

MatchMaker Resource Package
2020 – Argiculture Capacity (Somalia)

Welcome!



Congratulations! You have been accepted into the MatchMaker program. We have created this resource package based on the application criteria you filled out on the Response Innovation Lab website and the interactions you had with the RIL MatchMaker in your country.

This resource package contains the top three organizations that we think offer the best solutions to your challenge. Within each of these summaries we will tell you about the organization, their key value to you, and how they meet your match criteria.

We will also share with you next steps and contact info at each of these organizations. We intend to sustain an added value relation with you, so we will keep in touch to support you and hear your thoughts and feedback.

Summary

LOCATION

Somalia

ORGANIZATION & WEBSITE

Somalia Food Security Cluster | <https://fscluster.org/somalia>

SECTOR

Agriculture

DEMOGRAPHIC

Small Landholding Farmers, Agronomists, Extension Workers, CSOs, NGOs

HUMANITARIAN NEED

Food Security (around 2.5 million people food insecure), Nutrition, Livelihood, and Resilience Building

PROBLEM DESCRIPTION

We are seeking a solution for building capacity in the Somali agricultural sector in order to increase farmer productivity and stabilize the income of rural households. Agricultural stakeholders specifically requested support in solutions that improve the quality of agricultural academic institutions in training students; improve farmer's capacity to use modern technology for better and more sustainable yields; and build the overall capacity of partners (civil society organization, line ministries, NGOs, etc.) to plan, design, and implement quality food security and livelihood programs.

CONTEXT

Food insecurity affects more than 2.5 million people annually in Somalia. The World Food Program reports that the situation is worsening in rural areas following consecutive seasons of poor rainfall and low river water levels. These climatic shocks have resulted in near total crop failures, reduced rural employment opportunities, widespread shortage of water and pasture – with consequent increases in livestock deaths.

The Somali government and many partner organizations are making longer-term investments in improving the resilience of small landholding farmers and their rural communities. Efforts are underway by the UN Food and Agricultural Organization (FAO) to increase and stabilize agricultural production and productivity and rural families' incomes. FAO and a range of actors are attempting to tackle causes of unstable agricultural production by focusing on the adoption of modern farming technologies; continuous education opportunities for actors across the agricultural sector; and building of local universities so that they are more conversant and active in providing trainings on practical farming challenges.

While the food security challenges are immense, it is possible for a community of actors to collaborate on developing a massive and standardized re-training initiative for those across the sector (i.e. farmers, CSOs, extension workers, line ministries, and private sector) in modern sustainable and adaptable farming. Furthermore, the recent [Human Capacity Development Mapping](#) completed by the Somali government and integrated into the new National Development Plan highlights the importance of practical and standardized agricultural training programs

DESIRED SOLUTION CRITERIA

To pilot and scale new training efforts, it is critical to work with Somali actors with experience in building and delivering hands-on learning experiences. City University of Mogadishu and Hano Academy are leading educational institutions that emphasize training for the real world. In recent years, both organizations have made considerable investments in acquiring and building up agricultural land to offer Somalis hands on practical training opportunities. Each organization also works closely with the Ministry of Agriculture and Irrigation, so their efforts can be scalable with government backing and international support. Finally, each organization has existing knowledge and training partners including American Refugee Committee, Filsan, International Organization of Migration, the University of Minnesota, and the Somali Agriculture and Technical Group.

Given the visionary leadership at these institutions and their various networks, they are both equipped to pilot new standardized training modalities and test out and sustain various farming solutions. Building off the imperatives of the HCD mapping, these pilots could be used in a process for creating a national certification system for the agricultural sector. City/Hano can also facilitate a process of sharing best practices across farmer field schools, farming cooperatives, fellow universities, and TVET centers.

Finally, as these significant investments and pilots are all taking place in the Mogadishu-Afgoye corridor, it is possible that this area could eventually become an example of an ag-tech hub for learning, training and experimentation that can be replicated in other parts of the country. Other important factors that need to be considered in developing solutions for how to support City and Hano in the piloting of new standardized training modalities and testing/sustaining farming solutions are:

- Mogadishu/Afgoye corridor is accessible and safe enough for most partners, which is not case for some parts of Somalia
- Value for money in leverage existing capacities, assets, and networks of these organizations
- Highly sustainable investment opportunities because national entities have led in the design and identification of needs
- A large-scale road repair project between Mogadishu and Afgoye has now begun

BUDGET & TIME

Budget: \$700,000

Implementation Timeline: 24 months



Overview

The Somali Response Innovation Lab (SomRIL) co-convened a workshop with the Somali Food Security Cluster on agriculture in Mogadishu in May 2019 with a cross-section of stakeholders from INGOs, LNGOs, UN Agencies (FAO and WFP), government, donors (including DFID, USAID and the EU) and the private sector. These representatives collectively under the Food Security Cluster submitted challenge statements related to advancing the capacity of those in the sector. Through follow-on consultations, RIL identified City University of Mogadishu and Hano Academy as two potential owners of solutions to the challenges submitted, given their recent investments in agricultural land and commitment to practical training programs.

Each organization needs different types of support. City University aims to leverage momentum around its contributions to the Somali government's [Human Capacity Developing Mapping](#) project, which highlighted critical next steps in investing skills development in the ag sector. Specifically, City wishes to pilot short training courses for farmers and FSL professionals at its two experimental farming training facilities, while potentially developing other customizable programs in the future. Moreover, City is keen on continuing to partner with the Ministry of Agriculture and Irrigation, especially regarding standardization, accreditation, and scaling. Solutions therefore focused on potential resource partnerships.

Hano Academy is piloting the training of dozens of women on its land in Afgoye in order to create immediate employment through the establishment of a women's cooperative for selling fruits and vegetables, as well as honey. Its primary interest is the financial sustainability of its TVET model, as well as the potential for scaling across Somalia. Solutions therefore focused on revenue generation.

Standardized Training Curriculum

An immediately realizable partnership in Somalia to pilot courses for farmers and FSL professionals.

Latia Resource Center

A model training farm in Kenya that can be replicated by City University

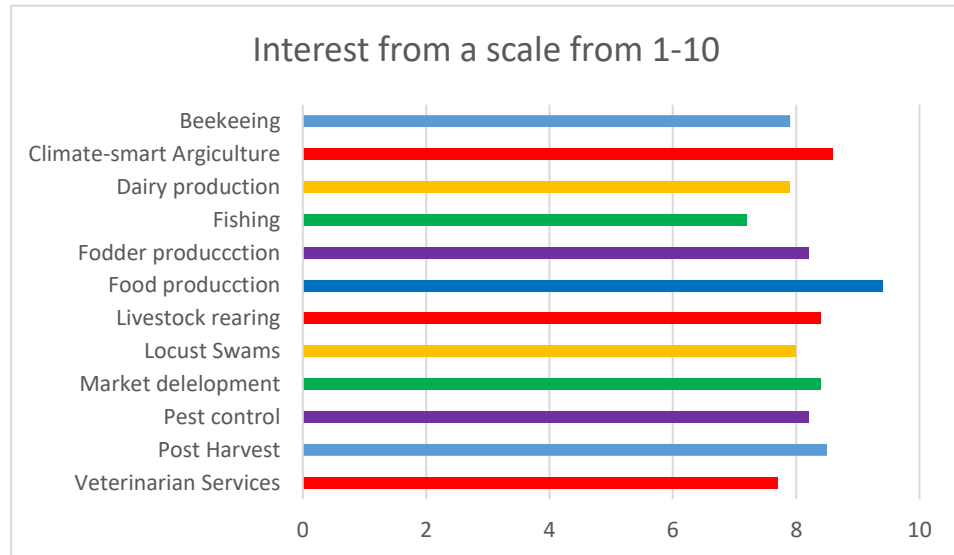
Hello Tractor

An ag-tech start-up that can be piloted by City and Hano to raise revenue for the experimental farms, while testing market viability in Somalia

Results of Survey

SomRIL conducted a survey to assess the interest and need for training for agriculture related topics. A total of 65 staff members from 22 international and 38 local organisations in Somalia contributed.

When asked how interested on a scale from 1-10 one would be in a training in a list of selected areas related to agriculture, **Food production (9,4)**, **Climate-smart agriculture (8,6)**, and **Post-harvest (8,5)** was ranked with the highest scores.



When looking at sub-categories a general interest in **Safety** was ranked high under every category, as well as **Storage**, and **Technology, equipment, and methods**.

Other popular sub-categories are:

- **Crops** (55 indicated an interest)
- **Farming in general** (55 indicated an interest)
- **Veterinarian Disease control** (60 indicated an interest)
- **How to get started with beekeeping** (54 indicated an interest)
- **Market analysis** (56 indicated an interest)
- **Small scale business** (58 indicated an interest)
- **Prevention and response to Locus swarms** (56 indicated an interest)

The entire list of results can be found in the annex of this resource package.

City University and partners can develop and standardize trainings for farmers and FSL professionals in Somalia.

Standardized Training Curriculum



ABOUT THE ORGANIZATION

Filsan and the Somalia Agricultural Technical Group (SATG) collaborate to demonstrate various need-based technologies in agriculture in Somalia. Filsan operates as a for-profit with a primary mission of providing appropriate and affordable seed to Somali farmers alongside complementary technologies. SATG operates as a non-profit with a primary focus on original research and training to advance the Somali agricultural sector. Both organizations partner with Dr. Paul Porter, an Emeritus Professor of Agronomy at the University of Minnesota. Dr. Porter is exploring ways to increase the university's institutional support to development in Somalia.

KEY VALUE

The founder of Filsan and SATG, Dr. Hussein Haji, served as the lead researcher on agriculture for the Somali government's 2018/2019 Human Capital Development Mapping project. As part of the section on Productive Sector Skills Development, the mapping calls for a National Qualifications Framework per sector and, in particular, for agriculture, TVET schools with the proper curricula, staff, equipment, technologies, and certification criteria.

Curricula: These partners can immediately support City University in developing curricula for short-term course seekers (such as FSL professionals) and farmers in residence. Existing City students in agronomy will also benefit from these courses.

Pilot Training/Certification: These partners can pilot the trainings together in partnership with the Ministry of Agriculture in order to advance a process of national certification standards

Key Information

These three partners can support City University in offering a hands-on, practical set of courses for a diverse set of agricultural stakeholders. Means for distributing relevant tools and seeds via Filsan to trainees can also be explored.

1. SECTOR

Argiculture

2. INTERESCTIONS

Production, Research, Training

3. FOUNDED

SATG (2001); Filsan (2014)

4. KEY PEOPLE

Dr. Hussein Haji
 Founder, SATG/Filsan
hhaji@satg.org

Dr. Paul Porter
 University of Minnesota
pporter@umn.edu

5. LOCATION & WEBSITE

SATG/Filsan
 Safari Apartment, KM5 Rd
 Hodan District, Mogadishu
www.satg.org; www.filsansomalia.com

6. RESULTS & IMPACT

Decades of research and partnerships

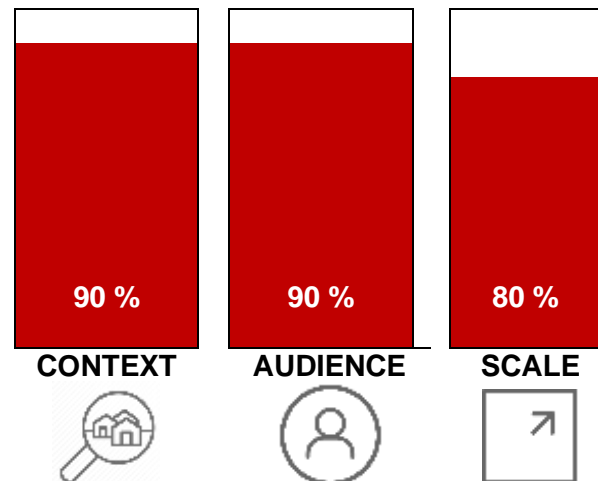
7. KEY ACTIVITIES

Knowledge transfer; customized agri-tech

8. NEXT STEPS

For FSL professionals, City and its partners meet with leading programs to understand continuous education needs; for farmers, they map out existing curricula inside and outside of Somalia, and also meet and assess specific needs of potential farmer trainees

OVERALL MATCH



IMPLEMENTATION

Difficulty:

Mostly time intensive; requires dedicated staff for research and customer assessments

Time:

Pilot of first cohorts = 9 months (including research, assessments, recruitment, training, and after-action review)

Barriers:

Willingness of existing Somali INGO and CSO programs to partner on sharing current training resources

Cost:

Estimate for full pilot \$200,000

Operate income generating experiment farming facilities that can be places of hands-on learning, showcasing, and knowledge warehousing for the ag sector

Latia Resource Center



ABOUT THE ORGANIZATION

Latia Resource Center is a not for profit organization in Kenya committed to modernizing agriculture and improving livelihoods through provision of business services like training, dissemination of technology, marketing support, and increasing access to financial services for farmers, pastoralists and agribusinesses. LRC is part of a larger family of organizations, including Latia AgriBusiness Solutions and AgriTech.

KEY VALUE

Latia manages the Latia Agripreneurship Institute (LAI), a 60 acre farm at Isinya in Kajiado County in Kenya. LAI is a government registered and accredited TVET center in Kenya.

Apprenticeship: LAI's signature program offered at LAI is in agriculture apprenticeship. Students earn money while gaining a nationally recognized qualification. The program is open to youth graduating from secondary and tertiary institutions. The modular course is designed to equip individuals with competencies required to select site, grow horticulture crops, evaluate productivity, post-harvest handling and farm management.

Short Training Programs: LAS offers short courses, seminars and field days for farmers and other agripreneurs keen on deepening knowledge and skills and learning new technologies and practices. These programs cover topics in production, marketing, value addition, labor management, farm financial management, agribusiness investments planning, analysis and certification.

Key Information

Latia contributes to the modernization of agriculture and improvement in food security in East Africa by offering effective practical training, adequate dissemination of knowledge and technology, and the provision of business support services to farmers, pastoralists, and agribusinesses.

1. SECTOR

Agriculture, Ag-Tech, Business Support Services

2. INTERSECTIONS

TVET, Social Enterprise

3. FOUNDED

2007

4. KEY PEOPLE

+254716431054

info@latiaagribusinesssolutions.com

5. LOCATION & WEBSITE

Latia Resource Center

Isinya Kiserian road

Kajiado County, Kenya

www.latiaresourcecenter.org

6. RESULTS & IMPACT

The Resource Center has trained hundreds of Kenyans, placed hundreds of trainees in farms across the country, and partnered with numerous development organizations

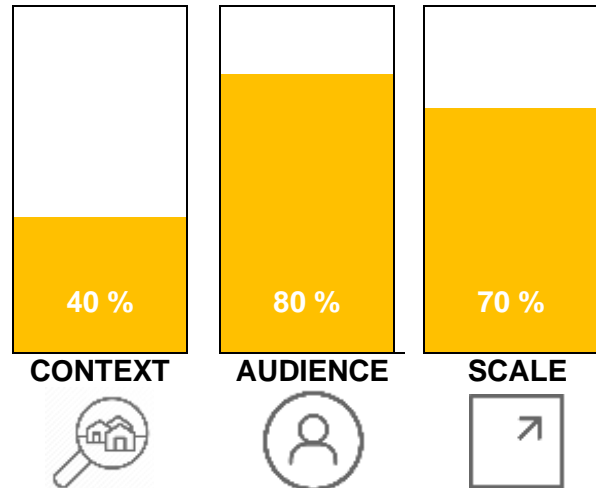
7. KEY ACTIVITIES

Training, Incubation, Consultancies

8. NEXT STEPS

City University has already visited Latia and wants to replicate the model; what is most needed is support for further capital investments in its Afgoye farm. The farm on the outskirts of Mogadishu is now up and running, including the recent installation of two greenhouses.

OVERALL MATCH



IMPLEMENTATION

Difficulty:

Few challenges foreseen, as City has already secured funding for first farm on outskirts of Mogadishu; facility ready to use; Latia offers opportunity for learning and advisory services on best practices.

Time:

6 months or less for activation of farm on outskirts of Mogadishu; 12 months for upgrading of Afgoye farm

Barriers:

Financing of Afgoye farm upgrades

Cost:

\$398,00 - upgrading of Afgoye farm includes fencing of land, building a small teaching hangar, drilling a new borehole for water, and the solarization of the borehole and overall facility

Hello Tractor pilots its software as a service business model for tractor owners with City and Hano Academy to test out the solution for the Somali market and bring in additional revenue for the organizations' farms

Hello Tractor



ABOUT THE ORGANIZATION

Hello Tractor, an ag-tech firm, using technology to revolutionize the farming sector. The start-up operating in multiple countries across Africa provides mechanization access to hundreds of thousands of farmers by connecting tractor owners and smallholder farmers through a farm equipment sharing device and application.

KEY VALUE

Hello Tractor aggregates smallholder farmers' requests for tractor service on behalf of tractor owners, while providing enhanced security through remote asset tracking and virtual monitoring. Tractor owners and manufacturers are therefore able to expand their markets, reaching new customers who were previously inaccessible.

Cost: With average farm sizes under one-hectare, rural African farmers face smaller profit margins and often cannot access financing to invest in machinery. Even if they could, it would not be economical for them to do so, due to high costs and low on-farm machine utilization rates. At the same time, tractor services for hire (at 1/3 the cost of manual labor) are within reach.

Access: Connecting fragmented farm plots to a sharing economy drives more equitable access to mechanization for farmers and makes serving the area profitable for tractor owners

Key Information

Hello Tractor is an Internet-of-Things (IoT) solution that supports the improved efficiencies, profitability, and transparency in the tractor contracting market. A tractor monitoring device can be installed on any tractor, connecting it to the Hello Tractor cloud.

1. SECTOR

AgTech

2. INTERESCTIONS

Mechanization, Food Security, IoT

3. FOUNDED

2014

4. KEY PEOPLE

Jehiel Oliver

Chief Executive Officer

jehiel@hellotractor.com

5. LOCATION & WEBSITE

Kenya HQ

The River Front Building

Nairobi, Kenya

www.hellotractor.com

6. RESULTS & IMPACT

Hello Tractor customers can generate up to 200% ROI on asset ownership; in Nigeria, it is estimated that if 10,000 tractors were on the platform, they would bring 9 million hectares of land into production, creating 37 million metric tons of additional food and adding over 2 million direct and indirect jobs.

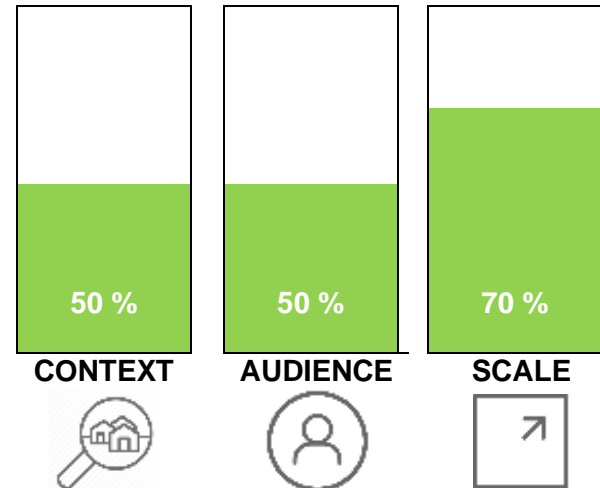
7. KEY ACTIVITIES

Asset management, revenue multiplier

8. NEXT STEPS

Start discussions on the design of a pilot with both City and Hano, as well as market assessment in Afgoye; Hello Tractor is interested in applicability with Village Savings and Loan Associations (VSLAs)

OVERALL MATCH



IMPLEMENTATION

Difficulty.

The monitoring device on the tractor uses an international SIM card; so ready to use in the Somali context. The app can initially support better management of tractor rentals by the institutions; the Uber-like feature whereby farmers can request by phone tractor services requires awareness raising and is not necessary at first.

Time:

12-month pilot

Barriers:

Financing of tractors

Cost:

\$100,000 for purchase of 2 new tractors; good second-hand tractors are also available for purchase from Italy and not as expensive; research of market viability and channels for adoption such as VSLAs

Additional Insights

The following additional insights were explored as part of RIL's research process. While these were not deemed to be strong matches with the challenge, they are nonetheless interesting aspects that City and Hano may like to explore in future or as complementary options.

AGCO Agribusiness Qualification Program @ Strathmore University

<https://sbs.strathmore.edu/news/agco-agribusiness-qualification-programme-pioneer-class-hope-africas-food-security-challenges-youth/>

The program targets African youth passionate about addressing the food security challenges in Africa and creating a profitable and sustainable agribusiness and agro-industry sector in Africa.

Arizona State University's Swette Center for Sustainable Food Systems

<https://sustainability.asu.edu/food/>

The Center develops innovative ideas and solutions to the many challenges of current food systems. The Center has research partnerships across Africa, including in Kenya, focused on water and energy use, carbon footprint and nutrition, innovations in agtech, and the well-being and livelihood of farmers and others working in food systems.

Digital Green

<https://www.digitalgreen.org/>

Digital Green is a global development organization that empowers smallholder farmers to lift themselves out of poverty by harnessing the collective power of technology and grassroots-level partnerships. With an office in Nairobi, they specialize in developing digital solutions for training and advisory services to farmers.

Future Farm

<http://ame-en.masseyferguson.com/agco-future-farm.aspx#>

AGCO is a global leader in the design, manufacture and distribution of agricultural equipment. In Zambia, they have set up a farm to educate and train farmers, dealers and distributors on integrated agricultural solutions; provide hands-on experience with new technology appropriate to local markets; and support professional farmers to feed the world

Due Diligence

The solutions presented as part of this Resource Package are provided based on the criteria that the MatchMaker applicant submitted in their application to the Response Innovation Lab (RIL) MatchMaker online tool. Wherever possible the RIL has provided solutions which align to the challenge and requirement criteria provided by the requesting agency. The suggested solutions are by no means an exhaustive list but provide insight and research into the challenge.

Risks and Due Diligence

As with all humanitarian programming, risks exist and the need for comprehensive due diligence is required. Before implementing any program, it is the responsibility of the implementing agency to undertake robust due diligence processes.

Humanitarian operating environments are complex, local dynamics can be fluid and understanding the local context is paramount in such environments to ensure that humanitarian standards are reached and quality programming is delivered. It is for the implementing agency to consider in detail the local context, carry out due diligence checks, engage with local communities for feedback and to manage risks associated with programming. And it is within this context that this MatchMaker Resource Package is provided.

Further Support

For further information and support please contact:

Nishant Das, Somali Response Innovation Lab (SomRIL) Manager
Email: somalia@responseinnovationlab.com

Annex 1

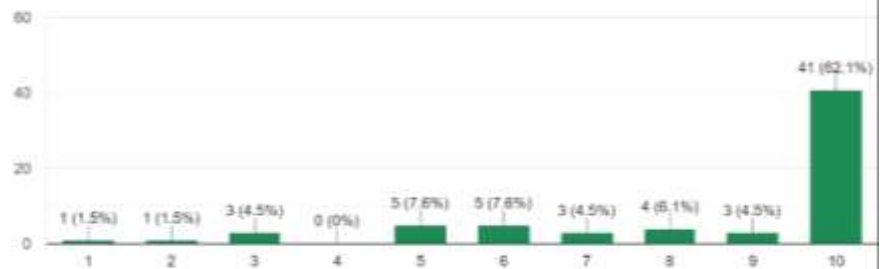
Survey results

A survey was conducted by SomRIL and shared through the Food Security Cluster's email network in April 2020.

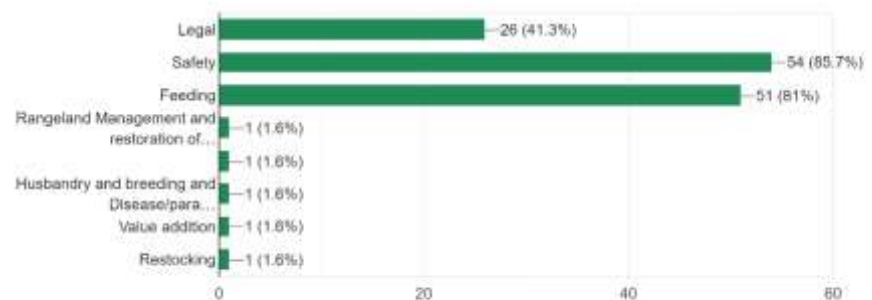
Responses from Local organisations: 42

Responses from International organisations: 24

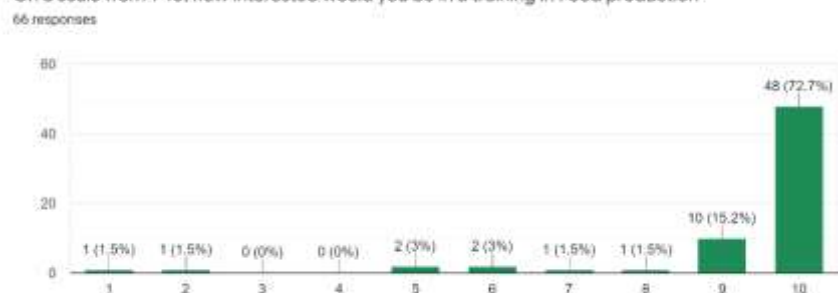
On a scale from 1-10, how interested would you be in a training in Livestock rearing
66 responses



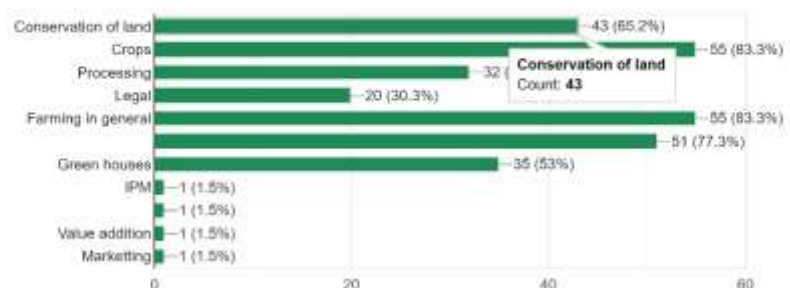
Which sub-categories under Livestock rearing would you be interested in (You can choose more than one)
63 responses



On a scale from 1-10, how interested would you be in a training in Food production
66 responses

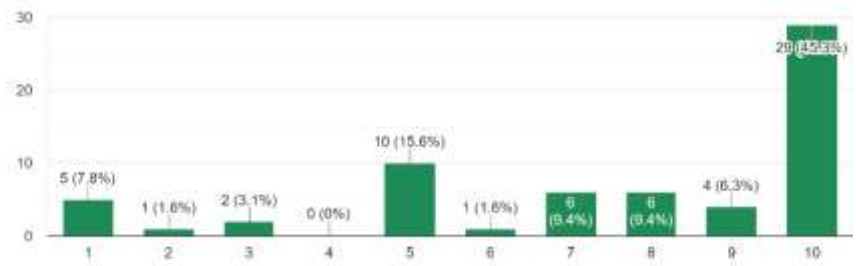


Which sub-categories under Food Production would you be interested in (You can choose more than one)
66 responses



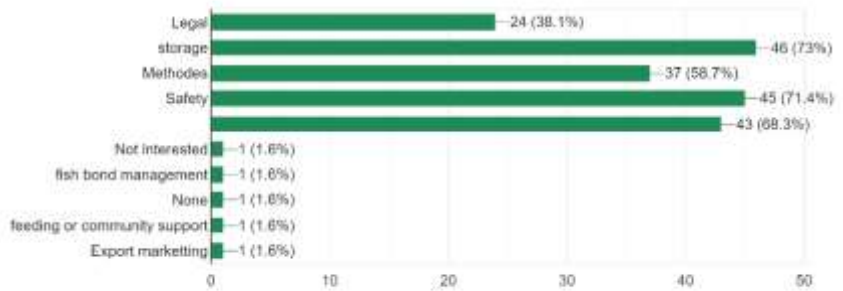
On a scale from 1-10, how interested would you be in a training in Fishing

64 responses



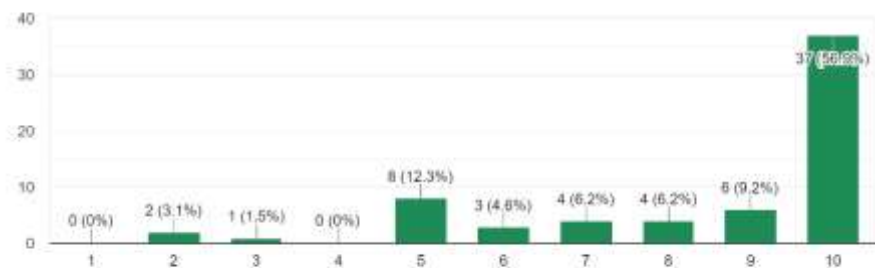
Which sub-categories under Fishing would you be interested in (You can choose more than one)

63 responses



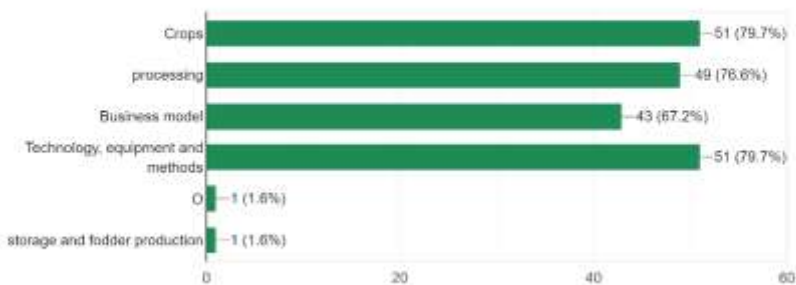
On a scale from 1-10, how interested would you be in a training in Fodder production

65 responses



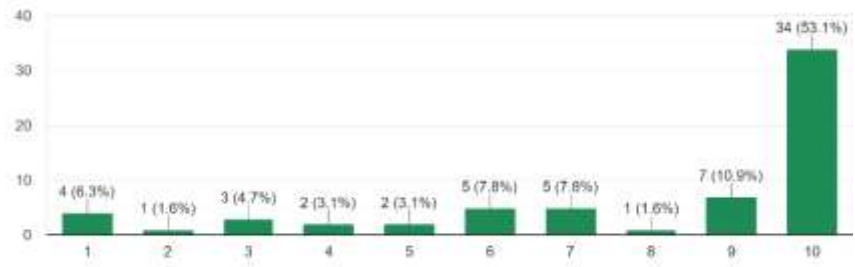
Which sub-categories under Fodder production would you be interested in (You can choose more than one)

64 responses



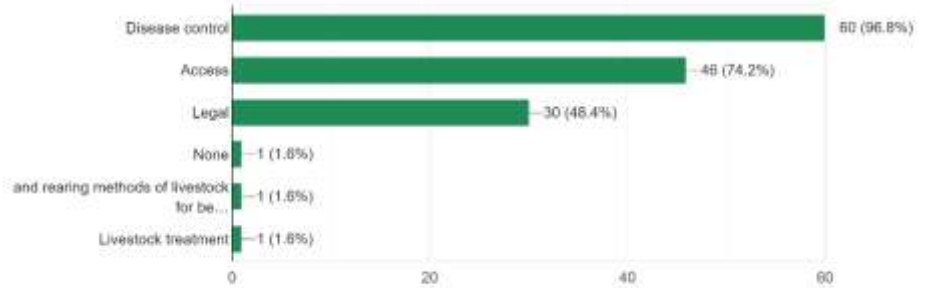
On a scale from 1-10, how interested would you be in a training in Veterinarian Services

64 responses



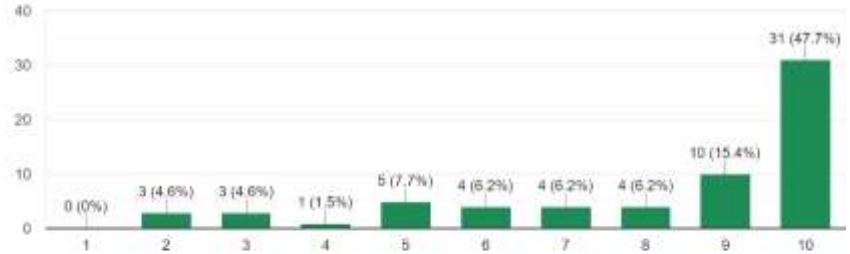
Which sub-categories under Veterinarian Services you be interested in (You can choose more than one)

62 responses



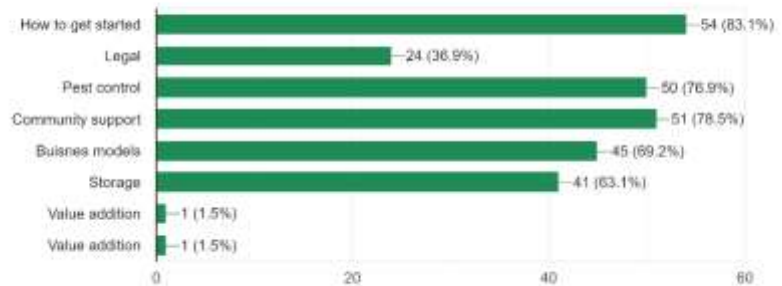
On a scale from 1-10, how interested would you be in a training in Beekeeping

65 responses



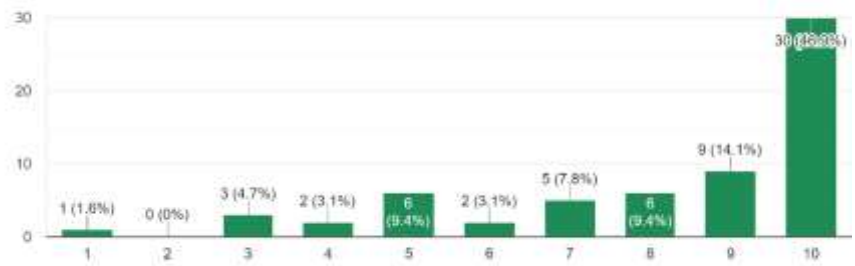
Which sub-categories under Beekeeping would you be interested in (You can choose more than one)

65 responses



On a scale from 1-10, how interested would you be in a training in Dairy Production

64 responses



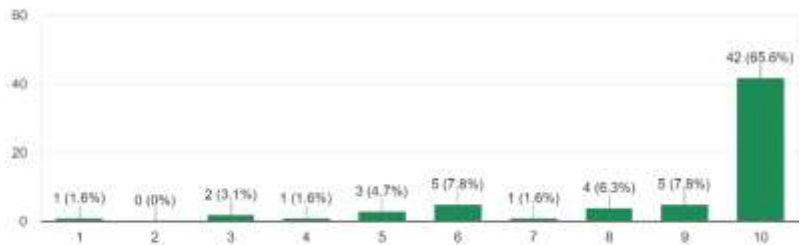
Which sub-categories under Dairy Production you be interested in (You can choose more than one)

65 responses



On a scale from 1-10, how interested would you be in a training in Market development/ Value chain development

64 responses



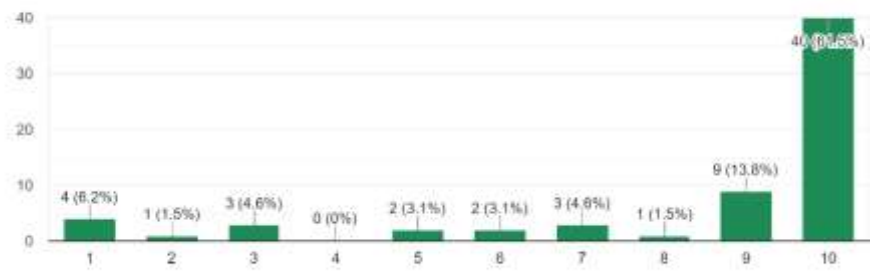
Which sub-categories under Market and Value chain development would you be interested in (You can choose more than one)

65 responses



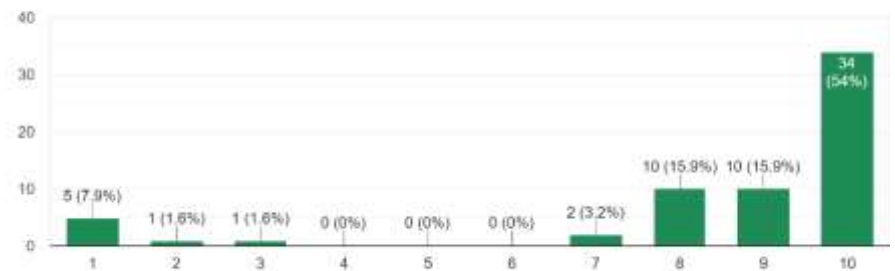
On a scale from 1-10, how interested would you be in a training in Pest control

65 responses



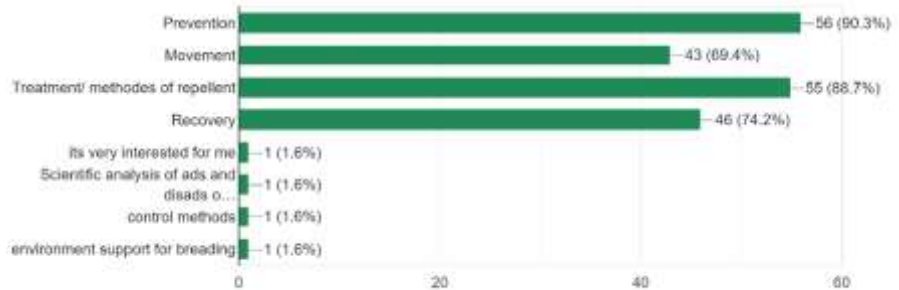
On a scale from 1-10, how interested would you be in a training in Locust-Swarms

63 responses



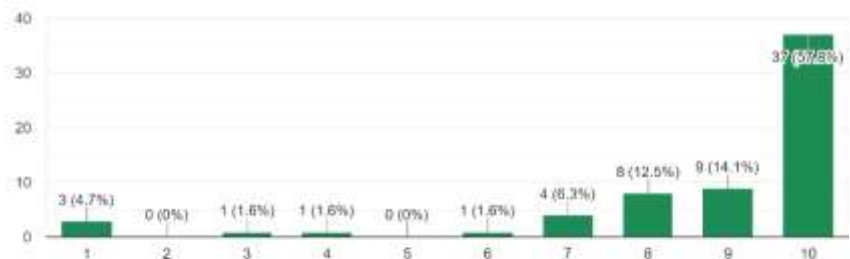
Which sub-categories under Locust swarms would you be interested in (You can choose more than one)

62 responses



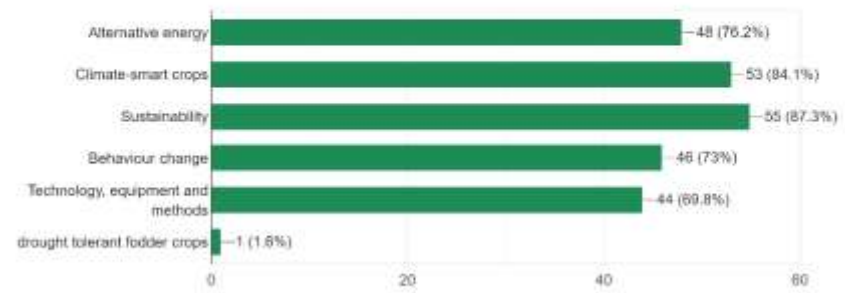
On a scale from 1-10, how interested would you be in a training in Climate-Smart Agriculture

64 responses



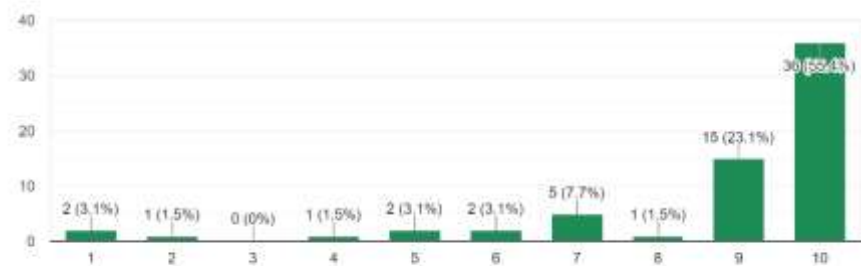
Which sub-categories under Climate-smart Agriculture would you be interested in (You can choose more than one)

63 responses



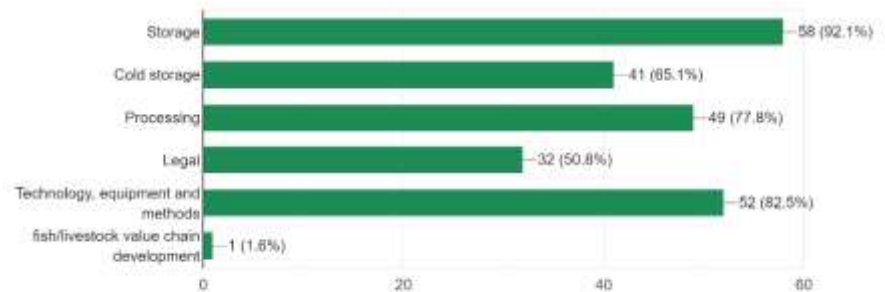
On a scale from 1-10, how interested would you be in a training in Post Harvest

65 responses



Which sub-categories under Post Harvest would you be interested in (You can choose more than one)

63 responses



SERVICES WE PROVIDE



1 CONVENE

- Discuss areas you want to improve, for better understanding and solutions
- Find innovations you can use in country
- Find innovators that you can work with in country
- Access innovation forums
- Join a community of innovators

- Refine your humanitarian challenge
- Search our networks for existing solutions, globally and locally
- Be paired with tested innovations that meet your challenge
- Get evaluation and implementation support



2 MATCHMAKER SERVICE

- Access funding pathways
- Get referrals to global innovation networks
- Plan your financial model
- Get support with monitoring and evaluation of innovation projects, business models ethics, intellectual property and so much more.
- Test, pilot, and scale innovations



3 SUPPORT