



## MANAGE Induction Training Program

### Inculcating the Professionalism for Future



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## Key Learnings from Each Day

Each day of the program offered valuable insights into various aspects of agricultural extension management.



# A Changing Role in Agricultural Extension: Past, Present & Future

The initial day of Induction Training offered a comprehensive overview of MANAGE, including its various activities, projects, and schemes since the institute's inception. Following this, Dr. Saravanan Raj (Director, MANAGE) provided insight into the evolving landscape of agricultural extension. This included learning about the paradigm shift from the traditional Transfer of Technology (ToT) model to a Networking and Partnership-based approach that emphasizes collaboration among institutions, the private sector, and community organizations. Finally, a group activity highlighted the practical applications of videos in agricultural extension, allowing me to grasp the concepts and implementation methods more effectively than through traditional reading and listening alone.



## Climate Smart Agriculture and Farmer's Mobilization

The second day focused on Climate Smart Agriculture (CSA) and strategies for building climate resilience. Key learning covered essential practices for tackling climate change, including Natural Farming, promoting stress-tolerant seed varieties, sustainable water management, Integrated Pest and Disease Management, Agroforestry, and the use of Crop Weather Advisory.



A central theme was that strengthening agricultural extension is crucial for a climate-resilient food system. Effective extension programs must be well-funded, participatory, and grounded in the latest science to empower farmers to adapt and mitigate climate change. We also explored the concept and necessity of Farmer Producer Organizations (FPOs), especially given challenges like fragmented land holdings, limited market access, and restricted credit. FPOs are vital for collective marketing efforts and post-harvest management, significantly aiding market supply and value chain management.



## Gender Nutrition and Market-Led Extension

The sessions on Gender, Nutrition, and Market-Led Extension highlighted the interconnected roles of women in agriculture and the urgency of integrating nutrition concerns into modern, market-driven extension services. A significant takeaway was acknowledging the substantial contribution of women farmers to the agricultural sector's growth.



Market-led extension (MLE) represents a necessary shift from a purely production-oriented approach to one driven by market demand and profitability. Discussions focused on how extension services must help farmers better connect with market opportunities to ensure producers gain profitable segments from market-led value chains. This requires training in market literacy, post-harvest technology, value addition, and entrepreneurial skills. The overall consensus advocated for a holistic, gender-sensitive, nutrition-focused, and market-responsive approach to extension.

## Soft Skills, ICT Initiatives, and e-Governance

The soft skills session emphasized the importance of professional attributes and used the analogy of the five elements of the Universe to stress the need for purpose, enthusiasm, a positive attitude, and emotional intelligence in the workplace. The session significantly increased my motivation and self-confidence.

The training also covered ICT Initiatives and e-Governance in Agriculture, focusing on major Government of India initiatives like the National e-Governance Plan in Agriculture (NeGP-A) and the Farmers' Portal. We gained practical knowledge on digital tools such as Kisan Call Centres and m-Kisan Portal.



## Seven Days, Seven Groups and Seven Insights

The final technical session focused on consolidating key takeaways, resulting in seven core messages collectively developed by the participants. Dr. Saravanan strongly encouraged us to ensure these messages are effectively implemented in our respective work areas.



## Institutional Visits and Inspiring Technologies

The institutional visits were highly beneficial and motivating. Exposure to research institutes and NGOs provided insight into real-life innovations. Some of the inspiring technologies include:

- Advanced soil health monitoring tools.
- Groundbreaking seed coating technology.
- Post-harvest and value addition technologies for millets and oilseeds.
- The advanced digital scanner for precision phenotyping observed at ICRISAT.
- The role of agribusiness incubation centers at MANAGE and other organizations.

These technologies powerfully demonstrated the potential for scaling sustainable and profitable practices in the field.

### National Institute of Rural Development and Panchayati Raj (NIRD&PR)

The day concluded with an insightful visit to NIRDPR, where we observed the design and implementation of Aquaponics integrated with horticulture. The ability to recycle and circulate pond water to vegetable beds was an impressive example of resource efficiency and a major field-visit takeaway.



गण्डीय ग्रामीण विकास एवं  
पंचायती गवर्नेंस  
National Institute of  
Rural Development & Panchayati Raj





**Access  
Livelihoods**

## Access Livelihoods Consulting (ALC)

Access Livelihood was established in 2005. This NGO has been steadfast in its mission to create equitable and sustainable livelihood opportunities, with a particular focus on women and youth. A key takeaway from observing their operations is the emphasis on a "Beehive model" for building producer enterprises, a testament to their commitment to collective growth and empowerment.





## ICAR - Indian Institute of Millets Research (IIMR)

The Indian Institute of Millets Research (IIMR) visit provided exposure to the diverse types of millets (three major and six minor). We saw the germplasm centre dedicated to conserving genetic diversity and the institute's strong focus on value addition (e.g., millet powders, cookies, boondi). IIMR also offers an incubation program for aspiring entrepreneurs interested in developing millet-based products, making the visit highly informative.



# ICAR-Indian Institute of Rice Research (IIRR), Hyderabad



The Indian Council of Agricultural Research-Indian Institute of Rice Research (ICAR-IIRR) Visit I gained hands-on experience with a newly developed, time-saving soil testing kit and learned about various rice varieties that are tolerant and resistant to biotic and abiotic stresses.



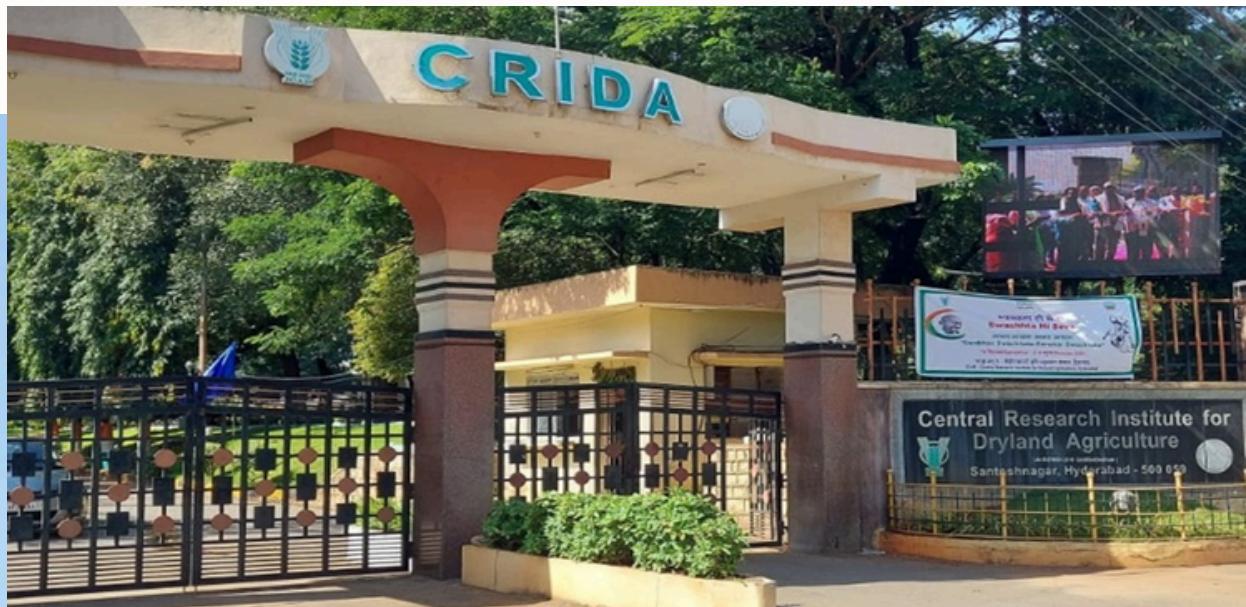
## ICAR-Indian Institute of Oilseeds Research (IIOR)



The visit to the Indian Institute of Oilseeds Research (IIOR) highlighted a prominent, advanced technology: the biopolymer seed coat. This is a crucial development for seed treatment that effectively utilises biofertilizers and biopesticides.

## ICAR - Central Research Institute for Dryland Agriculture (CRIDA)

At the Central Research Institute for Dryland Agriculture (CRIDA), we learned about the Weather-based Agro-Advisory tools developed by the institute, which are tailored for all states across India. The faculty members of CRIDA have also emphasized on networking and collaboration in the future for the successful implementation of any schemes or projects across the states.





## National Fisheries Development Board (NFDB)



The visit to the National Fisheries Development Board (NFDB) provided insight into various central sector schemes, including the Pradhan Mantri Matsya Sampada Yojana (PMMSY) and the Fisheries and Aquaculture Infrastructure Development Fund (FIDF). We also learned about the Recirculatory Aquaculture System (RAS), an advanced, highly controlled technology promoted by NFDB for sustainable fish production.



## ICRISAT and NMRI

The visit to the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) showcased its work on 11 major crops (three major millets, five minor millets, and three pulses). The institute maintains a global collection of 142,000 germplasm and has released 1,280 varieties since 1972.

New technologies observed included a digital scanner for precision phenotyping, capable of capturing data on up to 19 parameters simultaneously. A major takeaway was ICRISAT's success in rainwater conservation through watershed management and the creation of an artificial lake, which helps maintain a conducive micro-climate. We also learned about their work in regenerative agriculture, focusing on minimum tillage and multi-cropping to reduce greenhouse gas emissions.



The visit to the National Meat Research Institute (NMRI) was highly informative, beginning with an introduction from a faculty member and a brief address by the Director. We toured the facilities, including the highly hygienic and veterinarian-recommended slaughterhouse for goat and poultry. Although the technology is costly, its use is advisable for maintaining optimal cleanliness and public health. In the modern era, investing in this kind of advanced technology is essential for meat entrepreneurs.

## MANAGE-Centre for Innovation and Agripreneurship

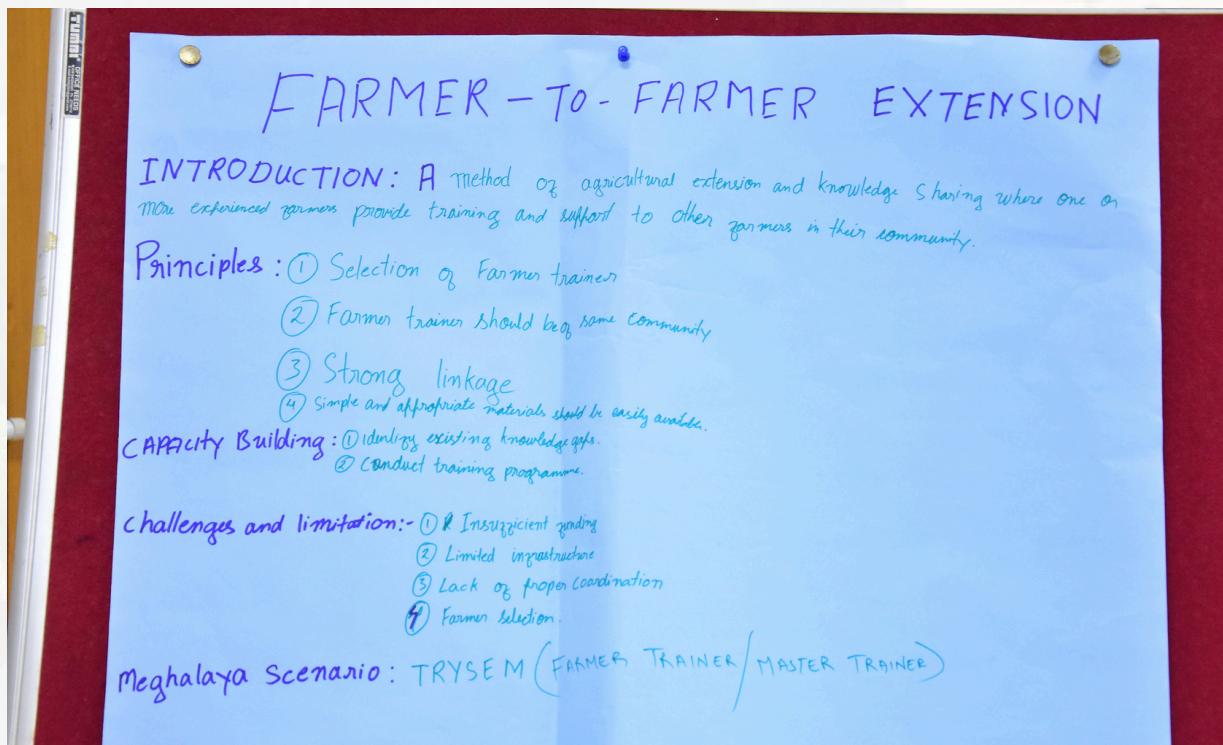
The final day introduced the MANAGE-Centre for Innovation and Agripreneurship (CIA), a MANAGE initiative offering various grant-in-aid schemes to entrepreneurs. It was inspiring to see the success stories of enterprises that have benefited from MANAGE's support and assistance. As an officer from Meghalaya, I am motivated to take this message back and encourage young entrepreneurs in my region to enroll in this valuable program.



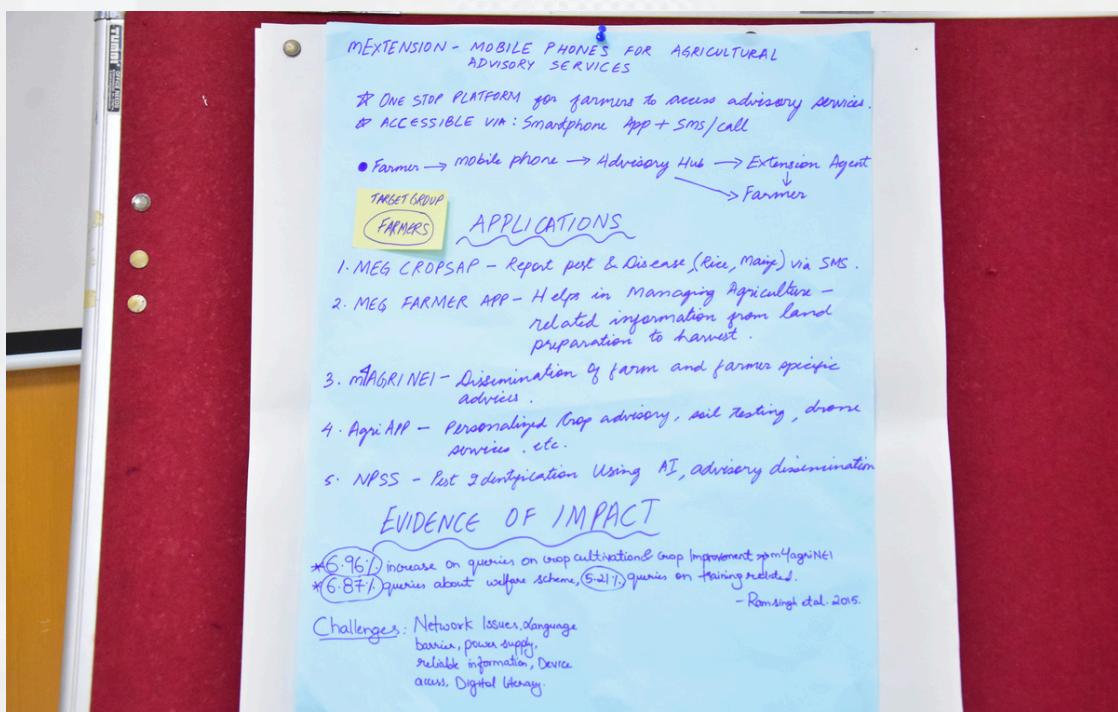
## Methodologies to Apply with Farmers

The knowledge gained will be central to planning and implementing highly effective, farmer-oriented extension programs. I will specifically emphasize participatory learning approaches, the use of digital tools for efficiency, and entrepreneurship promotion among rural youth and farmer groups. I plan to adopt proven methods such as:

- \* Farmer Field Schools (FFS).
- \* Video tools for both informative training and project documentation.
- \* Demonstration-based Learning to ensure farmers learn by doing.
- \* Capacity-building workshops and digital communication channels (including social media) to disseminate timely and targeted information.



## Application of Knowledge and Skills



## Technologies to Apply in Field Work



I intend to immediately promote and apply a comprehensive strategy in my field assignments to enhance productivity and sustainability. This includes:

- \* Implementing Climate-Smart Agriculture strategies.
- \* Utilizing mobile-based advisory services and digital tools for information dissemination.
- \* Promoting regular soil testing and Integrated Pest Management (IPM).
- \* Integrating Aquaponics with Kitchen Garden concepts at the household level.



## Training Experience

The training experience at MANAGE was enlightening, participatory, and enriching. It balances between lectures and the practical implications of the subject. It involves active participation from the participants inside the classroom. The training also provides theoretical learning with practical exposure through field visits, group discussions, group activities and experience sharing. The training created a balance between academic depth and real-world relevance.



## Change in Perspective on Agricultural Extension

The training at MANAGE was an enlightening, participatory, and enriching experience. It was well-designed to balance academic depth with real-world relevance, effectively blending classroom lectures with practical implications of the subject matter. This balance was achieved through active participant engagement, field visits, group activities, group discussions, and experience sharing, all of which provided valuable exposure.

Furthermore, the program profoundly changed my perspective on Agricultural Extension. I had previously viewed my role as solely focused on the Transfer of Technology (ToT), especially in rural settings. However, the sessions at the Norman Borlaug Training Hall and field visits revealed that modern agricultural extension goes far beyond technology transfer. I now understand it's fundamentally about facilitating learning, empowering farmers, and creating crucial market linkages. The program's focus on participatory, market-oriented, and ICT-enabled approaches significantly broadened my understanding of a modern extension system.

## Atmosphere and Environment during the Training



The atmosphere at MANAGE was vibrant and conducive to learning. The campus environment was serene, well-organized, and supported by highly professional and approachable faculty members. The beautifully maintained, green campus provided a peaceful backdrop that enhanced focus and reflection after intensive sessions. Participants felt encouraged to express their views, exchange experiences, and learn collaboratively. A strong peer-to-peer learning culture thrived, with participants eagerly sharing regional best practices and professional challenges during breaks and informal discussions. The daily scheduling was optimized to balance rigorous academic content with timely breaks, preventing burnout and sustaining engagement throughout the program.

## Most Appreciated Aspect of the Program

What I appreciated most was the diversity of learning methods—from expert lectures and active peer learning to comprehensive field visits. The resource persons' deep expertise and their willingness to share practical, on-the-ground insights made the sessions highly impactful. The field visits were particularly valuable; they not only imparted knowledge about research, technology, and development but also inspired me to be innovative in my own work. Strengthening collaboration with these central institutes will be essential for upscaling the potential of agricultural activities in our state through the adoption of demonstrated technologies.

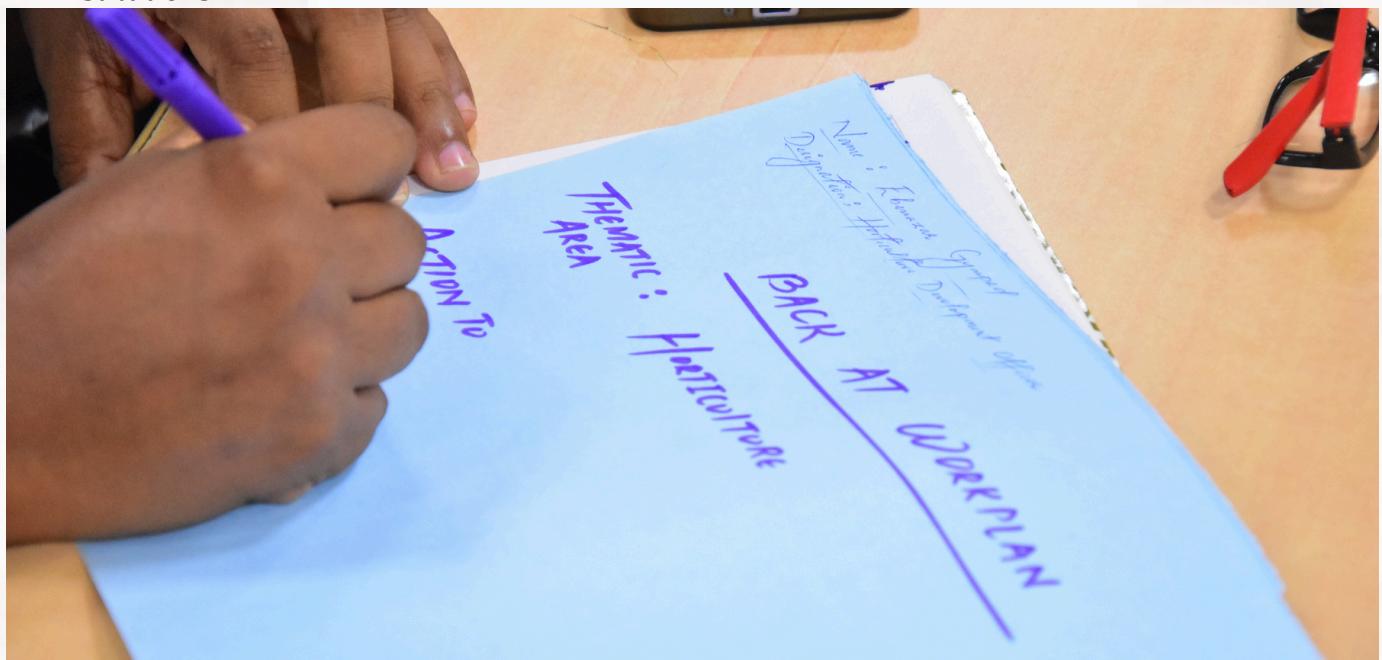
## Collaboration with MANAGE

I would be delighted to collaborate with MANAGE in future initiatives related to training, research, and project implementation. MANAGE's invaluable expertise and extensive network can play a crucial role in significantly enhancing the reach and impact of agricultural extension programs in my region.

## Back-at-Work Plan

Upon returning, my plan is to focus on the following key action points:

- Conducting awareness programs on digital extension tools and ICT for farmers.
- Facilitating the formation and strengthening of Farmer Producer Organizations (FPOs).
- Implementing and promoting climate-resilient agricultural practices and Scientific Natural Farming.
- Promoting entrepreneurship among rural youth.
- Initiating and solidifying collaborative linkages with MANAGE and other relevant research institutions.



## Experience During Hyderabad Visit

The Hyderabad visit was highly memorable. The city's unique blend of tradition and modernity, along with its rich cultural heritage and warm hospitality, made the overall experience enjoyable. The well-planned urban design and landscaping were noteworthy. Additionally, visits to local markets, the arts and craft village, and historical sites added a rich personal and cultural dimension to the professional training journey.



## Peer Interactions and Networking Opportunities

Interaction with expertise from MANAGE and other institutes gathered a collective information on the agricultural problems and solutions related to our state and the country as a whole. Interacting with officers from different districts and blocks fostered cross-learning and networking. Sharing experiences from different areas of the state enriched our understanding of varied agricultural challenges and solutions. These connections will serve as valuable professional networks for future collaboration.



## Most Significant Takeaway

My most significant professional takeaway was the necessity of systems thinking in agricultural extension—recognizing the farmer as part of a complex ecosystem that integrates markets, institutions, technologies, and policies.

Other major takeaways include:

- The innovative Biopolymer seed coating developed by the Indian Institute of Oilseeds Research.
- The critical strategies for practising Climate Smart Agriculture.
- The vital role of Farmer Producer Organizations (FPOs) for establishing robust market linkages.
- The efficiency of adopting the time-saving Soil Testing Kit (nicknamed "Maggi Time!").
- The potential of Aquaponics integration for improving farmer livelihoods.
- The importance of practising Soft Skills for professional effectiveness.



## My MANAGE Journey in a Few Lines

The MANAGE journey was a transformative learning experience that broadened my vision, strengthened my skills, and inspired me to be a proactive agent of change in agricultural extension.





MANAGE organised a comprehensive fourteen-day Induction Training Program for the newly recruited Meghalaya Agricultural Service (MAS-III) Officers of the Department of Agriculture and Farmers Welfare, Government of Meghalaya. The program was designed to inculcate strong technical and functional competencies among agricultural extension professionals, while simultaneously nurturing leadership qualities, team spirit, and a commitment to professional excellence. Emphasis was placed on enhancing digital skills, strengthening documentation capabilities, and fostering positive values and behavioural transformation essential for effective extension service delivery. Over the course of the program, participants were exposed to a diverse range of themes including the changing roles of agricultural extension, global good practices and innovation in extension, gender and nutrition-sensitive approaches, climate change adaptation, ICT applications in extension, and key soft skills for professional development. Structured institutional visits further enriched the learning experience by providing hands-on exposure to relevant technologies, methodologies, and innovative practices that officers can meaningfully apply in their engagement with farmers across Meghalaya.



MANAGE - Center for Agricultural Extension Innovations, Reforms and Agripreneurship (MANAGE- CAEIRA)  
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