S.No.	PROBLEM	STATEMENT
	AGRICULTURAL MACHINERY	
1.	Bio-degradable film for vegetable cultivation	To replace plastic sheets used in vegetable farming, pest-degradable films are needed to control weeds and enhance water efficiency, improving sustainability in agriculture
2.	Pest Management in Organic Farming	Farmers are facing significant challenges in controlling pests while adhering strictly to organic farming practices. The limited availability of effective, eco-friendly pest control solutions often impacts crop yield and quality. There is a growing need for sustainable, non-chemical pest management strategies that are both cost-effective and environmentally safe.
3.	Organic Fertilizer	The demand for high-quality organic fertilizers is increasing due to the shift towards sustainable agriculture. However, farmers require guidance on selecting suitable organic inputs that enhance soil fertility and improve crop productivity. Standardization, quality assurance, and awareness about application methods remain key areas of concern.
4.	Requirement for Vacuum Sealing Machine for Vegetables	Producers and vendors have expressed the need for vacuum sealing machines to improve the shelf life and freshness of vegetables. Proper packaging solutions are essential to reduce post-harvest losses and maintain product quality during storage and transportation. Affordable and efficient vacuum sealing equipment would significantly support small and medium-scale agri-entrepreneurs.
5.	Labor Scarcity & Hand Tools	Finding skilled farm labor at the right time is becoming impossible, causing critical delays that ruin yields. We need to solve this by hacking together better, ergonomic manual tools or building simple local networks to share manpower.
6.	Last-Mile Market Linkage	Smallholder farmers lack the volume to afford direct transport to city markets, forcing them into distress sales at the farm gate. We need to figure out shared logistics or direct-to-consumer models so farmers capture the true retail value of their harvest.
7.	Stopping Post-Harvest Rot	During peak seasons, market gluts cause prices to crash, leaving farmers helpless as their grade-A produce rots in the sun. We need to explore low-cost processing or micro-cooling solutions that give farmers holding power and turn waste into value.
8.	Making Multi-Cropping Work	Relying on a single organic crop is risky, but managing the harvest and sale of five different crops at once creates massive complexity. We need to design practical ways to aggregate and sell these mixed baskets so natural farming stays financially viable.
9.	Knowledge Gaps, Farm Advisory & Soil Health (To be discussed in detail on March 21)	Farmers often resort to panic-spraying and blind fertilizer application because they lack real-time, localized soil and weather data. We need to build simple digital or community tools that give them the exact right advice at the right time to stop chemical overuse. Also solve weed management and soil nutrition along these lines.
10.	Navigating High-Value Exports (To be discussed in detail on March 21)	Growing exotic or organic spices is highly lucrative, but solo smallholders cannot navigate the strict maze of global compliance and traceability alone. We need to simplify the export journey, helping local producers meet international standards and reach premium buyers.

MANUFACTURING AND TECHNOLOGY		
11.	Drone R&D challenges: lab access, materials, components like motors, propellers, ESCs:	Accessibility to technical labs is poor, making it difficult to perform research and development on drones. The challenges span multiple aspects — from sourcing and experimenting with suitable materials to manufacturing components like frames, motors, propellers, and Electronic Speed Controllers (ESCs). The lack of proper infrastructure significantly slows innovation and prototyping
12.	High cost of fabrication (laser cutting); need for space and IoT integration:	Fabrication of enclosures using laser cutting is currently very expensive. There is a pressing need for dedicated workspace and cost-effective moulding options. Additionally, integrating Internet of Things (IoT) components into the designs remains a technical and financial challenge
13.	Need for licensed software (Cadence, Synopsys); semiconductor collaboration:	The development and simulation of electronic circuits are hindered by the unavailability of licensed Electronic Design Automation (EDA) software such as Cadence and Synopsys. Without access to these industry standard tools, circuit validation and chip design are not feasible. Furthermore, collaborations with semiconductor companies are necessary to bridge this technology gap.
14.	Fiberglass moulding and labour issues; next-gen skilled workforce needed:	Fiberglass moulding processes are hindered by the lack of technical expertise and skilled labour. There's a generational gap in acquiring these skills, making succession planning and workforce development critical.
15.	Scarcity of labour in automobile fabrication; need funding support:	There's a specific labour shortage in the automobile fabrication sector, compounded by insufficient funding for hiring and technology upgrades
ORGANIC Industry		
16.	Secure Packaging of Glass Bottles	Solution for Secure packaging of glass bottles for export to guarantee their safety.
17.	A2 Nutrition Testing in Ghee	Testing the ghee for the presence of A2 nutrition requires specific tests.
18.	Barcode Implementation for Product Details	Want to Implement a barcode system where it contains detailed information about the product.
19.	Wax-Free Biodegradable Packaging Solutions	Biodegradable packaging solutions that are free from wax coating, as wax-coated packages are not permissible for organic product certification.
20.	Maintaining the Shape of Organic Jaggery	A solution to maintain the shape of organic jaggery at temperatures ranging from 55 to 60 degrees Celsius without adding preservatives, ensuring it retains its form even in high heat conditions.
21.	Regulatory challenge in herbal product licensing:	There is a lack of proper regulatory guidance and approval frameworks for herbal product manufacturing in Visakhapatnam and Andhra Pradesh. This leads to delays in licensing and limits the ability of startups to enter the market confidently.
22.	Herbal/Ayurvedic drug manufacturing standardization and quality control issues:	Batch-to-batch variations and inconsistent therapeutic efficacy are caused by variability in raw materials, lack of validated* analytical methods, and insufficient regulatory oversight. Standardization protocols and validated testing infrastructure are urgently needed.
SEAFOOD INDUSTRY		
23.	Saltwater Issue - Corrosion and rusting of equipment	The company is experiencing significant issues with saltwater in its processing plant, which is causing corrosion and rusting of equipment. Despite having installed both a softener plant and a Reverse Osmosis (RO) plant, these measures have not been effective. The primary objective is to meet the standards set by IS 10500 and IS 4251 to ensure that production processes remain uncompromised.
24.	Difficulty in Peeling Shrimp - Developing a food-grade chemical to dissolve collagen protein	There is a need to develop a food-grade chemical that can dissolve the collagen protein which firmly binds the shell and meat, making the peeling process more efficient.
25.	Post-Lethality Recontamination in RTE Products - Controlling biofilm formation on equipment	The company requires a solution to control biofilm formation on equipment, which leads to post lethality recontamination.
26.	Lack of Shelf-Life Study on Frozen Shrimp	In India Currently, no regulatory authority has conducted an in-depth shelf-life study on frozen shrimp. While CIFT Cochin has initiated a shelf-life study on frozen fish, there is a need for a comprehensive shelf-life study on IQF frozen raw/cooked shrimp.

27.	Prevention of Black Spot Formation in Shrimp - Seeking a substitute for sodium metabisulphite	The industry is seeking a substitute for sodium metabisulphite to prevent black spot formation. Developed countries have created 4-hexyl resorcinol, but it is not commercially available in the Indian market.
28.	Nanotechnology in Primary Packaging Material	Exploration of nanotechnology applications in primary packaging materials is needed to enhance product quality and shelf life.
29.	Value-Added Seafoods and Testing Laboratory for ATLP culture Industry	Want innovations in value-added seafood products. Establish standardized testing laboratories.
30.	Microbial Testing Centre for the Seafood Industry	They requested to establish a microbial load testing centre specifically for seafood.
31.	Fresh prawn business: deshelling, shelf life, packaging, transportation:	Deshelling of shrimps is a major labor intensive process. There's also a pressing need to increase the shelf life of fresh prawns, along with developing cost effective and reusable cooling agents that do not affect the product's quality. Traditional ice methods are expensive and less efficient during transportation.
PETROCHEMICAL INDUSTRY		
32..	Technical support needed for chemical product manufacturing:	Chemical manufacturing units working with naphthalene, creosote oil, and similar compounds require process optimization and R&D support. Many current processes are outdated and inefficient.
YARN PRODUCTION PLANT		
33.	Upcycling virgin fabric scraps by training village women:	Despite having ample raw material, sanitization, sorting, and design processes are time-consuming. Market demand is low for sustainable upcycled products. There's a need to enhance creativity, train labor, and boost sustainable product awareness.
AGRICULTURE AND FOOD TECHNOLOGY		
34.	Soil Productivity Detection Technology (AI or IoT-based)	A technology to detect soil productivity, particularly those based on Artificial Intelligence (AI) or the Internet of Things (IoT), offers a comprehensive solution for assessing and optimizing soil conditions. This technology would revolutionize agriculture by offering accurate and data-driven insights into soil conditions.
35.	Utilization of Bottom Ash and Fly Ash	The waste management process produces residual materials which consist of fly ash, and bottom ash. The client is seeking suggestions for the utilization of fly ash and bottom ash in alternative applications, such as road construction or brick manufacturing
36.	Technology to Increase the Shelf-Life of Vegetables and Fruits	Extending the shelf life of fruits and vegetables has the potential to reduce food waste and improve food security. Hence, the development of technology to prolong the shelf life of vegetables would be of great benefit.
37.	Soil pH Improvement Technique	Increasing the pH of the soil has an impact on the nutrients available to the plants. Research in this area can help identify the optimal pH ranges for different crops and the associated nutrient availability.
38.	Food processing: fruits, spices, rice, cattle food:	There is a need to modernize and scale up food processing operations to handle a diverse range of products such as fruits, spices, rice, and cattle feed. This includes upgrading storage, packaging, and quality control infrastructure.
39.	Low-temperature freeze drying of fruits and vegetables:	The startup focuses on freeze drying technology at -40°C to lock in moisture. Key challenges include developing effective vacuum packaging techniques and preserving quality during storage and transportation.
40.	25 year old food processing unit needs MSME support, national facilitation:	Despite decades of operation, the food processing unit hasn't received sufficient support from MSMEs. It seeks comprehensive modernization and facilitation for expansion across India, including import/export planning and market access.
41.	Need for upgraded paint technology and machinery for bakery and food industry:	The industry is looking to modernize operations by upgrading existing paint technologies and acquiring new machinery suitable for food and bakery production. This includes equipment for mixing, baking, coating, and packaging.
42.	Domain knowledge gap in microbiology biotech lab to market transition:	Startups in microbiology and biotechnology face difficulties in commercializing lab innovations due to limited ERP systems, poor reverse logistics strategies, and a lack of mentoring for technology transfer.
43.	Import and Export and Food Processing:	Challenges include regulatory barriers, customs clearance delays, and lack of coordinated logistics. Coupled with food processing, it needs proper supply chain mechanisms and market linkage support.
LOGISTICS & SUPPLY CHAIN		

44.	Export Channels and Logistics:	The sector requires facilitation in building export channels, establishing logistics, and meeting compliance for international markets. There is also a need for infrastructure to streamline customs and documentation procedures.
45.	Logistic solutions for MSMEs and small-scale exporters:	There is a gap in efficient and cost-effective logistics tailored for small-scale industries. The aim is to build logistics solutions that cater to MSMEs with minimal overhead.
SUSTAINABLE PACKAGING / WASTE MANAGEMENT		
46.	Insufficient Digital Integration:	(i) Poor use of AI and data analytics in waste tracking, collection, optimization and facility management. (ii) Limited adoption of smart Bins, route optimization software and block chain for traceability.
Entrepreneurship, MSME & Ecosystem Development		
47.	Requirement of skilled technicians and manpower:	Industries face an acute shortage of skilled technicians and general manpower, limiting their ability to scale operations or maintain productivity. Upskilling and targeted recruitment are needed urgently.
48.	Availability of specialized and skilled labour:	A common issue across domains is the lack of both general and specialized skilled workers, particularly in technical and manufacturing sectors. This affects production efficiency and quality control.
49.	Lack of customer awareness about sustainable development solutions:	Startups offering eco-friendly products or sustainable solutions face difficulty in customer acquisition due to lack of awareness. Need marketing campaigns and customer education initiatives.
50.	Lead generation, industry connections; need student support:	Startups need help in generating leads, building B2B connections, and require students or interns for cost-effective marketing execution.
51.	Customer acquisition; lack of marketing knowledge:	Founders struggle to attract clients due to limited marketing expertise. Training and tools for effective outreach are essential.
52.	Facing competition from unregulated MSMEs:	Lack of awareness and operational standards among competitors undercuts professional startups. Need for branding, education, and market differentiation strategies.
53.	Competition with large-scale industries and pricing issues:	Startups struggle to compete with established players due to lower pricing power, transport costs, and poor quality raw materials. Market linkage and raw material quality assurance are needed
54.	Need both online and offline marketing strategies:	A balanced and integrated marketing plan is required to maximize brand visibility and customer reach, combining digital tools with on-ground engagement.
55.	Lack of reach in other colleges and communities:	Startups need access to student communities and cross-college collaboration to spread awareness and expand markets.
56.	Help with patenting support:	Innovators have prototypes or ideas but lack guidance on how to patent them. There is a need for help with patent filing, technology validation, and finding industrial partners.
57.	Prototyping and support for pilot testing:	Startups need access to facilities for prototype development and testing. Support is required to refine products based on user feedback and ensure they are production ready.
58.	Product-to-market journey; gap between concept and scale up:	There is a significant gap between developing a concept and scaling it to market. Startups require mentoring, financial support, and technical validation to make this transition
59.	Lack of access to IP services and legal consulting:	Startups often struggle with navigating the IP landscape, including filing patents, copyrights, or trademarks. Affordable access to legal consulting for IP matters is needed.
60.	Need for local community upliftment through entrepreneurship:	Entrepreneurs are seeking to build solutions that uplift local communities by creating jobs and solving grassroots issues. They need support in navigating government schemes, developing sustainable models, and ensuring long-term impact.

61.	Creating platforms for multi-sector B2B matchmaking:	There is a need for digital platforms that can match buyers and sellers across industries, especially for MSMEs. A trusted B2B interface can significantly streamline procurement and collaboration.
62.	Need for support across operations tech, HR, finance, logistics:	Startups struggle due to lack of holistic support and need guidance in multiple areas including hiring skilled HR, managing finances, leveraging technology effectively, and improving logistics. A one stop mentorship or incubation service is essential for sustainability.
63.	Need for an established ecosystem for MSMEs to collaborate:	Startups and MSMEs often work in isolation and lack platforms for collaboration, knowledge sharing, or joint ventures. Establishing physical or digital clusters with shared services could foster innovation and resource optimization.
64.	Value Addition in Cashew Products	There is considerable potential for expanding the range of value-added products. The industry is keen to develop innovations such as oil-less roasted cashews, nutritious energy bars, cashew milk, and cashew butter, and is exploring the adoption of advanced processing methods to create these products.
Education, Training & Academia		
65.	Lack of internships, no incubation centre, minimal tech collaboration:	The institution struggles to provide industry exposure due to a lack of internship opportunities, absence of an incubation center, and limited collaboration with tech hubs and R&D labs.
66.	Need for industrialist led workshops for students:	Students require more hands on training through workshops conducted by industry professionals to gain practical skills and become industry-ready.
67.	Lack of entrepreneurial mindset in students:	Most students aim for jobs rather than establishing enterprises. Institutions need programs that ignite entrepreneurial thinking and provide startup incubation support.
68.	Industry academia gap, need to enhance practical knowledge:	Theoretical education is insufficient to meet industry demands. Institutions must create models for practical exposure through internships, live projects, and academia-industry partnerships
69.	Awareness and Adoption	The cashew industry faces challenges due to low awareness and limited adoption of modern technologies and best practices, especially among small-scale farmers and processors. This lack of knowledge transfer and support hinders productivity, quality, and overall competitiveness.
70.	Establishment of a Skill Development Centre	Although Palasa's cashew industry employs a high proportion of women (about 90%), there is a significant shortage of skilled labor. To improve productivity, reliability, and innovation, the establishment of a dedicated skill development center is recommended. This would facilitate training for workers and stimulate growth and empowerment within the sector.