

GREEN BUSINESS SOLUTIONS CATEGORY

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**Oyungerel
Munkhbat**
AIREE



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Oyungerel Munkhbat
oyungerel@airee.mn



COMPANY NAME	Airee Felt
AWARD CATEGORY	Green Business Solutions Category
REGISTRATION DATE	Sep 23, 2021
COUNTRY OF BUSINESS	Mongolia
WEBSITE	https://airee.mn/
FACEBOOK	https://www.facebook.com/airee.mn
LINKEDIN	https://www.linkedin.com/company/airee-mn/
INSTAGRAM	https://www.instagram.com/airee.mn/

FOUNDER AND THE FOUNDING TEAM MEMBERS

Oyungerel Munkhbat - CEO (F). Environmental scientist (BSc) with over 4 years of experience in sustainable Finance and energy efficiency.

Batmunkh Myagmardorj - CTO (M). Biotechnologist (MSc) with over 5 years of experience at the Mongolian Academy of Sciences.

Khulan Tsermaa - Product development manager (F). Chemist (MSc) with 5 years of research and policy experience.

Byambajargal Naranbat - Electrical engineer (M). IT and electrical engineer (MSc) with 5 years of executive experience in software, hardware, and VR development as well as embedded systems engineering.

Munkhjin Munkhbold - Product designer (F). Industrial designer (BSc) with 4 years of experience in interior and furniture design.

PROBLEM

Air filters are made from 100% plastic, and burned in countries without appropriate waste management, creating microplastic problems for soil, air, and water.

In our hometown Ulaanbaatar, Mongolia, air pollution reaches 133 times the WHO guidelines, resulting in miscarriages happening 3.5 times more during polluted seasons (7.5 months) and pneumonia, the second leading cause of death for children under 5, killing over 400 annually (UNICEF, 2018). Buildings aren't equipped with adequate filtration and indoor air purifiers are a luxury product, ranging 370 USD with spare filters averaging 90 USD. Sometimes the filters are not imported by vendors, so even people with purifiers can't breathe clean air. This results in 6,000 tons of synthetic filter waste and over 26,000 air purifiers in good condition that don't filter air pollution. Ultimately, protecting children and pregnant women from air pollution is not affordable, and the existing filtration contributes to the microplastic crisis.

SOLUTION

Airee is creating a 100% biodegradable wool filter that can be used for both ventilation and various air purifier devices, but also cars. Our patented filter technology relies on discarded wool that is locally sourced and traceable. The wool filters them the same way our hairs smell like cigarettes after we exit a smoking area. Our version 2 filter is as efficient as HEPA (high efficiency particulate air) and carbon filters in filtering fine dust and volatile organic compounds. It has no odor and is naturally hypoallergenic.

Our first product is the purifier which costs ~USD150, which is 2.5 times cheaper than imported purifiers, and its spare filter is sold 5 times cheaper than the market price. In addition, it offers a 100% biodegradable alternative to synthetic filters, have the potential to reduce microplastics by 6,000 tons a year.

ENVIRONMENTAL IMPACT

Half of our filter is made from discarded wool. It's wool that has too thick a fibre to be used even for carpets and wool slippers. The discarded wool undergoes physical, chemical treatment and through a small production line (our patented line) before it becomes a final product that is worth 8 times more its initial value. Annually, this results in approximately 250,000 kg less wool that's wasted and recycled into the economy.

Also, we are in the process of establishing a production facility, which uses no water during production.

IMPACT GOALS

If biodegradable filters with high filtration efficiency are created, then filter manufacturers will create sustainable filtration end-products, and plastic waste from the single use filtration industry will be reduced by 6,000 tons a year.

In our initial years, we can contribute to 35.4 ton waste reduction per year and 3,525 tonne CO₂e reduced compared to synthetic filter production, resulting in 23,580 households breathing clean air through the purifier devices and building ventilation.

COMPETITIVE ADVANTAGE OR UNIQUE SELLING POINT

Since COVID and ESG policy enforcement in the EU, the filtration industry has started to improve its sustainability. Our product is attractive to filtration manufacturers who need to decrease their carbon footprint in Scope 3 emissions, as the product is biodegradable and energy efficient while maintaining filtration efficiency. Within this regard, we have started discussions with Mann+Hummel to test the filter against ISO standards and against multiple applications. This market is around 26 billion USD.

FINANCIAL SUSTAINABILITY OF BUSINESS MODEL AND MILESTONES

1. We've sold over 230 air purifiers with wool air filters. The purifier is 150 USD, with 36% profit margin.
2. We'll be selling filter materials, which will have more than 60% of profit margin.



Chirag M G

BROWN REED AGRI WASTE
INNOVATIONS



SUNBIRD
STRAWS

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Chirag M G
chirag@sunbirdstraws.com



COMPANY NAME	Brown Reed Agri Waste Innovations
AWARD CATEGORY	Green Business Solutions Category
REGISTRATION DATE	Nov 23, 2020
COUNTRY OF BUSINESS	India

WEBSITE <https://sunbirdstraws.com/>
LINKEDIN [chirag-m-g-2aa673154](https://www.linkedin.com/company/chirag-m-g-2aa673154/)

FOUNDER AND THE FOUNDING TEAM MEMBERS

Saji Varghese: Dr. Saji is the brainchild behind the coconut leaf straws. He has a strong passion towards product development and grassroots innovation. He has more than 10 patents in his name. His core competencies are in product development and innovation management. His innovation has enabled more than 100 women across rural India find income generating opportunities

Sandeep: Sandeep is pursuing his PhD in the field of economics and has deep passion to engage with local farmers and understand the pain posts and policy gaps. Sandeep's core competencies are in supply chain management and operations

Jobin Jose: Jobin comes from strong technical background with 5 years of experience at HCL as lead engineer. Jobin along with Chirag develop machines that are robust, efficient and that can be placed in any part of rural India.

Fousul Haq: Fousul has completed his MBA and is passionate about sales and marketing. He has 5 years of work experience. His core competencies are in brand building, sales and marketing

Chirag M G: Chirag has a masters in Astronautics and Space Engineering and has a deep interest in technology enabled innovation. He also has patent in re entry module design. Chirag along with Jobin has developed 8 special purpose machines that has enabled women in rural India to roll out straws. He is also working to use satellite data and help fine-tune the supply of raw materials and in turn help farmers in rural India.

PROBLEM

The problem we are addressing is three fold:

- 1) The world is grappling with problem of single use plastics where America alone uses 500 million straws everyday. These straws end up ultimately in our oceans and landfills and polluting it
- 2) Agri waste burning has been on the raise for over a decade now. India being the second largest producer of coconuts in the world, the fronds of which are burnt in open kitchens and landfills every year amounting to significant carbon and particulate emission
- 3) Female Labour Force Participation Index (FLFP) in India has been on an all time low and with the pandemic, women who were employed has lost their jobs too

SOLUTION

Sunbird Straws is a substitute to single use plastic straws and the world's first drinking straws made from naturally fallen dried coconut leaves, the same leaves that were previously being burnt in open kitchens and landfills. We do this while empowering women across rural India. We have built 8 special purpose machines with which women in the remotest part of rural India will be able to collect the fallen coconut leaves and convert them into drinking straws. We have recently added coconut leaf writing pens to our product portfolio where we are reducing closer to 96% plastic usage. The women are unable to travel or attend day work are trained for a week at our dedicated centers and post which they carry pen components back to their home, roll the straws and sell it back to us.

This is Sunbird Straws, where we create social wealth through sustainable Innovations

ENVIRONMENTAL IMPACT

Agri Waste burning is on the rise over the last decade. Coconut farmers in India burn 3 million tons of coconut leaf every year accounting to 5.5 million tons of carbon monoxide emissions.

Sunbird Straws is converting these agri waste into resource. We can make 200 straws from single coconut frond making it a scalable proposition where just 40% of India's coconut trees can cater the global demand for drinking straws.

By 2024 we aim to control 900 tons of carbon monoxide and 480 tons of highly carcinogenic particulate emissions from reaching earth's atmosphere.

IMPACT GOALS

By 2025, we aim to provide employment to 2000 women across rural India and in the process we will be contributing to 5 SDGs that we feel are pivotal to have an equitable and sustainable future. So far we have achieved the following:

SDG 1,5 &8: 200 women across rural India have a guaranteed income source and earn on an average of Rs. 230/day

SDG 13: By preventing coconut agri waste burning, we have contained 160 kg of CO_e and 86 kg of highly carcinogenic particulate emissions

70 tons of agri waste have been prevented from burning in open kitchens & landfills SDG 5 & 13 We have contained 2.1 tons of plastic from polluting our oceans and landfills

We have replaced 1.4 million plastic straws

COMPETITIVE ADVANTAGE OR UNIQUE SELLING POINT

Though there are multiple alternatives for drinking straws including Bamboo, paper, cane, PLA, corn starch etc and all have their own shortcomings. Bamboo straws for example are expensive, uneven diameter, not eco friendly. The paper straws gets soggy and people generally don't like the cellulose feel it has and is not eco friendly. The cane wheat and PLA straws are brittle, compostable only at special industrial conditions.

Sunbird Straws on the other hand are customisable to any diameter from 4mm to 12mm and any length from 5" to 10". It is made in chemical free process under strict hygienic conditions and can stay in any cold or warm beverage for more than 3 hours. We already have onboarded 30+ clients across India and have 5 million straws in pipeline for the next three month. The other unfair advantage is that the product, process and design has been patented under PCT and individual patent has been filed in Europe, Sri Lanka

FINANCIAL SUSTAINABILITY OF BUSINESS MODEL AND MILESTONES

The dried fallen leaflets are collected and converted to drinking straws in a hub and spoke model. the final straws are bought back at a fixed cost from the women. At present women are able to earn on an average of Rs.250 per day and with our upgraded machines they will be able to earn Rs.300 per day.

The straws are then processed, checked for quality, sterilised and packed for our customers around the world. We are currently comfortably selling the straws to major five star hotels across India including Four Seasons, The Leela group, Accor group, Stories cafe, etc from Rs 1.5 to Rs 2.5 depending on the diameter of straws and will be able to sell it at Rs. 0.9/straw by economics of scale with the help of our new machines.



**Tamara
Gondo**

LIBERTY SOCIETY



LIBERTY SOCIETY

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LIBERTY SOCIETY

COMPANY NAME	Liberty Society
AWARD CATEGORY	Green Business Solutions Category
REGISTRATION DATE	Nov 12, 2021
COUNTRY OF BUSINESS	Indonesia
WEBSITE	https://liberty-society.com/
LINKEDIN	liberty-society
INSTAGRAM	https://www.instagram.com/liberty.society/

FOUNDER AND THE FOUNDING TEAM MEMBERS

Tamara is the CEO and Founder of Liberty Society. She double majored in Sociology and Communication Studies, and double minoring in Social Justice, Human Rights and Conflict Transformation and Biblical studies at Biola University. Her experiences have immersed her in diverse culture and worldview, thus she is passionate about seeking for justice all, regardless of their race, background, gender or religion. She started her passion for social work in Grade 8 of middle school. Upon university, she consulted for NGOs and social projects around Indonesia working for refugee groups, disaster relief, and rural community development.

Her previous experiences in the intersection of corporations and nonprofits include being Head of Acquisition at Yuna&Co, Partnership manager at Digtaray, a Google for Startup Accelerator, and Director of her non-profit Second Chance Initiative, focusing on child sponsorship & microfinancing poor households.

Passionate about people development, community development, and financial inclusion, she created Liberty Society, a social enterprise of eco & impactful B2B merchandise & hampers that empowers marginalized women and communities. They have worked with the world's biggest companies like Uniqlo, Ikea, and Body Shop to reach millions of customers through their product and stories behind. Partnering with 15 artisan communities, Liberty Society empowers 500+ people through using business to lift communities out of poverty. Through their training to employment program, 100 refugees have been trained, increased x3-x4 in income and impacted 1,000 in the community through social well being programs.

PROBLEM

- Corporates, especially FMCG, beauty & retail companies are producing waste in the supply chain. -Government are mandating post consumers waste to be upcycled.
- ESG trends are on the rise in SEA, as companies work towards the ESG, there is company waste that is collected from waste recyclers but sits unprocessed.
- Refugees & disabled communities with tailoring skills are lacking means of productive work that meets the market's demands

We train more than 150 marginalized communities member to produce ecocorporate merchandise and upcycled 1 tonnes of waste. Our training classes range from sewing and screenprinting class, to mental health and financial management class.

How we help: Upskilling opportunities Community of Support Access to market

SOLUTION

Liberty Society is a social enterprise, of eco & impactful B2B merchandise & hampers that empowers refugees & marginalized communities affected by violence & poverty. We help corporations appreciate and value their team, supporters, or clients with curated personalized goods & gifts that are loving to the people and the planet. We repurpose waste (plastic & textile) and upcycle them into meaningful products to help our clients' sustainability efforts.

- Providing skills upskilling & safe employment to increase income and better the livelihood of communities
- Eco & meaningful Goods & gifts supplier
- Ethical & lean production house for fashion brands
- Design solutioning on upcycling / CSR projects focused on sustainability from waste collection to product creation

ENVIRONMENTAL IMPACT

- We use less packaging and alternatives of cassava bags.
- Our team works hybrid x2 a day in the office
- We made goods out of upcycled material (50% of our catalog)

Find out here more <https://liberty-society.com/pages/the-planet>

IMPACT GOALS

We empower & work with a community of marginalized women by giving training and providing a platform for them to handcraft products passionately. By 2025, we will train 500 people in the community through tailoring, digital literacy, makeup and f&b entrepreneurship program, impacting 10,000 lives who are indirectly impacted through the income generated by the individuals who we've trained.

As a result, the ladies who go through our program:

- Increase in income average x3-x4
- Increase in socioemotional level and sense of confidence
- Increase in sense of community and social support

Find here our Annual Impact Report 2022:

<https://drive.google.com/file/d/149W-UwHQeKZZiqZlqMXPigTGIE5dIIL/view?usp=sharing>

Our hope is children can go to school and get better lives as a result of the women who become breadwinners from our intervention. Through product creation, we will restore dignity and purpose back.

Find here our impact SDG explanation: <https://libertysociety.com/pages/our-impact>

COMPETITIVE ADVANTAGE OR UNIQUE SELLING POINT

For the impact, with our training to employment model, not only do we provide employment for refugees to gain income from working at our fashion manufacture (tailoring skills) but we also give them entrepreneurship training (soft skills) so they'll be able to jumpstart their own entrepreneurial venture. We also have an established market connection and e-commerce platform as an access for them to sell their products. We have build our own curriculum for a 3 months & 6 months long training that concludes the whole basic-advanced level and mentorship program.

We also focus on:

Hardskill (Tailoring and upcycling waste) & Softskill (Entrepreneurship including finance, marketing) so that they are able to take the skills for their future Digital literacy training : (computer class)

For businesses, we offer ESG solutioning that company can procure responsibly, gift sustainably and do CSR in a way that empowers communities. Their every dollar is reinvested back to our training program so that the impact does not stop at purchasing product or doing one of CSR program, but they will allow a multiplier effect that money generated by the community is growing the marginalized community and lift them out of poverty.

FINANCIAL SUSTAINABILITY OF BUSINESS MODEL AND MILESTONES

Up to date, our revenue has been 250,000 SGD, with 50,000 SGD are wages directly benefitting our makers. Our makers have created more than 20,000 goods from previously being without income to earning income with us. We are profitable in year 3 of the business.

As a social enterprise that sells merchandise for companies, right now we have a supply problem. Whereas we have a good demand and leads generation, we need to train up more refugees to meet the growing demands of companies ordering goods with us, ensuring the quality of the products as well. With our clients, we have a long term partnership as well. Ensuring financial sustainability with our training to employment model: From Trainee to Makers. By allowing them to work for Liberty Society or referring them to sourcing will give them a chance to be an employee and increase their income/productivity. With the fastly growing digitalization, they will also be able to market their product online or learn more through the digital world.



**Abdulrhman
Zaki Elhalafawy**
CUPMENA



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Abdulrhman Zaki Elhalafawy
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COMPANY NAME	Cupmena
AWARD CATEGORY	Green Business Solutions Category
REGISTRATION DATE	Feb 13, 2019
COUNTRY OF BUSINESS	Egypt

WEBSITE	cupmena.com
FACEBOOK	=
LINKEDIN	https://linkedin.com/company/cupmena
INSTAGRAM	https://www.instagram.com/cupmena/

FOUNDER AND THE FOUNDING TEAM MEMBERS

Mohamed Abdelgawad Co founder and CEO with nine years of experience in Business Management and Auditing Mohamed brings a wealth of expertise in strategic planning financial management and operational efficiency to the team driving the organization overall success

Doha Ahmed Co founder Product Manager a highly knowledgeable Product Manager with over seven years of experience Doha plays a crucial role in driving product innovation market research and customer insights contributing to the growth and development of the organization Her expertise in product development and management helps shape the companys success story

Abdulrhman Elhalafawy Project Lead brings six years of experience in business development and operations in diverse industries including agriculture waste management and ecommerce Abdulrhman leads the project strategically overseeing operations and driving growth through effective project management and business development strategies His expertise and experience make him a valuable asset to the team

PROBLEM

Coffee, the world's most consumed beverage, with over 2.25 billion cups consumed daily, generates over 16 million tons of coffee grounds. However, these spent coffee grounds are often dumped into landfills, producing methane, a potent greenhouse gas. Climate change, soil erosion, biodiversity loss, and changing consumer preferences are increasing pressures on the food production industry. Additionally, agricultural countries like Egypt face limitations in productivity due to salinity affecting approximately 35% of cultivated land and drainage issues. Despite this, coffee grounds containing valuable nutrients and energy are discarded, representing a linear economic structure of take, make, and dispose of. This wasteful act demonstrates a missed opportunity to utilize coffee grounds in various industries, reflecting the need for more sustainable and circular approaches to resource management.

SOLUTION

We have established a comprehensive value chain for spent coffee grounds (SCGs) by implementing a reliable collection system that enables coffee chains to dispose of SCGs while protecting the environment safely. Our innovative biotechnology and agriculture methods allow us to extract valuable nutrients from the coffee grounds and apply them to various applications, including Agri-Solutions and new products. Our value chain helps coffee chains save money on disposal costs, addresses food security issues, and promotes sustainability. By using our coffee recycling service, companies can reduce their carbon footprint by up to 80% compared to sending SCGs to landfill.

ENVIRONMENTAL IMPACT

We started building a value chain for the spent coffee ground by building a collecting system to help the coffee chains get rid of the SCGs safely to save the environment. Then we used the spent coffee waste as the primary substrate to grow mushrooms to cover a need in the market and help solve a trophic problem by covering the gap, turning the spent mushroom soil into organic fertilizers.

All this Value chain that we created is to get benefit from the SCG, providing a sustainable source to produce mushrooms, and also to get used out of the spent mushroom soil to produce an organic compost to give the land the needed elements from coffee ground and Myslim to make our clean production cycle, and zero waste and depending on R&D and product development to provide and new Agri-solutions that will help to develop the Agri-sector in MENA.

IMPACT GOALS

Cupmena plans to achieve this change through a multifaceted approach that involves partnering with local businesses, coffee shops, and cafes to offer reusable cups for customers to borrow and return through a convenient mobile app. This encourages customers to bring their cups and reduces the reliance on single-use cups, which can help reduce the environmental impact of disposable cup waste.

Cupmena contributes to achieving the Un SDGs in several ways.

SDG 12 - Responsible Consumption and Production, promoting sustainable consumption patterns and reducing waste from single-use cups.

SDG 13 - Climate Action, as reducing the use of disposable cups can help reduce greenhouse gas emissions associated with their production and disposal.

SDG 17 - Partnerships for the Goals. Cupmena collaborates with local businesses and coffee shops to implement their reusable cup-sharing

COMPETITIVE ADVANTAGE OR UNIQUE SELLING POINT

As one of the only two startups operating in the MENA region that innovatively utilize coffee grounds, Cupmena holds a unique advantage in the Agri-solution market. As a first mover, we have established ourselves as leaders in the field. Additionally, our approach sets us apart from our competitors in the mushroom market. Using coffee grounds instead of traditional materials, our cultivation process allows us to have a faster production cycle of just six weeks than our competitors' three months. Additionally, our use of readily available and cost-effective material, as opposed to competitors' reliance on expensive and seasonal rice straws, further solidifies our competitive edge.

Furthermore, our commitment to research and development allows us to improve and expand our product offerings continuously. By staying updated on the latest industry developments through our partnership with the renowned institution "Ginkau," we can offer a diverse range of mushroom species to cater to a wide range of customers and meet their varying needs.

FINANCIAL SUSTAINABILITY OF BUSINESS MODEL AND MILESTONES

Cupmena is utilizing innovative business models to maximize the value of its resources and address waste management and sustainable agriculture, working on several innovative business models in place and under development to maximize the value of spent coffee grounds and address pressing environmental and agricultural challenges. The current revenue model involves using the coffee waste as a substrate to grow mushrooms, which are then sold to B2B and B2C customers.

In addition, Cupmena is also exploring other revenue streams, such as selling ready-to-cultivate mushroom bags to farmers and using the spent mushroom soil as animal feed or raw material for fertilizer companies. These business models are still under validation, but they show the company's commitment to finding new and innovative ways to generate value from its resources.

Furthermore, Cupmena is selling the spent coffee ground waste as raw material to fertilizer companies and is already onboarding paying customers. This revenue stream not only helps to reduce waste but also provides a valuable resource for fertilizer companies and contributes to a more sustainable agriculture sector.

LAND RESTORATION CATEGORY

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**Mashrur Hossain
Shurid**

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Mashrur Hossain Shurid
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COMPANY NAME	iPage Bangladesh
AWARD CATEGORY	Land Restoration Category
REGISTRATION DATE	Mar 19, 2019
COUNTRY OF BUSINESS	Bangladesh

WEBSITE	https://www.ipageglobal.com
FACEBOOK	https://web.facebook.com/ipageglobal
LINKEDIN	ipageglobal

FOUNDER AND THE FOUNDING TEAM MEMBERS

Mashrur H. Shurid, Cofounder / CEO, iPAGE I am an electronics engineer turned into an agri-business enthusiast with nine years + of experience working with youths and rural populations. Responsibilities: I look into strategic partnerships, B2B affiliations, fundraising, and government collaborations.

Imtiaz Hossain, Cofounder/CTO, iPAGE My partner Nisat received his Bachelor’s degree in Computer Science & Engineering. He is a data system architect and a full-stack software engineer, having 9 years+ experience working in reputed local and global companies like Field Information Solutions GmbH, Bangladesh-Japan IT, Cyber Security Division of Mutual Trust Bank Ltd. Responsibilities: Nisat heads our R&D department and iterates upon our existing solutions to make those more efficient.

Mohammad Saifullah Mithu, Cofounder/CCO, iPAGE My other partner Mithu holds a Bachelor’s degree in law from the University of London. He also received a diploma in Disaster Management and a Master’s in Development Studies. He is a seasoned professional in the development and impact sector with 9+ years of experience. He cofounded BANDHU Foundation of Bangladesh, Project Kombol, and Give Bangladesh; all of which are impact organizations and impact projects, working across 40 districts of Bangladesh with direct beneficiaries numbering in millions. Responsibilities: Mithu oversees iPAGE’s network at the grassroots level (among farmers), circulates core values to the field support staff, and maintains liaison with local NGOs and government partners.

PROBLEM

Approximately 2.7M of Bangladesh’s 16M farmers inhabit climatevulnerable areas, facing challenges like soil salinization, flash foods, and drought. Coastal farmers lack accessible data on soil salinity, pH levels, and appropriate agricultural knowledge. Inefficient government soil testing labs lead to guess-based salinity amendment practices. Due to similar challenges, small farmers in low-elevated and wetland areas miss the chance to save 20% on input costs because they do not understand their soil conditions post heavy silt assertion from tidal foods. Unregulated chemical fertilizer and pesticide use damages soil health and pollutes air and water sources. Lack of actionable information on soil, weather, and climate-smart farming practices is the core problem causing poor profitability of Bangladeshi smallholders, contributing to a 38% decline in the agricultural workforce over the past two decades and creating roughly 35000 climate migrants every year.

SOLUTION

We have developed IoT and blockchain-enabled precision agronomic advisory system to provide timely, actionable information service to Bangladesh’s climate-vulnerable smallholder farmers. We call the advisory service ‘Aunkur’. The core advisory system collects real-time data from our proprietary, electronic soil testing devices, automated weather stations, and farmers’ production histories and generates high-value crop recommendations tailored for salt-prone and low-lying areas, including optimal fertilizer, seed, and pesticide applications. We also offer training sessions to ensure proper implementation of our recommendations.

The advisory service includes the delivery of automated text messages and voice calls with weather forecasts and good agricultural practices, enabling farmers to access accurate information instead of relying on guesswork or biased guidelines from input retailers. This homegrown innovation empowers thousands of smallholders to make well-informed decisions for increased productivity.

Additionally, we connect farmers with ecosystem players such as banks, agricultural insurers, input vendors, and buyers, fostering profitable partnerships.

ENVIRONMENTAL IMPACT

Bangladeshi farmers have a misconception that the more fertilizer, exceptionally Urea, they apply, the higher their yield will be. Their guess-dependent fertilizer application often leads to 2-3x overfertilization. They usually apply chemical pesticides in fear of infestations, causing increased production costs. Our soil testing-guided fertilizer suggestions have cut Urea usage by 25%, and our symptom analytics-based advice has lowered pesticide overuse by 15%. By following our guidance on selecting seed varieties and organic fertilizer combinations, farmers have seen a 15-18% increase in yields.

We optimize fertilizer and pesticide use through site-specific agronomic recommendations, significantly reducing greenhouse gas emissions by 240 kg eqv CO₂/Acre, preventing topsoil degradation, and reducing irrigation water waste by 15%. Our pest management supports eco-friendly practices, decreasing chemical impact on soil and water sources.

As part of our ESG strategy, we'll offer carbon sequestration guidance, promoting vetiver grass planting for improved soil retention and carbon absorption.

IMPACT GOALS

Our IoT and blockchain-enabled advisory service positively impacts SDGs 8, 12, and 13 by enhancing crop diversity, connecting farmers to ecosystem players, fostering demand-driven production, promoting responsible consumption, and reducing agriculture's carbon footprint.

We boost economic productivity (SDG 8.2) and resilience (SDG 13.1) for climate-vulnerable farmers through crop diversification and enhanced decision-making. Our bundled advisory service links smallholders to buyers, retailers, banks, and insurers (SDG 8.10.1), digitally streamlining KYC and credit rating processes.

We enable farmers to adopt sustainable farming (SDG 12.2), promoting high-value crop production and optimizing supply chains through end-to-end connectivity between farmers and ecosystem actors contributing toward SDG 12. Soil-test-guided fertilization reduces urea use by 25% and CO₂ emissions (SDG 13.2.2). Starting with 50 farmers in 2020, we now serve 8,300 and aim to reach 92,000 across 10 Bangladeshi ecological zones by 2025, potentially cutting GHG emissions by 22.08M kg eq CO₂/acre annually.

COMPETITIVE ADVANTAGE OR UNIQUE SELLING POINT

Our innovation differs from others, not only because of its homegrown technicality but also because of the holistic business model, which also makes it sustainable & scalable rapidly locally and globally. Existing solutions in the region focus on solving one/two concerns (such as access to finance or access to market) of a farmer. Because of having deep-lying data on farmer's practice, soil, weather & market trends, we have a birdseye view of the entire agri-industry. Besides providing advisory, we effectively use that data pile to connect farmers with other value-chain actors, solving multiple pain points of the farmers from a one-stop platform (our advisory system).

Farmers are like Facebook users to us. The more they use our advisory service, even for free, the more we capture data on their soil, weather, and farming practices, which we convert into actionable insights for B2B partners like Banks, NBFIs, input manufacturers, and large consumers. Using our insights, B2B partners market their products/services to our aggregated farmers' base.

FINANCIAL SUSTAINABILITY OF BUSINESS MODEL AND MILESTONES

In a developing economy like Bangladesh, smallholders usually find it challenging to pay high service fees for advisory services at the early stages, so we charge a small subscription fee to farmers for our digital advisory service. We mostly cross-subsidize our operating and technology costs from our commission-based revenue strategy and external funding. We collect significant data from farmers, such as farmland size, financials, assets, stocks, borrowing capacity and history, national ID, crop rotations, and previous farming tracks. We use this data to generate actionable insights for our B2B partners, such as banks, insurers, input vendors, and large consumers, to sensitize them to mobilize their products and services to or source raw materials from our farmer base.

We treat our B2B partners' products and services as separate add-ons, and farmers can choose to purchase a combo pack of add-ons based on our advisory recommendations. We earn commission from these combo sales (via our NGO franchisees), averaging \$15, \$25, and \$45 per farmer per season for Aunkur Lite, Standard, and Premium, respectively. Currently, 35% of our fund comes from this commission revenue, which we reinvest within the company to fuel our growth. The remaining 65% comes from angel investments, government grants, and blended finance from a European impact fund.

Our goal is to capture 2.5% of the global small farmers' market (900M) with the commission-based revenue model in the next five years, and with a 148% YoY growth rate in subscribed farmers, we aim to become the Asian climate-tech unicorn by 2027.



**Christina Mawuse
Gyisun**
SOMMALIFE



YOUTH ECOPRENEUR AWARDS 2023

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Christina Mawuse Gyisun
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COMPANY NAME

Sommalife

AWARD CATEGORY

Land Restoration Category

REGISTRATION DATE

Feb 17, 2020

COUNTRY OF BUSINESS

Ghana

WEBSITE

<https://sommalife.com/>

FACEBOOK

<https://web.facebook.com/Sommalife>

LINKEDIN

[sommalife](https://www.linkedin.com/company/sommalife)

INSTAGRAM

<https://instagram.com/sommalife>

FOUNDER AND THE FOUNDING TEAM MEMBERS

Christina Mawuse Gyisun (Co-founder and Chief Operating Officer)

Bachelor of Arts in Development Communication. With over 8 years of experience spanning Community Development, Agricultural Consultancy and Administration, Mawuse has equipped herself with vital skills that have driven rural community growth and development.

JohnCarl Dunyo (Co-founder and Chief Executive Officer)

Over 10 years of experience in agritech, rural development, and project management. These experiences include World Bank and UNICEF funded development projects in hundreds of rural communities across Ghana. He led the scaling up of Farmerline's Farmer Services from 8,000 farmers to over 75,000 farmers in Ghana.

Tom Savalle (Chief Finance Officer)

5 years of experience as a consultant and a financial director. He has worked with hospitality businesses, corporations, and nonprofits. As a finance director, he led a 3.0 million euro turnover business to profitability. He holds a Bachelor in Technology, Policy and Management and Master of Science degree in Transport & Logistics.

PROBLEM

Over 16 million women smallholder farmers in West Africa depend on the production of shea commodities for survival. The shea tree is listed as Vulnerable on the IUCN list. About 80% of the charcoal produced in northern Ghana comes from shea trees. This poses a threat to the preservation of shea trees and their immense value to the country. With the long lifespan of the shea tree, it is exponentially more valuable alive and producing nuts than being burned for charcoal. If this act goes unhindered, it will cause the fall of the shea nut industry and contribute to deforestation, environmental degradation, loss of income, etc. The shea tree is important in Ghana's fight against desertification. Every year, around 20,000 hectares of Ghanaian land are lost to desertification. This trend is contributing to global warming and the loss of livelihoods for millions of women and children.

SOLUTION

Sommalife is leveraging modern technology to effectively conserve shea trees and restore lost ones, while creating access to markets for smallholder farmers. Our innovative software, TreeSyt, collects information about existing trees and newly planted ones. The data includes their exact location, health, age, height, vulnerability status, etc. This data is used to make cost-effective decisions on conservation projects.

We are working with strategic partners in the 5 northern regions of Ghana to restore shea parklands and plant new, early maturing seedlings. We set up nurseries in communities and provide them with tools to raise and manage seedlings. Selected community members are trained in managing the shea seedlings. This is how we are empowering local farmers to become agents of conservation and contribute to biodiversity.

ENVIRONMENTAL IMPACT

Sommalife's environmental impact is multifaceted. Our work in conserving and restoring shea trees not only contributes to biodiversity but also helps combat deforestation, which is a major driver of climate change. By encouraging the use of energy-efficient cooking stoves and supplying them to smallholder farmers, we are promoting renewable energy and reducing the consumption of wood, which is a major source of fuel in rural communities. This, in turn, reduces deforestation and contributes to mitigating climate change.

Additionally, Sommalife is working with local communities to ensure efficient use of water resources in our nurseries and tree planting projects. We educate community members on the importance of water conservation and provide them with the tools and knowledge necessary to manage water sustainably.

Overall, Sommalife is committed to promoting sustainability and protecting the environment through our work in shea tree conservation, energy efficiency, and water management.

IMPACT GOALS

Sommalife's impact goals are to contribute to achieving the SDGs by promoting environmental sustainability, reducing poverty, empowering women, and promoting economic growth. By 2030, we aim to have restored over 100,000 hectares of shea parklands and to have planted over 5 million trees. This will contribute to climate resilience, promoting biodiversity, and creating livelihoods for over 1,000,000 smallholder farmers in West Africa.

Sommalife contributes to several SDGs, including SDG 1 (No Poverty), by providing economic opportunities for smallholder farmers and contributing to poverty reduction. We also contribute to SDG 5 (Gender Equality) by empowering women through training and leadership opportunities, and SDG 8 (Decent Work and Economic Growth) by promoting economic growth in rural areas through the creation of sustainable livelihoods. Our efforts to promote environmental sustainability and mitigate the effects of climate change align with SDG 13 (Climate Action).

COMPETITIVE ADVANTAGE OR UNIQUE SELLING POINT

TreeSyt's offline-online capabilities that allow for digitization in remote farming communities without internet access makes it a product of innovation suitable for our target beneficiaries in West Africa. The software is designed to meet the needs of rural smallholder farmers who are not tech savvy due to the high rate of illiteracy, without compromising on the quality of data. We use our highly trained field agents as a means of communication between the software and target beneficiaries. TreeSyt can digitize tree management from forests to individual trees in remote farming communities. Our software combines geolocation information and potentially satellite data to reduce the costs of monitoring millions of trees for impact organizations and conservationists. Also, a major differentiator is the integration of Machine Learning in commodity purchases and tree monitoring. The software leverages OCR technology to enhance the speed of purchase transactions while reducing the risks of errors and fraud. With this, field agents use the app to read the weights of commodities and automatically work out prices to be paid to farmers. Similar ML functionalities are being applied to tree health computation, where scans and drone images will be processed to automatically compute tree health.

FINANCIAL SUSTAINABILITY OF BUSINESS MODEL AND MILESTONES

We create digital profiles of smallholder farmers (50,000 so far) in Ghana who produce quality commodities, largely shea nuts, and integrate them in our impact programs (market access, innovative finance, and conservation). We source these commodities from them and mark-up with a 30% margin for our added value of traceability, environmental conservation, and impact services. We then sell the products to our international clients. With this model, we project cumulative revenue of \$36 million by 2025. In the medium term, the team is working to monetize its software and conservation services. After 3 years of pilots and testing, we have confirmed interest from SMEs, NGOs and other agricultural value chain actors in a solution like TreeSyt. This SaaS is projected to be an additional source of revenue for the financial sustainability of our business. These would be built and complemented by the raising of investment capital. By 2025, we project having the ability to sustainably cover the expenses of projects of this magnitude. 2020 was our inception year where a couple of small-size sales were made with little to no funding to work with. The costs for certifications and registration were higher and could not be covered by the amount of sales. In 2021, we took one step back in the chain and focussed more on the shea nut commodity. This proved effective and we managed to increase our sales from about 2,000 USD to 115,000 USD. We made a marginal loss due to the fact that our gross margin was relatively low but the first pilot of connecting smallholder shea-nut farmers to international markets proved successful. In 2022, we aimed to grow to 800,000 USD revenue which we exceeded by over 25%. Another aim was to pilot and analyze the potential margin. We grew our margin to almost 30% which led to our first profitable year (15% EBITDA margin).



**Max
Fontaine**
BONDY INTERNATIONAL



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Finalist Dossier

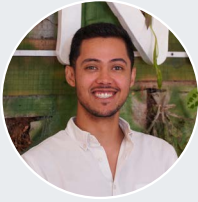


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COMPANY NAME	Bondy International
AWARD CATEGORY	Land Restoration Category
REGISTRATION DATE	Nov 20, 2019
COUNTRY OF BUSINESS	Madagascar
WEBSITE	www.bondy.earth
FACEBOOK	Bondyreboisement
LINKEDIN	https://fr.linkedin.com/company/b%C3%B4ndy
INSTAGRAM	https://www.instagram.com/bondy_trees/

FOUNDER AND THE FOUNDING TEAM MEMBERS

Max Fontaine : CEO. As a Malagasy, Max was born and raised in Madagascar. Max's role is to overview the company's operations, manage relations with financial institutions and government authorities, and represent the company to various summits. He was born and raised in Madagascar and went studying for 5 years in Canada in Business Administration specializing in applied economics.

Nelson Maillard : Nelson is the co-founder and Chief Communication Officer. He's Swiss Italian and French and grew up in Madagascar. After studying 5 years in Communication in Montreal and Geneva, he returned to Madagascar to join the project. His role is to develop and implement effective communication strategies to promote the company's brand, establish its reputation, and engage with its target audience, while also managing internal communications to ensure that all stakeholders are aligned with the company's vision and goals.

Gabriel Tasso : Gabriel is the co-founder and Chief Growth Officer of Bôndy. His role is to maintain a safe and efficient growth at Bôndy, making sure that its business model stays viable, efficient and trendy without losing the focus to create positive impacts on a daily basis. Background: Gabriel is a Swiss Lebanese citizen, who grew up in Geneva where he obtained his Swiss Maturity specializing in Economics and law. Afterward, Gabriel went to Canada to obtain its BAA in Finance and Management from HEC Montreal.

PROBLEM

- 80% of the population lives in rural areas.
- The UN has declared Madagascar the first country to suffer famine due to the effects of climate change in 2021
- Madagascar is the 10th poorest country in the world in 2021 (IMF)
- Since 1980, Madagascar has lost 75% of its forests (WWF)

Reforestation projects in Madagascar have multiplied since the country's independence in 1960 but the expected results are rarely achieved. The 3 problems we address in our projects are: lack of follow-up of reforestation projects, lack of technical expertise and lack of involvement of local populations.

SOLUTION

Bôndy carries out land and mangrove reforestation projects with the aim of developing rural populations. We do this work because the populations most vulnerable to poverty and the effects of climate change are those who are least included in development policies. 100% of the trees we plant are useful and have an economic or social value for the farmers. We consider ourselves as much humanists as environmentalists and thus we focus on resilience and adaptation to address the social and climate challenge in Madagascar.

In addition to reforestation, our projects include social initiatives such as capacity building for farmers and communities (training in women's empowerment, agroforestry, field schools, natural resource management), development of income-generating activities, improving access to basic services and environmental education.

ENVIRONMENTAL IMPACT

The beneficiaries of our solutions are smallholder farmers. Our projects improve the living conditions of rural populations through the planting of agroforestry plots on their land, technical and material support as well as social projects such as community infrastructure or rural entrepreneurship development. Primary needs such as food and clean water are our priorities.

In 2022, we have awarded the farmers partners that had the highest survival rates with solar panels.

In 2023 we have distributed 20.000 cookstoves to our beneficiaries. This solution is more efficient regarding energy needs and therefore reduce the human pression on forests.

IMPACT GOALS

The society change we are thriving is a greener and more inclusive society. Instead of working against natural ressources, we created a model that is based on nature whilst protecting it.

In the short term, our main impact is to get the targeted populations out of emergency needs through basic infrastructure (drinking water supplies or latrines). (drinking water supply or latrines).

In the medium term, our impact is to develop our beneficiaries economically and socially through the exploitation of the plots of land planted together and the processing and marketing of these.

Finally, our vision is that our project can lead Madagascar on the path of a green development where the environment, adaptation and resilience are no longer a separate component of policies and society but are the main pillar of development.

COMPETITIVE ADVANTAGE OR UNIQUE SELLING POINT

We are the first company dedicated entirely to reforestation in Madagascar (most environmental initiatives in Madagascar have been led by NGOs and international aid). Our projects are sustainable because they are profitable for us, our partners and the local population. We have a no-holds-barred approach to social, African and youth entrepreneurship. Thus, our model brings together so many different stakeholders (government, local authorities, partner companies, partner farmers) and technological innovations (treetracking, satellite monitoring) in a never-before-seen model that it is difficult to quickly grasp our vision as a whole.

FINANCIAL SUSTAINABILITY OF BUSINESS MODEL AND MILESTONES

Our first business model is to collaborate with companies through their CSR budget.

Now we have launched our own chain development projects and carbon credits projects.

We have developed 44 partnerships on 5 continents, appeared in major international and local media (BBC World, RFI, Al Jazeera, Le Monde), invited more than 3,000 volunteers to our events, represented Madagascar at international conferences such as Youth4Climate, COP 26 & 27, UNGA 77, One Forest Summit and have been invited to present our model at various World Bank (CIF) summits or other partners in Africa, Asia, Europe and North America.