



Rashtriya Krishi Vikas Yojana (RKVY) Remunerative Approaches for Agriculture and Allied Sector Rejuvenation (RAFTAAR)





Agripreneurship Orientation Programme (AOP) - Cohort 2

Centre for Innovation and Agripreneurship (CIA) (A Centre of Excellence in Agribusiness Incubation and Knowledge Partner of RKVY-RAFTAAR)

National Institute of Agricultural Extension Management (MANAGE) Hyderabad, India

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About the Publication

Agri-Startups highlighted in this publication, participated in the Agripreneurship Orientation Programme (AOP) and were part of the two-month residential training programme, conducted at MANAGE, Hyderabad, under the RKVY-RAFTAAR scheme of the Ministry of Agriculture and Farmers' Welfare (MoA & FW), Government of India.

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Smt. G. Jayalakshmi, IAS Director General, MANAGE

The prospects for increasing future agriculture rely on increased focus on innovations and entrepreneurship in agriculture sector. Bringing innovation to agriculture not only underpins the creation of new opportunities for agri startups but also opens new markets. Innovation when patented, production becomes smoother and it adds to the prosperity of the nation.

Twenty first Century has witnessed major change in the agricultural sector. The traditional agriculture has shifted to agribusiness in the past few years by many startups. Technological intervention in the field of agriculture, farm mechanization, digitalization has taken it to new heights. India's ranking in the innovation index has improved to 52 out of 126 countries. Innovation in agriculture is a need of the hour. Government of India has come up with many schemes.

RKVY-RAFTAAR is one such scheme which encourages innovations in agriculture by providing grant – in – aid to the entrepreneurs.

This coffee table book talks about the aspiring entrepreneurs of Agripreneurship Orientation Program Cohort 2 who have come up with number of innovative ideas to solve the existing problems and also to provide better services to farmers and other stakeholders.

(G. Jayalakshmi)





Dr. Saravanan Raj, Director (Agricultural Extension), MANAGE & Chief Executive Officer, MANAGE-CIA

For the fragmented and unorganized Agriculture sector in India, innovations can help the economy grow in the long run. The dearth of market linkages, services, and networks, are the major pressure points plaguing the agriculture sector. Incubators and accelerators have disrupted the Indian agricultural startup ecosystem in the past few years. Incubators can help agri startups by grooming entrepreneurs, channelling funds, maximizing business opportunities, and providing on-ground pilot testing facility.

We at MANAGE, seed the potentially disruptive ideas of the aspiring agripreneurs and support them to create a viable business model. The agripreneurs gain co-working space, technical and business mentoring, structured funding and networking support. This Coffee table book showcases the innovations of few agri startups which have the potential to make significant impact in the agri startup ecosystem.

(Saravanan Raj)

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01. Harithapatra

Harithapatra would like to work in the area of value chain development of Banginapalli Mangoes. Harithapatras' mission is to provide the Indian population a chemical residue free fruits and vegetables.

Problems Solutions



Non Certified Produce/ Pesticide residue Mangoes.

Unsafe ripening (Calcium Carbide/ China Ethylene Powder) of Mangoes.

Limited availability of Safe/ Pesticide residue free Mangoes in Summer season.

Scientifically approved harvesting (mature, sap free and along with stem) of Banginapalli Mangoes.

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Global GAP (Good Agriculture Practices) certified/Pesticide residue free Banginapalli Mangoes.

Use of Scientific Ethylene based Pressurized ripening chambers for Banginapalli Mangoes ripening.

To make even ripened and safe Banginapalli Mangoes available to the customers.

Name of Founder: Mr. Roja Chand Chiluveru

- Name of Startup: Harithapatra
- Address: 104, Narayani Residency, Bachupally
- e-Mail ID: harithapatra@rediffmail.com

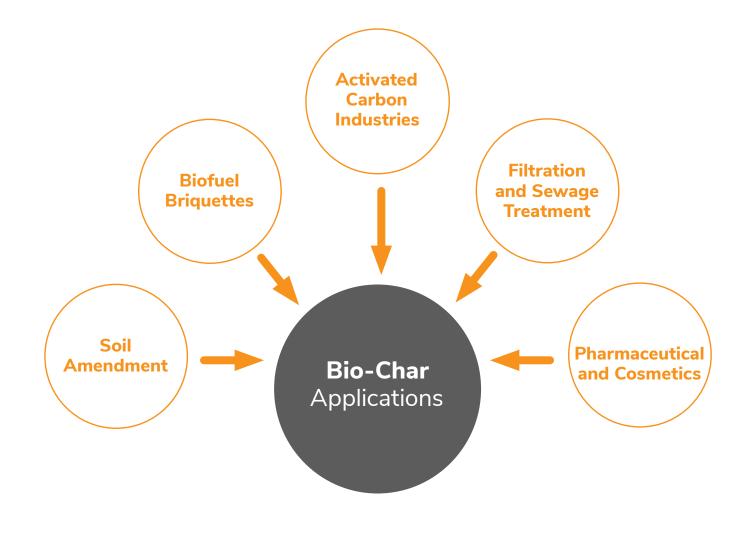
Mr. Roja Chand is a post graduate in agriculture and has 15 years of experience in different corporate companies. He also worked in value chain development for Banana Robusta. He is looking forward to provide the chemical residue free fruits and vegetables and reduce the post harvest loss through the adoption of improved technology.



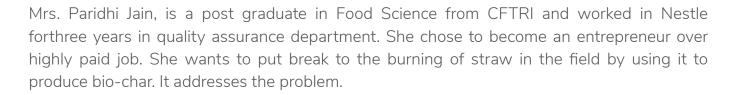


02. Krishi Uday

Krishi Uday has come up with an innovative idea of producing bio char out of farm waste like straws and stalks. Biochar helps adding fertility to the soil by increasing the soil sequestration.



Name of Founder:	Mrs. Paridhi Jain
Name of Startup:	Krishi Uday
Product Name:	Carbolyzer
Address:	Pipariya, District Hosangabad, M.P.
e-Mail ID:	paridhijain2012@gmail.com







03. Nutritious Feed to Domestic Animals

Total Mixed Ration (TMR) is a feed for cows, sheep and other domestic animals, that is made out of field waste like paddy straw, maize stalk, cotton stalk etc. Now a days, India is facing shortage of fodder crop especially in summer and lot of environmental pollution is recorded due to burning of crop residues. This innovation will address the problem of both fodder shortage and environmental pollution.

Animal nutrition made of farm waste can solve the problem of fodder shortage and pollution





Cattles are suffering due to fodder shortage

 $\mathbf{N}\mathbf{R}$







Farm waste burnt which leads to pollution

Name of Founder:	Mr. Jannu Kiran Kumar
Name of Startup:	Nutritious feed for animals
Address:	Paidipally, Warangal, Telangana
e-Mail ID:	jannu.kirankumar96@gmail.com

Mr. Jannu Kiran is an Agriculture graduate, hails from Andhra Pradesh. He was emphasized with the problem of fodder shortage and decided to address the problem which ended up him in becoming an entrepreneur.



04. Farm Experts

Farm experts is working on new age farm technologies. Urban farming is gaining importance now a days due to lack of land availability and requirement of green air. Hydroponics is one such technology which is widely adopted in metropolitan cities. A technology which entered India to meet the fodder demand has now being used to grow green leaves and few vegetables. To facilitate such people who wants to grow vegetables at their home, Farm Experts has come up with different types of hydroponic units like horizontal unit, vertical unit with customized size and dimensions.



Horizontal Hydroponic system suitabale for farms



Vertical Hydroponic system suitable for urban farming/gardening

Name of Founder:	Ms. P Sai Navya Sri
Name of Startup:	Farm Experts
Address:	C/O Human, Plot # 528, Gulmohar Colony, Near MMTS- Serilingampally, Hyderabad- 500019
e-Mail ID:	askfarmexperts@gmail.com, potlanavya1997@gmail.com



Ms. Navya is a vibrant woman who decided to become an entrepreneur while studying her 2nd year of B.Tech. She with the help of her brother came up with an idea to facilitate the urban farmers.

Along with developing the hydroponic units, she is generating revenue by selling the fruits and vegetables grown in hydroponic unit.



05. Home Town Harvest



Name of Founder: Ms. E K Sruthi

- Name of Startup: Home Town Harvest
- Address: 2-21#, Sangem, Warangal-506310, Telangana
- e-Mail ID: sruthisony50@gmail.com



Ms. Shruthi, E. K. is an agri graduate from Warangal district of Andhra Pradesh. She instead of choosing a job decided to become an entrepreneur. She enjoys farming activity, hence, she decided to grow vegetables and green leaves through hydroponics and aspiring to make contracts with super markets and urban retailers to sell them.



o6. Karimnagar Murrel Fish Seed Rearing Unit

Demand for murrel fish in the market is very high due to its taste. The challenges of murrel fish farming are addressed by this entrepreneur.

Problems

Solutions

Untimely availability of fingerlings

Middle men intervention

High rate of mortality

Poor linkage between seed rearing unit and farmer

Continuous rearing and supply of fingerlings

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Supplying directly to farmers by avoiding middle men

Careful transportation and consultancy services at reasonable price to farmers

Identifying the market and develop the market linkage

Name of Founder:	Mr. Parlapalli Mahesh
Name of Startup:	Karimnagar Murrel Fish Seed Rearing Unit
Address:	3-59, Shanagar, Ramadugu Mandal, Karimnagar, Telangana, 505531
e-Mail ID:	maheshprince16@gmail.com

Mr. Mahesh Parlapalli is a B.Sc graduate from Karimngar district of Telangana.

Mr. Mahesh identified the demand for Murrel Fish and trying to fill the gap between Fish farmer and the fingerlings supplier by supplying the fingerlings directly to the farmers.





07. Carbo Mills

Diabetics and obesity are the modern days problems due to change in work culture and lifestyles. Carbo mills provides an innovative advance milling solution which can reduce the glycemic index rice that could be consumed by the diabetic and obese people so that their blood sugar will not rise and help obese people to control weight without sacrificing their taste buds.

It's a new milling process which increases the resistant starch of rice which acts as fibre and don't get digested in the stomach so it allows less glucose to flow into blood which results low glycemic index of rice, ready to use by diabetic and obese people without hampering their health.

He has received proof of concept from the scientists of Indian Institute of Rice Research and also filed a patent.



Name of Founder:	Mr. Sohan Kumar Dandapat
Name of Startup:	Carbo Mills
Address:	Kochilapada, Madhapur, Pratappur, Baripada, Odisha - 757103
e-Mail ID:	sohan44gudluk@gmail.com



Mr. Sohan Kumar, who is pursuing MBA has an extreme interest in the field of agriculture and biology. Currently dealing with organic farming, zero budget natural farming, supply chain of paddy, hydroponics etc.

He aspires to become world's leading cater of diet conscious rice to solve the modern-day problems with continuous research, which will be helpful for the people to maintain their taste buds with value addition to rice and meeting global food requirements.



08. Krishi Kranthi

An agro-advisory to promote the development of farmer collectives and consumer groups for the production, distribution and consumption of naturally cultivated food produce under the subscription-based farmer-to-consumer (F2C) community-supported agriculture (CSA) model. The agro-advisory aims to successfully establish multiple Community Supported Agriculture (CSA) groups all over the country.



Name of Founder: Mr. Shashi Arun Khakhar

Name of Startup: Krishi Kranti

Address: Pune

e-Mail ID: skhakhar@hotmail.com

Mr. Shashi Arun Khakhar, is a post graduate in Food Science from Pune, Maharashtra with 15 years of experience in diverse industries including food processing, construction and hospitality. He aspires to contribute towards the health and nutrition of consumers, safety and economic well-being of farmers, protect the environment and make a net positive impact towards the society through natural farming.





09. TechIn AG

TechInAg is delivering robotic systems for increasing efficiency, productivity and sustainability in the farming. It also provides the highly interactive mobile application to remotely monitor our farm condition and get some suggestions based on climatic conditions.



Pest Information

Name of Startup:	TechInAg
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Address: 2-1599,LBS Road, Piler, Chittor, Andhra Pradesh, India-517214.

e-Mail ID: shaikalthaf@gmail.com



He is an undergraduate in the department of Electronics and Communication Engineering and Robotics lab student co-ordinator at IIIT RK Valley. He aspires to become worlds leading cater of robotic and dynamic systems to solve the problems in farming at affordable price, which will be helpful in meeting the production requirement.



10. Samaikya Krishi

Easy-Kheti is a mobile app based E-commerce product of Samaikya Krishi, which provides the farmer with option to book any kind of Agri-input products and skilled, unskilled Labour which are available in local villages and delivering/transporting them direct to farms.



Name of Founder: Mr. K V Vikas Reddy

Name of Startup:	Samaikya Krishi
Address:	3-131/404, SLN Swami Nivas, Opp. e-seva , Vikasnagar, Dilshukh Nagar, Hyderabad, Telangana - 500060
e-Mail ID:	kesamreddyv@gmail.com



Mr. K . V. Vikas Reddy from Pulivendula region of Andhra Pradesh has pursued his B.Tech from IIT Jodhpur.

As he is from a farming background, he is emotionally attached to farmers. During his B.Tech he come across the problems faced by farmers and took a decision to serve them with technology.



11. Prakruthi Service

Prakruthi has a vision to spread wings to every individual with natural fruits and vegetables. They rent farm fields to customers to grow the customized vegetables.

- 1. Generates employment to the rural youth.
- 2. Natural productsto customers.
- 3. Awareness to customers and their families through monthly 'Happy Events'.

Prakruthi service aims at door to door delivery of the fruits and vegetables to the customer directly from farm.

- 1. A Liquid made of leaves – helps to keeps veggies fresh and increases the shelf life.
- 2. Testing of products at doorsteps for regular customers.

Name of Founder: Mr. P Sreenivasulu

Name of Startup:	Prakruthi Service
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- Address: Kandula Estate, Opp RM Office, Kadapa 516002
- e-Mail ID: sreenivasulu9996@gmail.com

Mr. P Sreenivasulu is a MBA graduate from Andhra Pradesh. He aims to solve the uncertainty faced by farmers due to price fluctuations. Hence, he came up with "Prakruthi Service" which directly reaches the customer avoiding the middle men. This results in farmers' getting large portion of the consumer payment.





12. Farmscanindia

A brain child of resolving, farmer distress during crop insurance claims. Farm scan solutions aims at providing information regarding agri census, crop damage report through satellite images which is a more reliable data for providing insurance.



Name of Founder: Mrs. Sripriya S

Name of Startup: Farmscanindia

Address: 401/1, S. C. Road, Sheshadripuram Bangalore -560020 Sheshadripuram

e-Mail ID: prasd11@gmail.com

Mrs. Sripriya S is a B.E electrical graduate from Bengaluru. She at the age of 50 decided to become an entrepreneur. She look forward to fill the gap between crop insurance agencies and farmers by providing a real time information through satellite images.





13. Protec Agro



Protec Agro is becoming an excellent platform to the farmers for Quality crop consultancy and quality input and add innovation in agriculture i.e., Field monitoring and pest analysis by experts. On farm delivery of agri inputs, hi-tech machinery support to small and marginal farmers also ensured.

Mr. Deepak Anjana is a B.Sc (Agriculture) graduate, from Madhya Pradesh who wants to be a job provider than a job seeker. So he decided to be an entrepreneur.

Now he has come up with an innovative idea to become a technology partner to farmers by providing them all crop cultivation related information through mobile apps and service.



Name of Founder: Mr. Deepak Anjana

Name of Startup: Protec Agro

Address: 22/4 village Bamnapati Ujjai Madhya Pradesh 456222

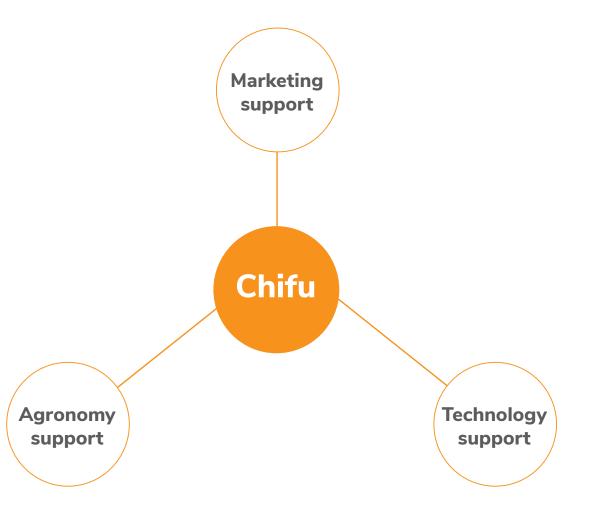
e-Mail ID: deepanjana65@gmail.com





14. Chifu

The startup aims to provide a suite of services to the farmers, so that farmers can focus on core farming while the start-up attempts to minimize the risks of weather & market through a unique business model.



Name of Founder: Mr. Kiran Naik

- Name of Startup: Chifu
- Address: 102, SSD Heights, Friends Colony, Manikonda, Puppalaguda, Hyderabad – 500089
- e-Mail ID: kirans90@gmail.com

Mr. Kiran is a graduate from IIT Madras and is extremely passionate about agriculture in India. Over the last two years, Kiran has developed a deep understanding of the FnV space (Fruits and Vegetables) and has come up with a business model in agriculture sector.

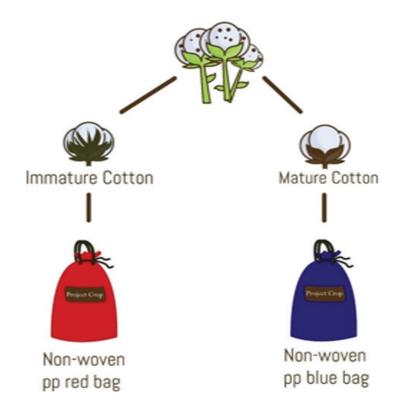




15. Project Crop

Project crop is an agri packaging and processing services startup that aims to provide suitable packaging products to cotton farmers at the time of picking to separate and store variants of cotton.

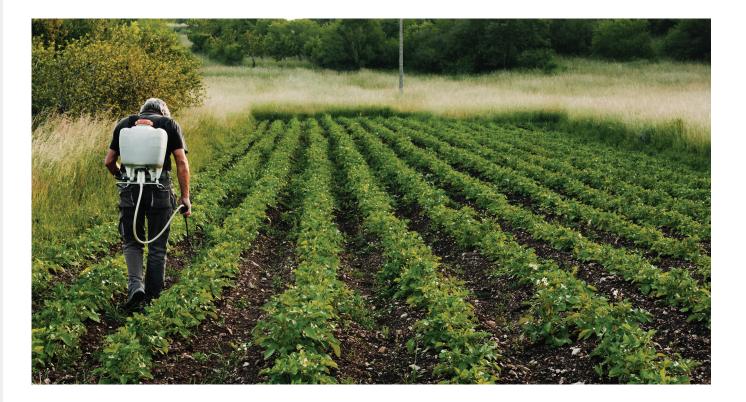
The dual colour non-woven poly propylene bags can reduce 80 percent of contamination and also provide means to store mature and immature cotton separately, if provided at picking level.



Name of Founder: Mr. Krishna Ravuri

- Name of Startup: Project Crop
- Address: 1-75/5/28 Road no 2 Srisairamnagar Boduppal
- e-Mail ID: krishnaravuri113@gmail.com

Mr. Krishna Ravuri has completed his Bachelors in Mechanical Engineering and is currently pursing his PG Diploma in Environmental sciences and sustainable development. He aspires to capture the Agri-supply chain ecosystem with sustainable eco-friendly packing materials.





16. S & H Dairy Products

S & H Dairy products makes contract with farmers, provide them consultancy services to produce quality milk and procure the milk from farmers.

The procured milk is processed without the intervention of chemicals that has a high shelf life.



Name of Founder: Mr. Oggu Surya

- Name of Startup: S&H Dairy Products
- Address: H-NO: 2-176, Itharajpalli, Sulthanabad, Peddapalli
- e-Mail ID: reddygaru3056@gmail.com

Mr. Oggu Surya hails from Karimnagar, a district in Telangana. He has completed his graduation in Agricultural Engineering where he has been exposed to real time practices in agriculture.





17. Ginger and Goodness (G&G)

"Ginger" is renowned for its medicinal value, here is a story of ginger and goodness. Ginger based soft drinks like ginger ale, ginger beer with zero alcoholic content, ginger syrup, and cocktail mixtures based on in house developed recipes.



Name of Founder: Mrs. Bhavya, Kotesh

Name of Startup: Ginger & Goodness

Address: 503, Lalitha Nivas, Dattatreya Colony, Asif Nagar, Hyderabad-500028.

e-Mail ID: bhavya.kotesh@gmail.com

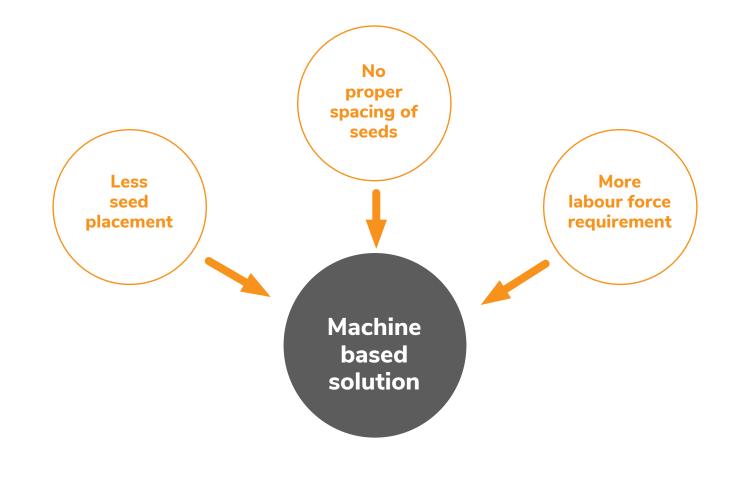
Mrs. Bhavya Kotesh, who got married at the age of 18 is a mother of 2 kids. But neither the marriage nor the children is a barrier for her to become an entrepreneur. She is not from agricultural background but she has identified the gaps and recognized the opportunities in the agriculture as a business.



18. Smart Agri Manufacturers

The startup is manufacturing innovative machinery to solve the farmer's day to day problems.

This startup created a prototype, a portable machine which can sow tiny seeds on nursery bed maintaining uniformity.



Name of Founder:	Mr. A Raghu Kumar
Name of Startup:	Smart Agri Manufacturers
Address:	H.No: 2-108/6/27/44, B.L Nagar, Boduppal, Hyderabad - 500039
e-Mail ID:	raghu.mail12@yahoo.com

Mr. A. Raghu Kumar have completed his engineering in electronics & communication. Contrasting his field of study he chose to practice Organic Farming. Understanding the grassroot problems. Mr. Raghu wants to provide machine based solutions to farmer's day-to-day problems through his startup.







RKVY-RAFTAAR

Rashtriya Krishi Vikas Yojana – Remunerative Approaches for Agriculture and Allied Sector Rejuvenation (RKVY – RAFTAAR) was launched in 2017-18 by the Ministry of Agriculture and Farmers' Welfare (MoA & FW), Government of India, to give impetus to agriculture and allied sectors through promotion of innovation and agripreneurship by facilitation of financial aid to agribusiness incubation centres.

The objective of RKVY-RAFTAAR is to support incubation of agribusiness by tapping and harnessing the innovations and technologies for creating new ventures in agriculture. Under regular RKVY-RAFTAAR scheme, 70% of the annual outlay is allocated among States according to the given criteria under three heads, viz., (1) Infrastructure & Assets; (2) Valueaddition- linked Production Projects (Agribusiness Models); and (3) Flexi Funds.

The Innovation and agri-entrepreneurship development comes under RKVY-RAFTAAR special subschemes. Under this, 10% of the annual outlay is allocated for encouraging innovation and agri entrepreneurs through skill development and financial support. It will support incubates, incubation centres, Krishi Vigyan Kendras (KVKs), awards, etc.

To specifically cater to the needs and approaches for agribusiness promotion, the Government of India launched a remodelled RKVY-RAFTAAR in 2017-18 with an element of innovation and agrientrepreneurship. This initiative strives to provide an impetus to promote agripreneurship and agritech startups. In this process, incubation facilities and expertise already available with participating academic, technical, management and R & D institutions in the country shall be utilised on an individual or collective basis to harness their synergies.

www.rkvy.nic.in



MANAGE-CIA

MANAGE – Centre for Innovation and Agripreneurship (CIA) is a Centre of Excellence (CoE) in Agribusiness Incubation and Knowledge Partner for strengthening, hand-holding and demonstrating best practices to the RKVY-RAFTAAR Agri-Business Incubators (R-ABIs).

MANAGE was established in 1987, as the National Centre for Management of Agricultural Extension at Hyderabad, by the Ministry of Agriculture & Farmers Welfare, Government of India, as an autonomous Institute. In recognition of its importance and expansion of activities all over the country, its status was elevated to that of a National Institute in 1992 and rechristened to its present name, i.e., National Institute of Agricultural Extension Management. MANAGE is the Indian response to challenges of agricultural extension in a rapidly growing and diverse agriculture sector.

MANAGE strives to nourish agri-startups at every stage and reinforces its unflgging support to all such agri-startups and agripreneurs, who contribute to the betterment of the agricultural and allied sectors, and thereby contribute to the country's GDP and economic growth.

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