



Submitted Institute Data for Atal Ranking of Institutions on Innovation Achievements (ARIIA) - 2020-21 Institute Name: ICAR - National Dairy Research Institute [ARI-U-0171]

List all the departments / centers / units are part of innovation and startup ecosystem of the institite

Department / Center / Unit Name	Type of Department / Center / Unit	Mention the Stream / Discipline / Sector of focus	Department / Center / Unit Level	Program Type	Student / Benificiary Strength (2019-20)	Academic Staff Strength (2019-20)	Non-academic Staff Strength (2019-20)
National Dairy Research Institute	Academic Department with lab facility	Dairy Science	At all level	Both	793	161	681

Participation of HEI in Innovation & Entrepreneurship Initiatives of Ministry of Education (Till Today)

Programs/Initiatives	Status	Registration ID
Adopted National Innovation and Start-up Policy at the HEI	Yes	Not Required
Establishment of Institution's Innovation Council (IIC) at HEI	No	Not Required
Trained Innovation Ambassadors at HEI	Yes	Not Required
Participation in Smart India Hackathon (SIH)	No	Not Required
Facilitated listing start-ups/ technologies in Young India combating COVID with Knowledge, Technology and Innovation (YUKTI 2.0) portal of MIC	No	Not Required
Participation in National Education Alliance of Technology (NEAT)	No	Not Required

Details of Co-curricular events/programs related to Innovation, IPR and Entrepreneurship/Start-up Conducted by the HEI

Smo	Name of Program (Full Name)	Program Theme	Program Type	Program Category	Organizin g Departm ent / Centre / Student Body Name	Program Start Date	Program End Date	Program Duration(i n Days)	Program Location	Internal Participa nts (Student)	Internal Participa nts (Faculty)	External Participa nts (Student)	External Participa nts (Faculty)	Total Number of Participa nts	Had institute spent expenses either from own resource/received fund to organise the program/activity/event?	Did any of the participants received any awards/recognition for startup / innovation ideas / research?
1	Milk Processi ng and Value Addition	Entrepre neurship/ Startup	Orientatio n Session	Institute Lead Activity	Society for Innovatio n and Entrepre neurship in Dairying (SINED- TBI)	01-04-20 19 00:00:00	10-04-20 19 00:00:00	10	Within Campus	0	0	21	0	21	No	No

Details of Co-curricular events/programs related to Innovation, IPR and Entrepreneurship/Start-up Conducted by the HEI

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2	Commerc ial Dairy Farming	IPR	Orientatio n Session	Institute Lead Activity	Society for Innovatio n and Entrepre neurship in Dairying (SINED- TBI)	22-04-20 19 00:00:00	27-04-20 19 00:00:00	6	Within Campus	0	0	13	0	13	No	No
3	Commerc ial Dairy Farming	Entrepre neurship/ Startup	Orientatio n Session	Institute Lead Activity	Society for Innovatio n and Entrepre neurship in Dairying (SINED- TBI)	17-06-20 19 00:00:00	22-06-20 19 00:00:00	6	Within Campus	0	0	18	0	18	No	No
4	Milk Processi ng and Value Addition	Entrepre neurship/ Startup	Orientatio n Session	Institute Lead Activity	Society for Innovatio n and Entrepre neurship in Dairying (SINED- TBI)	01-07-20 19 00:00:00	10-07-20 19 00:00:00	10	Within Campus	0	0	15	0	15	No	No
5	Commerc ial Dairy Farming	Entrepre neurship/ Startup	Orientatio n Session	Institute Lead Activity	Society for Innovatio n and Entrepre neurship in Dairying (SINED- TBI)	15-07-20 19 00:00:00	20-07-20 19 00:00:00	6	Within Campus	0	0	14	0	14	No	No
6	Commerc ial Dairy Farming	Entrepre neurship/ Startup	Orientatio n Session	Institute Lead Activity	Society for Innovatio n and Entrepre neurship in Dairying (SINED- TBI)	26-08-20 19 00:00:00	31-08-20 19 00:00:00	6	Within Campus	0	0	13	0	13	No	No
7	Milk Processi ng and Value Addition	IPR	Orientatio n Session	Institute Lead Activity	Society for Innovatio n and Entrepre neurship in Dairying (SINED- TBI)	02-09-20 19 00:00:00	11-09-20 19 00:00:00	10	Within Campus	0	0	8	0	8	No	No

Details of Co-curricular events/programs related to Innovation, IPR and Entrepreneurship/Start-up Conducted by the HEI

Dota		ourrioulu	il cvento	program	15 Telatet		ration, n	IT UNU E	ind opion	ourompre	start up	Sonauoli				
8	Commerc ial Dairy Farming	Entrepre neurship/ Startup	Orientatio n Session	Institute Lead Activity	Society for Innovatio n and Entrepre neurship in Dairying (SINED- TBI)	14-10-20 19 00:00:00	19-10-20 19 00:00:00	6	Within Campus	0	0	13	0	13	No	No
9	Milk Processi ng and Value Addition	Entrepre neurship/ Startup	Orientatio n Session	Institute Lead Activity	Society for Innovatio n and Entrepre neurship in Dairying (SINED- TBI)	16-12-20 19 00:00:00	25-12-20 19 00:00:00	10	Within Campus	0	0	14	0	14	No	Νο
10	Commerc ial Dairy Farming	Entrepre neurship/ Startup	Orientatio n Session	Institute Lead Activity	Society for Innovatio n and Entrepre neurship in Dairying (SINED- TBI)	23-12-20 19 00:00:00	28-12-20 19 00:00:00	6	Within Campus	0	0	19	0	19	No	No
11	Commerc ial Dairy Farming	Entrepre neurship/ Startup	Orientatio n Session	Institute Lead Activity	Society for Innovatio n and Entrepre neurship in Dairying (SINED- TBI)	02-03-20 20 00:00:00	07-03-20 20 00:00:00	6	Within Campus	0	0	26	0	26	No	No
12	Commerc ial Dairy Farming and Milk Processi ng	Entrepre neurship/ Startup	Orientatio n Session	Institute Lead Activity	Society for Innovatio n and Entrepre neurship in Dairying (SINED- TBI)	16-03-20 20 00:00:00	25-03-20 20 00:00:00	10	Within Campus	0	0	21	0	21	No	No
13	Entrepre neurship Develop ment Awarene ss Program me	Entrepre neurship/ Startup	Awarene ss	Institute Lead Activity	ICAR- National Dairy Research Institute Karnal	17-08-20 19 00:00:00	17-08-20 19 00:00:00	1	Within Campus	234	5	0	0	239	No	No

Details of Students, Faculties/Staff Participation/Representation in Co-curricular events/programs related to Innovation, IPR and Entrepreneurship/Start-up at the State, National and (or) International Level (Organized by External Organizations) sent by the HEI

Srno	Name of Program (Full Name)	Program Theme	Program Type	Organizin g Agency / Institute Name	Organizin g Agency Type	Program Start Date	Program End Date	Program Duration(i n Days)	Participa nts (Students)	Participa nts (Faculty)	Total Number of Participa	Awards/R ecognitio ns/Achiev ements	Award / Position / Recogniti on	Title of Innovatio n / Start- up	Had institute spent expenses either from own resource/ received fund towards sending delegation to participate /	Did any of the participants received any awards/recognition for startup / innovation ideas / research
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Details of Students, Faculties/Staff Participation/Representation in Co-curricular events/programs related to Innovation, IPR and Entrepreneurship/Start-up at the State, National and (or) International Level (Organized by External Organizations) sent by the HEI

											nts		Secured	Secured the Award / Recogniti on	represent the activity /event?	
1	4th BRICS- Young Scientist Forum- 2019	Innovatio n	Innovatio n Contest	BRICS Rio de Janerio	Internatio nal Agencies	06-11-20 19 00:00:00	08-11-20 19 00:00:00	3	24	0	24	Yes	BRICS- Young Innovator Prize- 2019 (First place USD 25000)	Nano- fluid based low cost milk chilling system	No	Award / Position / Recognition SecuredBRICS- Young Innovator Prize-2019 (First place USD 25000)Title of Innovation / Start-up Secured the Award / RecognitionNano-fluid based low cost milk chilling systemAward/Recog nition/Achieve ment Received forIdea/Innovation pe
2	India Innovatio n Growth Program- (IIGP2.0)	Innovatio n	Innovatio n Contest	Departm ent of Science and Technolo gy	Govt. Agency (Central)	17-07-20 19 00:00:00	17-07-20 19 00:00:00	1	1	0	1	Yes	India Innovatio n Growth Program- (IIGP2.0) Universit y Challeng e Award- 2019	Nano- fluid based low cost milk chilling system	No	Award / Position / Recognition SecuredIndia Innovation Growth Program- (IIGP2.0)- University Challenge Award- 2019Title of Innovation / Start-up Secured the Award / RecognitionNano-fluid based low cost milk chilling systemAward/Recog nition/Achieve ment Received forIdea/Innovation low cost milk chilling system
3	Internatio nal Exhibition and Conferen ce on Cold Chain, Industrial Refrigera tion and Reefer Transport ation	Innovatio n	Innovatio n Contest	Indian Society of Heating, Refrigera ting and Air Condition ing Engineer s	Corporat e / Industry Associati on	21-11-20 19 00:00:00	21-11-20 19 00:00:00	1	1	0	1	Yes	First Prize (Cash Prize INR 25,000)	Nano- fluid based low cost milk chilling system	No	Award / Position / Recognition Secured First Prize (Cash Prize INR 25,000) Title of Innovation / Start-up Secured the Award / Recognition Nano-fluid based low cost milk chilling system Award/Recog nition/Achieve ment Received for Idea/Innovation/Prototy pe

Details of Students, Faculties/Staff Participation/Representation in Co-curricular events/programs related to Innovation, IPR and Entrepreneurship/Start-up at the State,
National and (or) International Level (Organized by External Organizations) sent by the HEI

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4	Student Research Conventi on (North Zone)	Innovatio n	Innovatio n Contest	ANVESH	Govt. Agency (Central)	16-01-20 20 00:00:00	17-01-20 20 00:00:00	2	1	0	1	Yes	First Position	Decipheri ng the Role of Probiotic Lactobaci lli on DNA and Histone Modificati ons in Intestinal Epithelial Cells	No	Award / Position / Recognition Secured Innovation / Start-up Secured the Award / Recognition Award/Recog nition/Achieve ment Received for	First Position Deciphering the Role of Probiotic Lactobacilli on DNA and Histone Modification s in Intestinal Epithelial Cells Novel Research Paper/Work
5	Student Research Conventi on	Innovatio n	Innovatio n Contest	ANVESH AN	Govt. Agency (Central)	16-01-20 20 00:00:00	17-01-20 20 00:00:00	2	1	0	1	Yes	Third	Technolo gical Interventi ons For Textural Improve ment of Goat Milk Based Probiotic Yogurt	No	Award / Position / Recognition Secured Title of Innovation / Start-up Secured the Award / Recognition Award/Recog nition/Achieve ment Received for	Third Technologi cal Intervention s For Textural Improveme nt of Goat Milk Based Probiotic Yogurt Idea/Innova tion/Prototy pe

List the Academic Programs on Innovation, IPR and Entrepreneurship Development Offered During the Academic Period (2019-20)

Srno	Title of Course/Subject Offered	Program Theme	Type of Course	Course Offering Department/Centr e/Unit Name	Level of Course	Program Start Date	Program End Date	Program Duration(in Days)	Mode of Delivery	Total Numbers of Participants	Total Numbers of Contact Hours of Course (Minimum 30 Contact hours)
1	Student Ready Rural Dairy Work Experience Programme-I	Entrepreneurship/Startup	Elective/Core Credit Course	Bachelor	Dairy Technology Division	01-07-2019	31-07-2019	31	Offline	34	120
2	Student READY Rural Dairy Work Experience	Entrepreneurship/Startup	Elective/Core Credit Course	Bachelor	Dairy Technology Division	10-01-2019	15-05-2019	126	Offline	39	100
3	Student Ready-II Industrial or Laboratory Exposure	Entrepreneurship/Startup, Innovation	Elective/Core Credit Course	Bachelor	Dairy Technology Division	01-07-2019	31-07-2019	31	Offline	43	120
4	Intellectual Property and Its Management in Agriculture	IPR, Entrepreneurship/Startup	Elective/Core Credit Course	Master	Multidisciplin ary	14-01-2020	06-06-2020	145	Offline	135	50

LiList the Employment Generation Skill Development Programs Organized by the HEI on Innovation, IPR and Entrepreneurship Development During the Academic Period (2019-20)

Srno	Title of the Training Program	Program Theme	Type of Course	Course Offering Department/Centre/ Unit Name	Program Start Date	Program End Date	Program Duration(in Days)	Mode of Delivery	Total Numbers of Participants	Total Numbers of Contact Hours of Course (Minimum 30 Contact hours)
1	Student READY III Experiential Learning Programme	Innovation	MDP in I&E / IPR	Dairy Technology Division	01-10-2019	10-01-2020	102	Offline	42	200

List the Full Time Faculties had with a Degree (UG/PG/PhD) in Innovation/IPR/Entrepreneurship and (or) Received Specialized Training program of I&E, IPR (MDP, EDP, FDP, Short-term Certificate Course, of minimum 30 hours Duration) conducted by various State, Central Govt. agencies, and Knowledge Agencies in the Academic Period (2019-20)

Srno	Faculty Name	Departn	nent/Centre/Unit Name	D	esignation	Do you have a deg	ree in I&E & IPR?	Had the faculty rece IPR during	eived training on I&E & AY 2019-20	
1	Dr. Ashish Kumar Singh	Dairy Technology	Division	Principal Sc	ientist	No		No		
2	Gaurav Kr Deshwal	Dairy Technology	Division	Scientist		No		Yes		
	Training Name Tra	ining Theme	Type of Course Tr	aining Agency Name	Training Agency Type	Training Start Date	Training End Date	Training Duration (in Days)	Mode of Delivery	
3	Dr. Naresh Kumar Goyal	Dairy Microbiolog	y Division	Principal Sc	ientist	No		No		
4	Dr. S K Jha	Dairy Extension E	Division	Principal Sc	ientist	Highest degree name in I&E and IPR Degree Type Year of Highest degree in I&E and IPR	Post Graduate Diploma in Technology Management in Agriculture Diploma 2012	No No		
5	Dr. P N Raju	Dairy Technology	Division	Scientist		No		No		
6	Dr. P N Raju Dairy Technology Division Dr. Rajan Sharma In-charge ZTMC ITMU C		TMU Cell	Principal Sc	ientist	Highest degree name in I&E and IPR Degree Type Year of Highest degree in I&E and IPR	Post Graduate Diploma in Technology Management in Agriculture Diploma 2012	No		

List Idea/Innovation Centric Student Clubs Are Functional at the HEI with Access to Co-working Space/Work-stations for Students with Facilities & Equipment Available to promote and Support Innovation, Entrepreneurship and IPR Activities in Campus

No Data Flled!

List the Pre-Incubation Facility (Tinkering Lab/Makers' Space/Design Centre/New Gen IEDC/IEDC/EDC/Innovation Centre/Startup Cell) (>= 600 Sq. Ft. Floor Area)

Srno	Name of Pre- Incubation Centre	Type of Facility	Year of Establishme nt	Type of Facilities Available at the Centre	Pre-Incubation with Access to Other I&E Facilities at the HEI	Name of the Funding Schemes Available with Pre- Incubation Unit, if any (Optional)	Facility Details	Total Nos of Dedi Executive/Manage team Strength Enga the Facility	Unit F cated Fundir ement Idea/Pro aged at on Dev implement the Fi	Pre-Incubation Provided any ng Support for ototype/Innovati velopment and entation during inancial Year 2019-20	Had ins Generated either from Offered I Incuba Centre/Fa	I Income Services by Pre- ation	Had institute spent expenses either from own resource/received fund towards Establishment/Operation of Pre-Incubation Centre/Facilities?
1	Experiential Learning Unit	Startup Cell	2017	Co-working Space,Work Stations	Incubation Unit,Centre of Excellence with Advance Tools,IPR Cell/Technology Transfer Centre	Incubation Unit,Centre of Excellence with Advance Tools,IPR Cell/Technol ogy Transfer Centre	Facility Incharge NameDr. Ashish Kumar SinghFacility Incharge EmailAshish. Singh @icar. gov.inFacility Incharge Phone967139 2406	7	Yes		No		Yes
		Sour	ce of Grant / Fur	nd			Agency Name		F	Agency Type			Grants / Funds Received by Pre- ion & Incubation Centre / Facilities kists in Campus (In Rupees)
	Institute's Own Fu	nd / Resource				CAR			Govt. Agency (Ce	entral)		750000	

List the Centre of Excellence (CoE) Facilities with Advance Tools and Equipment at the HEI (>= 1000 Sq. Ft. Floor Area)

Srno	Name of CoE Facility	Year of Establishment	CoE with Access to Other I&E Facilities at the HEI	Name of the Funding Schemes Available with CoE, if any (Optional)	Facility Details	Total Nos of Dedicated Executive/Manag ement team Strength Engaged at the Facility	Had the CoE Provided any Funding Support for Idea/Prototype/Innovation Development and implementation during the Financial Year 2019-20?	Had institute Generated Income either from Services Offered by CoE Centre/Facilities?	Had institute spent expenses either from own resource/received fund towards Establishment/Operation of CoE Centre/Facilities?
1	Business Planning & Development (BPD) Unit	2014	Pre- Incubation,Incuba tion Unit,IPR Cell/Technology Transfer Centre	National Agricultural Innovation Project (NAIP) Indian Council of Agricultural Research	Facility Incharge NameDr. Ashish Kumar Singh @icar. gov.inFacility Incharge EmailAshish .Singh @icar. gov.in96713 92406Facility Incharge Phone	4	No	YesTotal Annual Income from Training and Skill Development Services (In Rupees)1401031Development Services (In Rupees)593570Total Annual Income from (Technical and Business) Mentoring Services (In Rupees)593570Total Annual Income from Office Space and Rental Services to Start- ups/Innovators (In Rupees)0	Yes

List the Centre of Excellence (CoE) Facilities with Advance Tools and Equipment at the HEI (>= 1000 Sq. Ft. Floor Area)

Source of Grant / Fund	Agency Name	Agency Type	Total Grants / Funds Received by CoE Facility exists in Campus (In Rupees)
-	-	-	0

List the Incubation Facilities at the HEI (>= 1500 Sq. Ft. Floor Area)

Srno	Name of Incubation Facility	Year of Establishment	Incubation with Access to Other I&E Facilities at the HEI	Name of the Funding Schemes Available with Incubation Unit, if any (Optional)	Facility Details	Total Nos of Dedicated Executive/Manag ement team Strength Engaged at the Facility	Had the Incubation Facility Provided any Funding Support for Idea/Prototype/Innovation Development and implementation during the Financial Year 2019-20?	Had institute Generated Income either from Services Offered by Incubation Centre/Facilities?	Had institute spent expenses either from own resource/received fund towards Establishment/Operation of Incubation Centre/Facilities?
1	Society for Innovation in Entrepreneurship & Dairying (SINED) Technology Business Incubator (TBI)	2009	Centre of Excellence with Advance Tools,IPR Cell/Technology Transfer Centre	Department of Science and Technology (DST) Government of India	Facility Incharge NameDr. Ashish Kumar SinghFacility Incharge EmailAshish @icar. gov.in96713 92406Facility Incharge Phone	5	No	YesTotal Annual Income from Training and Skill1450000Development Services (In Rupees)865000Total Annual Income from (Technical and Business) Mentoring Services (In Rupees)865000Total Annual Income from Office Space and Rental Services to Start- ups/Innovators (In Rupees)145000	
		Source of Grant /	Fund		Agency	v Name	Agenc	y Type Total Gra Facili	nts / Funds Received by Incubation y exists in Campus (In Rupees)

List the Innovation Park/Research Park Facilities at the HEI (>= 5000 Sq. Ft. Floor Area)

No Data Flled!

List the IPR Cell/Technology Transfer Centre Facilities at the HEI

Srno	Name of IPR Cell/Technology Transfer Centre Facility	Year of Establishment	IPR Cell/Technology Transfer Centre with Access to Other I&E Facilities at the HEI	Name of the Funding Schemes Available with IPR Cell/Technology Transfer Centre, if any (Optional)	Facility Details	Total Nos of Dedicated Executive/Manag ement team Strength Engaged at the Facility	Had the IPR Cell/Technology Transfer Centre Provided any Funding Support for Idea/Prototype/Innovation Development and implementation during the Financial Year 2019-20?	Had institute Generated Income either from Services Offered by IPR Cell/Technology Transfer Centre?	Had the IPR Cell/Technology Transfer Centre Provided any Funding Support for Idea/Prototype/Innovation/Start up/Venture Development and implementation during the Financial Year 2019-20?
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List the IPR Cell/Technology Transfer Centre Facilities at the HEI

1 Zonal AgroTechnology Management Centre (ZTMC) 2015 Pre- Incubation, Incuba tion Unit, Centre of Excellence with Advance Tools NAIF IPTM SECTION ICAR Facility Incharge Email Dr. Rajan Sharm a 3 1 Zonal AgroTechnology (ZTMC) 2015 Pre- Incubation, Incuba to Unit, Centre of Excellence with Advance Tools NAIF IPTM SECTION ICAR Facility Incharge Email Dr. Rajan Sharm a 3 5 Facility Incharge Phone Facility Incharge Phone Topical Property Topical Property 3	No Yes Total Annual Income from Training and Skill Development Services (In Rupees) 0 Total Annual Income from (Technical and Business) Mentoring Services (In Rupees) 0 Total Annual Income from Office Space and Rental Services to Start- ups/Innovators (In Rupees) 0
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Provide detail list of Faculties as Mentor to help Ideas/Innovations/Startups

Srno	Name of the Faculty	Designation of the Faculty	Mentor Expert Area		Years of Experience in Mentorship (In Years)		
1	Dr. Ashish Kumar Singh	Principal Scientist	Idea/Innovation Development,Entrepreneurship/Startup Development		8		
	Name of Idea/Innovation/ St	artup Mentored	Mentoring Setup [Within (or) Outside] HEI		CIN (in case it is Startup)		
	Whey based drinks		Outside				
	Whey protein-enriched Fruit beverages		Outside				
	Millet based fortified biscuits		Outside	23ALUPG4508L	1ZU		
	Milk-Millet Based Fermented Beverages		Outside	U01403HR2014	PTC052272		
	Nutrimix for weaning and lactating mothers		Outside				
	Goat milk based value added fermented dairy products		Within	U15412RJ2016F	PTC054973		
	Camel milk based powders and beverages		Outside	U15412RJ2016F	PTC054973		
	Nutri-cereal bars and Fortified Muffins		Outside	U15549UP2016	PTC083207		
2	Dr. Rajan Sharma	Principal Scientist	Idea/Innovation Development, IPR Protection & Commercialization		10		
	Name of Idea/Innovation/ St	artup Mentored	Mentoring Setup [Within (or) Outside] HEI		CIN (in case it is Startup)		
	Rapid Diagnostic kit for adulterants, Contaminants in mil	k	Outside	U74992HR2017	PTC067622		
3	Dr. Naresh Kumar Goyal	Principal Scientist	Idea/Innovation Development	9			

Provide detail list of Faculties as Mentor to help Ideas/Innovations/Startups

	Name of Idea/Innovation/ Sta	artup Mentored	Mentoring Setup [Within (or) Outside] HEI		CIN (in case it is Startup)
	Rapid diagnostic kit for antibiotic residues in milk		Within		
	Rapid diagnostic kit for antibiotic residues in milk		Outside	U74992HR2017	PTC067622
4	Gaurav Kr Deshwal	Scientist	Entrepreneurship/Startup Development		2
	Name of Idea/Innovation/ Sta	artup Mentored	Mentoring Setup [Within (or) Outside] HEI		CIN (in case it is Startup)
	Goat milk based products		Within	U15412RJ2016	PTC054973
	Camel milk powder and flavoured drinks		Within		
5	Dr. P N Raju	Scientist	Entrepreneurship/Startup Development		6
	Name of Idea/Innovation/ Sta	artup Mentored	Mentoring Setup [Within (or) Outside] HEI		CIN (in case it is Startup)
	Value added dairy products		Outside		

Provide detail list of External Experts/Agencies engaged as Mentor to help Ideas/Innovations/Startups

No Data Flled!

List all the Innovations Generated Developed, Completed and Implemented in Ground with Support of Pre-incubation & Incubation facilities at the HEI and Recognitions Received

Srno	Name of the Innovation Generated with the Support of HEI	Type of Innovation	Nature of Innovation	Name of the HEI Supported Innovation Development	Innovation Developed by	Stage of Innovation /Stage of TRL it started receiving the Support during the FY 2019- 20	Stage of Innovation /Stage of TRL reached as on 31st March 2020	Status Pre- Incubation/Inc ubation Support to Innovation as on 31st March 2020	Had the Innovation Received any Recognition at State, National, International Level Programs during the financial period 2019-20	Had the Innovation Converted into Venture/Startu p/SME Unit during the financial period 2019- 20	Had Centre/institut e provided any Financial support (either own resource or fund received from agencies) in terms of Seed Grant/Fund Support to Idea / Prototype / Innovations Development during the financial period 2019- 20	Had the Innovations raised any Seed fund/Angel Investment/VC during the period of receiving pre- incubation/inc ubation vinc ubation or HEI during the financial period 2019- 20	Had the Pre- incubation/Inc ubation Centre/HEI received any income/revenu e from Idea/Prototype /Innovations for the pre- incubation/inc ubation support and the services offered by Pre- incubation/inc ubation or institute during the financial period 2019
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Design and development of nanofluids based extended surface module and milk cooling.	Process Innovation	Technological	SoutherN Regional Station of NDRI, Bangalore	Student- Faculty	TRL 6 : Prototype system tested in intended environme nt close to expected performan ce.	TRL 7 : Demonstr ation system operating in operationa I environme nt at pre- commerci al scale.	Innovation Development Completed	Agency Name Agency Type Award / Position / Recognitio n Secured	BRICS Young Scientist Forum Internati onal Agencies First Prize	No	No	No	No
	Name		Ту	/pe		Ge	nder			Email		Conta	act
Ravi Prakash		Stud	ent		1	Male		rdwivedi.pral	kash@gmail.c	com		9034966791	
	Name		Ту	/pe		Ge	nder			Email		Conta	act
Rekha Menon		Facu	llty		F	emale		rekhamn@g	mail.com			-	

2	A new strip based test for detection of neutralizers in milk	Product Innovation	Technological	Dairy Chemistry Division	Faculty	TRL 9 : Full commerci al application , technolog y available for consumer s.	TRL 9 : Full commerci al application , technolog y available for consumer s.	Innovation Adopted and Implemented at Ground	No	Yes	No	Loan/I nvest ment Agen cy Name	MSME, ASPIREScheme	40 00 00	
												Agen cy Type	Govt .Agency(Central)		
												Total Loan/ Angel Invest/ Fund VC Fund by Stap of pre- pre- pre- intion/ia suppont tion/ institute finance finance suppont tion/ institute finance suppont tion/ institute finance suppont tion/ institute finance suppont tion/ institute suppont finance finance suppont finance finance suppont finance fin	4, 0, 0, 0 0	Amo unt Rec din Rs.	

												Date 8- of 0 Invest 9- ment 2 Raise 0 d 1 9	
		Name			/pe			ender		Email		Cont	act
	Dr. Rajan Sharma		Fa	aculty			Male		rajansharma21@gmail.cor	n		9416120181	
		Name		Ту	/pe			ender		Email		Cont	act
	Priyae Brath Gautam		St	udent			Male		-	1		-	1
3	Paper strip assay for rapid detection of pesticide residue	Product Innovation	Technologica	l Dairy microbiology	Faculty	TRL 9 : Full commerci al applicatior , technolog y available for consumer s.	al application , technolog y available for	Innovation Adopted and Implemented at Ground	No	Yes	No	No	No
		Name		Ту	/pe		Ge	ender		Email		Cont	act
	Naresh kumar								i i				
			Fa	aculty			Male		nrshgoyal@yahoo.com			8901023594	
		Name	F		/ре			ender		Email		8901023594 Cont	act
	Raghu H.V.	Name			ре			ender		Email			act
4		Name Product Innovation		Ty aculty	/pe Student		Ge Male TRL 9 : Full commerci al application , technolog y available for	Innovation Adopted and Implemented at Ground		Email	No	Cont	act No
4	Raghu H.V. Paper strip based assay for detection of antibiotic residues in		Fa	aculty I Dairy Microbiology Division		TRL 9 : Full commerci al applicatior , technolog y available for consumer	Ge Male TRL 9 : Full commerci al application itechnolog y available for consumer s.	Innovation Adopted and Implemented	4rvsy.dmndri@gmail.com	1	1	Cont 9466963599	No
4	Raghu H.V. Paper strip based assay for detection of antibiotic residues in	Product Innovation	Technological	aculty I Dairy Microbiology Division	Student	TRL 9 : Full commerci al pplicatior technolog y available for consumer s.	Ge Male TRL 9 : Full commerci al application itechnolog y available for consumer s.	Innovation Adopted and Implemented at Ground	4rvsy.dmndri@gmail.com	No	1	Cont 9466963599 No	No
4	Raghu H.V. Paper strip based assay for detection of antibiotic residues in milk	Product Innovation	Technological	Ty aculty I Dairy Microbiology Division Ty aculty	Student	TRL 9 : Full commerci al pplicatior technolog y available for consumer s.	Male TRL 9 : Full commerci al al application , technolog y available for consumer s. Get Male	Innovation Adopted and Implemented at Ground	4rvsy.dmndri@gmail.com No Image: state	No	1	Cont 9466963599 No Cont	No

5	Milk-protein enriched bajra snacks	Product Innovation	Technological	Dairy Technology Division	Faculty	TRL 9 : Full commerci al application , technolog y available for consumer s.	al application , technolog y available for	Innovation Adopted and Implemented at Ground	No	No	No	No	No
		Name		T <u>ı</u>	/ре		Ge	ender		Email		Conta	act
	Dr. Ashish Kumar Sin	gh	Fac	ılty			Male		aksndri@gmail.com			9671392406	
		Name		Ty	/pe		Ge	ender		Email		Conta	act
	Dr. P.N Raju		Faci	ılty			Male		narender.P@icar.gov.in			9896038983	
	Dr. R.R.B. Singh		Faci	ılty			Male		rrb_ndri@rediffmail.com			9416468437	
6	Whey Mango Drink	Product Innovation	Technological	Dairy Technology Division	Faculty	TRL 9 : Full commerci al application , technolog y available for consumer s.	al application , technolog y available for	Innovation Adopted and Implemented at Ground	No	No	No	No	No
		Name		T	ype		Ge	ender		Email		Conta	act
	Dr. Ashish Kumar Sin	gh	Faci	ılty			Male		aksndri@gmail.com			9671392406	
		Name		Ty	уре		Ge	ender		Email		Conta	act
	Dr. R.R.B Singh		Fact	ılty			Male		rrb_ndri@rediffmail.com			9416468437	
7	Nutrimix	Product Innovation	Technological	Dairy Technology Division	Faculty	TRL 9 : Full commerci al application , technolog y available for consumer s.	al application , technolog y available for	Innovation Adopted and Implemented at Ground	No	No	No	No	No
		Name		Ту	уре		Ge	ender		Email		Conta	act
	Dr. Ashish Kumar Sin	gh	Fac	llty			Male		aksndri@gmail.com			9671392406	

		Name		Ţ	ype		Ge	ender		Email		Conta	act
	Dr. P N Raju		F	aculty			Male		ndri.pnr@gmail.com			9896038983	
	Dr. R R B Singh		F	aculty			Male		rrb_ndri@rediffmail.com			9416468437	
	Dr. Sumit Arora		F	aculty			Male		sumitak123@gmail.com			9896054444	
8	Development of whey dewatering mechanism for channa	Process Innovation	Technologic	al Dairy Engineering Division	Faculty	TRL 9 : Full commerci al applicatio , technolog y availabl for consume s.	al application , technolog y available for	Innovation Development Completed	No	No	No	No	No
		Name		Ty	/pe		Ge	ender		Email		Conta	act
	Dr. Vairat Amita D		F	aculty			Female		amita.vairat@gmail.com			9810272885	
		Name		T	/pe		Ge	ender		Email		Conta	act
	Dr. Chitranayak Sinha		F	aculty			Male		chitranyaksinha@gmail.co	m		8867192926	
	Dr. P S Minz		F	aculty			Male		psminz@gmail.com			9992454593	
	J K Dabas		F	aculty			Male		jkdabas@gmail.com			9416468699	
	Khushbu Kumari		F	aculty			Female		khushbu.kumaricae@gma	il.com		7056410862	
9	Probiotic bacterial culture for preparation of fermented milk products for healthy gut	Product Innovation	Technologic	al Animal Biochemistry Division	Faculty	TRL 9 : Full commerce al applicatio , technolog y availabl for consume s.	al application , technolog y available for	Innovation Development Completed	No	No	No	No	No
		Name		Ty	/pe		Ge	ender		Email		Conta	act
	Dr. Rajeev Kapila		F	aculty			Male		rkapila69@gmail.com			9416392519	
		Name		Ty	/pe		Ge	ender		Email		Conta	act
	Dr. Suman Kapila		F	aculty			Female		suman_ndri@yahoo.com			9416742567	
10	Area Specific Mineral Mixture for Dairy Animals	Product Innovation	Non- Technologic: / Social / Community Innovation	Animal Nutrition Division	Faculty	TRL 9 : Full commerci al applicatio , technolog y availab for consume s.	al application , technolog y available for	Innovation Development Completed	No	No	No	No	No

	Name	Туре	Gender	Email	Contact
Dr.	: Veena Mani	Faculty	Female	veenamani1@yahoo.com	9416522669

List all the Ventures/Startups/SME Units Established with Support of Pre-incubation & Incubation facilities at the HEI

Srno	Name of the Venture/Startup/SME Unit Established with the Support of HEI	Type of Innovation of Venture/Startup/SME Unit	Nature of Innovation	Name of the Pre- Incubation/In cubation Unit of HEI Supported Innovation Development	Venture Founded by	Venture Registerd as	Year of Registrati on	What is the current status of Pre- Incubation/Incubation Support to Venture/ Startup/ SME Unit as on 31st March 2020?	Had the Venture Received any Recognition at State, National, International Level Programs during the financial period 2019- 20?	Had Centre/institu te provided any Financial support (either own resource or fund received from agencies) in terms of Seed Grant/Fund Support to Venture establishmen t during the financial period 2019- 20	Had the venture/startu p raised any Seed fund/Angel Investment/V C during the period of receiving pre- incubation/inc ubation support at your Pre- incubation/inc ubation or HEI during the financial period 2019- 20	Had the Pre- incubation/In cubation Centre/HEI received any income/reven ue from venture/startu p for the pre- incubation/inc ubation support and the services offered by Pre- incubation/inc ubation or institute during the financial period 2019- 20	Has the Start-up Grown to a stage of Employment Generation to 10 Numbers or an annual Turnover to Rs. 50 Lakhs during the financial year 2019-20
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1	J V Foodworks Pvt. Ltd.	Product Innovation	Technologica	7668	External to the Institute/I ncubatee	Venture with Corporate Identificati on Number (CIN) Registrati on	U15549 UP2016 PTC083 207	2016-17	Graduated from the Incubation unit	Age ncy Na me Age ncy Type Age ncy Type Aw accel Aw accel Aw accel Age ncy Type Aw accel Age ncy Type Age accel Age Age ncy Type Age accel Age Age accel Age Age Age Age Age Age Age Age	Ti ne Sh ∋ Jn td Aw ar I- 20 99 F Do 19 Ca eg Dry	No	Loan /Inve stme nt Agen cy Nam e	MadisonCaptl02Pte.Ltd. Corporate/IndustryAssociation	Am oun t Rec eive d in Rs.	16 00 00	Yes	
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											Total Loan1 6 0 , lnvesInves el lnves, 0 twen tvVCVund raise d by durin g the perio d of pre- incub ation/ ation/ incub ation/ incub atio		
		Name		DIN numbe	r	Туре		Gender		E	mail	Cont	tact
	Japna Rishi Kaushik		066157	6		Incubatee Entrepreneur	Fema	ale		japna.rishi@ł	nungryfoal.com	8860652067	
	Vivek Kaushik		0247157	′5		Incubatee Entrepreneur	Male			-		-	
2	KBA Food and Beverage Pvt. Ltd.	Product Innovation,Process Innovation,Market- place	Technologica I	7668	External to the Institute/I ncubatee	Venture with Corporate Identificati on Number (CIN) Registrati on	2017-18	Graduated from the Incubation unit	No	No	No	No	Yes

Name	DIN number	Туре	Gender	Email	Contact
Kulvinder Choudhary	02184238	Incubatee Entrepreneur	Male	pbay@outlook.in	9999103768

List all the Collaborations with External Agencies and Co-Creation of I&E Activities by the HEI

Srno	Collaborated Agency Name	Collaborated Agency Type	Purpose of Collaboration	Type of Support Offered	No. of Student Projects/ Ideas / Innovation / Startups from the HEI get benefitted through this partnership	Date of MOU / Agreement Signed on
1	Pusa Krishi, ICAR-IARI, AgriTech Incubation Centre	Govt. Agency (Central)	Collaboration with Startups/Industry Associations/Knowledge Agencies to Promote I&E Activities and/or Internship Opportunities	Mentoring	2	05-04-2019

List the IPs Filed/Published/Granted (Copyright & Designs Only) by the HEI as an Applicant / Co-applicant / Co-owner

No Data Flled!

List the IP (Patents only) Filed by the HEI as Applicant / Co-applicant / Co-owner

Srno	Title/Name of Patent	IP Registration Number	Date of Filed/Published (Year, Month)	Application Level	Copy of receipt / application screenshot [PDF or Image]
1	A Preservative formulation for Milk and Milk Product Samples Stored for Analytical Purpose	201911032383	National	2019 - 08	NA
	2	Paper strip based sensor for detection of heavy metals in Milk	202011006420	National	2020 - 02
Uploaded		3	Microfluidic device for enrichment of live and motile spermatozoa of cattle	202011008229	National
2020 - 02	Uploaded		4	Detection of A2 milk derived peptide (BCM9A2) by aptamers	202011001446
National	2020 - 01	Uploaded		5	Gluten free pasta dough composition and method of preparation thereof

List the IPs hold by the Innovation teams/Startups Incubated at the Pre-incubation/incubation Unit of the HEI

No Data Flled!

Srno	Name of Technology Licenced / Transferred / Commercialized	Technology Type	Type of Transfer	Patent / Licence Number	Patent / Licence Holder	Centre / Department of Origin of Licence	Licence Transferred to	Had institute spent expenses either from own resource/received fund to organise the program/activity/event?	Total Annual Income Received from Technology Transfer/Licensing (In Rupees)
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1	Technology for preparation of self-stable, nutritionally rich smoothies using dairy and non-dairy ingredients	Non- IP/Non- Patented Technology	One-time transfer/Licen sing	1	Patent/Licence Holder name (Institute Co- ownership is Must)	MR Jalli Bharat	Dairy Technology Division	Licence Transferred to Name of Industry/Start-	Industry Zest Fresh Foods,	Yes	150000
					Contact number of license holder	9951341341		Name of Industry/Start- up/Agency Received License/Techn ology	Andhra Pradesh		
					Email of Licence holder	bharatjalli02 @gmail.com Male		Address of Agency	Zest Fresh Foods, Andhra Pradesh		
					Gender			Contact Number of Agency	9951341341		
								Email of Agency	bharatjalli02 @gmail.com		
2	Misti Doi with Fast Acidifying high Sugar tolerating lactic cultures	Non- IP/Non- Patented Technology	One-time transfer/Licen sing	2	Patent/Licence Holder name (Institute Co- ownership is	Mr K Rathnam	Dairy Technology Division	Licence Transferred to	Industry	Yes	160000
					Contact number of license holder	7550314777		Received License/Techn	Milky Mist Dairy Food Pvt. Ltd.		
					Email of Licence holder	jagannath@ milkymist.in		ology Address of Agency	Chennai		
					Gender	Male		Contact Number of Agency	7550314777		
								Email of Agency	jagannath@ milkymist.in		
3	Strip based test for detection of hydrogen peroxide in milk	Non- IP/Non- Patented Technology	One-time transfer/Licen sing	3	Patent/Licence Holder name (Institute Co-	Mr Jitin Kumar Arora	Dairy Chemistry Division	Licence Transferred to	Industry	Yes	150000
					ownership is Must) Contact number of	0171289105 5		Name of Industry/Start- up/Agency Received License/Techn	J K Scientific Industries		
					license holder Email of	jkscientific@		ology Address of	Ambala,		
					Licence holder	gmail.com Male		Agency Contact Number of	Haryana 0171289105 5		
					Gender			Agency Email of Agency	jkscientific@ gmail.com		

4	Paper strip assay for rapid detection of pesticide residues	IP/Patente d Technology	One-time transfer/Licen sing	3819/DEL/2015	Patent/Licence Holder name (Institute Co- ownership is Must) Contact number of license holder Email of Licence holder Gender	Mr Lalit Gupta 9811131548 lalit@florece rs.com Male	Dairy Microbiology Division	Licence Transferred toIndustryName of Industry/Start up/Agency Received License/TechnFlorecer Services Private LimitedAddress of AgencyNew DelhiContact Number of Agency9811131548Email of AgencyIalit@florece rs.com	Yes	500000
5	Paper strip based assay for detection of antibiotic residues in milk	IP/Patente d Technology	One-time transfer/Licen sing	2213/DEL/2014	Patent/Licence Holder name (Institute Co- ownership is Must) Contact number of license holder Email of Licence holder Gender	Mr Lalit Gupta 9811131548 lalit@florece rs.com Male	Dairy Microbiology Division	Licence Transferred toIndustryName of Industry/Start- up/AgencyFlorecer Services Private LimitedAddress of AgencyNew DelhiContact Agency9811131548 Number of AgencyEmail of AgencyIalit@florece rs.com	Yes	500000
6	A new strip based test for detection of neutralizers in milk	IP/Patente d Technology	One-time transfer/Licen sing	201811030055	Patent/Licence Holder name (Institute Co- ownership is Must) Contact number of license holder Email of Licence holder Gender	Mr Jatin Kumar Arora 0171289105 5 jkscientific@ gmail.com Male	Dairy Chemistry Division	Licence Transferred toIndustryName of Industry/Start up/Agency Received License/TechnJ K Scientific IndustriesAddress of AgencyAmbalaContact Number of Agency0171289105 5Email of Agencyjkscientific@ gmail.com	Yes	150000

7	Strip based test for maltodextrin in milk	IP/Patente d Technology	One-time transfer/Licen sing	2097/DEL/2014	Holder name (Institute Co- ownership is Must) Contact number of license holder Email of Licence holder	Ir Jitin umar rora 172289105 scientific@ mail.com	Dairy Chemistry Division	Licence Transferred to Name of Industry/Start- up/Agency Received License/Techn ology Address of Agency Contact Number of Agency Email of Agency	Industry J K Scientific Industries Ambala 0172228910 55 jkscientific@ gmail.com	Yes	225000
8	A new rapid test for detection of detergent in milk	IP/Patente d Technology	One-time transfer/Licen sing	750/DEL/2015	Holder name Ku (Institute Co- ownership is Must) Contact number of license holder jks Licence holder g	Ir Jitin umar rora 171289105 scientific@ mail.com	Dairy Chemistry Division	Licence Transferred to Name of Industry/Start- up/Agency License/Techn ology Address of Agency Contact Number of Agency Email of Agency	Industry J K Scientific Industries Ambala 0171289105 5 jkscientific@ gmail.com	Yes	400000

Declaration

To, The ARIIA Committee MHRD's Innovation Cell New Delhi

Joint Declaration by the Head of the Institute and Nodal Officer

Dear Sir,

Herewith, myself Dr. Manmohan Singh Chauhan (Head of Institute) and Dr. Nitin Tyagi (Nodal Officer) jointly declaring on behalf of our institute is that all the information submitted are true and correct to best of our knowledge.

Thank you

The Head of Institute

Dr. Manmohan Singh Chauhan Head of the Institution, Karnal, Haryana

Nodal officer n

Dr. Nitin Tyagi Nodal Officer, Karnal, Haryana

Responsibility for accuracy and authenticity of data lies with the concerned institution.