Brief note on Agri. Innovation Center

The Agri-innovation centre at UAS, Bangalore will nurture and strengthen the Agri. innovation and entrepreneurship. The aim is to foster cutting edge innovations in Agri based sector leading to job creation and product development resulting in the economic benefits to the farming sector.

The incubator centers are becoming instrumental in translating the potential scientific discoveries into products for economic development. Unlike IT and pharma area, the Agri entrepreneurship has just begun its impact in contribution to economic development.

Even though many Agri. entrepreneurs started their ventures, there was no visible impact so far. The major reason being, these startups did not focus on technologies that were driven by the leads obtained by the scientific discoveries. The consensus is that the startups that are incubated at academic institutions did well signifying the need for hand holding of the startup entrepreneurs by academia. From this context, strengthening incubation centre at academic institute like our university has relevance

The centre will be a virtual incubation centre with the participation of several departments/research centers of the university in the incubation activity. Yet another novel feature of the centre is to function as a Knowledge centre of Agri-based technologies with commercial potential and as a repository of biological material in terms of seeds, QTL and trait donor lines, microbial strains, genomic resources which can be outsourced by entrepreneurs to develop innovative products and processes. The Agri. innovation Centre addresses specific thematic areas which have high potential for Agric entrepreneurship and to develop commercially viable products by the entrepreneurs.

The deliverables of the Agri. innovation Centre include:

- Nurturing innovations to develop technologies and products
- Develop entrepreneurship in Agri-based activities to startups
- Skill development of entrepreneurs

- Facilitate commercialization of technology by startups
- Structured information of the potential technologies and Biological material

Thematic Areas:

- 1. Crop improvement
- 2. Crop protection
- 3. Microbiology
 - a. Biofuel
 - b. Biofertilizer
 - c. Mushroom cultivation
 - d. Composting technologies
- 4. Agriculture engineering and Post harvest technology
 - a. Agricultural implements
- 5. Biofertilizers, Biopesticide and Bio-weedicides
- 6. Value addition and processing
- 7. Marketing and digital farming
- 8. Crop production
- 9. Diagnostics
- 10. Agro-chemicals including synthetic molecule development as pesticides, soluble fertilizers, phyto-hormonesetc
- 11. Plant Breeding and Seed Production.
- 12. Precision Agriculture Protective cultivation, aeroponics

So with this context Agri.Innovation Centre has started in Aug, 2016 to nurture and Strengthen Agriculture innovation and entrepreneurship and to incubate start ups and capitalize on the knowledge base existing at UAS, B.

Objectives

Major Objective:

Developing a Agri. Innovation Centre to incubate start ups to translate innovative ideas to develop commercially viable products from existing scientific leads/technologies in the area of Agriculture.

Specific Objectives:

- Develop Entrepreneurship and provide opportunities to convert their innovative ideas into technologies and products
- Develop modalities to nurture start upsand facilitate entrepreneurs to initiate their programmes. Provide physical and technical expertise and help fine tune their concepts into products
- Identify few deserving entrepreneurs and support the implementation of their programmes.
- To facilitate entrepreneurs to obtain external funding to execute their programmes.
- To nurture the entrepreneurs to establish a self sustainedAgri business activities, and commercialization of their products.

Establishment of Agri. Startup programme (Under UAS-B initiative)

In order to pave the way for PhD graduates, P. G students, farmers, and unemployed youths to implement their ideas, Vice chancellor suggested starting an Agri. Startup (under UAS-B initiatives) programme with low budget.

Upon approval of Vice chancellor, a broader umbrella of Agri. Innovation Center was formed on Jan, 2019.



Conceptual framework



Following committees have been formed to monitor the Agri. Innovation centre

Management committee for UAS (B) Agri. innovation centre (AIC)

1.	Dr. S. Rajendra Prasad, Vice Chancellor, UAS, Bengaluru	:	Chairperson
2.	Director of Research, UAS, Bengaluru	:	Co-Chairperson
3.	Dean (Agri), UAS, Bengaluru	:	Member
4.	Dean (PGS), UAS, Bengaluru	:	Member
5.	Prof. M. Udayakumar, Professor, UAS-B	:	Expert Member
6.	Dr D. P. Kumar, Emeritus Professor, Dept of Horticulture	:	Member
7.	Dr. P. H. RamanjiniGowda, Emeritus Professor, Dept. of Plant Biotechnology	:	Member
8.	Dr. H. S. Subramanya, Project consultant	:	Member
8.	Dr. Harinikumar K.M, Professor, Dept. of Plant Biotechnology, UAS-B	:	Co-ordinator
9.	Dr. VeenaS. Anil, Professor, Dept. of Plant Biotechnology, UAS-B	:	Co- coordinator

Executive Committee for Agri. Startup programme (Under UAS-B initiative)

1	Dean (PGS), UAS(B)	:	Chairperson
2	Dean (Agri), CoA, GKVK	:	Co-Chairperson
3	Associate Director of Research(Head Quarters)	:	Member
4	Prof. M. Udayakumar, Professor	:	Member
5	Dr D. P. Kumar, Emeritus Professor, Dept of Hortioculture, GKVK,	:	Member
	UAS-B		
6	Dr P.H. RamanjiniGowda, Emeritus Professor, Dept. of	:	Member
	Biotechnology, GKVK, UAS-B		
7	Respective University Head and HODs(Depending on the technology)	:	Member
8	Dr. Veena S. Anil, Professor, Dept. of Biotechnology, GKVK, UAS-B	:	Co-coordinator
9	Dr. Harinikumar K. M, Professor, Dept. of Biotechnology, GKVK,	:	Co-ordinator and
	UAS-B		convener

Co-ordination committee for UAS-B – C-CAMP Agri. Innovation Centre

1.	Dr. S. Rajendra Prasad, Vice Chancellor, UAS, Bengaluru	:	Chairperson
2.	Director of Research, UAS, Bengaluru	:	Co-Chairperson
3.	Dr. TaslimarifSaiyed, CEO & Director, C-CAMP	:	Co-Chairperson
4.	Dean (Agri), CoA, GKVK	:	Member
5.	Dean (PGS), UAS, Bengaluru	:	Member
6.	Dr D. P. Kumar, Emeritus Professor, Dept of Hortioculture, GKVK,	:	Member
	UAS-B		
7.	Prof. M. Udayakumar, UAS-B	:	Member
8.	Nominated member as invitee from Bangalore Life Science Cluster	:	Member
	(NCBS, InStem, C-CAMP)		
9.	HoD of the Dept. of Plant Biotechnology	:	Member
10.	Dr. VeenaS. Anil, Professor& Co-Coordinator, Dept. of Plant Biotechnology,	:	Member
	UAS-B		
11.	Programme Manager, Entrepreneurship and Innovation, C-CAMP	:	Member
12.	Sr. Programme Manager, Entrepreneurship and Innovation, C-CAMP	:	Member Co-
			Convener
13.	Dr. Harinikumar K.M, Professor& Co-ordinator, Dept. of Plant	:	Member
	Biotechnology, UAS-B		Convener

Executive Committee for K-Tech TBI for UAS-B – C-CAMP Agri. Innovation Centre

1.	Dr. Taslimarif Saiyed, CEO & Director, C-CAMP	:	Chairperson
2.	Director of Research, UAS, Bengaluru	:	Co-Chairperson
3.	Dr P.H. RamanjiniGowda, Emeritus Professor, Dept. of	:	Member
	Biotechnology, UAS-B		
4.	Dr. PratibhaBoga-Kamat, Senior Programme Manager,	:	Member
	Entrepreneurship, C-CAMP		
5.	Dr. Veena S. Anil, Professor and Co-Coordinator of Agri. Innovation	•	Co-convener
	Centre		
6.	DrGoda Krishna, Manager, Incubation Programme, C-CAMP	:	Member
7.	Dr. Harinikumar K. M, Professor and Co-ordinator of Agri. Innovation	•	convener
	Centre, Dept. of Biotechnology, UAS-B		

Now the Agri. Innovation Centre is offering THREE broad models of Incubation

1. Under UAS-B initiatives

I. <u>Agri StartUp</u>: Under this Model, the Incubatees will be provided space and will physically incubate their start-up idea at the UAS-B Agri Innovation Centre, Bangalore.

Rental Model:

- The incubation fee for the incubatees registering as internal incubatee will be Rs 6,000/- p.m. and shall deposit an advance of 3 months of incubation fee *i.e.*,Rs 18,000/- as refundable deposit. Registration will have to be renewed after 11 months.
- The incubation fee paid by the incubatee is for the work space allotted to him/her and the equipment charges should be paid by them additionally on the daily usage basis.
- The equipment charges will be finalized by the Agri. Startup Executive committee involving HODs/ Scheme Head/ Mentor.
- II. <u>External Registrant Incubatees</u>: Under this Model, interested incubatees can register to virtually incubate at the UAS-BAgri Innovation Centre (without physically Incubating at the Centre).

Rental Model:

- Registration will be for a period of three years. The registration fee for this Model of Incubation will be Rs 20,000/- p.a. for Individuals (Farmers, Fresh start ups and Academia). Registration will have to be renewed after a period of three years.
- For the External registered Incubatees besides the general services, access to other facilities will be based on the nature of the facilities availed.

2. In collaboration with other incubation facilities such as C-CAMP

III. <u>In-House Incubatees</u>: Under this Model, the Incubatees will be provided space and will physically incubate their start-up idea at the UAS(B)-C-CAMP Agri. Innovation Centre, Bangalore.

Rental Model:

- For the In-house Incubatees-the rental charges will be based on the facilities provided to the incubatees (equipment and running costs).Incubatees will have different options depending on the number of scientists in the team, typically half a bench (3 scientists) in wet lab or a full bench (6 scientists) in the wet lab or space for lesser number of scientists.
- Under the In-house model Rentals was fixed at Rs 20,000/- per month for two chair space (work bench with designated space), an additional chair space maybe offered with additional Rs 10,000/- per month. Additional charges for field experiments maybe applicable.
- In addition to Rentals for In-House Incubation model, the Service providers also give a percentage (10-20%) of the service profits to the Agri Innovation Centre.