPAK
ASSOCIATION OF INSECT FARMING & IT'S PRODUCTS
CONSTITUTION AND RULES

1. NAME

The name of the society shall be ASSOCIATION OF INSECT FARMING & IT'S PRODUCTS

(In this constitution referred to as "the Society").

2. OBJECTS

- (a) Non-political and non-profit making
- (b) To encourage and support insect farming
- (c) To promote and attain higher standards of insect farming skills
- (d) To offer a platform for self-regulation for practicing insect farmers
- (e) To provide support services to members

3. MEMBERSHIP

- (a) Any person over the age of eighteen years shall be eligible for membership of the Society and shall, subject to the approval of the committee, become a member on payment of an entrance fee of Shs.5,000.00
- (b) Every member shall pay an annual subscription of Shs.2,000.00 not later than the 1st day of every March.
- (c) Any member desiring to resign from the Society shall submit his resignation to the secretary, which shall take effect from the date of receipt by the secretary of such notice.
- (d) Any member may be expelled from membership if the committee so recommends and if a general meeting of the Society shall resolve by a two-thirds majority of the members present that such a member should be expelled on the grounds that his conduct has adversely affected the reputation or dignity of the Society, or that he has contravened any of the provisions of the constitution of the Society. The committee shall have power to suspend a member from his membership until the next general meeting of the Society following such suspension but notwithstanding such suspension a member whose expulsion is proposed shall have the right to address the general meeting at which his expulsions to be considered.
- (e) Any person who resigns or is removed from membership shall not be entitled to a refund of his subscription or any part thereof or any moneys contributed by him at any time.
- (f) Any member who falls into arrears with his annual subscription for more than six months shall automatically cease to be a member of the Society and his name shall be struck off the

register of members. The committee may, however, at its discretion, reinstate such member on payment of the total amount of subscription outstanding.

4. OFFICE BEARERS

(a) The office bearers of the Society shall be:

- (i) The Chairman
- (ii) The Vice Chairman
- (iii) The Secretary
- (iv) The Assistant Secretary
- (v) The Treasurer
- (vi) The Assistant Treasurer
- (vii) The Technical and Advisory Committee Chairman

all of whom shall be fully paid-up members of the Society and shall be elected at the annual general meeting to be held in March each year. (See also rule 6 (b) below).

(b) All office bearers shall hold office from the date of election until the succeeding annual general meeting subject to the conditions contained in sub-paragraphs (c) and (d) of this rule but shall be eligible for re-election.

(c) Any office bearer who ceases to be a member of the Society shall automatically cease to be an office bearer thereof.

(d) Office bearers may be removed from office in the same way as is laid down for the expulsion of members in rule 3 (d) and vacancies thus created shall be filled by persons elected at the general meeting resolving the expulsion.

5. DUTIES OF OFFICE BEARERS

(a) Chairman - the Chairman shall, unless prevented by illness or other sufficient cause, preside over all meetings of the committee and at all general meetings.

(b) Vice-Chairman - the Vice-Chairman shall perform any duties of the Chairman in his absence.

(c) Secretary - the Secretary shall deal with all the correspondence of the Society under the general supervision of the committee. In cases of urgent matters where the committee cannot be consulted, he shall consult the Chairman. The decisions reached shall be subject to ratification or otherwise at the next committee meeting. He shall issue notices convening all meetings of the committee and all general meetings of the Society and shall be responsible for keeping minutes of all such meetings and for the preservation of all records of proceedings of the Society and of the committee.

(d) Assistant Secretary - in the absence of the Secretary, the Assistant Secretary shall perform all the duties of the Secretary and such other duties as shall be assigned to him by the Secretary or committee whether the Secretary is present or not.

(e) Treasurer - the Treasurer shall receive and shall also disburse, under the directions of the committee, all moneys belonging to the Society and shall issue receipts for all moneys received by him and preserve vouchers for all moneys paid by him. The Treasurer is

responsible to the committee and to the members that proper books of account of all moneys received and paid by the Society are written up, preserved and available for inspection.

(f) Assistant Treasurer - the Assistant Treasurer shall perform such duties as may be specifically assigned to him by the Treasurer or by the committee and in the absence of the Treasurer shall perform the duties of the Treasurer.

6. THE COMMITTEE

(a) The committee shall consist of all the office bearers of the Society and any other members elected at the annual general meeting in each year; such committee members shall hold office until the following annual general meeting. The committee shall meet at such times and places as it shall resolve but shall meet not less than once in any three months.

(b) Any casual vacancies for members of the committee caused by death or resignation shall be filled by the committee until the next annual general meeting of the Society.

Vacancies caused by members of the committee removed from office will be dealt with as shown in rule 4 (d).

7. DUTIES OF THE COMMITTEE

(a) The committee shall be responsible for the management of the Society and for that purpose may give directions to the office bearers as to the manner in which, within the law, they shall perform their duties. The committee shall have power to appoint such sub-committees as it may deem desirable to make reports to the committee upon which such action shall be taken as seems to the committee desirable.

(b) All moneys disbursed on behalf of the Society shall be authorized by the committee except as specified in rule 12 (d).

(c) The quorum for meetings of the committee shall be not less than Four (4) members.

8. GENERAL MEETINGS

(a) There shall be two classes of general meetings - annual general meetings and special general meetings.

(b) (i) The annual general meeting shall be held not later than 30th April in each year. Notice in writing of such annual general meetings, accompanied by the annual statement of account (see rule 11 (b)) and the agenda for the meeting shall be sent to all members not less than 21 days before the date of the meetings and, where practicable, by Press advertisement not less than 14 days before the date of the meetings.

(ii) The agenda for any annual general meeting shall consist of the following:

(a) Confirmation of the minutes of the previous annual general meeting.

(b) Consideration of the accounts.

(c) Election of office bearers and the committee members (and trustees where necessary in accordance with rule 10 (c)).

- (d) Appointment of auditors in accordance with rule 11 (a).
- (e) Such other matters as the committee may decide or as to which notice shall have been given in writing by a members or members to the secretary at least four weeks before the date of the meeting.
- (f) Any other business with the approval of the Chairman.
- (c) A special general meeting may be called for any specific purpose by the committee. Notice in writing of such meeting shall be send to all members not less than 7 days before the date thereof and where practicable by Press advertisement not less than 7 days before the date of such meeting.
- (d) A special general meeting may also be requisitioned for a specific purpose by order in writing to the secretary of not less than Four (4) members and such meetings shall be held within 21 days of the date of the requisition. The notice for such meeting shall be as shown in rule 8 (c) and no matter shall be discussed other than that stated in the requisition.
- (e) Quorum for general meetings shall be not less than two-third (2/3) of the registered members of the Society.
- (a) At all meetings of the Society the Chairman, or in his absence, a member selected by the meeting shall take the chair.
- (b) The Chairman may at his discretion limit the number of persons permitted to speak in favour of and against any motion.
- (c) Resolutions shall be decided by simple voting by a show of hands. In the case of equality of votes, the Chairman shall have a second or casting vote.

10. TRUSTEES

- (a) All land, buildings and other immovable property and all investments and securities which shall be acquired by the Society shall be vested in the names of not less than Five (5) trustees who shall be members of the Society and shall be appointed at an annual general meeting for a period of three years. On retirement such trustees shall be eligible for re-election. A general meeting shall have the power to remove any of the trustees and all vacancies occurring by removal, resignation or death, shall be filled at the same or next general meeting.
- (b) The trustees shall pay all income received from property vested in the trustees to the Treasurer. Any expenditure in respect of such property which in the opinion of the trustees is necessary or desirable shall be reported by the trustees to the committee which shall authorise expenditure of such moneys as it thinks fit.

11. AUDITOR

- (a) An auditor shall be appointed for the following year by the annual general meeting. All the Society's accounts, records and documents shall be opened to the inspection of the auditor at any time. The Treasurer shall produce an account of his receipts and payments and a statement of assets and liabilities made up to a date which shall not be less than six

weeks and not more than three months before the date of the annual general meeting. The auditor shall examine such annual accounts and statements and either clarify that they are correct, duly vouched and in accordance with the law or report to the Society in what respect they are found to be incorrect, unvouched or not in accordance with the law.

(b) A copy of the auditor's report on the accounts and statements together with such accounts and statements shall be furnished to all members at the same time as the notice convening the annual general meeting is sent out. An auditor may be paid such honorarium for his duties as may be resolved by the annual general meeting appointing him.

(c) No auditor shall be an office bearer or a member of the committee of the Society.

12. FUNDS

(a) The funds of the Society may only be used for the following purposes:

(i) Marketing Expenses

(ii) License and Permits

(iii) Telephone and Postage

(iv) Secretariat Running Expenses

(v) Travelling and Accommodation

(vi) Salary and Wages

(vii) Statutory Deductions – PAYE, NSSF, NHIF

(viii) etc

(b) All moneys and funds shall be received by and paid to the Treasurer and shall be deposited by him in the name of the Society in any bank or banks approved by the committee.

(c) No payments shall be made out of the bank account without a resolution of the committee authorizing such payment and all cheques on such bank account shall be signed by the Treasurer and two other office bearers of the Society who shall be appointed by the committee.

(d) A sum not exceeding Shs.20,000.00 may be kept by the Treasurer for petty disbursements of which proper account shall be kept.

(e) The committee shall have power to suspend any office bearer who it has reasonable cause to believe is not properly accounting for any of the funds or property of the Society and shall have power to appoint another person in his place. Such suspension shall be reported to a general meeting to be convened on a date not later than two months from the date of such suspension and the general meeting shall have full power to decide what further action should be taken in the matter.

(f) The financial year of the Society shall be from 1st January to 31st December.

13. AMENDMENTS TO THE CONSTITUTION

Amendments to the constitution of the Society must be approved by at least a two-thirds majority

of members at a general meeting of the Society. They cannot, however, be implemented without the prior consent in writing of the Registrar, obtained upon application to him made in writing and signed by three of the office bearers.

14. DISSOLUTION

(a) The Society shall not be dissolved except by a resolution passed at a general meeting of members by a vote of two-thirds of the members present. The quorum at the meeting shall be as shown in rule 8 (e). If no quorum is obtained, the proposal to dissolve the Society shall be submitted to a further general meeting which shall be held one month later. Notice of this meeting shall be given to all members of the Society at least 14 days before the date of the meeting. The quorum for this second meeting shall be the number of members present.

(b) Provided, however, that no dissolution shall be effected without prior permission in writing of the Registrar, obtained upon application to him made in writing and signed by three of the office bearers.

(c) When the dissolution of the Society has been approved by the Registrar, no further action shall be taken by the committee or any office bearer of the Society in connection with the aims of the Society other than to get in and liquidate for cash all the assets of the Society. Subject to the payment of all the debts of the Society, the balance thereof shall be distributed in such other manner as may be resolved by the meeting at which the resolution for dissolution is passed.

15. INSPECTION OF ACCOUNTS AND LIST OF MEMBERS

The books of account and all documents relating thereto and a list of members of the Society shall be available for inspection at the registered office of the Society by any officer or member of the Society on giving not less than seven days' notice in writing to the Society.

1.14.3 Appendix 2: Interviews with Association Founders

1.14.3.1 Interview with Craig Chapman

3 February 2023

Craig Chapman's was one of the companies in Australia that initiated the creation of the tea tree association. It started in 1987 through the first AGM with 30-40 members. At this time it was non commercial players known as bush cutters which grew from approx 20MT per year to 500MT in 10 years through commercialisation which was aided by research and development through the association. This is actually very similar to where the insect industry in Kenya currently finds itself where there are few commercial players who have access to the required capital while the rest of the industry is supported by small-medium scale producers who have a primary challenge of finding an adequate market.

Due to the establishment of the association, there was greater access to the market by members, and more cohesive actions around research and development even on farm level to eliminate duplication of effort (and money spent). As the industry grew, supporting industries were stimulated including:

Equipment providers with purpose build items for tea tree producers for the first time

Centralised processing hubs for smaller farmers who cannot justify the cost of sophisticated processing equipment - This might be easier in Australia as tea tree farmers were geolocated close to each other due to weather for farming the commodity

Marketers/middle men - This was both for combining different farmer products to access larger markets including for export

A downside risk of overall growth of the industry is that as this growth gains momentum, more players will come online to take advantage of the growth (get on the bandwagon) which created an over supply of tea tree (demand>supply) therefore the market economic forces moved the price from a high of \$50 per kg to \$20 per kg.

One of the biggest challenges that the association faced was the "bullying" of larger players that had increased financial contribution to control the direction of the association which was not always in the best interest of the different sized players. Craig could not provide a mitigation mechanism for this risk as "money talks".

The most important arm/pillar of the association was research and development which allowed for essential research to support growth of the sector, development of the product/s and its processing/rearing techniques. This was closely followed by marketing once the industry was slightly more developed so that the members/players could access the market (local and international), have adequate support from the government.

Research and development

Research and development is the most important element of an association that is in the phase of tea tree in the 80/90's and insects now. This research should be decided on by members, and remain incredibly easy to access by members so that farming practices can progress from "bush cutting" to commercial and financially viable - this is the same for insect industry.

It is noteworthy that research and development fell outside of the direct costs of the association which was still heavily funded by members and universities etc. R+D was fundraised by the association through the 5 year strategic plan which attracted interested parties for the industry growth including government and aid funding with subsidies from universities.

Membership

At the beginning, the association was a meeting of minds, and a place to come together to discuss and prioritise joint activities. All activities were paid for by members only (100%) and members volunteered their time to progress the industry however, this changed in the mid 90's (approx 10 years from start of association) when the association was recognised by the government who then took on 75% of the costs of the association itself.

Membership of the association was broken down into members and associated members: Members were producers of tea tree in Australia - This fee included invitation to quarterly farm visits to see other farmers in action with guest speakers on new research findings (expert consultants), access to association created market, seeds that were genetically created through association paid for research (seed breeding program - improved seeds for increased yield by up to 30%) and extension officer visits to discuss best practices for farming on individual farmer land outside of larger meetings
Association members were those industries that were connected to the tea tree industry eg. buyers, equipment providers, research organisations, marketers

1.14.3.2 Interview with Joe Karuri

21 February 2023

Pioneer Feeds HQ, Nairobi

Background

Joe Karuri was part of the founding 5 people/feed millers that initiated the establishment of an association in 2004 - these members registered a legal association. None of these organisation were considered "big players" at the time - all were small/SMEs because they

felt that “they did not have a voice” because they were all too small but together they could be 1 large voice to be taken seriously.

The first call / AGM was called in order to create the overall vision of the association. ALL potential members were invited to attend:

All feed millers, irrespective of size in Kenya

Feed input suppliers - Potentially as an association and not individuals

Government and legislators

Regulators including KEBS

Government registries including Agriculture

Research/academic institutions

It is important to note that these were not all members - membership was not prioritised at this time but rather including as many voices as possible to drive the vision of the association.

Association priorities

At the beginning these included:

Recognition of the association by the government

Continuous collaboration with the government - this was welcomed by the government because it allowed them to liaise with a significant portion of feed millers through 1 place - a direct link between policy and business

Establish clear code of conduct for the industry and how to build capacity of members to work within - This is ongoing with a project in 2022 which revamped the full system

Joe reflects that he wishes that they had prioritised the design and writing of a 5 year strategic plan at the beginning because this would have been an effective tool to bring the associations vision to life for its members - members would have seen/felt the value proposition sooner.

It is through their current strategic 5 year plan that they have raised funds to execute on projects - 90% funded from outside of membership fees:

Policy and advocacy

Self regulation - continued work on and implementation of code of conduct for all members to increase the overall quality of animal feed in Kenya. 2022 project through a consultant to audit all members on the code of conduct and increase capacity for those millers that did not meet the requirements. It is noteworthy that the rating received by millers took their size into consideration - not standard across the board.

Farmer trainings - working with the supplier of animal feed inputs to increase supply of the right types of crops to support the animal feed industry

Structural strengthening

Overall and simplified value proposition:

As the industry increases in size, there will be significant increase in business opportunities which members will be able to leverage to increase their businesses and associated revenue. "Bringing sanity, order and industry stability".

Examples of successful association collaboration with government:

In 2013 the government introduced a bill to shift animal feed from a zero rated VAT (VAT on inputs claimed back from government) goods to a fully VATable good (essentially representing an increase in price of 32% - 16% x 2). Through the lobbying of the association and direct discussions with the government, the bill was amended based on the negotiated compromise of animal feed being VAT exempt representing a 16% increase

In the current drought (and previous droughts as the precedent was set in the past), the association has lobbied the government to import increased quantities of maize as the local market is unable to meet the demand. When importing from COMESA this is not a challenge as there are no import taxes imposed however, when importing from outside of COMESA there is a 50% import duty imposed by the Kenyan government. Through lobbying, the association has this import duty scrapped to ensure that there is no impact on the price of animal feed (any increased prices would be passed onto the end consumer). This success is applied across the industry therefore, non-member millers also benefit from this which is then motivating for them to join the association - this does not always happen. Joe also outlined that challenges associated with non-members in these times as the government will commit to a certain quantity which is based on data from members + an estimate for those outside of the association - this is incredibly challenging to get right.

Membership fees

Current membership is approximately 60 in total in 2022 representing/producing approximately 60% of the total industry in Kenya:

30 Full members

30 Association members

At the beginning, a push towards increasing memberships was not prioritised. The thinking behind this was to drive value based on vision so that members are interested in joining. Members will be willing to pay if they see value in the vision being implemented - 1 person representing 1 organisation given 1 vote (irrespective of size).

Joe recalls that membership fees at the beginning (2005) were all the same for all types of members

Once off registration fee - 2,000/-

Annual subscription - 15,000-20,000/-

Over time it was identified that there was an opportunity to redefine the membership structure in order to allow non-feed millers to also gain access through a paid membership (Associate). The justification for the increased charge to Associate members was that they gained business value (sale of products and services to members) through being a member of the association.

Currently there are 2 types of memberships:

Once off registration fee - 10,000/-

Full members are Feed Millers who pay annual subscription of 60,000/-

Associate members are Raw material suppliers, Feed additives/Supplement suppliers, Drugs/pharmaceutical input suppliers, Livestock institutions and other feed/livestock value chain actors who pay an annual subscription of 90,000/-

It is noteworthy that there are flexible payment terms eg. paid upfront for the year or invoiced on a monthly basis to increase access to its members.

Joe would suggest a minimum of 12,000/- per member per year which equates to 1,000/- per month. This should be achievable, and will also ensure that the quality of members is aligned.

The AKEFEMA is currently rethinking this approach as the smaller players are complaining that large players who have far higher revenue/cashflow should pay a higher subscription than they do. AKEFEMA has been in discussions with the South African Feed Millers Association (seen as an inspiration) who apply a fee (eg. ZAR1) per kg of animal feed produced (based on tonnage). A system was developed by which feedback is received from suppliers creating powerful data that drives invoicing of the association. The association can be seen as a small tax applied to all millers.

AKEFEMA is interested in this approach in Kenya however, there are perceived challenges around millers giving accurate feedback for the invoicing of the association. This said, AKEFEMA sees this as the most appropriate mechanism to provide tiered membership structure to its members - small producers pay less than large producers.

Administration of the association

Initially, the association was 100% volunteer based. This shifted in 2007 when a premises was secured and an administrator was hired.

It is in the past 5 years that the association has been able to hire full time staff (secretariat) based on receipt of the membership fees received from members.

CEO

Administrator

All Excom, committees and regional representatives provide their time on a volunteer basis for all work that is done through the association. Expenses incurred in the execution of association work is covered by the association.

The association work is allocated based on committees that drive the agenda of the association:

Finance

Technology

Trade

Publicity - Joe outlined that this is definitely an underestimated committee but critical for success of the association

There are an additional 6 regional representatives that assist with work on the ground.

An association should be viewed as a philanthropic venture (giving your time for the betterment of the industry) and not a business.

1.14.4 Appendix 3: Minutes from association meeting (9 June 2020)

Present:

1. Roseanne Mwangi
2. David Kiguru
3. Frederik Kimani
4. George Muturi
5. Lydia Wanjiku Kibue
6. Joe Gathecha

Absent with Apology:

1. Senator
2. Jennifer Muthike
3. Madam Wanja

Agenda:

1. Registration Fees
2. Name Search & Registration of the Association
3. Draft Constitution
4. Draft Memorandum of Understanding

5. AOB

Preamble:

The meeting began with a word of welcome from Roseanne. She was happy to have everyone on board and looked forward to this becoming a regular monthly meeting towards developing the association.

Minute 1/6/2020 – Registration Fees

A one-off registration/ joining fee of Kshs 5,000 per person had been proposed but was yet to be

deliberated and decided upon. The argument in support of this was that if members invested an agreed amount, this would raise the level of commitment and involvement. All members present approved this motion. It was agreed that the amount would be applicable to both individual and corporate membership.

The next matter of discussion was on where the Treasury would be located, and who would receive the funds and run that function. It was noted that this was yet to be determined as elections were yet to be held and the association currently did not have office bearers. It was suggested a team of interim officials be appointed from those members who had already demonstrated a level of commitment by attending the meetings each month, as well as paying the registration fees.

The calendar of meetings had been for every second Tuesday of the month.

Members present noted that an interim chair and secretary had already been selected at a previous

meeting. The meeting confirmed the interim office bearers therefore as:

Chairman - David Kiguru

Secretary - Roseanne Mwangi

Treasurer - George Muturi

It was agreed that the appointed treasurer would start collecting the registration/ joining fees

immediately. The funds would be used for the immediate needs of the registration of the association. An account would be opened for the same.

All members who paid would be added into a new Whatsapp group. A report on this could be shared at the next meeting. It was proposed that members be given a timeframe of three months to have made the full payment

It was noted that there is an urgent need to go viral and spread our influence as an association –locally and beyond. It was felt that as members of this association, we would need to benefit from it. All forms of exposure would be of benefit to the association.

Minute 2/6/2020 – Name Search & Registration of the Association

Different members shared that having consulted, it had been noted that there was need to be careful on what kind of registration we chose. It was important to articulate exactly what the association wanted to do and if we would acquire assets as an association.

Regarding the name search, it was noted that the Registrar does not accept abbreviations, we would therefore need to use the name in full. The team would need to propose 3 names to the registrar and see which was accepted. The names that had previously been proposed were:

1. BSF Farms of Kenya
2. BSF Council of Kenya
3. BSF Farmers Association of Kenya
4. National Chamber of Insect Farmers

There was a need to agree on how we would constitute ourselves. Would it be a business, an association or otherwise? It had been proposed that we follow the line of the East African Grain Council with the aims of:

- Marketing
- Awareness creation
- Arbitration on BSF issues

A member felt that there was need to create a body with a direct authority over its members, especially in financial matters. It was agreed that the association/ body needed to demonstrate its ability to give benefit to members.

As a way forward, it was agreed that Mr. Biketi would be requested for a forum to engage with members and give his opinion and recommendations for the team for a way forward.

Minute 3/6/2020 – Draft Constitution

A draft constitution had been worked on by Madam Muthike and this would be shared with the team for discussion and input. This discussion could be held within the Whatsapp group. It was agreed that the same would also be shared with the lawyer for input and guidance going forward.

Minute 4/6/2020 – Draft Memorandum of Association

The previous meeting had proposed that we draft an MoU for purposes of handling grants that the association received.

Roseanne shared about a French company which was going to produce 8 tonnes of larvae. Comparatively, this team had projected producing 140 tonnes combined which would easily attract funding, especially in these COVID-19 times.

Members felt that this matter could be discussed once we were registered.

There being no other business, the meeting was closed with a vote of thanks from the Chairman.

1.14.5 Appendix 4: Financial Statement of Association (March 2023)

Account: 1287211607 PROSCOVIA GEORGE ROSE JA
Balance at Period Start 0.00 KES Balance at Period End: 94,974.00 KES

BANK STATEMENT RECORDS				GOOGLE FORMS SHEET				
DATE	REFERENCE	NAME	AMOUNT	BALANCE	Timestamp	Company/Business	name/ representative	Fees Reference
08-Jul-2021	PG833Q38XZ	JOSH	5,000 in	5,000.00	08-Jul-2021	Joshua Mwangi Maina (Individual)	Joshua Mwangi Maina (individual)	PG833Q38XZ
08-Jul-2021	PG823Q6GIS	SAMW	5,000 in	10,000.00	08-Jul-2021	Kijani Smile limited company	Samwel Mwangala, Grace Kabibi Mai	PG823Q6GIS
08-Jul-2021	PG8442LJ30	GEOR	10,000 in	20,000.00	05-Jul-2021	Munyama ventures limited	Dorcas Ayoma Mbalanya	Paid to George kamau
					07-Jul-2021	Wai Aniprotein Ventures Ltd	Capt Joe Gathecha	Yes
09-Jul-2021	PG834905MT	GIDE	5,000 in	25,000.00	07-Jul-2021	Gideon Gitonga	Gideon Gitonga	By mpsua.
09-Jul-2021	PG98569UAS	CAND	5,000 in	30,000.00	09-Jul-2021	KARU FARM (Karuana)	Karuana muthoni	PG98569UAS
10-Jul-2021	PGA35XEHS9	ROSE	5,000 in	35,000.00	07-Jul-2021	The Insectary	Roseanne Wanjiku Mwangi	To send
13-Jul-2021	PGC59V82PZ	LYDI	5,000 in	40,000.00	12-Jul-2021	Lydiah	Lydiah Kabue	PGC59V82PZ
14-Jul-2021	PGE3BRPA73	SAMS	5,000 in	45,000.00	14-Jul-2021	Samson Ndambo	Samson Ndambo	PGE3BRPA73
14-Jul-2021	PGE2BVG5XQ	JULI	5,000 in	50,000.00	14-Jul-2021	FAM FEEDS	Julius kinyua meme	Done
14-Jul-2021	PGE8CBB3LU	MONI	5,000 in	55,000.00	08-Jul-2021	Sanergy Limited	Monicah Muriithi	To follow through with the payment
15-Jul-2021	PGF8D8031Y	HELL	5,000 in	60,000.00	15-Jul-2021	Self	Hellen Ndegwa	PGF8D8031Y
16-Jul-2021	PGF6E3V012	OYUG	5,000 in	65,000.00	16-Jul-2021	Biofit	Jack Oyugi	PGF6E3V012
17-Jul-2021	PGG8FNSDLC	NGAN	5,000 in	70,000.00		*** no reference from Google sheet to match record***		
20-Jul-2021	PGKOK4PUXS	PAUL	5,000 in	75,000.00	20-Jul-2021	GreenSect Farm	Paul Some	PGKOK4PUXS
20-Jul-2021	PGK4KZ252K	GEOR	5,000 in	80,000.00		Samuel Mwangi		Confirmed by George Muturi
23-Jul-2021	PGN2P8WY2G	NAPH	5,000 in	85,000.00	23-Jul-2021	EcoKud Limited	Joash Adongo	PGN2P8WY2G
21-Aug-2021	PHK8URCEG6E	PROS	5,000 in	90,000.00	20-Aug-2021	Ressect	Proscovia Alando	PHK8URCE6E
23-Aug-2021	PHN7YEGX3R	MARI	5,000 in	95,000.00		*** no reference from Google sheet to match record***		
26-Jul-2022	QGQ049U4SK	ROSE	100 in	95,100.00				
26-Jul-2022	Tax Amount Due AT-DPC		-21 out	95,079.00				
26-Jul-2022	Interim Stmt Charge AT-D		-105 out	94,974.00				
27-Jan-2023			5,000 in		27-Jan-2023	Afriprot	Collins Sirmah	RAR8BEN2D0-confirm by Roseanne
16-Feb-2023			5,000 in		16-Feb-2023	Kikaboni Biotech Farm	Michelle Nyaga & Gilbert Gathuo	RBG1S20H2T-confirm by Roseanne
21-Feb-2023			5,000 in		21-Feb-2023	Marula Proteen	Tommy Hoft	RBL65BRDOG-confirm by Roseanne
23-Feb-2023			5,000 in		23-Feb-2023	Kiberndasky	Mark Bichachi	RBD0JR71C2-confirmed by Roseanne
23-Feb-2023			5,000 in		23-Feb-2023	Eco Dudu	Adan Mohammed	RAQ19MX1KB-confirmed by Roseanne
23-Feb-2023			5,000 in		23-Feb-2023	Protein Masters	Frederick Kimathi	Confirmed by Roseanne
30-Mar-2023			5,000 in		30-Mar-2023	The Bug Picture		RCU2YFSHX0-Confirmed by Roseanne
Closing Balance			129,974 CR					

*** no reference from Google sheet to match record in the bank statement***

Timestamp	Name of your Company/Busine	your name/ representative	Fees Reference
10-Jul-2021	Apposite Concept Co. Ltd.	Jenipher Okoth	N/A
17-Jul-2021	Gideon Gitonga M'Miruri.	Bus Gideon Gitonga M'Miruri	Paid up
21-Jul-2021	Junky Bins	Junky Bins Company	Notyet