



Agriculture and Allied Sectors





Shri Narendra Modi
Hon'ble Prime Minister

Startups are the engines of exponential growth, manifesting the power of innovation. Several big companies **today** are startups of **yesterday.**

They were born with a spirit of enterprise and adventure kept alive due to hard work and perseverance and **today** have become shining **beacons** of **innovation.**

Message from Dr. Rajiv Kumar



With the world population set to grow to over 9 billion people by 2050, the demand for food is growing proportionately. The UN estimates that we will have to, at the very least, double our agricultural output by 2050 to keep up with this worldwide population growth.

The growing population is indeed putting continuous pressure on farmers and fields to fulfill growing global needs. However, the challenge has also opened up opportunities for entrepreneurs and innovators - Agritech, the use of technology in agriculture with the aim of improving sustainability, efficiency and profitability, is leading the way.

Today, Agritech is a \$7.8 trillion industry with investments reaching \$2.6 billion. It can be said that Agritech is starting to go mainstream with plenty of opportunities for expansion in the sector in the years to come and Agritech startups around the world are looking to scale, leveraging technology to positively disrupt the sector.

Novel methods of growing crops, such as aeroponics, desert agriculture, and seawater farming are being explored or used as alternatives; vertical and urban farms have made their way into campuses, onto rooftops, skyscrapers, and shipping containers, which significantly reduce the amount of water and fertilizers needed to grow food. Food sharing and crowdfunding initiatives are popping up around the world aiming to reduce food waste. Smart farms are on the rise globally thanks to AI (Artificial Intelligence), IoT (Internet of Things), and big data analytics with a move towards natural and chemical free farming. Drones are already being integrated to measure and monitor fields, create terrain maps, map fertilizer use, predict soil quality, and even plant seeds.

Indeed, the realization of these opportunities will bring escalating possibilities for farmers and innovators, raise investment in hard and soft infrastructure, advance efficiency in operation, and enhance productivity in the field of agriculture.

I commend the AIM team for coming up with the second edition of ***Innovations For You*** focused on startups working in the Agriculture and Allied Sector. The book truly highlights the success stories of innovators and entrepreneurs who are working towards capturing realistic ideas and converting them into real innovations. My heartiest congratulations to the AIM team for coming a long way in this journey and best wishes for their dedicated efforts and positive energy.

Dr. Rajiv Kumar

Vice Chairman, NITI Aayog



Message from Prof. Ramesh Chand

The integration of science, technology, and innovation into national policies can help the country to achieve faster and sustained socio-economic development. The advent of technology has further transformed various sectors across the globe, agriculture being one of them.

In 2021, India was among the top 50 innovative economies in the world and today India has become the 3rd largest startup ecosystem globally with over 4000 startups focusing on Agriculture and Allied sectors. The potential in terms of talent, skill, and knowledge has motivated the youth to begin their own ventures contributing to the startup culture in the country. Initiatives from the government have further enhanced the startup ecosystem in India making business processes quick and efficient.

With an aim to promote a culture of innovation and a robust ecosystem for start-ups and entrepreneurs, Atal Innovation Mission in NITI Aayog has been establishing Atal Incubation Centres (AICs) in universities, research institutions, corporate organizations to foster greater cooperation within the international community by providing world-class technological facilities, growth funds, network and linkages, co-working spaces, mentoring and advisory support to scale up the ideas and make the enterprises sustainable.

I commend the team for starting the “Innovation for You” series to showcase the success stories of startups with the second book focused on the innovations in Agriculture and Allied Sectors. It gives me immense pleasure to know that numerous startups in the Agri-tech domain are able to access emerging markets and attract institutional investments and other stakeholders besides the vision of supporting the society at large. AIM has been doing a great job by providing collaborative opportunities for different stakeholders through its programs like ATL, AIC, ACIC, and ANIC-ARISE. I would like to congratulate Dr. Chintan Vaishnav and his team for compiling this book.

I encourage the young minds to actively engage in innovative and sustainable solutions to the various challenges faced by our society and leverage the AICs to pivot their ideas into market-ready products.

Prof. Ramesh Chand

Member, NITI Aayog





Message from Amitabh Kant



Agriculture and Allied Sector is the backbone of the Indian Society which provides employment to around 43% of the workforce and accounts for about 12% of our exports. The percentage share of GVA of Agriculture and Allied sector to the total economy has increased from 17.6% in 2018-19 to 20.2% in 2020-21 (as per provisional estimates by NSO). More so, the transition of India towards the growth of telecommunication and information technology sectors since the 1990s and 2000s has been a driving force towards entrepreneurship and innovation contributing to a wave of change in cleantech, fintech, medtech, agritech among others.

The interface of agriculture with technology-induced entrepreneurship is increasing competitiveness, leveraging digitization, and relying on innovation to solve varied challenges in this sector. It's time to bring an 'agri-nnovation' revolution into the country. A revolution with the correct mix of technology milieu, policy environment, and evolving entrepreneurship spirit. It will not only bring newer innovations but also bring a shift in Indian agriculture practices which will incorporate indigenous farmer knowledge, focus on optimization of the value chain by leveraging technological efficiencies, and give access to the markets for farmers and their produce.

With agritech startups using technology drivers such as artificial intelligence (AI), machine learning (ML), robotics, and satellite communication to serve farmers' needs, Agriculture is certainly the next frontier where the combination of escalating private sector-led entrepreneurship, transformative technology, and favorable policies will ensure a paradigm shift for the entire value chain.

The Atal Innovation Mission through its Atal Incubation Centers spread across the lengths and breadths of the country has been supporting the Indian agriculture economy through its AgriTech startups. This book is an excellent example of how the product and service innovations in agriculture and allied sectors have been supported by the AIM startup ecosystem. I give my best wishes to all the entrepreneurs mentioned in this book for their commendable innovation and their unwavering willpower to bring a positive change to our agriculture sector.

The idea of "Atmanirbhar Bharat" is to usher the country into self-reliance and self-dependence, and India's AgriTech and Agribusiness startups will be critical in fulfilling this goal. My best wishes to everyone contributing to this national movement.

Shri Amitabh Kant
CEO, NITI Aayog



Foreword by Dr. Chintan



No matter what may be your imagined pathway for India's future development and growth, agriculture would be a critical sectors for getting there. With more than 50% of Indians employed in it, this human resource is critical to not only the modernization of agriculture sector but also the growth of any other sector that needs it. As India moves forward, to rebalancing the agrarian, industrial, and knowledge sub-economies we will need technological and institutional innovations that are both rigorous and relevant. This compilation captures what is emergent today in this direction from the vantage point of Atal Innovation Mission. The last decade has witnessed a tremendous growth in Indian startup and Innovation ecosystem. In the recent times, India has prioritized fostering innovation and encouraging technology development by engaging R&D institutes, academia, industries, start- ups and even individual innovators. Today, India has the 3rd largest startup ecosystem with over 70,000 recognized startups. Entrepreneurial boost to the Indian economy has helped hundreds of startups and has attracted global investors.

The ingenious yet effective solutions by startups show the power of frugal innovation, a disruptive strategy to solve critical socio-economic issues and create market-relevant products and services faster, better, cheaper. With a vision to establish India as a global innovation hub, Atal Innovation Mission through its programs is promoting a culture of innovation and entrepreneurship across schools, universities, research institutions, private and MSME sectors.

Since 2017, Atal Innovation Mission has established a total of 68 Atal Incubation Centers. Spread across the country, these incubators have incubated innovative Ag-tech startups who are providing solutions to various challenges confronting input, farm productivity and output sides of agriculture. A new wave of budding entrepreneurs and emerging startups in the country are leading the way in disrupting the age-old agriculture system with innovative ideas and affordable solutions. These startups are acting as channels between the farmers, input providers, wholesalers, retailers, and consumers connecting the stakeholders and providing strong marketing linkages and quality produce on time.

This book is a collection of Ag-tech startups of Atal Innovation Mission that are leveraging technologies in the areas such as Big-data analytics, Biosciences, Drones, FaaS, IoT enabled engineering, Supply chain/Market-linked Models and Digital agronomy platforms.

I hope this compilation inspires many other entrepreneurs and young minds across the country to create innovative and disruptive products, services and solutions that can pave a path for a sustainable future.

Heartiest Congratulations to all the innovators and others supporting them, who are passionately working to empower farmers with innovative solutions so as to ensure that (s)he who is producing the food for us all does not go to bed hungry at night.

Dr. Chintan Vaishnav

Mission Director, Atal Innovation Mission, NITI Aayog



About Atal Innovation Mission

Atal Innovation Mission (AIM) is Government of India's flagship initiative to create and promote a culture of innovation and entrepreneurship across the length and breadth of our country. AIM's objective is to develop new programs and policies for fostering innovation in different sectors of the economy, provide platforms and collaboration opportunities for different stakeholders, and create an umbrella structure to oversee the innovation & entrepreneurship ecosystem of the country.



About Atal Incubation Centres

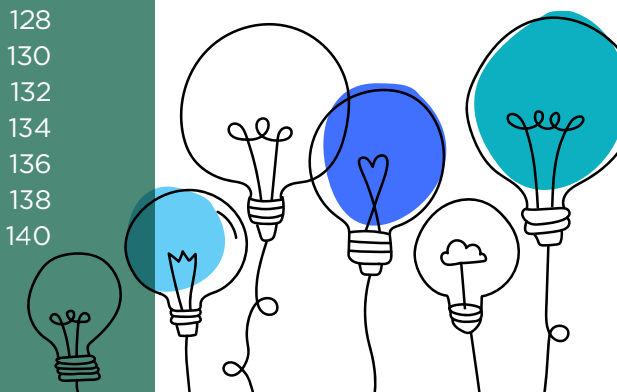
To create an ever-evolving ecosystem of start-ups and entrepreneurs, Atal Innovation Mission has been establishing business incubators called Atal Incubation Centres, also known as AICs, at universities, institutions and corporates among others. These business incubators are institutions that are geared towards speeding up the growth and success of start-ups and early-stage companies by providing technological facilities and advice, initial growth funds, network and linkages, co-working spaces, lab facilities, mentoring, and advisory support.

By establishing Atal Incubation Centres, AIM hopes to achieve a holistic ecosystem stretched along the length and breadth of our country. The idea is to bring all aspiring and motivated start-ups spread across varied topographies under the umbrella of innovation ecosystem. Thereby, fulfilling the objective of 'World Class Incubation'.

A special mention to the team of AIM supporting Atal Incubation Centres – Manglesh Yadav, Rohit Gupta, Anish Somani, Vinay Garg, Garima Ujjainia, Prithvi Sai Penumadu, Ashish Pandey and Rajeev Kumar, to support the Indian startup ecosystem and achieve its ultimate goal of becoming #WorldClass.

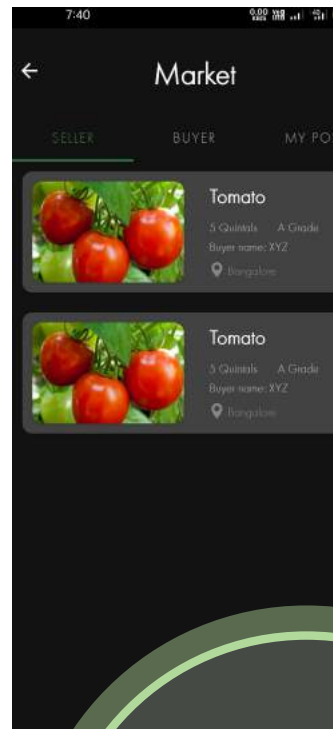
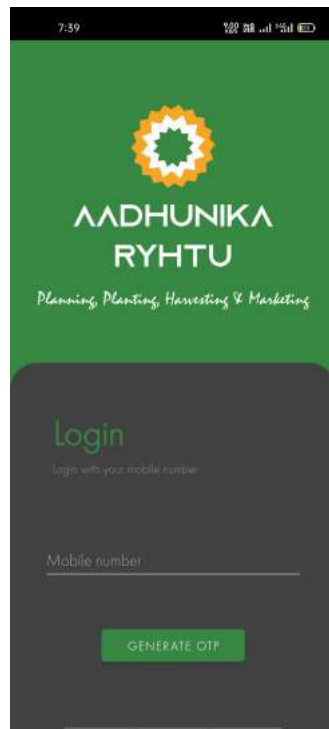
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STARTUPS AND THEIR INNOVATION





Aadhunika Rythu

Founders/Co Founders

**Vishnu vardha, Raghavendra,
Sukesk, Venkat, Bablu**

AIC Name

AIC-SKU

Type

Product and Service

Stage

mvp

Target Market

Domestic

IP Status

na



ceo@aadhunikarythu.com



Website



Aadhunika Rythu is tech enabled solution that facilitates contract farming between industries and farmers while providing all the required services that promotes and improves the yield. Aadhunika Rythu also provides a digital application that connects industries directly industries with farmers. Aadhunika Rythu is working on developing a price analytics model and using satellite data to improve precision agriculture in India.

Major achievements/Awards/Recognitions

Aadhunika Rythu has achieved the second price in start-up weekend at Gwalior. It has successfully developed an application which is beta version soon going to launch in the year 2022 January. They have an ongoing event where farmers can participate and win exciting prizes.

Societal Relevance

Problems faced by Indian farmers are numerous. One of them is deplorable farm income from crop cultivation due to price fluctuation in the market, lack of matching demand and supply, scarcity of capital for investments. To enhance farmer income level, there is a need to move from a production-centric approach to a market-centric approach as increased production of agricultural commodities does not guarantee enhanced income even in highly irrigated areas. Market-centric approach is systematic market linkages, refraining from post-harvest losses of commodities and many more. The best market linkage -digitalized solutions are brought to the farmers by "Aadhunika Rythu". It is a deep technology solution that helps farmers and food processing industries to solve their problems. They provide industry requirements to farmers to match supply-demand line, technical assistance and access to the market, digital assistance for every crop, assistance in decision making, suggestions on securing loans, traceability, and transparency in the value chain, uniformity and quality assurance, impart knowledge on saving time and money. The inclusion of data analytics in the agri-value chain provides a one-stop solution to all the problems in the commodity value chain and consultancy services in contract farming eliminate middlemen and provide better price realization to farmers and eventually lead to income stabilization to farmers.

Acviss Technologies Private Limited

Founder/Co Founder

Vikas Jain

AIC Name

AIC CCRI CED, Coffee Board

Type

Service

Stage

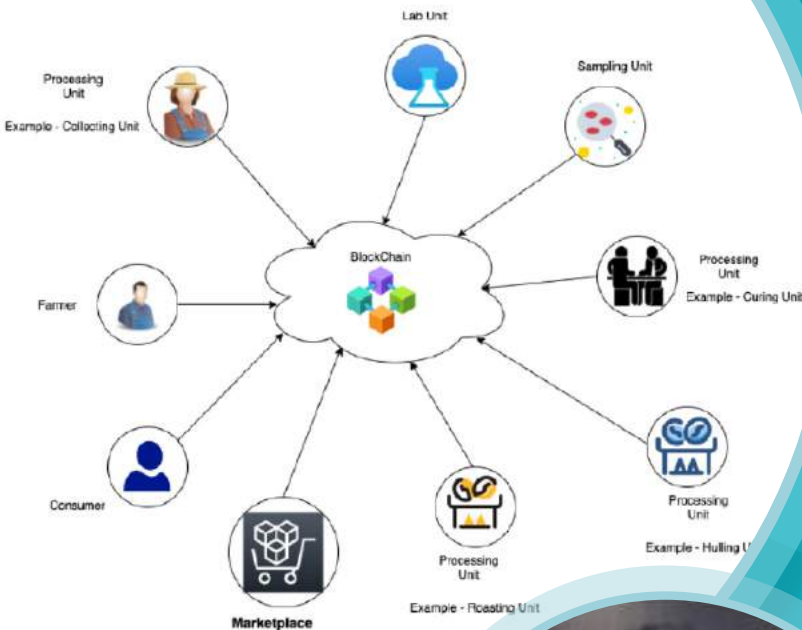
Commercialized

Target Market

Domestic

IP Status

NA



Acviss Coffee Track is a new age solution that ties in newest technological advancements in a simple way, providing an effective way to provide true provenance of coffee products, counter counterfeiting and building brand loyalty.

Major achievements/Awards/Recognitions

They have won the Best anticounterfit solution award 2020 and Indian achievers 2020 for emerging company

Societal Relevance

Fast Moving Consumer Goods (FMCG) remains one of the worst hit sectors due to counterfeit, fraudulent /spurious products and costs exchequer loss in revenue, the manufacturer damage to the brand image and the consumer loss in quality, trust and well-being. So, Acviss come up with proactive steps in safeguarding brands with tampered evident and tamper proof technology that integrates into packaging, out track and track service and it can be taken into all the stages of supply chain. With the Acviss label, Consumers can track the product details (Details of grower, Date of harvest & processing) using QR code thus imparts traceability in the supply chain, increase customer/consumer loyalty and it remains a trusted choice for many FMCGs.



vikas@acviss.com



Website



Agpharm Bio Innovations LLP

Founder/Co Founder

Sanjai Saxena

AIC Name

AIC Sangam

Type

Product

Stage

mvp

Target Market

Domestic

IP Status

Filed



sanjaisaxena@
agpharmbioinnovations.com



Website

AGPHARM BIOINNOVATIONS LLP (AGPBI) is a biotechnology start-up founded in December 2018 with a vision with a vision Science towards sustainable development of life" for developing sustainable biosolutions as cost-effective bio-products which would address the needs as well as enhance the productivity of small and medium holding farmers of India. Thus, nearing an endeavour to make farming and farm produce chemical-free, non-toxic and health-oriented. The company is oriented in providing biotechnology-based solutions, and cost-effective products in the area of Agriculture, Food and Health. We have developed a novel product "VOLAFRESH", to enhance the post-harvest shelf life of fruits and vegetables, grains with an intent to keep them fresh from farm till fork. Volafresh is basically developed for Fruit and Vegetable producers (farmers), supply chain traders and vendors who are encountering major losses in revenue during storage and transportation. Volafresh minimizes decay and spoilage due to its potent antimicrobial action, and is essentially a cost-effective and user-friendly intervention which is sterile, non-residual and recyclable.

Major achievements/Awards/Recognitions

- The DIPP, Govt of India has recognized AGPHARM BIOINNOVATIONS LLP as "Start-up". (Certificate No.: DIPP34172)
- Winner of Agritech Innovation Challenge 1.0 by Social Alpha (2019)
- Member in First Cohort of Indian Agriculture Incubation Network (IAIN), an initiative of Social Alpha, IIT- Kanpur and Bill & Melinda Gates Foundation.
- AGPHARM BIOINNOVATIONS LLP was in Cohort -5 i.e., Reducing Food Loss and Waste of Food System Game Changers Lab (FGSCL). The program is supported by Thought for Food (TFF), open IDEO, Rockefeller Foundation and EAT.
- Recognized by Punjab Start-up Mission, Department of Industries and Commerce, Govt. of Punjab (ST/FC/20026)
- Recognized by AGNI Mission

Societal Relevance

The mission of AGPHARM BIOINNOVATIONS LLP is "Enhancing Food Security and Farmer's Income". The use of Volafresh is going to have a tremendous impact on the social structure of the farmers in particular small and marginal which constitute 86% of the Indian agrarian community. Due to use of Volafresh there will be no crash selling produce by farmers, they would get fair price of their produce due to extension of the shelf life. It shall have a positive impact since reduction in wastage or post-harvest losses would enhance the availability of food. Thus, long term use of Volafresh is going to impact the Global hunger index of India. Currently over 140 million people sleep without a single time meal in India. As we would conserve food and reduce wastage due to post-harvest losses it would have an impact on the Global Food Security Index of India. Volafresh would be an affordable, user-friendly intervention which would empower the farmer to store his produce for better price than crash selling and facing nominal or no profit. Volafresh aligns well with the UN sustainability goals 01 (No Poverty); 02 (Zero Hunger), 12 (Responsible production and consumption) and 13 (Climate action).



AgriBolo

Founder/Co Founder
Arvind Godara

AIC Name

AIC ISB

Type

Service

Stage

Commercialized

Target Market

Domestic

IP Status

Not filed



arvind@agribolo.com



Website



AgriBolo is farming as a service platform that provides 360-degree farming solutions. Through an all-inclusive platform the farm advisory, farming rental, irrigation facilities, market linkages, and quality input procurement services are provided. We aim at integrating the complete value chain, improving agricultural practices, developing the extension services (inclusive of input supply), and also creating the market linkages. We have developed a franchisee network (which we refer to as the AgriBolo Kisan Seva Kendra) on the aggregator model. We are For the Farmer, By the Farmer, and With the Farmer” and are on a mission to build India's largest network of digitally-enabled rural franchisees. We started our operations in April 2016 and are a profitable bootstrapped Agri startup. We are operating in the states of Rajasthan and Haryana. We have 3 lac+ registered farmers and have 25+ employees working towards serving the farming community most efficiently. We are different as we operate from seeds to market, from sowing till harvest, and beyond. We are with the farmers. We connect farmers, agriculture, and the markets efficiently.

Major achievements/Awards/Recognitions

Successfully completed the acceleration program, under FLCTD project jointly implemented by BEE-GEF- UNIDO and Sangam Ventures

Societal Relevance

The farmers in India face the challenges of information dissemination, quality input procurement, market linkages, access to tools and irrigation facilities. On top of these, a drop in production due to climatic conditions, pest attacks, or inadequate finance makes farmers vulnerable. Agribolo works on breaking this vicious chain and developing an ecosystem that would be a level playing field for everybody and creates a link from farm level extension to the final marketing of the produce.

AGRIBOLO provides e-mandi services with an app culminating vision of Hold, Buy and sell. Also, to streamline the agri-input procurement, Agrimart is a one-stop marketplace for farmers to buy agriproducts such as fertilizers, pesticides, seeds, hardware according to their needs. To encourage farmers to produce better quality seed, a seed program that pays according to the quality of seed that farmers bring in to them! To enable farmer interaction among themselves as such farmers' talk in the evenings at the commonplace in their villages, agribolo introduces CHAUPAL provided within agribolo app that connects farmers wherever and enable them to discuss on different aspects of farming. Also, the best consultancy is being provided by Agribolo as they educate farmers, provide solutions on fingertips with just one call to toll-free, farm machinery on rentals, and free home delivery of agri-products at their doorstep. These services streamline the entire agri-supply chain and aim for a better standard of living for farmers in India.



AgriVijay

Founder/Co Founder
Vimal Panjwani

AIC Name
ADT-BARAMATI

Type
Product and Service

Stage
Commercialized–Early Revenue

Target Market
Global

IP Status
Trademark – Under Process

 **vpanjwani@agrivijay.com**



Website



AgriVijay is India's first marketplace of Renewable Energy Products for Farmers & Rural households making them energy independent by reducing their dependency on Fossil fuels such as diesel, firewood etc. ,increasing their Savings & contributing to the Climate Change mitigation. AgriVijay interacts with farmers & rural population with their Omni-channel touch points such as user-friendly E-commerce Website, Mobile App (under development), Field Teams, Call Center & Village/Block level Franchisee Model known as 'AgriVijay Renewable Energy Stores' which is a one stop store of Renewable Energy Products meant for Agriculture & Farmers. The platform empowers the farmers by providing plethora of Renewable Energy Products & Services along with New Technological Innovations in Agritech space coupled with Energy Advisory that promises either increase in the Yield or Savings by reducing expenditure.

Major achievements/Awards/Recognitions

- FICCI Agri Startup Award 2021 – Top Agri Innovator in COVID times
- Go Global International Award 2021 – Cleantech Front Runner
- Top 100 Startups in 6th Edition of South Asia Innopreneurs Contest 2021 by Lemon Ideas
- Top 35 Best Social Impact Startups in India – Startup Pill
- Indian Achievers Award 2020
- Recognized by WWF- India under Climate Solver sub
- Recognized & Listed by Agnii & Invest India portal
- Recognized by Mr.Gautam Adani (MD,Adani Group) on Twitter
- Rajasthan Women Entrepreneurship 2020
- Climate Launchpad 2021
- Featured & Published by Print & Electronic Media – NDTV 24X7,Zee News, Business Standard, Yourstory, Mumbai Mid-day Newspaper, Dainik Bhaskar, Hindustan Times.

Societal Relevance

AgriVijay coupled with their experienced knowledge advisory & recommendation on Renewable Energy where they understand energy needs of farmers along with the Waste Availability at their end they are penetrating the knowledge & usage of 'Renewable Energy Products' to bring disruption in the lives of thousands of Farmers & their Families as a direct Social Impact along with an indirect Impact on Environment by increasing use of Renewable Energy & reduction of usage of Fossil Fuels & Chemical Fertilizers by the Farmers abating tons of GHG/CO2 emissions encompassing SDG's as a Climate Action movement on rural grounds.

We at AgriVijay also bringing Insurance & EMI/Financing options to buy the Renewable Energy products on the marketplace in ease installments especially for Poor, Small and Marginal Farmers so that they can switch to Renewable Energy and become Energy Independent with significant increase in savings and income along with Climate Change mitigation by making farmers independent on energy needs with provision of bio-gas/solar energy products therefore boosting returns on crop."





**Goat Diary
Android App**



**GoatMate Live Stock
Management System**



Agrosonic Solutions Private Limited

Founder/Co Founder

Anil Tatti

AIC Name

AIC-Pinnacle

Type

Product and Service

Stage

Commercialized

Target Market

Global

IP Status

Published



GoatMate LiveStock Management Software developed by AgroSonic Solutions Pvt Ltd offers very unique features that help make insightful decisions that consider longer term growth and sustainability of farmers.

GoatMate LiveStock Management Software keeps the livestock records up-to date to provide an aggregated view that tracks growth and metrics. Existing clients have reported a decrease in the mortality and increase in the weight of individual goats. Also, the number of offspring's has increased because of better weight control and vaccination schedules. The software helps reduce mortality and improves health of animals by providing an integrated perspective on vaccinations, health and medicines from doctors themselves.

Societal Relevance

The monetized, multilingual and user-friendly app "Goat diary Livestock & Farm Management" is presented by Aarush systems to gain the momentum in farm income. It improves the farm income with digital integration software that analyse farm performance with reports, plan early to save more through feed recording and milk yield, access to vaccination schedules that protect livestock and mortality, livestock monitoring, maintain weight records of the livestock and act accordingly on weight trends, healthy food plan brochure that enhances the quality of the product derived, breeding plan for each species which supports genetic backup for further generations, receiving alerts about bio-security issues pertain to livestock as soon as they happen and suggestions on how to best feed and care for animals in drought to ensure their welfare as a part of disaster management, maintaining livestock data, extent of investments and return on investment(ROI) by farmers/users, better resource management with account tracking. This revolutionary technology facilitate easier livestock rearing and enable them to escape from the wheel of debt and other blues in the livestock rearing ecosystem.

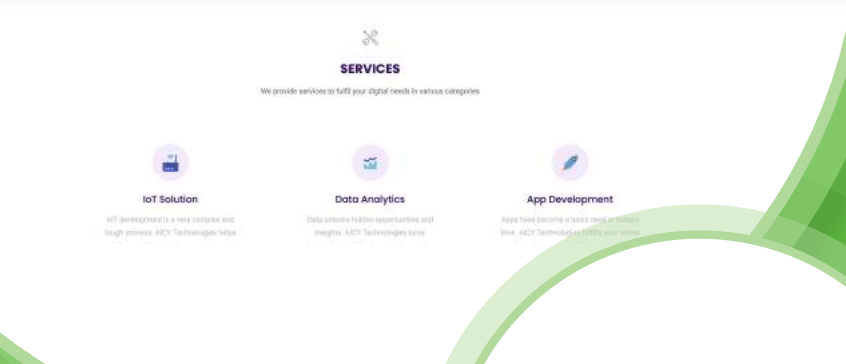
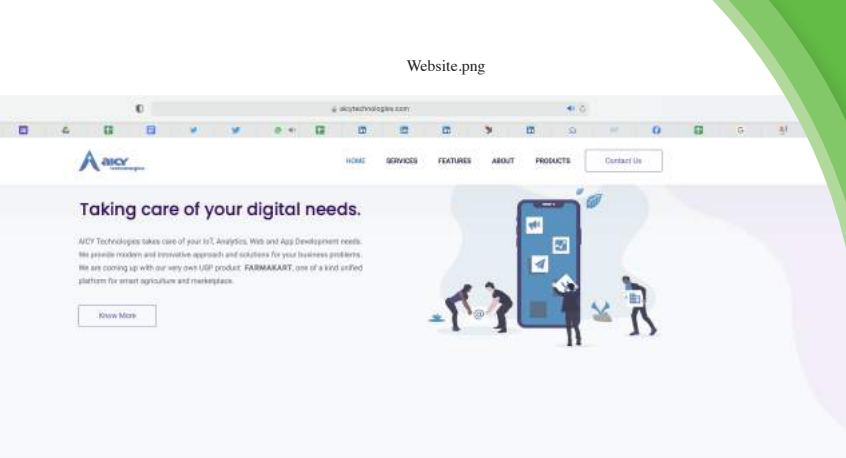


director@agrosonic.in



Website





AICY Technologies Pvt. Ltd

Founder/Co Founder
Anjan Choudhary

AIC Name
AIC-JKLU

Type
Service

Stage
mvp

Target Market
Domestic

IP Status
na



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Website



A young company currently based out of Guwahati, Assam, India. They provide services related to IoT, Analytics, Website and App development. Using these they come up with their product called FARMAKART which they believe is their USP. It will be a unified platform that will consist of smart agriculture services and also a marketplace that will sell all the farm produces. They are trying to tackle the present situation of farmers in the country with their product to give and help them have a better life.

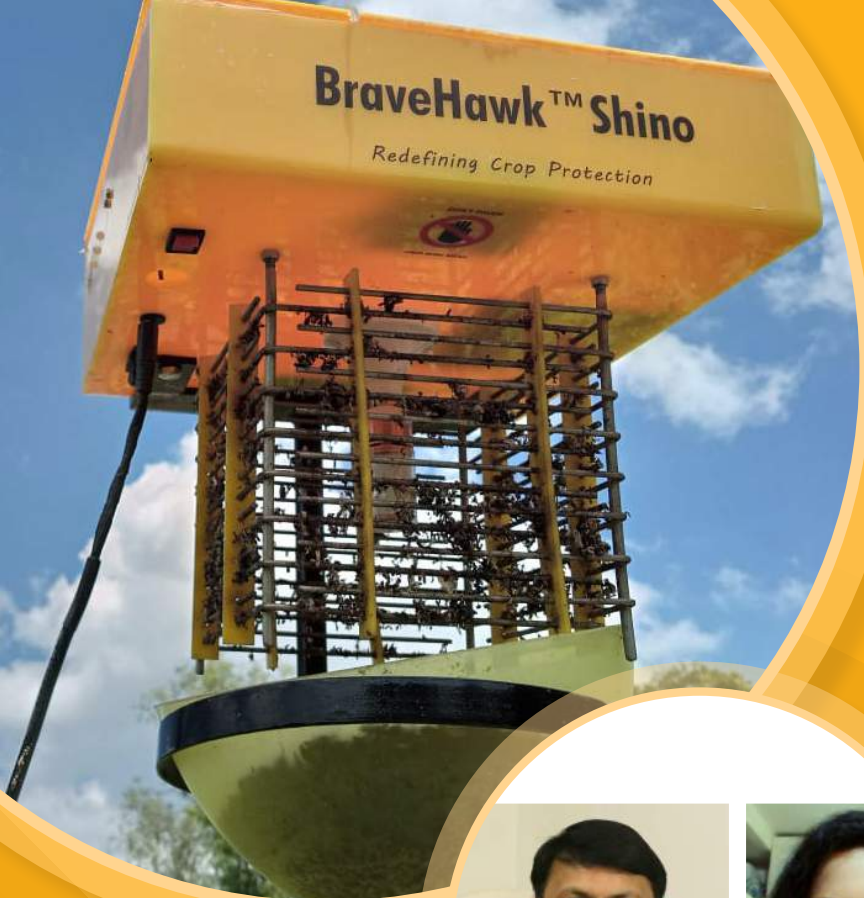
Major achievements/Awards/Recognitions

AIC-JKLU provided AICY TECHNOLOGIES Pvt Ltd the opportunity to participate in the UK India innovation challenge fund 2020. The UK Government launched a 3 million pounds challenge fund India to support innovation, climate change, Covid 19 pandemic challenges, AI, and Data Science problems. AICY TECHNOLOGIES participated in the AI and Data Science project in the agriculture domain. They were among one of the startups selected for the final round among 300+ applications and were called for the final bidding proposal.

Societal Relevance

The pandemic has resumed all the operations and put businesses in obstacles and made farmers unaccessible to input procurement. To streamline the input deliver to farmers, AICY technologies have come up with FARMAKART which delivers all the input accessories at the farmer's doorstep, making farmers digitally adaptable; technology for non-tech people and make use of the best new products and services in the market. More than 11,000 farmers have been associated with Farmkart and are enjoying seamless last-mile delivery.





AI-Genix International Pvt. Ltd.

Founder/Co Founder
Shahnaz Shaikh

AIC Name
AIC Sangam

Type
Product

Stage
Commercialized

Target Market
Global

IP Status
Pending



shahnaz.shaikh@ai-genix.com



Website



AI-GENIX International replaces pesticides/chemicals with its Artificially Intelligent pest traps which increase yields by 30-40% and reduce input cost when compared to chemical pest management. The company has sold over 3,000 self-installable pest traps available in premium and general models for small and marginal farmers for all field crops. These traps currently secure lands in excess of 3,000 hectares. We invent technology for crop protection and sustainable farming, which helps to address the global hunger threat and food security issue.

We are relentlessly working on Replacing Chemicals with AI, Electronics & Biology to Phase Out Highly Hazardous Agrochemicals from Agro Ecology”

Our ground-breaking crop protection technologies and crop management solutions are transforming the dynamics of the farming industry, enable millions of farmers to produce high-quality toxic residue free food and increase the yield by optimizing the use of available resources.

Major achievements/Awards/Recognitions

- Winner SKOCH Order of Merit Award Year 2016” SKOCH Foundation, Delhi.
- Winner Best Indian Social Enterprise Award -2019” from Action for India Foundation & IIT, Hyderabad.
- Award winner Best Women Entrepreneur Award 2019” from Action for India Foundation & IIT, Hyderabad.
- Winner "AABI TORCH AWARD" for PROMISING ENTREPRENEUR 2020 from Asian Association of Business Incubation supported by China Torch High Technology Industry Development Centre & Shanghai Technology Innovation Centre, China.
- Winners – Chunauti – Next Generation Challenge 2121” Software Technology Park OF India, Science and Technology organization, Indian Ministry of Electronics and Information Technology, India.
- Finalist–Global Disruptive Tech Challenge 2021 – The World Bank, Global Landscape Forum, and Plug & Play Tech Center, California.
- Winner TiE Sustainability Summit Women Social Entrepreneur Award 2021” TiE, Hyderabad

Societal Relevance

BraveHawk ArtificialIntelligent Pest Control Technology brings multiple positive impact on environment it helps us to make our food we eat, our air we breathe-in, our water we drink, and our soil we use to grow food free from toxic chemical contamination. It protects marine life from ill effects of toxic agro chemicals, protects the honey bees from sudden death syndrome called CCD (Colony Collapse Disorder) by cutting down the dependence on toxic agro chemicals those are largely responsible for CCD in honey bees.

Agriculture produces a substantial amount of greenhouse gas emissions due to chemical fertilizers, pesticides, which contribute greatly to global warming and climate change.

These greenhouse gases include nitrous oxide (N2O), carbon dioxide (CO2) and methane (CH4), Deployment of the AIPMT devices in farm reduces the greenhouse gas emission substantially. Its impact is scalable, as we increase the devices deployment in the farm in same proportion, the greenhouse gas emission comes down.



Anuha Food Products Private Limited

Founders/Co Founders

**Sneha Budhia,
Anubhav Bhatnagar**

AIC Name

AIC-ALEAP WE HUB

Type

Product

Stage

Commercialized

Target Market

Global

IP Status

Published



sneha@zillis.in, anubhav@zillis.in



Website



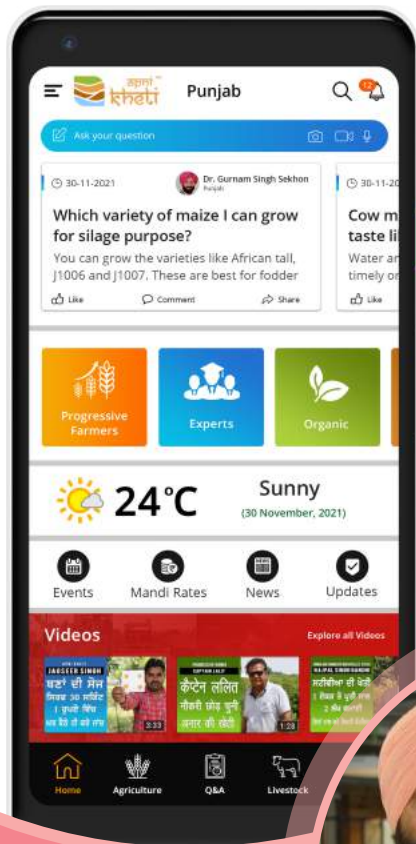
Anuha Food Products Private limited deals in dehydrated vegetable powders, flakes, and blends. Zilli's is a brand with dehydrated products that is a step towards making cooking easy and saving one's time. Dehydrated vegetable and fruit powders are more practical than their fresh counterparts in food manufacturing and have a longer shelf-life with packed vitamins. So, here vegetables are sun-dried to avoid the nutrient and active content losses and then it is subjected to decanters to separate the juice from the residue and then the juice is Clarified to remove impurities and later subjected to Spray dry that coverts clear juice to powder form which is done through Spray driers available in the market. Zilli's bring onion and garlic powder for daily kitchen recipes. It is 100% natural with no preservatives. Their motto is bringing up authentic flavors to say goodbye to peeling and chopping of garlic and onion.

Major achievements/Awards/Recognitions

- Recognized by Better India and Dainik Bhaskar.
- Amazon's Best Seller in the category.
- Exported the first consignment to the USA of 1 ton in the first 6 months on incorporation."

Societal Relevance

The startup has employed women who work as household maids. They work closely with partners and manufacturers to ensure every product is genuinely natural and with no added preservatives, gluten-free and vegan make consumers rustle up quick food specials. Also, Anuha Food Products Private limited takes a pledge in adhering to national food security and for safer and healthier consumption of food.



Apni Kheti

Founders/Co Founders
Taranpreet Singh Sidhu,
Hunardeep Singh Brar

AIC Name
AIC ISB

Type
Service

Stage
mvp

Target Market
Domestic

IP Status
na



taran.sidhu@cogneesol.com,
 hunar@apnikheti.com,



Website



Apni kheti is a digital platform that enables farmers to make data-driven smart decisions. For farmers, who lack access to correct information, resources, genuine products & services in Rural India, the Apni Kheti Mobile app provides a digital platform that enables them to have access to the right information & market linkages, at the right time, from the right sources like Govt. institutes, input companies, banks, institutional buyers & another stakeholder. Unlike they relying on looting middlemen & money-lenders, biased shopkeeper advice and limited knowledge of fellow farmer.

Societal Relevance

A one-stop destination for all the consultancy services that provide analyzed data reports to Government organizations, agriculture research institutions, agri-input companies, farm machinery companies, and financial institutions which in turn provide instant advisories to farmers such as weather updates and market linkages. It indirectly connects agricultural research and institutions with farmers and provides training schedules for crop management, data on improved seeds for sustainable utility and conservation, updates on the latest technologies and tries to make farmers innovators and early adopters (Under 5 adopter categories). Every farmer needs quality farm inputs for sustainable farming and a stable financial inclusion and so Apni Kheti does! It enables farmers to access quality farm inputs from agri-input companies as incessant information dissemination. Also, real-time financial advisory, easy access to financial funds, risk assessment provision is commendable. All the services above mentioned are paramount in farmer's life for plain sailing in the farming domain.



Barrix Agro Sciences Pvt. Ltd.

Founder/Co Founder
Mr. Lokesh Makam

AIC Name
ANIC Winner

Type
Product

Stage
Commercialized

Target Market
Global

IP Status
IPR filed in India. Currently under examination stage



ceo@barrix.in



Website

With a humble start in 2011, Barrix Agro Sciences Private Limited, an innovative establishment, made its foray into the agricultural sector to touch and profoundly influence human lives. Barrix developed eco friendly crop protection methods using pheromones through their latest dispersion technologies further they forayed into plant nutritional supplements which boost up the yields. With in depth study and research on products to support organic farming, Barrix provides innovative and effective products to help farmers. The positive reviews and wide acceptance from customers have paved the way for transforming cultivation methodologies. With a strong supply chain and dedicated personnel, Barrix empowers farmers and impacts the society and ecology in a positive way. Barrix Innovation Centre is approved by DSIR, Government of India. Barrix is focused towards developing Pheromone Based products. Our projects are funded and supported by DBT, BIRAC, and few of the foundations. Barrix emphasis on research as it is the need of the hour and is concentrating on synthesizing New Pheromones and New Pheromone dispersion Application products which are Eco friendly, pest control products for cultivation which supports and encourages organic farming.

Major achievements/Awards/Recognitions

- Barrix has filed 03 Intellectual Property Rights (IPR) pertaining to design, formulation and complete product for RPW Pest.
- Barrix has developed and commercialized Integrated Pest Management (IPM) Semio chemicals based product (Phero lure, Kairo lure, and trap) to control house fly menace in the brand name of BARRIX CATCH Housefly Trap which is been documented by Government of India and showcased by our Honourable Indian Prime Minister Mr. Narendra Modi and Honourable Israel Prime Minister Mr. Benjamin Netanyahu in 1st INDO ISRAEL CEO FORUM.
- Nutrient Management Barrix has established variety of nutrition mixture based in the brand name of BARRIX PLANT CHARGER, BARRIX ROOT CHARGER and BARRIX MAYA.
- Till time Barrix has synthesized 28 pheromone molecules to control different type of economically important agricultural pests and household pests with high yield, purity and cost effective method from R&D to Pilot plant scale, with these products can avoid almost 8 to 10 times of pesticides sprays.
- Currently all our products have been certified as organic inputs for safe cultivation by ECOCERT and ADITI accredited by APEDA (Agricultural and Processed Food Products Export Development Authority), an apex body under the Ministry of Commerce and Industry, Government of India.
- 6. AWARDS (a) TIME India Startup Innovative 2017 (b) Innovative Enterprise Award 2013 (c) Winner of Sankalp Awards 2013 (d) Winner of power of ideas 2012

Societal Relevance

Company has created a change in the lives of farmers by providing alternates to chemical pesticides thereby helping the farmers to lead a safe and healthy life. It also helps protect the crops and make it chemical free and fit for human consumption. Further, even the environment is getting benefitted by reduction in usage of hazardous chemicals in the cultivation.

The concept is entirely new, we shall have all proprietary rights with us.

BHAPRA STORAGE BAGS

Bhapra Storage Bag.
50 ka capacity. Appearance of

Bhapra storage bags
Ready to use.

Total no of 4 Bhapra bags
folded. They are strong
enough and occupied less space.

Bhapra storage bags
Ready to use.

Full length bag,
for filling
50 kg grains.



Bhapra Biosolutions Pvt. Ltd

Founder/Co Founder
Dr. J. Venkateswara Rao

AIC Name
Atal Incubation Centre-CCMB

Type
Product

Stage
mvp

Target Market
Global

IP Status
Filed



jviict@gmail.com,
jvbhapra@gmail.com



Website



M/s. Bharara BioSolutions Pvt. Ltd. produces reusable insect pest-proof has woven/non-woven and knitted plastic HDPE/PP bags for food grain storage and transportation. The idea is to produce user-friendly food grain storage bags containing deltamethrin as a sandwich layer for long-term grain storage. These bags protect the grains from insect pests while avoiding direct contact between the grains and deltamethrin, as well as the employees who operate them. This Agri-technology would address all the problems at the same time, reducing pesticide costs and maintaining grain quality by avoiding any further treatment. Currently, Pilot studies/ filed trials and certifications at IGMRI are underway and the team has commercial partners to commercialize the same not only within India but outside India.

Major achievements/Awards/Recognitions

- Exhibited the technology to Hon'ble VP of India, Shri. Venkaiah Naidu about the technology.
- Presented to Telangana State Innovation Cell (TSIC) and the Agricultural Department of TS to be recognized as one of the key suppliers of the product to the State Govt."

Societal Relevance

The commodity is related to social innovation in the post-harvest sector and influences local groups of farmers. Innovation will be extremely inexpensive, highly reliable, environmentally safe, and will eradicate workplace hazards in the handling of bags. We expect the safety of food grains during transportation and/or storage.

The new age 'storage bags' have new treatment technology that is user-friendly and healthy for small, middle-class farmers and Rythu Bazar who manage them by reducing grain infestations. Providing information to convince rural, middle-class farmers, households, or small businesses men to realize the benefits. Our superior quality grain storage bags are at a cheaper price.



Binita Mushroom Centre

Founder/Co Founder
Rajkumari Binita Devi

AIC Name
AIC-AAU Incubator

Type
Product

Stage
mvp

Target Market
Domestic

IP Status
na



binita1169@gmail.com



Website



Binita Mushroom Centre produces Value-added mushroom products. They are a one-stop solution for a mushroom that is dedicatedly working to manufacture mushroom products like mushroom nuggets, noodles, pickles, cookies, etc., and meet the dietary Vitamin D requirements.

The startup focuses on processing fresh mushroom with value-added nutritious products. Mushrooms are highly perishable in nature, so processing Mushrooms into various value-added products like Dried Mushroom, Mushroom Powder, Mushroom Pickle, Mushroom Nuggets (Bori), Mushroom Cookies, Mushroom Noodles, ready to drink Mushroom Beverage etc. has expanded peoples consumption choices and thus increased the potential market size and scope.

Major achievements/Awards/Recognitions

- Best State Level Farmer Award for the year 2018-19 on 11th October 2019
- 2nd Best Entrepreneurs Stall Award for State Agricultural Fair, 2019
- First Prize in the State Level Exhibition on 23rd December, 2019
- 2nd Position in Exhibition cum show (Processed Products) competition for CAU- REGIONAL AGRI FAIR 2020-21.
- 3rd Position in Exhibition Stall organized by CAU- REGIONAL AGRI FAIR 2020-21."

Societal Relevance

The startup is focused to bring a cooperative movement among mushroom farmers so as to double the income of the farmer. Many pieces of training were given to the farmers under KVK(Imphal East), ATMA(Imphal East), and Green Biotech Echosolution Pvt. Ltd.(Manipur). The founder is the member (Farmer representative) in the Scientific Advisory Committee of CAU, 2020





Bio Craft Innovation Pvt. Ltd (Biomize)

Founder/Co Founder
**Anubhav Sanwar Mal Mittal,
Nand Kishor Gautam**

AIC Name
AIC-BIMTECH

Type
Product

Stage
Commercialized

Target Market
Global

IP Status
Filed



info@biomize.in



Website



BIOMIZE
Bamboo Ware

Bio Craft innovation is developing technology that creates materials that are bio-based and compostable. The main raw material used is bamboo biomass or agriculture waste. The product of Bio Craft can be used on standard plastic machines and replace the use of plastic in our daily life. Their aim is to impact the livelihoods of farmers and bamboo growers with this technology, as they are connecting agriculture waste to high-value industrial raw material. We plan to transfer basic value addition at farmgate itself that can be used by us as an input feedstock, thereby generating additional income and employment in the rural economy. Also as bamboo is a resilient crop that can grow on wasteland, we are supporting those farmers that do not have good quality land and find it difficult to earn a decent livelihood from their land. Biomize supports them in building bamboo plantations and buying their harvest and supported 50 such farmers. So far they are working with farmers that already have bamboo farms and find it difficult to sell bamboo at better than market prices. As their requirements are growing they will support more such growers. Biomize plan to set up a procurement center in farms and procure directly from growers.

The long-term goal is to create a range of thermoplastic and thermosetting bamboo-based pellets and compounds that can replace plastic and grow further as a sustainable ingredient company and offer cost-effective solutions to reduce plastic pollution.

Major achievements/Awards/Recognitions

- Bio Craft was selected by US Embassy-run Nexus Program.
- Bio Craft Innovation Private Limited was selected by HDFC Bank on Tuesday to disbursed SmartUp grants worth Rs 25 Lakh. HDFC Bank disbursed Rs. 5 crore grants to 20 startups, who are working in the social sector. These grants help nurture startups that offer unique solutions to bring about sustainable changes in society and the environment.

Societal Relevance

The circular business model is a new buzzword in almost every organization, businesses create supply chains that recycle the resource, shrinking the environmental footprint, minimizing operational waste. Biomize does a similar innovation where it creates a bio-based value chain for agro-residues. Bamboo, which is categorized under Non-timber forest product (NTFP) is used in almost 1500 commercial goods' manufacture with wide adaptability of growing in wastelands too. It is a renewable biosource with a short period of growth and can be harvested for 15-20 years hence offering sustainable livelihoods to growers. Bamboo biomass is used as an industrial material and Biomize buys value-added bamboo fibers hence bringing employment and additional income. Also, Biomize connects bamboo to the industrial supply chain, therefore, creating perennial demand for bamboo throughout the year. Their technology can support growers across the country as their technology is species agnostic and aging agnostic.



PRIME CHIRON

प्राईम कायरॉन



Bioprime Agrisolutions Pvt Ltd

Founders/Co Founders

**Dr. Renuka Diwan Khandekar,
dr. Amit Shinde**

AIC Name

AIC ISB

Type

Product

Stage

Commercialized

Target Market

Domestic

IP Status

Filled



renuka@bioprimeagri.com



Website



Bioprime develops agri-biologicals solutions (using Smart Nanomolecules Induced Physiological Response -SNIPR technology) for pest, disease resilient, and weather-resistant crops. SNIPER Technology is based on the metabolites that modulate the physiological responses manifested by the plants as a mechanism of adaptation. This makes these metabolites very unique, target specific. Incorporating these in formulation allows Bioprime, rapid & precise manifestation of the results – like building up a tolerance to biotic and abiotic stress, activating plant's defense system.

Major achievements/Awards/Recognitions

Bioprime Amongst the Top Ten finalist at Future Food Asia Awards 2018., Our HRF-DH technology, SNIPR technology platform, BioNexus technology platform have received national and international recognition from Singapore, Cambridge, etc. Next-generation ag biologicals – doing it the nature's way! awarded the prestigious Biotechnology Ignition Grant (BIG) & Seed fund from BIRAC, DBT, Govt of India for developing new sustainable solutions in Agriculture.

Societal Relevance

An agri-biologicals(substance derived from plant/microbes maneuvering biotechnology) technology platform, bringing out innovations in products and services in the field of agriculture, horticulture, and floriculture that paves the golden way for farmers to relieve from crop loss, temperature fluctuations, drought, resilient insects and pests and disease and making the return on investments achievable. Wholly, this technology is able to reach higher productivity of crop, improving soil quality., soil, plant, and environmental vitality.



Chakrasfarm Pvt. Ltd.

Founder/Co Founder

Pranay Kumar

AIC Name

AIC-SMUTBI

Type

Product and Service

Stage

mvp

Target Market

Global

IP Status

Filled



ceo@thechakrasfarm.com



Website

We are an agritech company blending innovation into organic farming to grow multiple crops with the use of IoT & AI. We are helping urban and rural farmers or individuals to adopt a new way of organic farming techniques and help our ecosystem to live and eat healthily. We do provide consultancy for any technical issues. We have a FARM-FROM-PHONE concept where one can operate their farm from a phone and make farming easy and effective.

Major achievements/Awards/Recognitions

They won a grant of Rs.30,000/- from MSME department, Sikkim also have won a grant of Rs.5,00,000/- from NERES 1.0 organized by IIE, Guwahati and won a grant of Rs.50,000/- from BIRAC.

Societal Relevance

Chakrasfarm's mission is to educate and support their farmers/Individuals to adopt organic food production with the help of technology and try to avoid the use of harmful pesticides and synthetic fertilizers for production. We want to keep the authenticity of organic values with low cost of production and to break down expensive organic psychology. We are also trying to teach our upcoming generations to learn about what they eat and from where it comes.



Contra Farms LLP

Founder/Co Founder
Pritesh Bhatia

AIC Name
AIC GUSEC

Type
Product

Stage
mvp

Target Market
Domestic

IP Status
Filled



contrafarms@gmail.com



Website



Contra Farms aims at promoting a healthy lifestyle in urban areas by giving consumers the power to grow their own food. They are developing hydroponics-based cultivation systems that are bound to simplify the process of growing vegetables and fruits at homes. These systems are compact, lightweight and modular, making it easier to install indoors just as well as outdoors. To eliminate the need to be knowledgeable in farming practices to grow vegetables, we are bringing in automation that will control parameters like water quality and nutrient dosing. By bringing in automated ambient control of parameters such as temperature, humidity, and light, They are also guaranteeing a healthy crop each time. These automation features will remove the need of human involvement significantly.

Societal Relevance

Growing plants on own provides fresh farm produce at one's own kitchen. With the handy equipments from Contrafarms make all these things much easier, shortens the supply chain, preserves freshness of the produce and enhances better consumption of urban population for better healthy lifestyles with no pesticide residues and this can be possible only with these smart innovative units. Contrafash is a subsidiary of Contraframs which offers fresh leafy veggies, fruits, microgreens and ready to consume fresh fruit salads and cold-pressed juices amongst the wide variety of healthy alternatives. This has been possible as Ready-to- consume foods' demand has gained commendable market space in India.





Easy Haat Pvt. Ltd.

Founder/Co Founder
Ms. Bornali Sarma Boruah

AIC Name
AIC-AAU Incubator

Type
Product

Stage
mvp

Target Market
Global

IP Status
na



Easy Haat Pvt Ltd is into processing and preparation of ready-to-eat indigenous meals. These foods are packed in vacuum-free, aluminum pouches such that it needs only micro-wave heating or immersion in hot water before being served. The startup uses retort packaging technology for its products.

The startup has a wide range of veg and non-veg products that is prepared using local/Indigenous spices/herbs and cater to the taste of Northeast India.

The startup manufactures and supplies superior quality frozen, processed & ready to cook/eat items, which are healthy, hygienic gluten-free, low fat, and high in iron and protein."

Major achievements/Awards/Recognitions

License Holder of ICAR NEH. Borapani

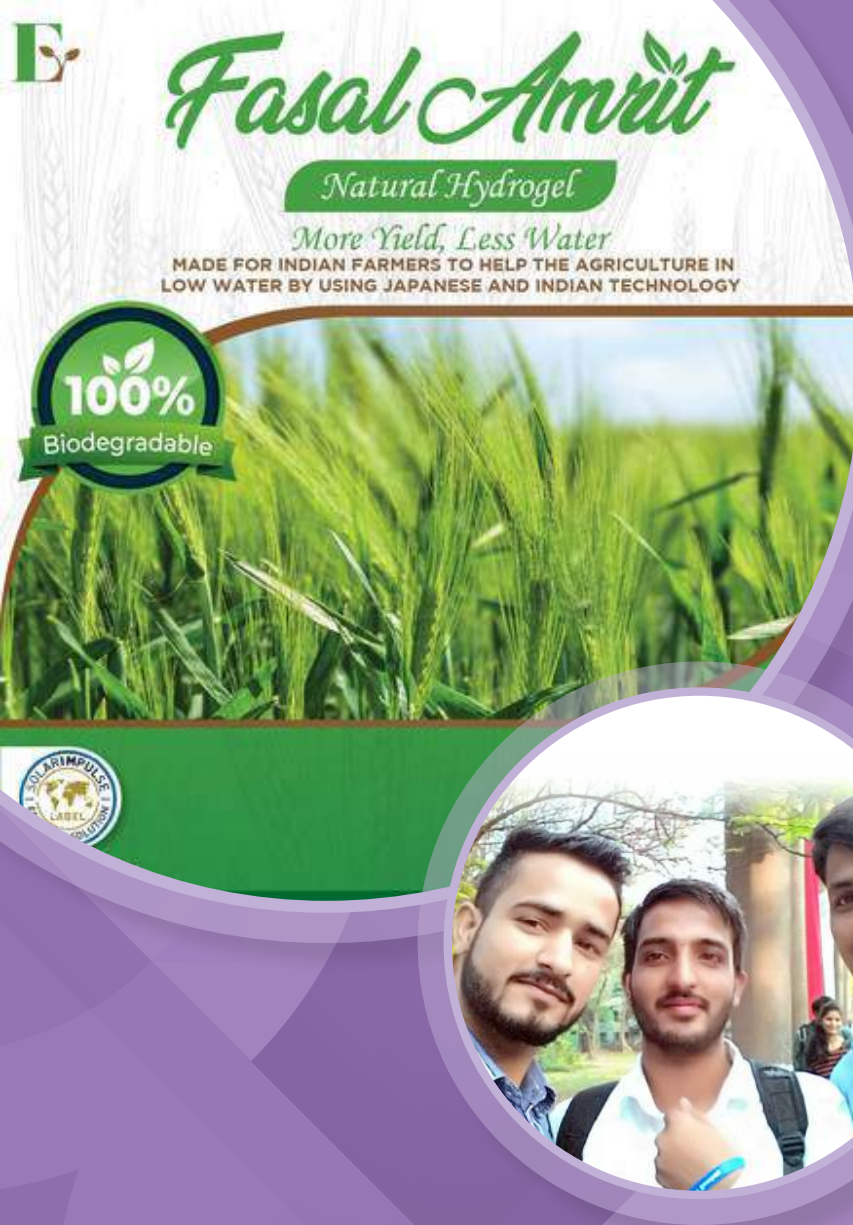
Societal Relevance

Easy Haat procures raw materials from local farmers. The Founder of the Startup, Ms Bornali S Boruah is also a Founder-Director of an NGO "Krishak Bandhu" and through the NGO, the startup is providing technical and advisory support to more than 1000 farmers of the region, leading to economic upliftment of farmers of the region.



Website





EF Polymer Pvt. Ltd.

Founder/Co Founder
Buddhi Prakash Gurjar

AIC Name
AIC Sangam

Type
Product

Stage
Commercialized

Target Market
Domestic

IP Status
Patented



bpgurjar05@gmail.com



Website

EF Polymer has developed a naturally biodegradable water retention polymer for soil conditioning by using fruit waste. It can absorb water up to 150 times its weight and release it over a longperiod to maintain the soil moisture. It is high in nutrients and hence it will work as a fertilizer as well. By using the product, farmers and land restoration proponents can reduce the water requirement for irrigation up to 40%, fertilizer requirement up to 20%, and can increase crop yield by up to 15% on barren land. Unlike our competitors, our product is organic, biodegradable, and lower in cost per acre.



Major achievements/Awards/Recognitions

- #1000 Efficient Solution Label from Solar Impulse Foundation: EF Polymer has been labeled as 1000 Efficient Solution for 2018 where Solar Impulse Foundation evaluated the solution in Feasibility, Environmental Impact, and Profitability.
- Okinawa Institute of Science and Technology, Japan, Startup Accelerator Program: We have been selected for a one-year in-residential startup accelerator program supported by Okinawa Institute of Science and Technology Graduate University with funding of 10M JPY.
- Social Alpha Quest for Agritech Innovations! Powered by Social Alpha and supported by Bill & Melinda Gates Foundation and Tata Trust in partnership with IIT Kanpur, Incubation & Innovation IIT Kanpur, CINI with the collaboration of the Government of Uttar Pradesh. We have been selected as the winner of this award and will get support in scale-up funding from Uttar Pradesh Government.
- Carbon Tech Award: The Climate Launchpad international organization runs a program in more than 53 countries and they shortlisted after the national round. This time in 2019, they shortlisted 130 teams from 53 countries and the event is organized in Amsterdam, Netherlands. We have been awarded Carbon Tech Award with 5,000 Euros of grant money.
- Leadership Innovation Fellowship: Selected by the Royal Academy of Engineering, London for 2 weeks of Business Development Workshop. Winner in the Startup Innovator Pitch organized by RAE at the end of the workshop. Also, got mentoring support for project development.
- Gandhian Young Technological Innovation Award: Organized by Society for Research and Initiatives for Sustainable Technologies and Institutions, National Innovation Foundation, supported by Honey Bee Network at President House. The award was honored by the Honorable President of India Mr. Ramnath Kovind Ji.
- Power of Ideas: Organized by Economic Times and Indian Institute of Management, Ahmedabad (IIMA), supported by Facebook India. The award was honored by Cabinet Minister Mr. Suresh Prabhu. Also, selected for 2 weeks of the residential workshop at IIMA along with funding of INR 5 Lacs.8. Challenge for Change: The government of Rajasthan sponsored a program to boost the startups across the state. The award was honored by Chief Minister of Rajasthan Mrs. Vasundhara Raje Sindhiya with working order of INR 25 Lacs.
- Awarded with Winner of i3-KLU-CITE Awards for Best Student Innovator, Winner of AICTE Most Promising Student Innovator Award, i3-Symbiosis International (Deemed University) Award, Winner of i3 Silver Award for Best Innovator, i3 Regional Fair and Entrepreneurship Training Workshop of 2 days.
- EF Polymer will receive a grant of INR 5 Lacs with mentoring support to develop the project. Also, PVR Cinema will create a Short Film on Project and will show this story before every movie for 6 months of period.

Societal Relevance

A fact that 2 liters of water are often sufficient for daily drinking, it takes about 3000 liters to produce the daily food needs of one person. Around 70% of freshwater withdrawals go into agriculture. Not only in production but also water is hugely consumed in each step of the value chain such as food preservation/crop cooling and processing! The designed product from EF Polymer Private Ltd. offers a water retention facility. It absorbs water in huge amount and stores it for a long time then release water slowly as per requirements to the crop and soil. It works on an anti-drought mechanism and reduces the water requirement of crops. It is an Eco-friendly product that causes no adverse impact on crops as well as on soil. So it is completely pollution-free and easy to use. It can degrade easily. It can provide some types of nutrition and fertilizers when it is degraded.

Everfarm Private Limited (Kisan India)

Founders/Co Founders

**Saiyed Faisal Rizvi,
Sudhir Kumar**

AIC Name

AIC-BIMTECH

Type

Service

Stage

Commercialized

IP Status

Domestic



Kisan India is an Agriculture Hyperlocal Marketplace and Advisory Platform which provides doorstep delivery of quality seeds, agricultural products, and soil testing services with personalized advisory to marginal farmers. Kisan India connected more than 25k Farmers in 3 districts of Uttar Pradesh and currently working in 275 Villages with 1500+ paid customers and 100+ village-level entrepreneurs.

Societal Relevance

Farmers' input procurement has been made easier with hyperlocal delivery model, where farmer can get instantly from the near by store through Kisanindia's marketplace. It delivers wide range of farm inputs at fair & competitive prices at their doorstep. The incessant agriculture advisory about seed selection, agronomic practices, irrigation schedule is been a great service indeed for farmers at most critical times like crop failure and natural calamities. Through Farmers-Volunteer network, about 200 farmers are educated with latest agri-tech and supported them which built team spirit, foster relationships among farmers.



kisanindia.in@gmail.com



Website





Evlogia Ecocare Pvt. Ltd

Founder/Co Founder
Manigandan Kumarappan

AIC Name
Amrita TBI

Type
Product

Stage
Commercialized

Target Market
Global

IP Status
Filled



mani@blessingpalms.com



Website



Evlogia’s goal is to provide the world with alternatives to plastic and other non-biodegradable articles used in homes, offices, hotels, and other places. Tapping into the knowledge, expertise, and creativity of people who believe in working towards a sustainable world, Evlogia has already come up with the patented Leafy Straws. This is an alternative to plastic straws, made entirely out of fallen down coconut palm leaves.

Major achievements/Awards/Recognitions

- CII STARTUPRENEUR 2018–Top Manufacturing startup Winner,
- Climate Launchpad Global Grand Final 2018–Social impact & location-based solutions Award Winner
- BIG Leap 2020–Best Business Plan Winner
- Elevate 2019–Karnataka Startup Winner
- Circular Innovation JAM 2020–APAC Winner
- National Startups Award 2020–Finalist”

Societal Relevance

Manufacturing eco-friendly organic cutlery from locally available agricultural waste and export worldwide to replace plastic cutlery. Women empowerment through high rural women employment in the production process spread across South India.



A holistic linkage solution for farmers including Agri-inputs, advisory and market linkages. Currently operating as an Agri Inputs based e-commerce platform under the brand name of "Saarathi". Also offer value added services like soil testing and Agri-consulting to our member farmers.

Societal Relevance

Creating efficient systems for Indian Agribusinesses, keeping farmer interest at the core. Optimizing cost of cultivation, maximizing farmer revenues through better linkages hence increasing farmers' net income. Farmers get farm inputs at their door-delivery on the same day they order! With this farmers' work become easier and they can well regualte other farm works. The farm inputs are genuine and has got commendable loyalty from farmers. Apart from, Farm Prosperity always strive to hire from rural youth as a part of their team thus changing the employment range from informal to formal.

Farm Prosperity Solutions Pvt. Ltd

Founders/Co Founders

**Mr .Rajesh Patidar, Mr. Ayush Jain
Mr. Sourab Rai, Mr. Ritesh Patidar**

AIC Name

AIC-RNTU

Type

Service

Stage

Commercialized

Target Market

Global

IP Status

Filed



farmprosperity.s@gmail.com



Website





Farmitopia Pvt Ltd

Founder/Co Founder
Mr. Jai Kumar
AIC Name
AIC CCRI CED, Coffee Board

Type
Service
Stage
Commercialized

Target Market
Domestic
IP Status
NA

jaikumar@farmitopia.com
 Website



Farmitopia Pvt Limited–Making scientific crop production accessible to all–digital extension with estate / farm customized actionable insights. Our solution bridges the knowledge gaps in planters / farmers, shrinks the cycle time in acquiring and on field application of the knowledge by providing crop, location and context specific actionable insights, thus levelling the playing field for all planters / farmers to be equally successful.

Major achievements/Awards/Recognitions

Best startup award -UAS Dharwad

Societal Relevance

Cropmint is built to be an honest friend of the farmer, to be there with the farmer at all times. This friend shall facilitate the farmer in day to day choices and operations, with actionable insights, both timely and customized. This friend packs knowledge, experience, and information, and is ever ready to offer it to the farmer, as and when it's needed and just what is needed. And the friend does it with only one motive and that is to make the farmer successful.

Main features include: MAKING RIGHT CROP CHOICES; LEVERAGING STANDARD PRACTICES; OPERATE FARM EFFICIENTLY; SMART RESOURCING AND UTILIZATION; BEING INFORMATION AWARE”





Fly at Mach Innovations Pvt Ltd

Founder/Co Founder
Madhu Ponkumari Uthra

AIC Name
**AIC- Jyothy Institute of
Technological Foundation**

Type
Service

Stage
mvp

Target Market
Global

IP Status
Not yet filed



Website



info@flyatmach.com



Fly at Mach Innovations Pvt. Ltd. is a group of young, dynamic engineers and a knowledgeable workforce that will provide a new viewpoint to UAV applications and embedded solutions in Agriculture, Security Surveillance, Industry, and Disaster Relief. Our products and services include GIS Surveying, Autonomous Mapping, embedded solutions to Agri farming, Full Automated farming, Indoor Navigation, Flood Assessment, Crop Health Monitoring, Flight Controllers, 3D Mapping, and Full Drone Systems Integration for any application. Unrivalled dedication to research and development, a culture of perpetual innovation and curiosity, and an emphasis on turning complicated technology into a simple system.

Societal Relevance

Make farming easy and innovative. Our aim is to make farming more productive with new innovation ideas and products.





Froots Technologies Private Limited

Founder/Co Founder
Shefalika Sharma

AIC Name
AIC-RMP

Type
Product and Service

Stage
Commercialized

Target Market
Domestic

IP Status
NA

 **shefalika@fruits.co**



Website

Froots–Food with Good Roots is creating a shorter, auditable, robust supply chain with largest network of locked-in smart distributed farms and micro-food enterprises to ensure access to safe, nutrient-rich and traceable food of assured, consistent quality and standard. Technology based farming ecosystem, working on supply chain concentricity, to empower small, scattered growers to efficiently grow and market nutrient rich food in limited spaces.



Major achievements/Awards/Recognitions

- Winner AgriIndia Hackathon 2020 MoA & Pusa Krishi
- Top 15 Conquest BITS Pilani
- 3rd cohort member at ICAR-Nivedi, NaaViC (under RKVY). Shortlisted for the ministerial round

Societal Relevance

SHORT TERM:

- **Business:** Wastage reduction (upto 17% from current 40%) by combating perishability limitations, mapping demand-supply gap
- **Socio-eco:** Economic losses minimised; Higher Income per crop acreage (7 times more prod area with new techniques), better price realization
- **Environmental:** Shorter supply chain (Grown at or within 150 kms of consumption point) reduces food miles travelled
- **Food Safety:** Nutrient density (upto 25% higher); Improved traceability; Reduced touch points leading to zero contamination; Reduced adulteration risk

LONG TERM:

- **Standardisation:** Auditable, monitored supply chain; Sustainable/ Good Agricultural Practices with Credible input usage; Verifiable information about status and produce quality
- **Digitisation:** Digitized channels and core for farms with digital identity which can be accessed by different partners in the ecosystem; Improved data sharing & information symmetry
- **Biodiversity** (multiple farms at unconventional, unutilised places), water conservation (using hydroponics, aquaponics, precision irrigation)



General Aeronautics Pvt Ltd.

Founder/Co Founder
Abhishek Burman

AIC Name
SID-IISc

Type
Product and Service

Stage
mvp

Target Market
Domestic

IP Status
filled



**abhishek.burman@
generalaeronautics.com**



Website

**General
Aeronautics**

General Aeronautics is Innovating and Developing focused agri-tech for advancement in Agri-space. Our Drone-based agricultural solutions enable transformative impact addressing core yield and productivity issues faced by agriculture sector today. The General Aeronautics team is comprised of highly experienced members with many decades of expertise in industry and R&D organizations internationally, marking the true dawn of smart farming by pioneering in cost-effective technology. Our complete solution is focusing on Agri value chain, creating a sustainable space for better tomorrow.

Major achievements/Awards/Recognitions

Recognised by leading agrochemical companies as drone partner of choice.

Societal Relevance

Control of endemic pests' such as desert locust with fierce reproductive capacity with handy/traditional pesticide sprayers over large farmholdings had tend to be impossible and results in loss of major crop fields. To cater the problem, General aeronautics presents Air drones with the name "KRISHAK" which can be utilized in wide range of applications of chemicals and fertilizers with advanced droplet control, consistency ,30x efficiency and 97% water saving serves to farmers in protecting their fields from sudden outbreak of endemic.

Also undertook multiple missions of disinfecting the public areas at the time of Covid, and creating awareness on covid safety measures using drones.

GA drone-based agriculture solution is designed to cater to the needs of small and marginal farmers at an affordable cost in an opex model in partnership with agrochemical and agro services organization. The sustainable solution eliminates overuse of agrochemical and improves crop yield thereby increasing farmers income.





Gram Shree Development Services Private Limited

Founders/Co Founders
**Rakesh Kumar Gupta,
Namita Pandey**

AIC Name
AIC Sangam

Type
Product and Service

Stage
mvp

Target Market
Domestic

IP Status
na

 rakesh@gramshree.net,
namita@gramshree.net



Website



Gram Shree
Innovative Marketing Solutions for Poor

Gram Shree licensed technology for "browning free Custard Apple pulp extraction" from MPUAT* and was able to provide 2-3x better price for Custard Apples to the tribal families in low-income states of Rajasthan and MP as well as providing seasonal work to 200 women at its three processing units. The technology can be applied for various fruits, preserving value at the farm-gate without the need for refrigeration.

Societal Relevance

The innovative value chain is indispensable for better price realization for farmers. Given this, Gramshree has started empowering farmers, making them understand the market access for their produce, assistance in the marketing of produce through web-portal, hands-on training for the staff working under in the different stages of the agri-value chain, developing and strengthening linkage with institutional buyers with no defraud, development of a business plan for FPOs' (Farmer Producer Organizations) and reviewing the business plan and filling the gap amongst it. Entirely with the intervention of human resources and strategies, developing marketing linkages to farmers helps in the invocation of a robust agri-value chain that ameliorates farmers' well-being.





GreenPod Labs Pvt. Ltd.

Founder/Co Founder
Deepak Rajmohan

AIC Name
TREC-STEP

Type
Product

Stage
mvp

Target Market
Global

IP Status
Filled



deepak@greenpodlabs.com



Website



GREENPOD LABS

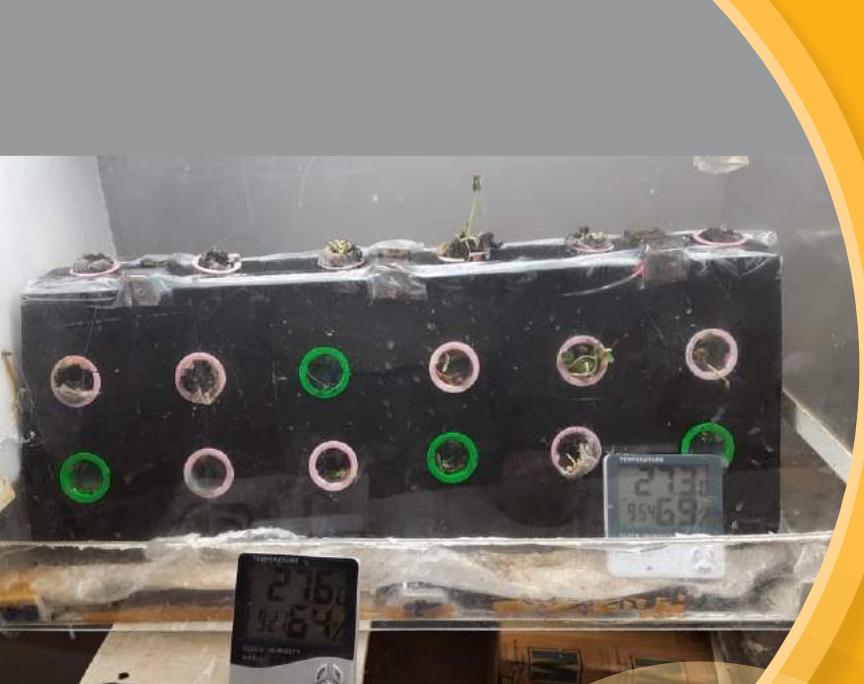
GreenPod Labs is an Agritech startup developing solutions to minimize food waste/ losses in India. Global food wastage is estimated to contribute 8% of greenhouse gas emissions. Meanwhile, 14% of Indians are undernourished. To counter this, Greenpod labs have come up with an answer given to reducing food wastage in India with a specially formulated packaging that activates plants' natural defense mechanisms and slows down the ripening process. These active ingredients are endowed in the sachets and are added to crates of harvested fruits and vegetables thus significantly enriching the shelf-life of the produce, thus standing as a potential solution for the agri-business domain.

Major achievements/Awards/Recognitions

- Won "Most Scalable Startups by she1K
- Won Startup TN SEED–Greenpod labs is been recognized as one of the top 30 startups to watch by Inc42 Media.
- Most scalable start-up award from C-Shark Tank
- Research grant from Start-up Tamil Naidu
- Amongst 25 Agritech start-up under CISCO Agritech Challenge".
- Amongst 30 start-ups to watch by INC42 Media.
- Winner of Climate Launchpad, India Regional Finals
- First Runner up of Grand Idea Challenge of Indian School of Business Hyderabad.
- Winner of Agritech Innovation Challenge 2 organised by Indian Agriculture Innovation (IAN) Network and Social Alpha (tata Trust and Bill Gates & Milinda Foundation)"

Societal Relevance

Food is lost or wasted for various reasons: Bad weather, processing problems, overproduction, and unstable markets cause food loss long before it reaches the grocery store or vegetable market. America wastes roughly 40% of its food, whereas Economic loss of food wastage costs 12Billion dollars despite India being the 2nd largest producer of fruits and vegetables! So, agile innovation is being brought up by Greenpodlabs where it presents products that preserve and enhance shelf-life of perishable farm produce with the help of plant extracts that are unregenerate, slows down the ripening rate and minimize microbial function thus extending shelf-life, more reach to the consumer and lessen food wastage.



Growing Pod

Founder/Co Founder

Mit Upadhyay

AIC Name

AIC GUSEC

Type

Product

Stage

mvp

Target Market

Domestic

IP Status

Filed



mitupadhyay7@gmail.com



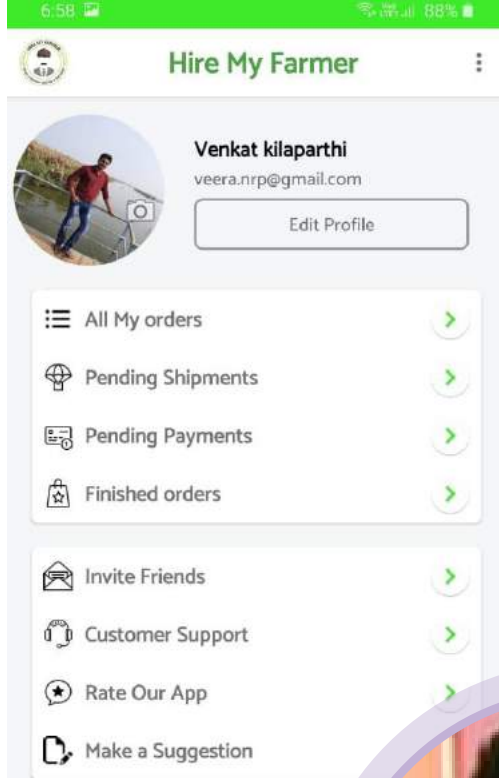
Website



The team is developing an aeroponics vertical growing pod. The design is made as a single unit that can be multiplied as needed. It has a closed growing chamber and artificial growth lights and humidity control can be made and that can help the design be more controlled. The growing pod houses 25-30 saplings and uses the aeroponic method. Which uses 98% less water than conventional farm growing. It has the potential to grow plants in any situation. The design is made to be scalable to any level from a single pod to an entire building filled with them making a huge farm. Using the spare spaces inside cities it can grow leafy plants (for now) organically. The design contains most of the parts as reusable and one-time investments to make the design more cost-efficient.

Societal Relevance

The growing Pod provides an alternate optimised method for growing food. It can be a reliable system which uses water responsibly and grows food without harmful chemicals which in turn results in a better health.



HireMyFarmer

Founder/Co Founder
Moin Mohammed

AIC Name
AIC ISB

Type
Service

Stage
Commercialized

Target Market
Domestic

IP Status
NA



moin@hiremyfarmer.com



Website



**Hire
My Farmer**

HireMyFarmer connects farmers to B2B, enabling agricultural production planning and contract farming. HireMyFarmer integrates the Agriculture services and provides an open public layer to navigate the farming lands and services of farmers, this unique platform provides incubation layer for the Agriculture services where crop dependent farmers are showcased to Retail/Manufacturer/ Restaurants / Food business to order the quantity to deliver Quality of stock to their warehouses direct from the farmers with better prices when compared to the market.

Major achievements/Awards/Recognitions

Part of UN food systems. Pilot successful.

Societal Relevance

On-boarding farmers with the company, mapping and monitoring individual farmlands with centralized data security, tracking all the farmer's processing units and market spaces provided with income generated optimal solutions. Farmers have connected to IoT-based vending machines and are been deployed in the market for preserving post-harvest farm produce and connecting them with retailers and other food businesses. This newly successful pilot project is aiming to promote farmers, promote agri-investments layers, keep track of productive farming lands and facilitate farmers' profit margins. The main motto of the startup is farmers get paid for the services they do, get promoted to the enterprise., claiming to be the world's first-ever startup to pay salary to the farmers to bring dignity and decorum!



Innotech Interventions Pvt. Ltd.

Founder/Co Founder
Priyangshu Sarma

AIC Name
AIC Sangam

Type
Service

Stage
Commercialized

Target Market
Domestic

IP Status
NA



priyangshu.sarma@innotechin.com



Website



Innotech Interventions restores land and water ecosystems that have been contaminated with hazardous waste from mining and oil extraction, with the use of their signature Phyto-assisted Land conditioning and Microbial Augmentation Technology. It uses native and indigenous microbes and flora and employs residents to implement their techniques and reforestation. They have restored 3,000 hectares in northeast India.

Major achievements/Awards/Recognitions

Clinched the Indo-Israel Award in the year 2018; Innotech was presented with the “Best Research Innovation Award” during the ceremony of The Water Digest Award 2017-2018 sponsored by Times Network, The Water Digest Water Awards and Water Warriors in 2018. Awarded 1st position in the category of Bio, clean-tech, Environment in the startup exhibition for “IKMC 2018 Innovation ecosystem of Disruptive Change” organized by IKP KnowledgePark, Hyderabad. Innotech was awarded as an “Outstanding Startup hero company” by IKP KnowledgeParkk, India in 2019.

Societal Relevance

Underground land depletion implies water depletion, which is mainly caused due to soil and water pollutants from pesticide residue and oil spills from oceans. This leads to flora, fauna and water ecosystem deterioration. So, in order to unriddle this, Innotech interventions lead to the development of hydrocarbon absorbent which is hydrophobic and absorbs only hydrocarbons and their derivatives leaving water behind and stabilizing reservoir pressure. This innovation is so quick-witted that it absorbs pollutants without any strenuous efforts by the workers and is been providing sustainable solutions for the retention of water and land ecosystems.



Intech Harness Private Limited

Founder/Co Founder
Tarang Patel

AIC Name
AIC-RMP

Type
Product

Stage
mvp

Target Market
Global

IP Status
Published



tarang@intechharness.com



Website



Intech Harness Pvt. Ltd.
IRRIGATION AUTOMATION THAT WORKS

Intech Harness is an Agritech startup that has developed a Patent Granted, IoT Enabled, Farmer Obedient Pump Controller for Individual Farmers to Operate and Automate the Pump Operation on the farm. It helps to overcome the problem of erratic power and water supply and completely automates the farm irrigation based on availability of water and power unlike GSM based technology which requires human intervention to operate the pump reducing inconvenience to the farmer. This is a wholesome automation solution to current day problems with aim to get the farmers onto the Digital Agriculture platform for the future.

Major achievements/Awards/Recognitions

Beneficiary of Grant In Aid under RKVY-RAFTAAR program by the Ministry of Agriculture & Farmer Welfare, GOI. Selected by United Nations Industrial Development Organisation-UNIDO under the FLCTD program (The Facility For Low Carbon Technology Deployment) in association with Bureau of Energy Efficiency (BEE), Global Environment Facility (GEF) and CII, after they evaluated our product / technology based on the Social Impact as well as contribution towards Sustainable Development Goals in the Agriculture / Irrigation space for their Accelerator program under the Pump, Pumping Systems & Motors.

Societal Relevance

Intech Harness Private Ltd. has developed automated pumps in comply with Pradhan Mantri Krishi sinchayee Yojana(PMKSU) and Atal Bhujal yojana developed by Government of India. Their technology adheres in accordance with fulfilling United Nations-Sustainable Goals as UN-SDG NO. 2 Zero Hunger, UN-SDG No.9 Industry, Innovation and Infrastructure, UN-SDG NO. 11 Sustainable Cities & Communities, UN-SDG NO. 12 sustainable Consumption and Production, UN-SDG NO.13 Climate Action and UN-SDG NO. 15 Life On Land. Intech Harness make farmers enthralled towards precision farm irrigation for judicious utilization of water resources, decrease dependency on labor that intervenes in extended pump operations due to manual Switch On/off of pump and to avoid dry run ,thus protecting the water and soil ecosystems and cost-savings to farmers.





Intello Labs

Founder/Co Founder

Milan Sharma, Himani Shah, Nishant Mishra

AIC Name

ANIC Winner

Type

Service

Stage

Commercialised

Target Market

Global

IP Status

Filed



himani@intellolabs.com



Website



Intello Labs provides AI-based quality monitoring and grading solutions using deep learning tools for all participants in the agriculture and food industries. Our solutions bring standardization, transparency, and objectivity to the quality assaying process, taking a bite out of food loss across the supply chain.

Major achievements/Awards/Recognitions

Winner for the post harvest solution in Agriculture category at National Startup Awards, Recognized by NASSCOM as "Leads in Deep Tech" and won AI for Good award, Won AI solution challenge at RAISE 2020

Societal Relevance

- Globally, USD 500 billion is wasted every year. This is the problem Intello Labs are trying to solve. Businesses
- end up procuring food items that do not meet their specifications. Due to their faulty internal practices,
- the losses mound through the supply chain. And all these 'not meeting specifications' are finally
- thrown away. Through our technology, we are trying to minimize this.





Kamala Farms

Founder/Co Founder

Meghana Rao

AIC Name

AIC-ALEAP WE HUB

Type

Product and Service

Stage

Commercialized

Target Market

Global

IP Status

NA



kayneagro@gmail.com



Website



Kamala Farms is a sustainable grid tech company specializing in Hydroponics. We use the latest cost-efficient techniques to set up farms for other agri entrepreneurs. Further, we extend our support by providing Agrii training and buyback services for their produce. We also deal in soil, mushroom and bee keeping.

Major achievements/Awards/Recognitions

- Trained 1500 students in various sustainable agriculture courses like Hydroponics, Aquaponics, Mushroom farming.
- Setup more than 80 acres of Hydroponics farms throughout India

Societal Relevance

The primary agenda is to encourage agri entrepreneurship through which they solve India's dependency on imports of exotic high-quality vegetables and fruits. Making farming easier is been possible by training on poly-house construction and equipment installation which is cost-effective. Also, they offer crop consultation i.e., crop selection and management, methods to save money in daily farm operations for farmers/growers to not to stuck in loop of debt through lavish and needless investments. Desired farm produce needs sufficient packaging and marketing where Kamala farms adds value to it., by designing sophisticated look through their creative marketing strategies. Besides, their services include 1030 students trained and 80 acres of land equipped with advanced technology for profitable future.



Khethworks Pvt Ltd

Founders/Co Founders
**Katherine Anne Taylor,
Victor Adam Lesniewski**

AIC Name
AIC Sangam

Type
Product

Stage
mvp

Target Market
Domestic

IP Status
na



katie@khethworks.com



Website

Developed a highly efficient portable solar pump design optimized to give farmers the flow required for surface and dug-well irrigation with less than 300 watts of power and payback in 2 years

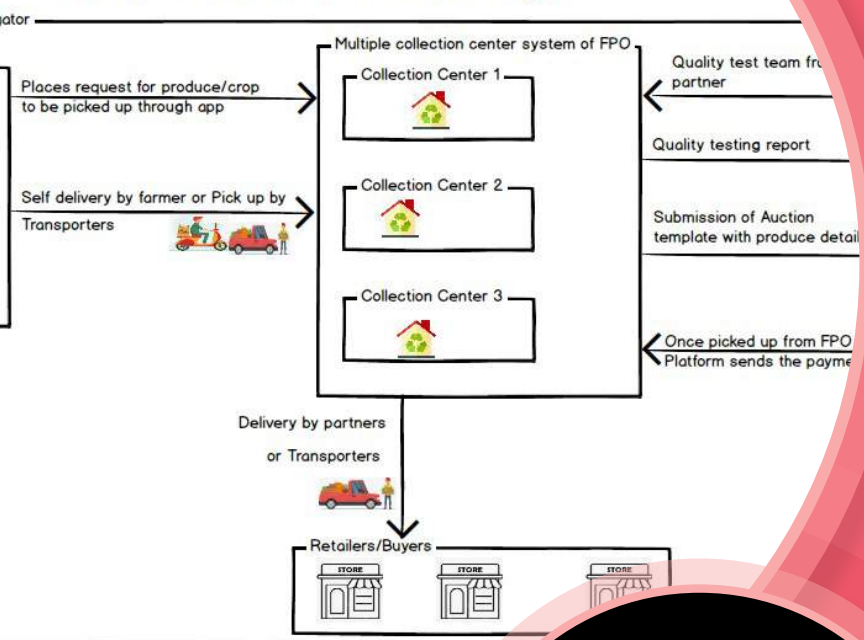
Major achievements/Awards/Recognitions

They received a prize of \$50,000 in the FLCTD Innovation Challenge.

Societal Relevance

India is a land for "gamble in monsoon". India has 68% cultivated area under dry land and 86% of the landholdings are by small and marginal farmers! Most of the small & Marginal farmers cannot access fueled pumps for irrigation with high electricity charges beset them persistently. As a result, the solar pumps from Khethworks that is dependent on solar power which is economical to small & marginal farmers. This penny-wise equipment not only saves money for farmers and generates disposable income through cost-savings, user-friendly where both men and women can easily operate but also is a sustainable way of reducing Carbon dioxide emissions.

Flow of Market Linkage



KleverKISAN

Founder/Co Founder
Sanghamitra Pattanayak

AIC Name
AIC-RNTU

Type
Service

Stage
Commercialized

Target Market
Domestic

IP Status
NA



sanghamitra.p@klevermind.com



Website



KleverKISAN provides end-to-end support to farmers for the disposal of crops at a fair price. The entire supply chain operations are handled through technology. Each stakeholder gets an interface to manage their operations which ensures effective transfer of products from the farmers to the end-users/retailers. It also provides market linkage to FPOs through bulk trade and helps them optimize their supply chain operations through technology. The ultimate aim is to support at the ground level to make the FPOs self-sustainable and focus on connecting them to all types of possible market linkages. Currently, the target customers are Aggregators(Small Agri Entrepreneurs), FPOs and Resource Institutions.

Major achievements/Awards/Recognitions

- Selected as one of the winners in Agri India Hackathon organised by Pusa Krishi in association with GOI under the category of Supply Chain and Logistic
- Sanghamitra(Founder) is a part of Goldman Sachs 10,000 Women Entrepreneurs Program at NSRCEL, IIM Bangalore.
- Selected for incubation program named Startup Agribusiness Incubation Program (SAIP) under RKVY-RAFTAAR operating at MANAGE, Hyderabad working under GOI.
- Second runner up in Grand Finale of Dream Startup Challenge 2021”

Societal Relevance

KleverKisan’s strategy of appointing local Agri Entrepreneur as Independent Resource Managers in a particular area/cluster so that they will train farmers at the ground level to provide them market linkage driven by technology. KleverKISAN will be providing all the required resources so that these small communities work independently and they become self sustainable from the beginning. This will be a community driven and scalable business model. Besides, KleverKisan enables sustainable employment in the supply/value chain making local transport vendors take part in the transportation ie.,in this technology integrated supply chain, anyone with vehicle and fascinate to be a part of supply chain can be easily entail an employment thus, strenthening the services sector.



Koel Fresh Private Limited

Founders/Co Founders

**Ms. Sandhya Naik,
Ms Kaveri Kantisudha Sarangi**

AIC Name

AIC-BIMTECH

Type

Product and Service

Stage

Commercialized

Target Market

Domestic

IP Status

NA



ceo@koelfresh.com



Website



Koel Fresh

Koel Fresh infuses capital into various value chains to support small-holding farmers to participate in supplying commodities to bulk institutions. The team provides knowledge and technology to design low-cost, innovative cold storage systems and food processing units. We are connected with the Farmer Producer Organization and capture the Agri produce using IoT-based systems.

Major achievements/Awards/Recognitions

Certificate of Recognition by Startup India and is been recognized as Startup under Odisha Startup Policy-2016.

Societal Relevance

With the main focus on protecting farm produce with affordable cold-storage systems from post-harvest losses and convenience designing channels for food processing in direct collaboration with NGO's and FPO's (Farmer producer Organizations) for better market value and price realization to growers, and is currently managing 10TPD of organic waste in bulk from hotels, hospitals and municipal waste! Some part of it goes to livestock feed, some part to micro-composting units and converts waste into biofuels and electricity and some part goes to farmland as organic manure thus striving to provide clean food, clean air and clean energy solutions to the world!



Krishi Janani

Founder/Co Founder
Usha Devi Venkatachalam

AIC Name
AIC Sangam

Type
Product and Service

Stage
mvp

Target Market
Domestic

IP Status
na



info@krishijanani.org



Website



Janani is an agritech marketplace creating economic incentives for farmers to transition to regenerative agriculture. It enables small farmers to practice profitable and regenerative agroecology by accessing high-value specialty markets while helping socially conscious companies source-verified and traceable organic produce from small farmers. Producing food with minimal or net-positive soil/water ecosystem and social impacts are known as Regenerative agriculture. Food production is associated with 15% global greenhouse emissions in parallel to increasing food needs leads to a carbon footprint.

Major achievements/Awards/Recognitions

Janani has been shortlisted for the 2021 Ashden Award for global climate solutions in the 'Regenerative Agriculture' category with support from DOEN Foundation.

Societal Relevance

Krishi Janani diffuse knowledge on regenerative agriculture to make their lands more productive, conserve the natural ecosystem, and for healthy human consumption. Also, procuring farmers' produce at fair prices and delivering quality bio-inputs from dealers to farmers to revitalize the agri-ecosystem is being their main motto in transforming agriculture.



Little Native Private Limited

Founders/Co Founders

**Pulkit Singh, Firdaus Jahan,
Satyansh, Gaur, Samradhi Singh**

AIC Name

AIC-BIMTECH

Type

Product

Stage

Commercialized

Target Market

Domestic

IP Status

NA



pulkit.singh92@gmail.com



Website



Little Native is a Direct Consumer food processing brand, focused on providing convenience in cooking homestyle traditional dishes, through ready-to-use gravies and sauces.

With our farm to fork processing, and 100% natural and preservatives-free products, we wish to provide a healthy solution for the daily eating needs of people with busy life, and who have limited time for cooking.

Major achievements/Awards/Recognitions

First entrepreneur in Uttar Pradesh to process dasheri mango to mango pulp in shelf stable consumer packaging (preservatives free). Sourcing directly from farmers, not just reduced post-harvest wastage, but also provided a good price to farmers for their C grade produce.

Societal Relevance

- Socio-economic changes in the last two decades with increasing population, increasing disposable incomes, rural to urban movement, increase in rural per-capita productivity, willingness to experiment with new cuisines has resulted in major shifts in food. Little Native makes all these possible, with various authentic pre-prepared cuisines without any artificial flavors/colors available to the population and making their rigid lives flexible.–Provide better prices to farmers for their produce by direct procurement.
- Reduce post-harvest food wastage by farm-gate processing.
- Reduce consumer level food wastage by making shelf stable products”



m/s Ngayam Foods

Founder/Co Founder
Mrs. Khayiwon Shangh

AIC Name
AIC-AAU Incubator

Type
Product

Stage
Commercialized

Target Market
Global

IP Status
NA



yarpashangh@gmail.com



Website



The startup deals in the Value addition of under-utilized indigenous horticultural crops found in Manipur and we make products like Fruit candies, Veg and non-veg pickles, processed meat items, herbal tea, chocolate, fruit juice, and wine, etc.

Ngayam Foods is a food processing firm started in 2016 at Shirui village, Ukhrul Manipur. Ngayam The startup has established a marketing network for more than 40 Processed products available in the market in Manipur and some cities outside the state.

Societal Relevance

Ngayam food has a policy of majority employing women in their processing units. At present they have 15 women employees. They are focused on the economic upliftment of the women of the region. The startup has two processing units located in a remote village called the Ukhrul district in Manipur. The startup source raw materials from local farmers. Further, they conduct various programs on conserving forest resources and also procure various raw materials from forests.



Microbial Research Lab Pvt td

Founder/Co Founder
Dipender singh

AIC Name
AIC ALEAP WEHUB

Type
Product and Service

Stage
Commercialized

Target Market
Global

IP Status
na

 dipender@royalgroupinfo.com



Website



Royal Life Sciences is instrumental in offering a wide range of Microbial analysis and R & D services. They are equipped with a sound infrastructure, which enables us to perform these services efficiently. The professionals of their team are experienced enough to conduct various microbial identification processes. They offer these services keeping in mind the industrial standards and specifications of the clients. Their service range includes Fame Analysis, PLFA (Phospholipid Fatty Acid), Biochemical Characterization of Microbe and DNA Sequencing and related research services.

Major achievements/Awards/Recognitions

The only lab in Asia & Africa to offer the services commercial and systems.

Societal Relevance

Understanding science in its extremely small and its fundamental concepts in the range 1-100 nanometer is known as nanotechnology. Understanding the physical and chemical matter of every substance be it a living or non-living thing paves the way for innovations as sometimes in most of the matter, nano-particles are often stronger compared to other forms/sizes of the same material. Royal Life sciences apart from their laboratory services imparting new ways of learning and research of nanotechnology at school Along with services, are providing instruction books, tutorial movies, lab books, kits, and tutorial contents as educational contents prevailing us better educators.





my E-KISAN INDIA PRIVATE LIMITED

Founder/Co Founder
VIKAS GUPTA

AIC Name
AIC-BIMTECH

Type
Service

Stage
Commercialized

Target Market
Domestic

IP Status
NA



info@myekisan.com



Website



MY E-KISAN

My E-Kisan Business is a B2B e-Marketplace ecosystem for Agri-Inputs (Like Fertilizers, Seeds, Pesticides, Agri-Equipment, and Cattle Feed). My E-Kisan Business connects the Agri Input-Manufacturers, Marketer, and Wholesalers with the Retailers online. It is of its kind platform for the Agri Input platform. My E-Kisan Business is using the empowering of technology to the farmers for their growth by offering easy-to-use mobile and web platforms to retailers, Wholesalers, Manufacturing Companies, and logistics Channel partners across India & making the underlying transactions more uniform, transparent & efficient for Indian B2B retailers.

Societal Relevance

The objective of My E-Kisan Business platform is to bypass tedious and time-consuming means of offline communication and payment by infusing the technology-driven solutions for various channel partners and bringing them into a single digital platform of Agri Input designed specifically for small & medium businesses in the Indian market. Ongoing advice to farmers from E-Kisan about pre-ordering of agri-inputs, low cost and high-quality agri-input door-step delivery, and multi-branding products at fair and competitive prices are brilliant ways of protecting farmers from the quagmire.





Mycrop Technologies Pvt. Ltd.

Founder/Co Founder

Paresh Shah

AIC Name

AIC GUSEC

Type

Product

Stage

mvp

Target Market

Domestic

IP Status

na



pcare21@gmail.com



Website



Mycrop technologies Private Limited is building an affordable, wireless IoT based smart integrated hardware and software system for measuring soil moisture, hyper-local weather conditions, and soil parameters which along with agronomic information related to crop (variety, irrigation requirement, crop cycle, etc) can provide an efficient and economical method to create automated irrigation plan. All data from ground-based sensors is transferred to the cloud using a wireless network, where it is processed with other contextual data to create insights for a farm/crop and can be accessed via the Mycrop app, anytime, anywhere. This helps to make irrigation decisions data-driven hence ensuring an increase in yields and quality of the crop, reducing crop stress hence less need for crop protection as well as making use of water more efficient. Our product is a 3600 water management tool to achieve ,More Crop Per Drop.

Major achievements/Awards/Recognitions

Recognized by World Economic Forum as technology pioneer 208, Best agriculture startup by Indian Council of food and agriculture 2018, Winners of AI for Good—an initiative by NASSCOM CoE–DSAI in association with the Government of Karnataka 2019,

Societal Relevance

We are working for smallholder farmers. Which are highly ignorant for many years. We worked on the ground for many years and come to know their real problems and challenges. Support them with technology to increase their yield and productivity using IoT, AI, and ML. Now we are coming up with IoT based easy-to-use soil moisture sensors And satellite-based weather information and crop status.



Nahakpam Food and Beverages

Founder/Co Founder
Shanta Singh Nahakpam

AIC Name
AIC-AAU Incubator

Type
Service

Stage
Commercialized

Target Market
Domestic

IP Status
NA

 **shantaanta12@gmail.com**



Website



Nahakpam Food and Beverages is an emerging business enterprise in Imphal, Manipur supported and promoted by ABI. Nahakpam Food and Beverages through its registered farmers started to grow vegetable crops in the year 2016.

The Startup launched an e-commerce portal (www.freshiesfresh.com) to serve the need of a tangible market of the Farmers, where they started listing their registered farmers from whom they procure fruits and vegetables. It connects farmers directly to consumers.

Nahakpam Food and Beverages opened their first 'FreshiesfreshSuper Store', a unique store of fresh and processed farm products. Most of the products sold in the store are either certified organic or naturally grown without any chemical input by FPC members/growers. The category of products include General Category, Wild Collections, Certified Organic, Under Organic Conversion, Chemical Free, etc. Besides, the store has a section of processed products prepared from indigenous and unique crops of Manipur.

Societal Relevance

Nahakpam Food & Beverages is providing support to more than 200 farmers which they have categorized based on the growth model and method of various crops. These Farmers directly supply their products to the store on a benefit-sharing basis and the startup also supports their farmers by providing farm support at nominal rates such as soil testing kit, bio-organic input, and quality seed, etc. Thus the startup is helping the local farmers to access the market and thereby uplifting their economical and social status.





Naro ki

Founder/Co Founder
Watila Longkumer

AIC Name
AIC-AAU Incubator

Type
Product

Stage
Commercialized

Target Market
Domestic

IP Status
na



wala19longkumer@gmail.com



Website



The startup deals with fresh and dried flowers. They buy flowers from farmers of Nagaland, Meghalaya, West Bengal, and Sikkim. In addition, they have also created market linkages for the flower growers. They take orders for planting materials, event planning baskets, and accessories. The company buys fresh flowers from farmers from Nagaland, Meghalaya, West Bengal & Sikkim, and creates markets for them. As flowers are perishable, market linkages are formed for the flower growers of the region.

Societal Relevance

Naro Ki is working to uplift the women flower growers of the region. The startup sources flowers from the local growers and connects them with markets and buyers. Naro Ki provides technical and advisory support to small flower growers and trains them on modern floricultural techniques. It also provides planting material to the groups with a buy-back mechanism.



Natura Crop Care

Founder/Co Founder
Manoj Kumar

AIC Name
AIC CCRI CED

Type
Product

Stage
Commercialization

Target Market
Domestic

IP Status
IP registered for 4 Products



rupamanoj@naturacropcare.com



Website



Natura Crop Care is founded by a team four Researchers with experience in Biological control for sustainable farming. By our Unique understanding of microbial plant interactions in nature, Natura is validating to the current scenario of increasing sustainable agri-horti produce across the world.

Natura has developed biological and botanical products to meet the increasing demand of residue free produce. These products are serving famers in plant-soil health management and plant nutrition management.

Exploration of Natura's unique culture bank of diversified microbial cultures has resulted in development of virulent and competent strains that develop climate resilience in crops. Focused on innovative technologies Natura has developed a proprietary technology "Ultra-Precise Microbial Fermentation Technology" with pharma-grade production system. They are promising products which are helping farmers to control diseases and pests, improves plant immunity giving healthier yields, simultaneously reducing risks of resistance development among pest population.

Vision:

- Sustainable innovation for farmers
- Micro precise farming practices
- Eco-friendly pest control
- Increasing yields of residue free produce
- Ultra efficient nutrition management
- Healthy farmers, healthy crops

Major achievements/Awards/Recognitions

- Natura Crop Care is recognized Startup by Startup India, DPIIT, Government of India.
- Natura Crop Care has received the recognition of Startup from Karnataka Startup cell
- The production facility of Natura crop care is ISO 9001-2015 certified.
- Recognized as one of top 5 agritech startups in India by ICAR (Ministry of Agriculture & farmers welfare), DST, Ministry of science & technology, Embassy of Brazil in India under MAITRI – an Indo Brazil Agritech cross border program during December 2019.
- Received best innovation in crop protection from Global forum for innovation in Agriculture award (GFIA – 2019) in Abu Dhabi from the Ministry of Food and Agriculture, Abu Dhabi during April 2019.
- Received BIG BIRAC grant, department biotechnology, Govt. of India during 2019.
- Received Elevate Award from Govt. of Karnataka with Research grant of 25 Lakh during 2019.
- Received MANAGE Samunnati Award–National level 2021
- Received ICAR UPJA Award–2021
- Recognized as best agriculture startups by ICAR during 2018
- Recognized as successful agri startup of 2018 by NABARD
- Recognised as best horticulture technology based startup by IIHR-ICAR 2019
- Filed 4 patents on innovative sustainable crop protection products and filing 2 patents on PHT products"

Societal Relevance

NATURACTIV PLUS is innovative patented trap for controlling fruit fly damage in horticultural crops. It is world's first commercial product to control female and male fruit fly population, with controlled release of lure that works whole season with out need for lure replacement in one crop season, in cucurbits, melon, gherkin, mango and citrus. In spite of farmers using male fruit fly traps there was damage recurring to farmers about 35% as actual damage is caused by female insects only. If farmers miss to replace the lure on time, crop losses occurring to tune of 90%. Exports were also banned due to presence of quarantined pest population in produce and export oriented food processing industries were facing losses due excessive pesticide residues as farmers were using hazardous chemicals that harm human consumers and beneficial insect population as well. By using "Naturactiv Plus that attracts and kill both male and female fruit flies sustainably without affecting beneficial insects in farms. Thus yields are increased by 25% and quality of fruits increased by 35% and insect damage less than 2%. This helped in increasing exporting opportunities for the fruits and processed food produced from this horticulture produce as it has no harmful pesticide residues. It helped in increasing farmers revenue to more than 30% in terms of additional quality yield produced and reduction in cost of pesticides used and labour spent. This generates an additional income of INR 38000–42000 per acre to farmers with about 1:22 cost benefit ratio.

Thus helping small and marginal farmers leading to improvement in livelihoods. Has higher impact on environment due to 70% reduction in pesticides used, which meets the UNO sustainable goals.





Naturebowl India Private Ltd.

Founder/Co Founder
Satheesh Nagaraj

AIC Name
TREC-STEP

Type
Product and Service

Stage
mvp

Target Market
Global

IP Status
na



 satheesh@naturebowl.in



Website



Naturebowl is an agri-tech startup for coconut farmers enriching the farming experience with innovative software for farm-keeping, connecting with other farmers, and increasing productivity with state-of-art machine learning and AI techniques providing end-to-end IoT hardware and software solutions. Nature Bowl is truly revolutionizing Coconut Farming with its IoT solutions.

Societal Relevance

India's coconut production is 22.34% (20 billion nuts) and its actual potential is 35 billion nuts, a loss of 40% due to par agricultural practices. Naturebwol's strategy of treating each plant differently with IoT solutions through an application called Farmsenz. explores important data about soil and plant ecosystem and sends notifications to farmer's mobile to provide optimal solutions, reduced fertilizer cost up to 60%, increased productivity to 5-20%, and envisions to build a society with healthy consumers and wealthier farmers by selling indigenous coconut products fresh out of the farm.





Neelaki Trails Pvt Ltd

Founder/Co Founder
Ricky Monappa

AIC Name
AIC CCRI CED

Type
Product and Service

Stage
Commercialization

Target Market
Global

IP Status
NA



ricky@coorgexpress.com



Website

- KAAPi TRAILS is a AGRI portal focussed on empowering & enabling small coffee growers of India.
- Our mission is to help the famers with various opportunities to double their farmer's income.

About Coffee Trails

- An experiential platform to showcase Unique Coffee experiences/ Trails from the small farmers to aficionados and Travellers
- An Ecommerce platform to promote unique coffees brands & other Coffee related products from the farmers of the region
- A Trade Platform to give access to coffee from the small growers to the World market to small growers as microlots with e-auction & Profiler modules
- A Community portal to connect Famers, Coffee experts & Coffee Aficionados in Cultivation, Blending, Brewing, Roasting, Branding and Marketing.

Project Model

- DTC / Direct to Customer model has been the success model for wine tours and has immensely contributed to increased domestic consumption in the west and our inspiration is to implement similar model in the Coffee growing regions.
- Coffee brings the similar science as we have in winery. The model will boost not only on-site sales but more importantly focusses on long term project of establishing a relationship with the customer.
- The Model focuses on inviting the consumers / travellers to Coffee trails—explaining the lifecycle of Coffee, taking them to experience center from where the best coffee can be sampled or purchased and establish long lasting connection with our e-marketplace.

Key Components of the Business model

- Coffee Tours & Programs
- Coffee Experience Center
- E- Marketplace
- Coffee tours are modelled in 4 different ways.
- Beginner Coffee Tours – This will be an open tour for all people who typically want to know about coffee plantations
- Intermediate Coffee Tours – This is for Gastro Tourist who are seeking to know more about Coffee and not just visiting the farm which will be education + entertainment and typically involves estate visit, Harvesting, Processing and experience local food
- Expert Coffee Tours – This is for Coffee Geeks who already know about Coffee but would like to explore Coffee in detail essentially—a Bean to Cup Tour
- Events – To conduct regular coffee festivals/ events which pairs best with the local food & Culture”

Major achievements/Awards/Recognitions

Under the brand Coorgexpress.com – We have been some of the best coffee experiential providers in Kodagu and our plan is to replicate the model in other coffee regions of India

We have partnered with Coffee Board of India, Airbnb, MakeMyTrip and local tourism department to conduct experiential coffee tours in India”





NeerX Technovation Private Limited

Founder/Co Founder
Harsh Agarwal, Nikita Tiwari

AIC Name
AIC ISB

Type
Product and Service

Stage
Commercialized

Target Market
Domestic

IP Status
NA

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nikitatiwari1096@gmail.com



Website



Neerx offers localized microclimate sensing equipment for detecting drought, predicting flood before a rainstorm, understanding the soil as well as a crop for better crop productivity. They have developed first a kind made in India dielectric probe for understanding dynamics of soil called "SHOOL" which is a complete IoT based station that has the potential to measure Increased salinity, Water-logging and deficiency, appropriate fertilizer quantity, pest infestation index, vegetation index, dew formation, nitrogen fixation, germination rate, etc. The solution increases productivity by 30% and reduces average input cost by 20%.

Major achievements/Awards/Recognitions

Winner at Vibrant Startup & Technology summit 2019, Winner at Uttar Pradesh Startup Conclave, Winner at DESIGNS AWARDS 2019 by NASSCOM, Winner at EMPRESARIO, IITKGP, WINNER, ISG SYMPOSIUM, SAC(ISRO).

Societal Relevance

Ever wondered, how a largely agrarian society like India manages its huge wealth of crops and biodiversity? How extent farmers take healthy measures of crop management? Farmers are not much aware of the accurate strategies for soil health and management and handling crop microclimate and have been facing problems in accessing real-time insights on data analytics. So, Neerx has a solution integrated with IoT(Internet of Things) and MI(Machine learning) known as SHOOL, an affordable handy sensor that provides insights on crop health. Recently, Neerx has established SHOOL STATIONS that are a solar-powered station that provides hourly insights on soil and crop management plans of action on farmer's mobiles. Thus, improving farm productivity and availing beneficial returns to farmers are swiftly taken care of by NeerX technology Private Ltd.





New Leaf Dynamic Technologies Private Limited

Founder/Co Founder
Akash Agarwal

AIC Name
AIC-RMP

Type
Product

Stage
Commercialized

Target Market
Domestic

IP Status
NA



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Website



Inventor of refrigeration technology powered by farm waste; New Leaf, expertise's in establishing cold chain at farm and aggregation point to reduce supply chain losses. GreenCHILL™ an off-grid, compressor-free, farm waste powered cold storage to store 10MT – 20 MT of horticulture produce at farm or aggregation point. GreenCHILL™ units have been installed at more than 50 plus locations across 9 states and Built 900+ MT of cold storage space

Major achievements/Awards/Recognitions

15+ awards from various National and International agencies. Just in 2020, GreenCHILL™ was classified winner by GIZ ONEWORLD No Hunger Innovation Challenge; ASME Hardware Trailblazer award; RAC Cooling Industry Award, Engineers Without Borders Ice Maker Challenge, U.S.-India Science & Technology Endowment Fund, UNIDO Facility for Low Carbon Technology Development Challenge with many more recognitions in past years. Presented on various Media Platforms like NDTV, CNBC TV 18, ZEE Business, Outlook Business, Open Magazine, Business Standard, Reuters, etc. Partnered with World-Renowned Universities like the Indian Institute of Technology Patna and Georgia Institute of Technology.

Societal Relevance

The startup benefitted 4,000 plus farmers from this, 200 plus farmers have been trained on post-harvest management. Two FPC's in Maharashtra made vendor to one of India's Largest Retailer Created market linkage for >50 MT of horticulture produce making a robust value-chain. Catalyzed financial linkage with Public and Private banks to finance GreenCHILL™ units for Farmers/FPC's who benefited through various subsidy schemes such as National Horticulture Mission. New Leaf is engaged with retail companies in the B2B space. Recently the startup has installed 5 x 20 MT GreenCHILL™ units at India's leading E-retail chain in Bengaluru, reducing post-harvest losses, ensuring product reaching distant markets with freshness retention capacity up to 1 week, and acting eco-friendly saving 30 tons of carbon emissions per year.



Pelican Thermologies Pvt Ltd

Founder/Co Founder

Priya Rao

AIC Name

AIC Sangam

Type

Product

Stage

mvp

Target Market

Global

IP Status

Patented in India, China, Europe, Australia and USA



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Website



Pelican, A women led startup has developed a novel photovoltaic solar power-based energy-efficient technology for dehydration of agricultural / marine/ food produce to generate value-added products from Agri produce and biodegradable waste. These drying systems (brand name – Multiple Magnetron Heating system – MuMaH) are designed for a wide range of applications benefitting farmers, food processors, fishermen, FPOs/ FPCs, consortium of sea food processors to get value added dehydrated products. MuMaH can also be used by bulk biodegradable waste generators like Agri waste, apartment waste, municipal waste, institutions etc, for converting wet waste into valuable pet nutrition/ animal or fish feed.

Major achievements/Awards/Recognitions

- As FOUNDER/ DIRECTOR OF PELICAN THERMOGENICS PVT LTD, A START UP COMPANY.
- Winner TiE Women 2021- TiE Kerala – participant of the TiE Women Global Finals in Dubai 2021
- Winner PACE- 2020- Incubation program of Kerala Agricultural University, Trichur
- Winner-The La Eve -Women Entrepreneurship program at the INDIAN INSTITUTE OF MANAGEMENT-LIVE, KOZHIKODE- 2020
- Finalist at the Facility for Low Carbon Technology Deployment- FLCTD- Accelerator program -2020
- Selected for Nidhi -Prayas program at NIT-C-2021
- Winner-Kerala Start up Mission- Innovation Grant 2020.
- WOMENPRENEUR 2021-AIC,Bnaasthali, Jaipur

Societal Relevance

Pelican Thermogenics aims to create climate resilient technologies which can mitigate almost 0.2 Million Tonnes Of carbon dioxide by 2026 and prevent 1.2 million tons of food waste.

With MuMAH, 110,000 farmers will be benefitted and \$1.2 Billion worth of food waste can be reduced.



Pinance Farms (OPC) Private Limited (Farms2families)

Founder/Co Founder
VISHWAS GUPTA

AIC Name
AIC-BIMTECH

Type
Service

Stage
Commercialized

Target Market
Domestic

IP Status
NA



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Website



Farms2Families is committed to chemical-free and sustainable farming for healthy living. Since organic food is different from 'conventional' food; it is closer to nature, more sustainable has a lower carbon footprint. This is often preservative and additive-free that leading to a sometimes lower shelf life. Farm2Families gives customers a piece of a farm on rent on a monthly subscription basis according to the family size in which chemical-free organic veggies can be grown according to customer's choice. Vegetables are then delivered to the customer's doorstep every 5th day. Since nowadays many farmers use pesticides during harvesting, which is causing cancer and many more deadly diseases, Farm2Families also provide customers with the option to monitor their farm through a mobile app.

Major achievements/Awards/Recognitions

Investments raised from RSVCP and UP Government

Societal Relevance

Disseminating health consciousness among people, bringing up the essence of traditional farming with no pesticides and fertilizers, Farm2Families promote the organic growing of fruits and vegetables by yourself. Indian organic market i.e., people who consume organic products stand worth Rs. 3000 crore and is expected to grow by Rs. 75,000 crores by 2025 and so this startup's contribution is a part of increasing organic produce consumption with 24*7 hours eye on your farm productivity growth implies complete transparency that needs no organic certificate for the farm that one associate with. Wholly, this startup is connecting people close to nature.





Pindfresh

Founder/Co Founder

Somveer Anand

AIC Name

AIC ISB

Type

Product and Service

Stage

Commercialized

Target Market

Global

IP Status

NA



Pindfresh makes systems that allow you to grow your own food at home. Without pesticides – without any poisons by developing hydroponic ‘do-it-yourself’ kits in all sizes and provide replacement nutrients / seeds / accessories – everything that you require to start and continue growing all of your own produce. By adopting hydroponics and decentralized food production techniques a more resilient and distributed food chain moves the actual production of food from the countryside to your home. This helps in saving water (over 90% saved), transportation costs, improving food quality and increasing the interaction that people have with their food.

Societal Relevance

Hydroponic units as desired by the buyer capable of fitting them anywhere possible is been designed and sold by Pinfresh. Growing fresh vegetables all around the year with no pesticides with robust leaf and root structure keeps it fresh and allures consumers especially millennials/ centennials desire! Pindfresh enables people to grow on their own with Do-it-yourself(DIY)kits which are small fungible, lego-like, and can be installed in a modular fashion as per need., supplemented with replacement nutrients, organic seeds, and inert mediums precisely everything that one needs to grow their food products. The startup aims at spreading awareness for people about life-threatening pesticides and encourages them to grow their food! Also, Pindfresh reaches out to many schools and conducts workshops that enriched children about the facets involved in growing plants and how they could do the same.



som@pindfresh.com



Website



Qzense Labs

Founder/Co Founder
Dr. Srishti Batra, Rubal Chib

AIC Name
AIC ISB

Type
Product and Service

Stage
Commercialized

Target Market
Domestic

IP Status
Published



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Website

qZense Labs

Qzense Labs provides a post-harvest solution for quality assessment and to reduce post-harvest losses using AI Technology based on IoT sensors to detect the quality and freshness of food

The solution is a hand-held device (hardware) with IoT sensors, which will be capturing data on internal quality, freshness, ripeness, and spoilage of fresh food. Our software analytics will use this data to predict shelf life, freshness and internal quality parameters, sugar content for better management of fresh produce."

Major achievements/Awards/Recognitions

Awarded by Shri. ravi Shankar Prasad, Hon'ble Minister of Electronics and Information Technology and NASSCOM.

Societal Relevance

Reducing internal ripeness and spoilage and assessing the quality parameters such as sweetness and shelf-life of perishable produce, Qzense labs come up with technology with olfactory sensors. Aiming to deploy this technology across the supply chain with e-retailers and e-tailers as this technology deployment is easier with them. This technology makes grading easier for the retailers based on spoilage and sweetness levels and delivers high-quality products to the customers and makes the AI agri-value chain.



Raheja Solar Food Processing Pvt. Ltd

Founder/Co Founder
Varun Raheja

AIC Name
ADT-BARAMATI

Type
Product and Service

Stage
Commercialized

Target Market
Global

IP Status
R&D on IP products

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Website



Raheja Solar Food Processing Pvt Ltd is a social enterprise empowering the farmers of India and by ensure their prosperity, by helping them protect their produce byreducing post harvest losses using scientific and advanced Solar Dryers. Raheja Solar has developed the most affordable and effective Solar Dryer that will significantly aid Indian farmers by creating a circular economy and minimizing post-harvest losses. It has ability to provide controlled and optimized heat to the produce which considerably increases its quality. As compared to naturally drying in the sun, the dryer protects the fresh product from UV radiation, dust, dirt, insects and pollution and preserves its nutrients value. Raheja Solar also helps farmers with the support in sales of solar dried products and provide solar drying techniques training.

Major achievements/Awards/Recognitions

The startup clicheed Dr. Shirin Gadhia Sustainability Award 2018 and the winner of Arunachal Pradesh Social Entrepreneurship Meet 2020.

- Awarded with Dr. Shirin Gadhia Sustainability Award 2018
- Winner of Arunachal Pradesh Social Entrepreneurship Meet 2020
- Selected among top 17 high impact cleantech startups of techtonic startups in clean energy challenge.
- Runner up in Kaaj Impact Social Pitch Contest

Societal Relevance

Our dryers empower farmers with a choice of selling their produce at their time and price. The farmers can preserve their excess produce without losing its natural color, taste, fragrance, and nutrients instead of throwing them away or selling at low market prices. The solar-dried products processed in the solar dryer can be further stored for more than a year, which allows farmers to have more market control, as whenever the rates are high, they can sell their produce.

We also provide farmers solar drying techniques training to develop products having good market demand and we also support them in the marketing of their solar dried products allowing them to get assured market price for their commodity. Hence, when the market rates are higher than the assured price, they sell their products in fresh otherwise they dehydrate their products and sell products to us and get profit in each and every harvested produce.





Rson Agrotech Automation Pvt Ltd

Founder/Co Founder
Rajendra Takawane

AIC Name
ADT-BARAMATI

Type
Product and Service

Stage
mvp

Target Market
Domestic

IP Status
Design Patent , Trademark



RSON Agro-tech Automation Private Limited is an automation company based out of Pune, India. Farming being the main and only occupation, Mr. Raj focused on rectifying the farm-related problems by implementing the technology in it. He has majored in Electronics and Telecommunication, which played a role of helping hand in innovating the smart irrigation system. The smart farming system and smart farming products are in much more in demand, these days.

Salient Features of the smart irrigation system

- Beneficial for smaller or moderate quantity land
- Can easily be operated from anywhere across the nation
- Balances and equates Ec/pH value of fertilizers and water
- Saves up electricity due to the essential and effective usage of the motor
- 4 + 1 dosing channels for out letting the fertilizers
- Sensors to alert the pressure of water and automate accordingly to switch the motor off
- Low investment. Lower maintenance
- Get notifications and alerts on the mobile application about the changed slots of the watering
- App gets buzzed with the information of the electricity
- Flush gets automatically cleaned
- Can be installed anywhere, either in a closed room or an open farmland

Major achievements/Awards/Recognitions

Participated in Startup India Maharashtra India Yatra 2018

Societal Relevance

Water management is paramount in countries with water scarcity. This also affects agriculture, as a large amount of water is dedicated to that use. The possible consequences of global warming lead to the consideration of creating water adaptation measures to ensure the availability of water for food production and consumption. Typical commercial sensors for agriculture irrigation systems are very expensive, making it impossible for smaller farmers to implement this type of system. RSON Agrotech has developed the RA-SM-19 smart irrigation system keeping the marginal land holder farmers and middle-class people in mind. The irrigation system causes drastic improvement in production, saves up electricity and water, user friendly android application and saves on labor expenditure.



rajtakawane@gmail.com



Website





Saptkrishi Scientific Pvt Ltd

Founder/Co Founder
NIKKY KUMAR JHA

AIC Name
AIC Sangam

Type
Product and Service

Stage
mvp

Target Market
Global

IP Status
Filed



 saptkrishi@gmail.com



Website



Saptkrishi is a young Agri-Tech start-up incubated at IIT Kanpur, with youth in decisive roles who are determined to work towards agricultural innovation and the transformation of rural South Asia.

It addresses the issue of the perishability of horticultural commodities and works on reducing waste by the development and provision of affordable technology directly to individual farmers, cooperatives, and traders to ensure better post-harvest outcomes. As a social enterprise, the focus sector for its first phase is the development of low-cost storage and transportation solution for farmers and traders engaged with horticulture and floriculture. Preservator/Sabjikothe is a wheel mountable storage for the transportation of fresh fruits and vegetables. It is a cost-effective, IOT Enabled, microclimate-based, portable storage that extends the shelf-life and preserves the freshness of fruits and vegetables anywhere between 5 to 30 days.

Major achievements/Awards/Recognitions

- Validated by SKAUST-J as third party validation after being shortlisted for the Rashtriya Krishi Vikas Yojana (RKVY)
- It has been awarded the Gold certificate by the Indian Innovators Association .
- Won the Arunachal Pradesh Social Entrepreneurship meet, 2020 .
- Awarded for the highest social impact by Alumni Association of IIT Kanpur
- Globally shortlisted among top 8 startups by UNCDF for their flagship program Nepal Innovation Challenge Agritech.
- Granted MSME status and promised for funding by the Government of India.
- Winner of 3M-CII Young Innovators Challenge Award, 2020.
- One of the winners of the 6th India International Science Festival (IISF-2020) 'Nav Bharat Nirmaan.'
- Winner of SOLVED challenge, 2021

Societal Relevance

Saptkrishi addresses the issue of the perishability of horticultural commodities and works on reducing waste by the development and provision of affordable technology directly to individual farmers, cooperatives, and traders to ensure better post-harvest outcomes. The UN estimates that more than 40% of food produced in India is wasted before it reaches the consumer and the issues have been largely around supply chain bottlenecks, transport, and storage. On the other hand, 194 million Indians go hungry every day. Preservator can helpin curbing the problem by not only providing a storage and transportation solution but also bringing the producer and consumer together. Farmers' Profit: We offer a 20-30% higher rate to farmers than what they were selling to traders in town. They need not travel to city for selling their fruits and vegetables and this way they can focus more on growing fruits and vegetables.



We are here to make Agriculture/Farming
pride

At PerFarm, we're passionate about changing the way farming
a touch of professionalism is required to enable rural
providing technology enabled support across



Saras Agri Ventures Private Limited

Founder/Co Founder
Pramod Seshan

AIC Name
AIC-RMP

Type
Service

Stage
mvp

Target Market
Domestic

IP Status
na



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Website



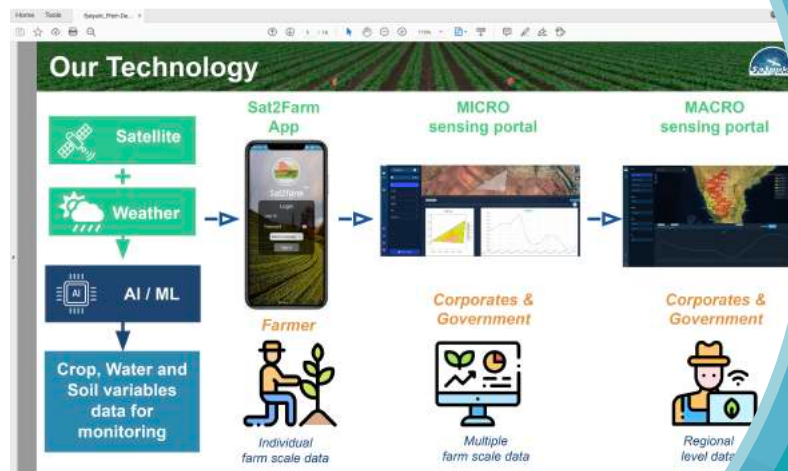
Viewing an individual farm of a small/ marginal farmer as a business unit & using PerFarm as a platform to contribute across all the CSFs. This perspective combined with extensive use of technology starting with market linkage and developing into all other critical areas, with impact transparently bringing out focus on highlighting every rupee (spent and earned) clearly on the mobile app interface & move towards demonstrating the per farm profit.

Major achievements/Awards/Recognitions

- Part of 3rd cohort at ICAR-Nivedi's Agri Business Incubator, NaaViC. Shortlisted for the ministerial round for the grant under RKVY-RAFTAAR scheme of Ministry of Agriculture, GOI
- Part of the shortlisted start-ups at MeITY Start Up Hub's bootcamp with PadUp Ventures
- Top 100 of the Cisco Agri Challenge

Societal Relevance

We envision PerFarm being able to play a key role in changing the functioning of agriculture/farming from a supply driven mode to demand driven mode. We would want to create a platform which totally eases and at the same time gives choices such as which crop to sow and the type of inputs are reliable and personalise all info during the course of the crop-cycle to the farmer. Each farm will be a business unit and PerFarm will work with millions of Farm CEOs in running a profitable business unit. People should pick up agriculture as a career option. Over a period and the credit worthiness of the farmer will go up. Some enterprising farmers can jointly (with PerFarm) open primary processing units at the farm-gate itself, become an employer and this should lead to gender equal opportunities.



Satyukt Analytics Pvt. Ltd.

Founder/Co Founder
Sat Kumar Tomer

AIC Name
AIC-JKLU

Type
Service

Stage
Commercialized

Target Market
Domestic

IP Status
NA



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Website



It is a space-based Agri-tech organization based out of Bangalore, India. Satyukt has developed scalable algorithms that utilize the data from optical and microwave satellites, weather forecasts, and water resources modeling to provide all-weather SaaS solutions to provide the advisories to agriculture, crop insurance, and water resources stakeholders globally. The solutions can increase efficiency, scale production, and strengthen sustainability across the board.

Satyukt has developed the following platforms:

- **Micro sensing platforms:** The farm-level information can be provided to the farmers (end consumers) through agri-input companies as channels.
- **Macro sensing platform:** The global level information can be provided to the corporations/governments who are end customers. The information connects farmers or their data to the corporations/governments

Societal Relevance

Satyukt's mobile application interprets data from numerous satellites and provides data for various parameters like when and how much to irrigate, endemicity of pests and disease and their threshold level, drought/flood warning, amount of loss due to pests and diseases, etc., to farmers. It forecasts ensuring the past happenings thus providing uses the best ever most accurate solution!

What Problems Are We Solving?



Procurement and Processing of Agri Produce is done by different stakeholders



Agri-Food Supply Chain is Driven by Unorganized Players



With 5+ Middlemen there are Margin Leakages, Added Logistics and handling Cost



Post harvest losses up to 40% due to perishability, lack of storage, distant markets



Low Capacity Utilization of processing units (130 days/ Year)



Science For Society Techno Services Private Limited

Founder/Co Founder
Ms. Nidhi Pant

AIC Name
**AIC Banasthali Vidyapith
Foundation**

Type
Product

Stage
Commercialized

Target Market
Global

IP Status
Published



nidhi@s4stechnologies.com



Website

S4S use their technology to help farmers earn more than their meager livelihoods, helping them believe in their work and dreams. Solar Conduction Dryer (SCD) is an electricity free solar powered food dehydrator that reduces moisture content in agri-animal produce so that farmers and rural women can preserve seasonal produce up to 1 year without using any chemicals and earn additional income through sale of dehydrated products. These products are made accessible to farmers, rural and urban market.

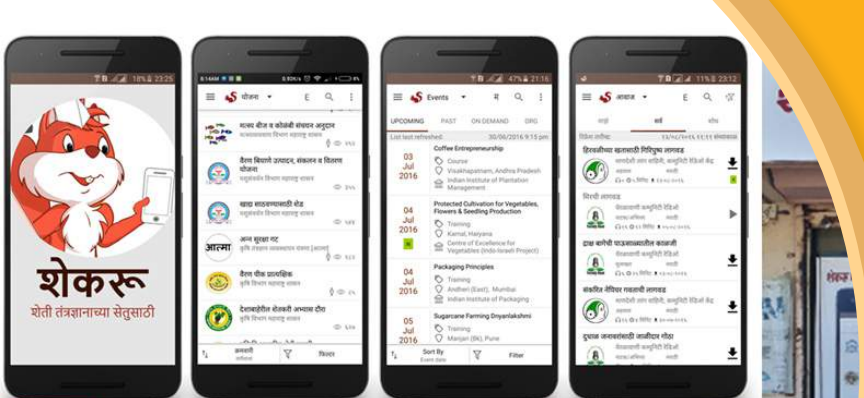
Major achievements/Awards/Recognitions

Women Transforming India Awards by WEP- NITI Aayog, Meet the 2020 Ashden Awards Longlist, 2019 Young Entrepreneurs Award winner for Initiative in Science for Society, Forbes 30 Under 30-Asia-Industry, Manufacturing & Energy 2019, Startup has raised funding of total 16 CR so far

Societal Relevance

Agri-value chain is incubated with 5 plus middlemen from farm produce procurement till it reaches to consumer. The handling of produce is being done unorganized with added logistics and handling cost. Also, the capacity utilization of processing units is low leads to post-harvest losses. Reducing post-harvest losses as their aim, they have come up with solar-drying equipments that removes moisture and preserves shelf-life of perishable produce, providing market-linkages to nearly 6000 farmers and 37.6k tons of carbondioxide saved annually making the valu-chain ecologically sustainable. Wholly, this technology is helping farmers earn more than their annual income and enjoy more than their meager livelihoods.





शेकरू टीव्ही

ऑनलाईन शिवार फेरी

नैसर्गिक शेती आणि आधारित प्रक्रिया उद्योग, शिर्डी (अहमदनगर)

नैसर्गिक शेती पद्धती, गो आधारित शेती, अग्निहोत्र शेती, मिश्रवाग फळवाग मॉडेल, पारंपारिक जीवन शैली, विषमुक्त शेतमाल उत्पादन खाद्यतेल उद्योग, वैदिक पीठ निर्मिती, डाळ मिल उद्योग, शेतमाल उत्पादन विक्री व्यवस्था इत्यादी.

सहभाग



श्री. राधाकृष्णन गुळवे

मुख्य पाटील शेती उद्योग समूह

गोगलगाव, राहता, अहमदनगर

संचालन



श्री. हेमंत जंगताप

मास्टर ट्रेनर

भारतीय कृषी कौशल्य परिषद, भारत सरकार

वेळ : सकाळी १० वा.

दिनांक : १०/०१/२०२१

मिटींग कोड : 828 0984 ०

पासवर्ड : 12345

Shekru Dot Foundation

Founder/Co Founder
Ananth Krishna

AIC Name
AIC-RMP

Type
Service

Stage
mvp

Target Market
Domestic

IP Status
na

Website

ananth@shekru.org

Shekru foundation is a not-for-profit startup with a hope to fill gaps in agriculture extension. The mission is to create awareness and access to resources for farmers of Maharashtra. The mediums are an on-ground school–Shekru Shetkari Shaala, online mediums as in a mobile app–Shekru and ShekruTV, a virtual meeting platform to conduct free, interactive and facilitated outreach sessions with a diverse set of stakeholders from KVKs, NGO, FPOs, Government Institutions and entrepreneurs to farmers.

Societal Relevance

Educating and upskilling all the stakeholders in agriculture for better outcomes and to create win-win situation for farmers and end consumer is their main aim. Their knowledge dissimination through various medium (virtually and physically)helping all the players in wide areas such as Lietracy programs on soil, water, plant, livestock, IoT and sensors, crop selection and its cost of cultivation–calculating the best possible returns and empowering women to have a stake in the agriculture domain. The service is truly for uplifting the socio-economic constrains that are prevailing in Indian agriculture system.

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Sickle Innovations Pvt Ltd.

Founder/Co Founder
**Nitin Gupta &
Vinay kumar reddy vadde**

AIC Name
SID-IISc

Type
Product and Service

Stage
Commercialized

Target Market
Domestic

IP Status
Filled



Nitin@sickle.in



Website



Indian agricultural sector mostly comprising micro farms has been plagued by several problems such as dwindling crop harvests, increased labour costs and severe labour attrition. We believe we can help farmers earn more by either reducing the input cost (in terms of labour) or by increasing the value of their produce. Prudent design intervention towards providing economic farming solutions for the micro farms remains our core focus.

Major achievements/Awards/Recognitions

- National Entrepreneurship Award From Ministry Of Skill Development & Entrepreneurship
- FICCI Business Excellence Award
- Farm Tech Startup Of The Year 2018
- Award By ICFA; Top Three Innovations In Agriculture By CII
- Selected As Top 35 Startups Of Country By PMO; Innovative Company Of The Year
- Innovative Startup Of The Year By ISBA
- ET Rise Top MSME Award In Agriculture

Societal Relevance

Sickle innovations has come up with technologies with preliminary product prototype with unique design, a solution that is affordable by farmers and that fits into small and marginal farm land-holdings.





TradeDoot Agriculture Marketing Solutions Private Limited (KisanSaathi)

Founder/Co Founder

Prem Rathod

AIC Name

AIC-RMP

Type

Service

Stage

Commercialized

Target Market

Global

IP Status

Filled



prem Rathod.afmi@gmail.com



Website

New Innovative Process of FPO Driven Organized Supply Chain System for Marketing of Agricultural produce of the Small & Marginal Farmers in rural India, thus giving them better returns on investment. Marketing of Agri produce directly from FPO to Buyers/Processors through effective Capacity Building on Improved post-Harvest practices and better Market linkages.

Major achievements/Awards/Recognitions

- 1st RUNNER-UP Agri Startup South India Region, MANAGE-Samunnati Awards-2021
- Elevate Call 2 Winner of Karnataka Startup Policy, KBITS, GoK in 2017
- Contributed Marketing Guidebook to FPOs on Strengthen Farm Produce Marketing Business in Association with GIZ Germany
- Our company Model story was published by FORBES International Magazine in May 2019 (<https://www.forbes.com/sites/christinero/2019/05/04/the-farmers-companion-bringing-together-food-buyers-and-producers-in-urban-india/#5a330f5154bf>)
- Ecosystem Partner with University of California's Smart Village Movement Initiative in Andhra Pradesh, Arunachal Pradesh and Meghalaya States of India (February 2020)
- <https://www.zenger.news/2020/11/20/technology-helps-indian-farmers-get-a-better-deal/-2021>

Societal Relevance

The social, economic, and environmental value Proposition to Small & Marginal Farmers

Social Impact:

- Self-sustainability of FPOs and farmer increases
- Improved standard of living of Farmers
- Empowering rural women without any gender disparity.

Economic Impact:

- Better price realization to Farmers
- Overall higher income per acre
- FPOs profitability increases compared to conventional agricultural practices.
- A step towards reduced multiple handling & wastage etc.

Environmental Impact:

- Reduced Food Wastage & cost of cultivation
- Increased percentage of Eco-friendly way of farming
- Effective change in conventional supply chain system



Trithi Robotics Pvt Ltd

Founders/Co Founders
**Vasant Bhat, Jutika Hazarika,
Sumanta Bhat**

AIC Name
ANIC Winner

Type
Product

Stage
Commercialised

Target Market
Global

IP Status
Working on 25 litre fuel hybrid setup



team@3thi.com



Website



Provides on-time farm gate crop spray services using drones & data. Created 10 teams who serve rural farms on demand basis thus providing on time crop care & affordable service cost to farmer saving 90% water & 60% chemical per spray per acre.

Major achievements/Awards/Recognitions

2018 agriculture grand challenge winner, 2019 AIM ANIC grant in aid winner, 2020 1st national startup awards finalist.

Societal Relevance

Enables rural graduate youth to operate agriculture drones for rental sharing basis to reach regional farms at affordable service cost.





Urdhvam Environmental Technologies Pvt Ltd

Founder/Co Founder
Rahul Bakare
Vinit Moreshwar Phadnis

AIC Name
AIC Sangam

Type
Product and Service

Stage
Commercialized

Target Market
Global

IP Status
Patent Pending

 **rahul@urdhvam.com**



Website



Urdhvam Environmental Technologies Pvt Ltd, is a groundwater Sustainability, Technology and Products company. We use IT, IoT, Robotics and Mobile Technology to develop innovative, affordable and scalable products that revive fast depleting groundwater resources in India and provide safe and sustainable groundwater for drinking, domestic and irrigation purposes. We have developed an innovative, robotic and patented smart rainwater harvesting technology, BoreCharger, that increases yield of failed or low yielding borewells (www.borecharger.com). Through more than 1500 BoreCharger implementations, across 8 states in India and West Africa, we have recharged more than 165 Cr liters of rainwater. Their patented technology potentially revives the existing, failed and low yielding borewells. The tech perforates" existing borewell casing from inside which enables the harvesting of rainwater from topmost, seasonally replenishable, unconfined aquifers and recharging the deeper confined aquifers solution develops portable cold storage to save the perishables during transportation from farm to folk .



Major achievements/Awards/Recognitions

Under StartupIndia",BoreCharger is funded by IIM-Ahmedabad, DFID, HDFC Bank, Hindusthan Unilever Foundation, Villgro, IIM-Kashipur, etc. and are part of many accelerators such as a) Sangam Ventures b) AISEA-IIT-Hyderabad c) Land Accelerator–WRI d) Indigram-AdhunikGram e) IIM Kashipur-FIED g) Social Alpha

Urdhvam also has won prestigious awards from Maharashtra State Innovation Society (Govt of Maharashtra), FICCI, Indigram-Adhunik Gram, Rotary International, Aegis Graham Bell award, Columbia Global Center, World Finalists in ClimateLaunchPad, etc.

Societal Relevance

Groundwater levels are declining across India, 54% dropped over the past seven years. Farmers in arid and dryland are heavily dependent on rainfall for irrigation and the North-eastern India stands out vulnerble devoid of irrigation! To protect the ground water level, sustainable irrifation practices are necessary which is possible through Bore charging, groundwater mapping and roof-top rainwater harvesting and watershed implementation which are successfully provided by Urdhavam Environmental Technologies Private Ltd. With their smart wetland conservation practices, the abundant salinity in the soil can be prevented which effects buildup of plant, refills aquifier, conserves and protects wetland ecosystems, thus increasing a rupee per crop to the farmers. 80% of India depends on groundwater for drinking, domestic, industrial and agricultural usage. Due to lack of recharge 4.5 Cr borewells are yielding lesser groundwater & drying up rapidly, resulting in adverse socio-economic impact such as farmer suicides, unsustainable farming, drought-prone villages, unviable industries and thirsty habitations.

- Socio-Economic and Ecological Impact of BoreCharger:
- Average Artificial Injection Recharge of 7 Lac Litres/borewell/year
- Improvement in water supply duration by 1 to 6 months
- Increases recharge of borewells 4 to 20 times that of natural recharge
- Improved irrigation & drinking water Quantity & Quality
- 90% success rate in revival of failed and low yielding borewells
- Reduction in salination of soil due to dissolved salts & improvement in soil health
- Improved farm output and Incomeby more than 30%
- Lesser vulnerability of farmers due to weather shocks
- Reduced pumping energy costs and competition for water
- Improved farm output productivity, production and farm income
- Reduced cost of tanker water supply and water treatment for urban population
- BoreCharger is applicable to any borewell in Rural and Urban settings used for Agriculture, Drinking, Domestic and Industrial purposes. Farmers, Households, Townships, Handpumps, Rural Water Supply systems, etc. would benefit tremendously from BoreCharger induced recharge.



Maximize Remote Sensing Application



Vasundharaa Geo Technologies Private Limited

Founder/Co Founder
Advait Kulkarni

AIC Name
AIC-RMP

Type
Service

Stage
Commercialized

Target Market
Global

IP Status
NA



advait@dharaatech.in



Website

Vasundharaa Geo Technologies works in the area of satellite and drone based remote sensing and location intelligence. With machine learning driven analytical solutions, they are involved in regular monitoring of farmlands, using a combination imaging sensors, field sensing techniques, and data distribution techniques.

Major achievements/Awards/Recognitions

Finalist for Start Up of the year, in Space channel, 2021; Start UP India

Societal Relevance

Geo spatial technology is one of the most subtle impacting sciences, collecting, colating and visualizing data from all aspects of human activity. The mission aims to make the basic user/layman technophile. This extent of data democratization will not only help the end user, but also create a seamless situtational awareness for highest stake holder creating a truely transparent governance.



Vedom Agro Enterprises

Founder/Co Founder
Dr. Kshetrimayum Vedmani Devi

AIC Name
AIC-AAU Incubator

Type
Product and Service

Stage
MVP

Target Market
Global

IP Status
NA



vaenterprise15@gmail.com



Website



Vedom Agro Enterprises established in 2014, deals with food processing and marketing. The Startup is producing more than 50 products turmeric (powder/dry slice/fresh), ginger (powder/dry slice/fresh), cyanne pepper (powder/whole), King chilly (fresh/powder/oven dry/smoke dry/pickle), pineapple queen/kew Fresh, cinnamon (stick/powder), black aromatic rice (Chak hou), bamboo Shoot (pickle), hogplum (pickle), Starfruit (pickle), olive (pickle), mixed fruit (pickle), oyster mushroom (pickle/dry powder), lemon, mango, litchi, passion fruit, gooseberry, garcinia (juice/candy/pickle), avocado (fresh), etc. It is an ISO 22000:2018 certified Firm, with Fssai no.21617001001616. Within a span of 6 years, the Enterprise has grown to a state level organization while networking with other similar entrepreneurs in various pockets of Manipur, and outreach in Guwahati, Kolkata, New Delhi, Ahmedabad and Mumbai.

Presently, the venture is focussing on supply of functional feed using food process waste to fulfil the functional feed demand of Manipur and North East India. The startup has high valuable nutrients from food, fruits and vegetable processing industry. The statup is striving to develop Microbial base alternative protein and functional bioactive substances."

Major achievements/Awards/Recognitions

- Top 20 Humanitarian Excellence Awardee- I Can Foundation, Faculty Iconic and Lady Legend Awardee-Jaipur, Global
- Goodwill Ambassador India for Humanitarian, Confederation of Indian Micro
- Vedmani has been recognized for her entrepreneurship as well as for her efforts to usher in better working conditions of the women food entrepreneurs and food workers, as contribution towards achieving goals 1,2,3,5,8,9,12 of the Sustainable Development Goals of the United Nations on the thematic note: Act Locally, Think Globally.
- Best of India.BIZ Award in the category of Best Agro Products at the 17th International Edition of World Expo & Conference, Mumbai, 2019;
- Best North-East Woman Entrepreneur 2019;
- Iconic Faculty Award 2019;
- Lady Legends Award 2020;
- Best Community Leadership under National Leadership Awards 2020 (awarded by Confederation of Indian Micro, Small and Medium Enterprises);
- 51 Humanitarian of the Year 2020 (ICAP Foundation, India); and
- selected for Great Indian Women Awards (GIWA 2021)."

Societal Relevance

Vedom Agro Enterprises is working with local community, in particular women farmers and workers. Vedom is training local youth on various entrepreneurship skill in food processing with a focus to enable sustainable livelihoods.

Vedom agro also connects local small food processing units to markets and supports the sales of such products through various Imphal based marketing agents, Local Common Distributor, NE-Dukan, 'Red Shopper' in towns across the State and through India Mart.



Vega Agrobots

Founder/Co Founder

Mr. Prateek Kumar S

AIC Name

**AIC Jyothy Institute of
Technology Foundation**

Type

Product

Stage

Commercialized

Target Market

Domestic

IP Status

NA



vezaagrobots@gmail.com



Website

veza agrobots is a start up engaged in manufacturing of battery operated trolley's. veza agrobots is also working on battery operated multi utility farm vehicle. Veza Agrobots is a technology based start up, providing need based solutions for agriculture. The startup was conceptualized to make agriculture simpler, by reducing the labor and human interventions, by using technology such as IOT, Machine Learning and Robotics.

The startup has developed a prototype which is a remote controlled and Autonomous robotic device which can do several agricultural operations such as:

- De-weeding
- Pesticide Spraying
- Paddy Reaping
- Seed sower
- Load Carrying

Societal Relevance

The end users of the product are the farmers. Considering that majority of the Indian farmers fall under the category of small and marginal, with the maximum land holding of 2.5 acres to 3 acres, Farmbot product developed by Veza Agrobots may not be affordable to them.

Hence, Veza Agrobots has planned to reach the end users on rental model. The product will be sold to intermediaries, who would rent it out to the end users.

The important target customers for Veza Agrobots would be:

- Farmer Cooperatives
- Farmer Producer Companies / Farmer Producer Organisations
- Agritech Aggregators
- Medium and Large farmers



Vyoda Private Limited

Founder/Co Founder
Vishnu Das Vasu Ranga

AIC Name
ANIC Winner

Type
Product

Stage
mvp

Target Market
Global

IP Status
To be applied



info@vyoda.com,
vishwas.nv@rangsons.com



Website

Vyoda's pump is based on hydraulics principles and is extremely efficient, enabling the operation of the solar water pumping system through longer hours and in low sun irradiation conditions. Since this is pump developed to have constant pressure, micro irrigation like drip or sprinkler can be used throughout the working hours of the pump. The solution is based on complex technology that utilizes a reciprocating piston pump driven by a servo motor. This technology pushes water both, on the up and on the down swings of the piston with high efficiency, so it is able to ensure higher volume of water is pumped by the system in less power produced by the solar panels.

Major achievements/Awards/Recognitions

Winner of INSPIRE 2019 under clean energy category, organised by EESL and received award for 'Technology Innovator of the year in off-grid solar for solar pumps' by EQ International

Societal Relevance

Reduction in carbon footprint by utilizing renewable energy and aids in doubling farmers income.



Zoofresh Foods Private Limited (Freshr)

Founders/Co Founders

**Ambika Satapathy,
Sadananda Satapathy**

AIC Name

AIC-BIMTECH

Type

Product and Service

Stage

Commercialized

Target Market

Domestic

IP Status

NA



**ambika@freshr.co.in,
zoofresh@yahoo.in**



Website



FreshR, by ZooFresh Foods, is India's first technology-enabled integrated platform (digital+physical) to organize the \$30 bn fresh meat industry in India. The project is being piloted in some of the poorest districts in five states in Eastern India—Odisha, Chhattisgarh, Andhra Pradesh, Telangana & West Bengal—with a PPP with the Odisha govt. FreshR will provide a market for live broiler birds, live country chicken, live & frozen fish & seafood, eggs etc which will be sold unprocessed to rural distributors, as well as dressed meat & value-added products supplied to retail consumers & institutional buyers. The goal is to de-risk the entire value chain and make it transparent and organized. The platform will improve small-scale livestock farmers' incomes upto 8x, enhance livelihoods for rural, tribal & small-town micro-entrepreneurs, reduce post-harvest losses from 25% to 3%, promote local, responsibly farmed produce and reduce the usage of preservatives, antibiotics and growth hormones.

Major achievements/Awards/Recognitions

Awarded Parivartan grant from HDFC Bank.

Societal Relevance

Developing a platform for farmers & micro-entrepreneurs to create market access and increasing incomes of producers and suppliers. Promoting high quality, low carbon footprint, affordable protein products. Creating livelihoods for rural and small town youth as distributors of fresh produce. Formalising an otherwise unorganised and fragmented industry. Minimising post harvest losses and preventing food waste



Dr. Neelam Patel
Senior Adviser (Agri.)

Development in science, technology and innovation can help achieve structural change in agriculture sector. Innovation is a major instrument in social and economic development; it stimulates not only production but an efficient use of natural resources as well.



Shri Neeraj Sinha
Senior Advisor (S&T)

To stay ahead in innovation, it is important to look beyond the obvious lines, which will be possible only if an environment where ideas fill the necessity gap.

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सुवर्णरौप्यमाणिक्यवसनैरपि पुरिताः ।
तथापि प्रार्थयन्त्येव कृषकान् भक्ततृष्णाया ॥

Even after having all the riches of the world,
you are dependent on the farmer for food.

Source: Krushi Prashar 1.4

