Azadi Ka Amrit Mahotsav

LICENSING OF INNOVATIVE TECHNOLOGIES

@ICAR

सत्यमेव जयते

Indian Council of Agricultural Research
Department of Agricultural Research and Education
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Licensing of Innovative Technologies @ ICAR

Concept and Guidance: Dr. T. Mohapatra, Secretary (DARE) & DG (ICAR)

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MESSAGE

Dr. Trilochan Mohapatra

Secretary (DARE) & DG, ICAR,
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New Delhi-110 001. India

ICAR formulated and implemented comprehensive guidelines for Intellectual Property Management and Technology Transfer/ Commercialization from 2nd October 2006. This has facilitated in establishment of institutional mechanisms for systematic management of the intellectual property and technology licensing in ICAR. Agrinnovate India Limited (AgIn) a registered Company, was established by the Government of India in the Department of Agricultural Research and Education (DARE) to work on the strengths of innovations developed at ICAR institutes through well-defined partnership with the industry for their wider dissemination and grater imports.

The present publication *"Licensing of Innovative Technologies @ Indian Council of Agricultural Research (ICAR)"* depicts innovative technologies of ICAR which have been commercialized through licensing. It is expected to serve as a valuable information resource for the agro-industry and other stakeholders. This work will encourage the inventors as well as licensees to come up on a single platform for mutual benefits. I congratulate the inventors of the innovations and complement the IP&TM Unit of ICAR for this compilation.

(T. Mohapatra)

FOREWORD

Dr. K. Srinivas,
Assistant Director General
(Intellectual Property & Technology Management)

Innovations at ICAR are always at the forefront for providing solutions for the various problems being faced by the farmers, entrepreneurs, agro-based industries, and other stakeholders. Its research and technology development have enabled the country to make a visible impact on the national food and nutritional security.

To know about the present status of these innovations and their spread on pan India level, an in-depth analysis of technologies licensed by 72 institutes has been done for a period of 2007-08 to 2021-22. Total 3029 licenses were transferred to 1709 entities.

The present document "Licensing of Innovative Technologies @ Indian Council of Agricultural Research (ICAR)" will be a good source for connecting inventors and licensees to industry linkages. This compilation would give a glimpse of ICAR's Innovative technologies to the agi-based industries, cooperatives, other govt entities, and start up entrepreneurs. This book is tribute to all innovations spread across 72 institutes and dedicated to the 75th year of Independence of the nation.

(K. Srinivas)

CONTENTS

I. Introduction

Indian Council of Agricultural Research (ICAR) institutionalized a three tier Intellectual Property (IP) management system, to protect its intellectual assets/research outcomes in the year 2006. This system is supported by Guidelines for Intellectual Property Management and Technology Transfer/Commercialization. To steer the IP environment in the research system of ICAR, a special project *"Intellectual Property Management and Transfer/Commercialization of Agricultural Technology Scheme"* was launched in XI Plan. This strengthening the IP governance mechanism. The three-tier system comprises of Institute Technology Management Unit (ITMU) at each ICAR institute, which is pursuing matters related to IP management with the purpose of accelerating transfer/commercialization of technologies in the institutes; Zonal Technology Management Centre (ZTMC) at level 2 to facilitate the ITMUs in their subject domain. At apex, the Intellectual Property and Technology Management (IPTM) Unit that facilitates ITMUs/ ZTMUs. The unit developed policy guidelines, monitors the programs of IP management and technology commercialization and help the units on difficult issues beyond the capacity of ITMU or ZTMC. Based on the encouraging lessons learnt during the XI Plan, the scope in the proposed XII Plan scheme was considerably enhanced with expanded scope, the programme was renamed as *"National Agriculture Innovation Fund (NAIF)"* with two components; Component I: Innovation Fund (the XI Plan Scheme of Intellectual Property Management and Transfer/ Commercialization of Agricultural Technologies); and Component II: Incubation Fund (Supporting Agri-business Incubation Centres in institutions developing agricultural technologies). The growth of licensing activities at ICAR can be seen at **Table 1**.

Table 1. Growth of IP Management System in ICAR

S No.	Time Period	Licenses	ICAR Institute	License Share (%)
1	2007-2011	341	37	11.26
2	2012-2016	1127	60	37.20
3	2017-2021	1561	59	51.54
Total		3029		100.00

Box-I: Timelines of IP Management System in ICAR:

2005-2006: *Development of Guidelines for Intellectual Property Management and Technology Transfer/Commercialization (2006)*

2007-2012: *Establishment of 3 tier system of Intellectual Property Management and Transfer/ Commercialization of Agricultural Technology Scheme (2007-12)*

2012 Onwards*:* ***National Agriculture Innovation Fund*** *(NAIF) Enhancing the scope of technology transfer by inclusion of Agri-business Incubation for utilizing the technology efficiency and innovations.*

Simultaneously, AgrInnovate India Limited (AgIn) was set up by Department of Agricultural Research and Education (DARE) under the Ministry of Agriculture and Farmers' Welfare. One of the mandate of this company was to commercialize the ICAR Technologies to different stakeholders. The ITMUs and ZTMCs are expected to work in tandem with AgIn. The IPR guidelines of ICAR were revised in 2018 to unite this activity. The process of technology commercialization mentioned in the guidelines are reproduced in Box-II.

Box-II: Technology Licensing Process @ ICAR as per revised Guidelines (2018)

Technology Licensing will be undertaken by ***AgrInnovate India Limited (AgIn)*** in association with the concerned ITMU/ZTMU.

Disclosure of ICAR Technologies: Concerned ITMU will disclose the salient features of technology ready for commercialization, and notify it to AgIn.

Techno-Commercial Assessment: After receiving the Technology Disclosure Form from concerned institute, AgIn constitute a Techno-Commercial Assessment Committee to determine the technical feasibility, commercial viability and handholding requirement of the technology, besides fixation of prices of technology.

Technology Evaluation and Standard Terms: The expert committee constituted by AgIn evaluate and valuate the technology/knowhow/

process for its operation, economic, legal and environmental feasibility and develop the standard terms for its transfer to commercial utilization in consultation with concerned institute.

Business Development Activities and Prospecting Clients: AgIn to carry out the Business Development activities to reach the potential clients.

Expression of Willingness: Interested clients express their willingness to license the technology to AgIn.

Due Diligence of Clients: AgIn/ITMU/ ZTMC obtains a brief proposal from the client on how the client propose to commercialize the technology, client records with respect to registration, tax compliance and other eligibilities.

Detailed terms are shared with the client and once agreed, triparty licensing agreement is signed.

*[**Source:** ICAR, 2018. ICAR Guidelines for Intellectual Property Management and Technology Transfer/Commercialization. Indian Council of Agricultural Research, New Delhi.]*

During the monitoring of the scheme statistical data on different aspects of IP management and technology commercialization was collected. This document is a glimpse of the progress of the scheme. The efforts to know the different trajectories of ICAR's intellectual assets/innovations through licensing to different public and private organizationsin the field of agriculture and allied field of research. The data sets were analysed with best possible permutation and combination, using simple tool and graphical representations.

The analysis in the document reveal that, the pan India presence of ICAR institutes focusing to the end users by providing its research outcomes. Data w.r.t. licensing of technologies by different institution was collected since the inception of scheme i.e. 2007 onwards. The data collected were grouped in three timelines: 2007-2011; 2012-2016; and 2016-2021. Total 72 ICAR institutes licensed 1084 technologies through 3029 licensing agreements.

II. Year-wise Technology Licensing

Before implementing the IP system in ICAR, technology transfer activities were led by the extension wing of the research institutes. These efforts were directed towards demonstrations and free kit distribution to the local farmers. Due to some individual efforts of scientists during 1996 to 2005 and awareness on IP management played a crucial role in transferring intellectual assets to the industry. This study reveals that initially, 37 ICAR institutes were involved in technology licensing activities and signed 341 agreements. During this duration most of the efforts for technology commercialization were of individual scientists backed institutions.

After implementation of XI Plan IPR Scheme and introduction of Business Planning and Development (BPD) Units under National Agricultural Innovation Project (NAIP) boost up this growth with the involvement of 60 ICAR institutes with 1127 licensing agreements. These new dimensions enhanced the technology licensing numbers significantly to 1561 technology licensing agreements with 59 ICAR institutes over the period. (**Fig. 1**)

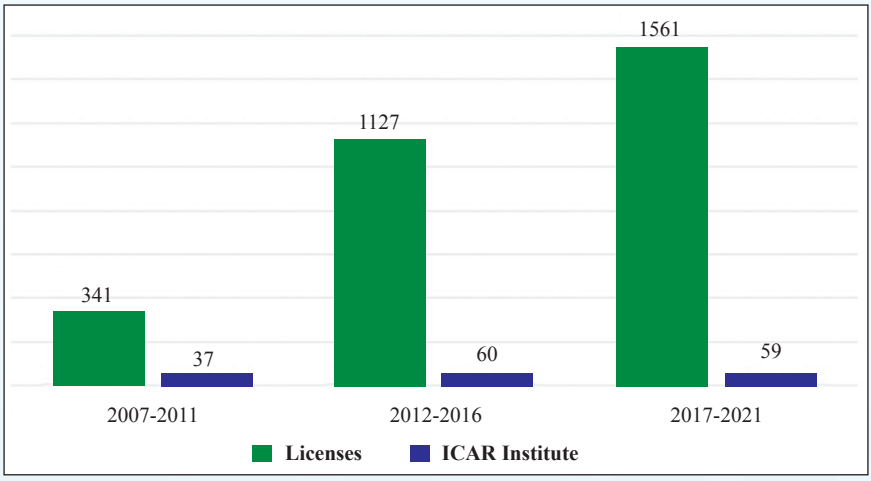

Fig. 1. Year Wise Growth of Technology Licensing Over the Period.

Year wise analysis shared indicate, since the establishment of IP and technology transfer ecosystem in ICAR, there has been a rise in transfer of technologies to different stakeholders. Since, year 2017 in number of

technologies licensed has continuously increased. During 2020 due to low turnout of licenses attributed to Covid-19 total number of transfers were less. **(Table 2, Fig. 2)**.

Table 2. Year-wise Technology Licensing

S No	Year	No. of ICAR Institute	No. of Technologies Licensed	No. of Licensees	No. of Licenses
1.	2007	11	21	24	29
2.	2008	11	22	47	56
3.	2009	17	31	49	59
4.	2010	20	54	81	110
5.	2011	26	45	71	87
6.	2012	25	55	90	119
7.	2013	37	138	161	260
8.	2014	28	82	189	254
9.	2015	35	82	220	275
10.	2016	31	86	147	219
11.	2017	20	76	97	141
12.	2018	33	118	173	234
13.	2019	37	144	345	465
14.	2020	39	183	188	248
15.	2021	39	231	371	473
Total					3029

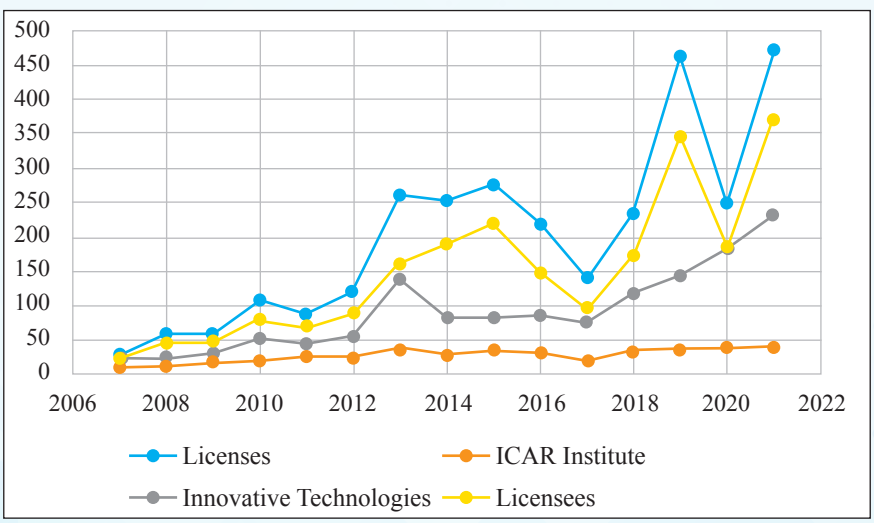

Fig. 2. Exponential Growth of Technology Licensing Over the Period

III. Subject Matter Division (SMD) wise Technology Licensing

Out of the total 3029 licenses, Horticultural Science Division has been on fore front with 1225 followed by Crop Science (1191), Animal Science (247), Agricultural Engineering (192), Fisheries Science (131), Natural Resource Management (42), and Agricultural Education (1). Out of 72 ICAR institutes, which are indulge in licensing process, ICAR-IIHR, Bangalore was a leading institute with its 784 signed licenses, followed ICAR-IARI, New Delhi (558); ICAR-IIWBR, Karnal (170), ICAR-CPCRI, Kasaragod (112), and ICAR-DOGR, Pune (92). These institutes had transformed their 1084 innovative technologies to 1708 licensees, which are having their business in 28 States and four union territories of the country. The institute wise details about licenses, technologies, licensees, and state covered are reflected in **Table 3.**

Table 3. SMD-wise Technology Licenses at ICAR Institutes

S No.	ICAR Institute	No. of Licenses	No. of Technologies Licensed	No. of Licensees	No. of States Covered
*AGRICULTURAL EDUCATION (01/01)**					
1	CIWA, Bhubaneshwar	1	1	1	1
AGRICULTURAL ENGINEERING (192/5)					
2	CIAE, Bhopal	61	50	54	16
3	CIPHET, Ludhiana	35	21	28	11
4	CIRCOT, Mumbai	64	58	47	9
5	IINRG, Ranchi	8	6	8	4
6	NINFET, Kolkata	24	22	13	3
ANIMAL SCIENCE (247/12)					
7	CARI, Izatnagar	40	26	28	13
8	CIRB, Hisar	2	2	2	2
9	CIRG, Makhdoom	5	4	2	2
10	DPR, Hyderabad	1	1	1	1
11	IVRI, Izatnagar	82	31	46	12
12	NBAGR, Karnal	4	4	2	1
13	NDRI, Karnal	78	43	50	17
14	NIANP, Bangalore	12	5	9	2
15	NIHSAD, Bhopal	1	1	1	1
16	NRC on Equines, Hisar	1	1	1	1
17	NRC on Meat, Hyderabad	11	5	11	4

S No.	ICAR Institute	No. of Licenses	No. of Technologies Licensed	No. of Licensees	No. of States Covered
18	NRC on Pig, Guwahati	10	8	9	7
CROP SCIENCE (1191/21)					
19	CCRI, Nagpur	1	1	1	1
20	CICR, Nagpur	7	6	5	4
21	CRIJAF, Barrackpore	8	7	6	1
22	CTRI, Rajahmundry	5	2	4	2
23	DGR, Junagarh	3	3	2	1
24	DRMR, Bharatpur	13	6	12	8
25	IARI, New Delhi	558	106	350	17
26	IIMR, Hyderabad	36	21	33	10
27	IIMR, Ludhiana	23	18	8	5
28	IIOR, Hyderabad	50	2	45	13
29	IIPR, Kanpur	4	4	1	1
30	IIRR, Hyderabad	29	6	23	8
31	IISR, Indore	13	11	8	4
32	IIWBR, Karnal	170	1	154	10
33	NBAIR, Bangalore	76	16	52	10
34	NBPGR, New Delhi	5	5	3	2
35	NCIPM, New Delhi	8	7	4	4
36	NRCPB, New Delhi	20	13	11	4
37	NRRI, Cuttack	79	34	37	10
38	SBI, Coimbatore	46	10	34	9
39	VPKAS, Almora	37	18	24	9
FISHERIES SCIENCE (131/07)					
40	CIBA, Chennai	38	30	34	11
41	CIFA, Bhubaneshwar	18	18	12	4
42	CIFE, Mumbai	1	1	1	1
43	CIFRI, Barrackpore	4	3	3	2
44	CIFT, Cochin	57	56	52	10
45	CMFRI, Cochin	12	12	9	4
46	DCFR, Bhimtal	1	1	1	1
HORTICULTURAL SCIENCE (1225/19)					
47	CIAH, Bikaner	3	3	1	1
48	CISH, Lucknow	9	7	5	4
49	CITH, Srinagar	1	1	1	1
50	CPCRI, Kasaragod	112	38	79	9
51	CPRI, Shimla	15	7	13	7
52	CTCRI, Thiruvananthapuram	12	8	10	3

S No.	ICAR Institute	No. of Licenses	No. of Technologies Licensed	No. of Licensees	No. of States Covered
53	DCR, Puttur	18	10	9	5
54	DMR, Solan	5	4	2	2
55	DOGR, Pune	92	10	65	8
56	DOPR, Pedavegi	2	1	2	2
57	IIHR, Bangalore	784	115	418	23
58	IISR, Calicut	47	16	30	8
59	IISR, Lucknow	13	7	12	7
60	IIVR, Varanasi	59	42	24	10
61	NRC for Grapes, Pune	2	1	2	1
62	NRC on Banana, Trichy	22	17	14	6
63	NRC on Pomegranate, Solapur	14	9	12	4
64	NRCSS, Ajmer	14	13	6	4
NATURAL RESOURCE MANAGEMENT (42/07)					
65	CAZRI, Jodhpur	2	2	2	2
66	CCARI, Goa	4	3	4	2
67	CRIDA, Hyderabad	4	4	4	1
68	CSSRI, Karnal	11	6	9	7
69	ICAR RC for NEH Region, Umaim	11	8	8	7
70	ICAR-RC-ER, Patna	9	6	6	5
71	IISS, Bhopal	1	1	1	1
72	NRCC, Nagpur	1	1	1	1
		3029			

*In bracket SMD-Wise Number of Licenses Transfer/Number of Institutes

In the technology basket of ICAR, bio-agents played a key role, which are based on 23 bio organisms. These bio-agents alone accounted for 618 licenses, followed by two wheat varieties (HD-3086 and DBW-173) with 409 licensing agreements; whereas 752 technologies transferred with only one licence. The data in **Table 4** reveals that the range of technology share in licensing activities.

Further, it has been observed that 1436 (47%) licenses were signed for 25 innovative technologies only, which is 2.30% share in total number of innovative technologies transferred. Both the scenarios had shown the importance of bio-agents and seed planting material research innovations in the council. These top-25 technologies are enlisted in **Table 5**.

Table 4. Technology Share in Licenses

Technology Licences (Range)	No. of Technologies	Licenses
500 and Above	1	618
100 to 499	2	409
20 to 99	10	322
10 to 19	15	193
5 to 9	37	224
4	19	76
3	51	153
2	141	282
Only One	752	752
Grand Total		**3029**

Table 5. Top 25 Technologies Licensed

S No.	Technologies	Licenses
1	Wheat Variety-HD 3086	239
2	Fungus (Trichoderma viride) based Biopesticide	193
3	Bacterium (Pseudomonas fluorescens) based Biopesticide	173
4	Wheat Variety-DBW 173	170
5	Fungus (Trichoderma harzianum) based Biopesticide	121
6	Wheat Variety-HD 3226	71
7	Arka Microbial Consortium	51
8	Fungus (Paecilomyceslilacinus) based Biopesticide	39
9	Onion Variety-Bhima Shakti	37
10	Bacterium (Bacillus thuringiensis)based Biopesticide	35
11	Arka Micronutrient Formulation	32
12	Fungus (Verticillium chlamydospore) based Biopesticide	31
13	Onion Variety-Bhima Super	28
14	Virgin Coconut Oil (VCO)	22
15	Vermiculture Technology	21
16	Onion Variety-Bhima Dark Red	20
17	Rice Variety-PB 1692	20
18	VAM Technology (Arbusculur Mycorrhiza)	20
19	Soil Moisture Indicator	19
20	Rice Variety-PRH 10	18
21	Kalparasa-natural coconut sugar Production	17
22	Soil Test Fertilizer Recommendation Meter (STFR)	16

S No.	Technologies	Licenses
23	Nematode (Heterorhabditisindica) based Biopesticide	15
24	Fungus (Pochoniachlamydosporia) based Biopesticide	15
25	Rice Variety-PB 1718	13
Grand Total(47% of total Licenses)		**1436**

IV. Sector wise Spread of Technologies

In this sector the intellectual assets are the innovative technologies which produced by ICAR institutes, it can be an input, device, process, practice, implement, know-how tool or group of multidisciplinary approach which developed through continuous selection, improvement, up-gradation, and association of existing and traditional practices, by using new methods of diagnosis/treatments from biological, physical and chemical sciences.

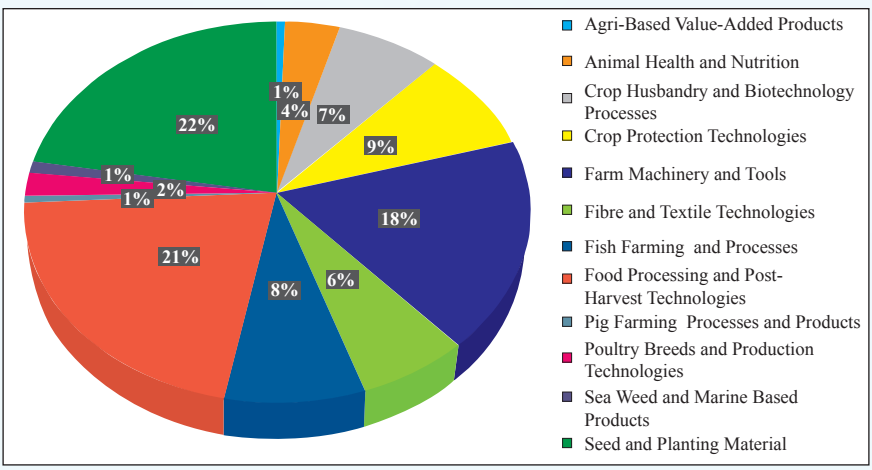

Fig. 3. Sector wise Technologies (in %)

There were 1084 such assets, which were classified in twelve subject specific areas according to their work domain, which were transferred to public and private organization are as follows: Seed and Planting Material (22.23%); Food Processing and Post-Harvest Technologies (21.13%); Farm Machinery and Tools (17.18%); Crop Protection Technologies (8.67%); Fish Farming and Processes (8.30%); Crop Husbandry and Biotechnology Processes (7.38%); Fibre and Textile Technologies (6.46%); Animal Health and Nutrition (3.78%);

Poultry Breeds and Production Technologies (1.85%); Sea Weed and Marine Based Products (01.01%); Pig Farming Processes and Products (0.74%); and Agri-Based Value-Added Products (0.65%). **Fig. 3** depicts the sector-wise technology spread. Sector and institute-wise list of these innovations can be seen at ***Annexure-I.***

V. Sector-wise Technology Licensing

Above discussed 3029 technology licenses were classified in twelve different subject specific domains of agriculture and allied sciences *viz.* Seed and Planting Material sector emerged top in generation and transfer of technologies through 34.66% of licenses followed by Crop Protection Technologies (27.90%); Food Processing and Post-Harvest Technologies (12.81%); Farm Machinery and Tools (07.86%); Crop Husbandry and Biotechnology Processes (06.21%); Fish Farming and Processes (03.30%); Animal-Health and Nutrition (2.77%); Fibre and Textile Technologies (2.54%); Poultry Breeds and Production Technologies (1.19%); and other three groups *viz.* Agri-Based Value-Added Products, Sea Weed and Marine Based Products, and Pig Farming Processes and Products having less than one percent share. **Fig. 4** and **Table 6** revealed the growth of licensing in different sectors.

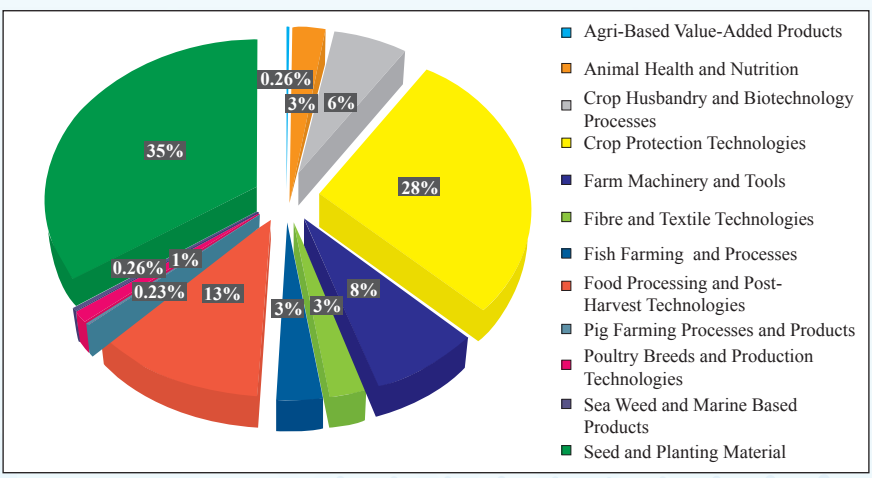

Fig. 4. Sector-wise Licensing (in %)

Table 6. Sector-wise Summary of Technology Licenses

S No	Technology Sector	Licenses	Institute	Technologies	Licensee	State Covered
1	Seed and Planting Material	1050	24	241	568	19
2	Crop Protection Technologies	845	20	94	425	22
3	Food Processing and Post-Harvest Technologies	388	29	229	290	23
4	Farm Machinery and Tools	238	27	193	183	21
5	Crop Husbandry and Biotechnology	188	22	80	136	17
6	Fish Farming and Processes	100	8	90	86	13
7	Animal-Health and Nutrition	84	9	41	42	14
8	Fibre and Textile Technologies	77	2	70	50	9
9	Poultry Breeds & Production Technology	36	1	20	26	12
10	Agriculture and Allied Sector Value Added Products	8	4	7	8	3
11	Sea Weed and Marine Based Technologies	8	1	11	6	4
12	Pig Farming and Processes	7	1	8	7	7
	Grand Total	**3029**		**1084**		

i) ***Seed and Planting Material:*** This is the core field of research in ICAR, where 24 ICAR institutes were licensed their 241 crop specific varieties (Box-III) to 568 public and private partners and signed 1050 licenses agreements. ICAR-IARI, New Delhi is the leading institute with 54 different crop varieties and 449 licenses (54/449), followed by ICAR-IIVR, Varanasi (36/58), ICAR-IIHR, Bangalore (32/61), ICAR-NRRI, Cuttack (27/69), ICAR-CPCRI, Kasaragod (14/14). Out of these 1050 licenses 39 percent

agreements were signed for only two wheat varieties viz. HD-3086 (239) and DBW-173 (170). The institute wise details technologies and licenses transferred can be seen in the **Table 7.**

Table 7. Institute-wise Licenses and Technologies of Seed Planting Material

S No	ICAR Institute	Technologies	Licenses
1	CIAH, Bikaner	3	3
2	CICR, Nagpur	5	2
3	CITH, Srinagar	5	1
4	CPCRI, Kasaragod	14	14
5	CPRI, Shimla	1	2
6	CRIJAF, Barrackpore	2	3
7	DCR, Puttur	2	3
8	DOGR, Pune	6	88
9	DRMR, Bharatpur	5	13
10	IARI, New Delhi	54	449
11	ICAR-RC-ER, Patna	9	9
12	IIHR, Bangalore	32	61
13	IIMR, Hyderabad	6	19
14	IIMR, Ludhiana	7	14
15	IIRR, Hyderabad	5	28
16	IISR, Calicut	5	15
17	IISR, Indore	1	1
18	IIVR, Varanasi	36	58
19	IIWBR, Karnal	1	170
20	NRC on Pomegranate, Solapur	1	5
21	NRCPB, New Delhi	1	2
22	NRCSS, Ajmer	7	7
23	NRRI, Cuttack	27	69
24	VPKAS, Almora	6	14
	Total	**241**	**1050**

Box-III: Crop-wise Varieties Licensed

- **Cereals-74***: Maize (14), Rice (42), Sorghum (6), and Wheat (12).*
- **Flowers-13***: Chrysanthemum (2), Gerbera (3), Gladiolus (3), Marigold (4), and Rose (1).*
- **Fruits-34***: Avocado (1), Bael (2), Arecanut (1), Cashew (2), Coconut (14), Guava (4), Jamun (1), Mango (3), Pomegranate (1), Walnut (5), and Watermelon (1).*

- **Oil Seeds-12**: *Mustard (11), and Soybean (1).*
- **Spices-13**: *Ajwain (1), Black Pepper (1), Coriander (2), Dill (1), Fennel (1), Fenugreek (2), Ginger (1), Nutmeg (1), and Turmeric (3).*
- **Textile-7**: *Cotton (5), and Jute (2).*
- **Vegetable-88**: *Baby Corn (2), Bitter Gourd (3), Brinjal (6), Carrot (1), Cauliflower (4), Chilli (9), Cowpea (4), Cucumber (2), Dolichos (1), French Bean (1), Okra (20), Onion (20), Palak (1), Pea (2), Ridge Gourd (3), Sponge Gourd (3), and Tomato (13).*

ii) ***Crop Protection Technologies:*** In this field of research 20 ICAR institutes licensed 94 innovations/technologies to 425 public and private partners and signed 845 licensing agreements. ICAR-IIHR, Bangalore (582) is leading institute in this field followed ICAR-NBAIR, Bangalore (76), ICAR-IIOR, Hyderabad (50), ICAR-IARI, New Delhi (43), ICAR-IVRI, Izantnagar (21) for its vermicompost technology. **Table 8** reveals the institute wise details of these licenses. Biological agents were the major technologies, which were transferred through these licenses. Box-IV is showing the biological agent wise details.

Table 8. Institute-wise Licenses of Crop Protection Technologies

S No.	ICAR Institutes	Licenses
1	CICR, Nagpur	3
2	CPCRI, Kasaragod	13
3	CPRI, Shimla	2
4	CSSRI, Karnal	5
5	DGR, Junagarh	1
6	DOGR, Pune	1
7	IARI, New Delhi	43
8	ICAR RC for NEH Region, Umaim	1
9	IIHR, Bangalore	582
10	IIMR, Ludhiana	7
11	IIOR, Hyderabad	50
12	IISR, Calicut	11
13	IISR, Lucknow	2
14	IVRI, Izatnagar	21
15	NBAIR, Bangalore	76
16	NCIPM, New Delhi	8
17	NRC on Banana, Trichy	1

18	NRC on Pomegranate, Solapur	2
19	SBI, Coimbatore	8
20	VPKAS, Almora	8
	Total	**845**

iii) ***Food Processing and Post-Harvest Technologies:*** Total of 29 ICAR institutes have transferred 229 innovations/processes/technologies to 290 public and private partners by commissioning 388 licensing

Table 9. Institute-wise Licenses and Technologies of Food Processing and Post-Harvest Technologies

S No.	ICAR Institute	Licenses	Technologies
1	CARI, Izatnagar	4	3
2	CCARI, Goa	3	2
3	CIAE, Bhopal	5	4
4	CIFT, Cochin	24	22
5	CIPHET, Ludhiana	16	9
6	CIRCOT, Mumbai	2	1
7	CISH, Lucknow	8	8
8	CPCRI, Kasaragod	73	10
9	CTCRI, Thiruvananthapuram	7	4
10	DCR, Puttur	1	1
11	DMR, Solan	5	3
12	IARI, New Delhi	11	12
13	ICAR RC for NEH Region, Umaim	7	3
14	IIHR, Bangalore	56	35
15	IIMR, Hyderabad	17	22
16	IINRG, Ranchi	2	2
17	IISR, Calicut	3	3
18	IIVR, Varanasi	1	1
19	IVRI, Izatnagar	7	5
20	NDRI, Karnal	71	37
21	NINFET, Kolkata	1	1
22	NRC on Banana, Trichy	21	17
23	NRC on Equines, Hisar	1	3
24	NRC on Meat, Hyderabad	11	4
25	NRC on Pig, Guwahati	3	1
26	NRC on Pomegranate, Solapur	7	5
27	NRCC, Nagpur	1	1
28	NRCSS, Ajmer	6	6
29	SBI, Coimbatore	14	4
	Total	**388**	**229**

agreements. The institutes-wise technology licensing details can be at **Table 9.**

Some of the important technologies which have been licensed for mass scale production are *Arjuna Herbal Ghee; Bajra Lassi; banana flour based baby food; emulsion based chicken products; meat and poultry products; milk protein enriched iron fortified bajra biscuit; Misti Doi with fast acidifying high sugar tolerating lactic culture; process for preparation of low cholesterol Ghee; qualitative and quantitative test for anionic detergent in milk; ready to cook milk chips technology; ready-to-serve fish curry in re-tortable pouches; retort pouch technology for shelf stable meat products; shrink wrap technology for capsicum; Strip based test for detection of added glucose, hydrogen peroxide, maltodextrin, and urea in milk etc.*

Box-IV: Biological Agents used as Crop Protection Technologies

Bacterium: *Bacillus pumilis, Bacillus subtilis, Pseudomonas fluorescens, Pseudomonas putida, Gluconacetobactersacchari, Bacillus megaterium, and Bacillus thuringiensis (ICAR-IIHR, Bangalore, and ICAR-NBAIR, Bangalore)*

Fungus: *Metarhiziumanisopliae,* Arbusculur Mycorrhiza, *Paecilomyceslilacinus, Pochoniachlamydosporia, Trichoderma harzianum, Trichoderma viridae, Verticillium chlamydosporia, Isariafumosorosea, Isariafumosorosea, and Beauveria bassiana (ICAR-CPCRI, Kasaragod, ICAR-IIHR, Bangalore, ICAR-NRC on Banana, Trichy and ICAR-NBAIR, Bangalore)*

Insect: *Chrysoperlazastrowi arabica, Chrysoperlazastrowi sillemi, Encarsiaguadeloupae, Trichogrammachilonis, and* Spodopterafrugiperda (ICAR-NBAIR, Bangalore)

Nematode: *Heterorhabditisindica (*ICAR-NBAIR, Bangalore)

iv) ***Farm Machinery and Tools:*** Most of the ICAR institutes are involved in research and development farm equipment and machinery related activities. Twenty-seven ICAR institutes were have commissioned 238 license agreements for 193 farm equipment and machinery to 183 public and private industries. The major share of innovative technologies came from ICAR-CIAE, Bhopal (77), ICAR-IIHR, Bangalore (22),

and ICAR-CIPHET, Ludhiana (10). The institutes-wise technology licensing details can be at **Table 10**.

Table 10. Institute-wise Licensesand Technologies of Farm Machinery and Tools

S No.	ICAR Institute	Licenses	Technologies
1	CAZRI, Jodhpur	1	1
2	CIAE, Bhopal	56	77
3	CICR, Nagpur	1	1
4	CIPHET, Ludhiana	18	10
5	CIRCOT, Mumbai	2	2
6	CIWA, Bhubaneshwar	1	1
7	CPCRI, Kasaragod	7	9
8	CPRI, Shimla	1	1
9	CRIDA, Hyderabad	4	6
10	CRIJAF, Barrackpore	5	5
11	CTCRI, Thiruvananthapuram	5	5
12	CTRI, Rajahmundry	5	2
13	DCR, Puttur	14	6
14	DOGR, Pune	1	1
15	IARI, New Delhi	9	6
16	ICAR RC for NEH Region, Umaim	2	2
17	IIHR, Bangalore	32	22
18	IIMR, Ludhiana	2	2
19	IINRG, Ranchi	2	1
20	IIPR, Kanpur	4	3
21	IISR, Indore	9	7
22	IISR, Lucknow	11	5
23	NDRI, Karnal	1	1
24	NINFET, Kolkata	1	1
25	NRCSS, Ajmer	1	1
26	NRRI, Cuttack	4	6
27	SBI, Coimbatore	24	4
28	VPKAS, Almora	15	7
	Total	**238**	**195**

Important machine and tools those were transferred *are as follows: CTRI banana fibre extractor; banana fibre extractor; cassava chipping machine (ss), cassava chipping machine (motorized); CIAE fruit cum vegetable grader; coconut de-shelling machine; IISR model jaggery unit; improved herbicide applicator; improved IIPR mini dal mill; mobile starch extraction unit; Pusa fruit and vegetable grader; rotating*

drum roasting machine for raw cashew nuts; sugarcane machines (planters); tractor operated hydraulic platform, onion seeder onion extractor; tractor operated turmeric harvester; VL paddy thresher etc.

v) ***Crop Husbandry and Biotechnology:*** Twenty-two ICAR institutes licensed 80 innovations/technologies to 136 public and private agencies and signed 188 license agreements. The major share of innovative technologies came from ICAR-IARI, New Delhi (21), ICAR-IIHR, Bangalore (11), and ICAR-IISR, Calicut (5). The institutes-wise technology licensing details can be at **Table 11**.

Table 11. Institute-wise Licenses and Technologies of Crop Husbandry and Biotechnology

S No.	ICAR Institute	Licenses	Technologies
1	CAZRI, Jodhpur	1	1
2	CCRI, Nagpur	1	1
3	CICR, Nagpur	1	3
4	CIRCOT, Mumbai	3	2
5	CISH, Lucknow	1	1
6	CPCRI, Kasaragod	5	1
7	CPRI, Shimla	10	4
8	CSSRI, Karnal	6	2
9	DGR, Junagarh	2	2
10	DOGR, Pune	2	2
11	DOPR, Pedavegi	2	1
12	IARI, New Delhi	46	21
13	IIHR, Bangalore	53	11
14	IIRR, Hyderabad	1	1
15	IISR, Calicut	18	5
16	IISR, Indore	3	2
17	IISS, Bhopal	1	1
18	NBPGR, New Delhi	5	5
19	NIANP, Bangalore	1	1
20	NRC for Grapes, Pune	2	1
21	NRCPB, New Delhi	18	8
22	NRRI, Cuttack	6	4
	Total	**188**	**80**

The major technologies transferred in this field are *aeroponic system technology; Ariel insect trap; Arka microbial consortium; Bt – express quick strips to detect cry1Ac Bt protein; codon modified gene cry1Fa1; device for beneficial insects (economy model) with host insect culture*

and its food; gene construct Cry1Fa1 gene in bt-brinjal; method ostoring and delivering PGPR/ microbes through bio-capsules; mridaparikshak mini lab of soil testing; PCR based detection assays, protocols and kits for GM crops; pH based micronutrient composition for black pepper, ginger, and turmeric; plant virus detection kit; VAM technology (Arbusculur Mycorrhiza) etc.

vi) ***Fish Farming and Process:*** Eight ICAR institutes licensed their 90 fish related innovations/processes/technologies to 86 public and private agencies and signed 100 license agreements.**Table 12** revealed the details of this sector's licensing activities.

Table 12. Institute-wise Licenses and Technologies of Fish Farming and Processes

S No.	ICAR Institute	Licenses	Technologies
1	CCARI, Goa	1	1
2	CIBA, Chennai	38	31
3	CIFA, Bhubaneshwar	18	17
4	CIFE, Mumbai	1	1
5	CIFRI, Barrackpore	4	3
6	CIFT, Cochin	33	33
7	CMFRI, Cochin	4	3
8	DCFR, Bhimtal	1	1
	Total	**100**	**90**

Important fish and marine based technologies transferred are as follows: *Asian seabase feed production technology; Cadalmin Anti-hypercholesterolemic extract (Cadalmin Ace) from seaweeds; Cadalmingreenalagal extract; CIBA shrimp feed technology; CIBAMOX water probiotic technology; CIBASTIM; CIFABROOD; CIFA-CRYO; CIFACURE; CIFAX; CIFRI cage grow fish feed; device for breeding and culturing marine fish in open sea; FRP magur hatchery; FRP portable carp hatchery; process to prepare antioxidant and anti-inflammatory concentrates from brown and red seaweeds; shrimp feed processing and production; Varsha-ornamental fish feed etc.*

vii) ***Animal-Health and Nutrition:*** Animal Science institutes of ICAR licensed their 41 animal health innovations/processes/technologies to 42 public and private agencies and signed 84 licensing agreements. The details about institute-wise licensing activities can be seen at **Table 13.**

Table 13. Institute-wise Licensesand Technologies of Animal Health and Nutrition

S No	ICAR Institute	Licenses	Technologies
1	CIRB, Hisar	2	2
2	CIRG, Makhdoom	4	2
3	DPR, Hyderabad	1	1
4	ICAR RC for NEH Region, Umaim	1	1
5	IVRI, Izatnagar	54	24
6	NBAGR, Karnal	4	4
7	NDRI, Karnal	6	4
8	NIANP, Bangalore	11	2
9	NIHSAD, Bhopal	1	1
	Total	**84**	**41**

Important technologies licensed for mass scale production are as follows: *anionic mineral mixture for prepartum dairy animals; broiler production technology-Caribrodhanraja; broiler production technology-Caribrovishal; broiler production technology-coloured broiler; brucella abortus cotton strain-19 vaccine; classical swine fever virus cell culture vaccine; foot and mouth disease (FMD) vaccine; kit for parentage verification in buffaloes; kit for parentage verification in camels (single and double humped); kit for parentage verification in Indian ruminant livestock; kit for parentage verification in zebu cattle (bosindicus); live attenuated homologous Peste des Petites Ruminants (PPR) vaccine; Vero cell based sheep pox vaccine.*

viii) ***Fibre and Textile Technologies:*** Only two ICAR institutes *viz.* ICAR-CIRCOT, Mumbai, and ICAR-NINFET, Kolkata are working on research and development of fibre and textile related issues. These institutes had developed 70 innovative technologies which were licensed to 50 public and private agencies by signing 77 licensing agreements. The institute specific details can be seen in **Table 14.**

Table 14. Institute-wise Licenses and Technologies of Fibre and Textile Technologies

S No.	ICAR Institute	Licenses	Technologies
1	CIRCOT, Mumbai	54	49
2	NINFET, Kolkata	23	21
	Total	**77**	**70**

Both the institutes developed the technologies which are useful in textile and jute industry viz. *design and development for miniature ginning machines; design and development autogrooving machine for roller ginning system; double roller ginning machines with hinged knife, leaf spring pressure mechanism and reciprocating finger type seed metering device; jute based agro textiles; Nano-ZnO finishing of Textile Material and its characterization; light weight non-woven fabrics; pedal driven banana fibre spinning system, CIRCOT-phoenix charkha; technology for nanocellulose production etc.*

ix) ***Poultry Breeds and Production Technologies:*** Poultry sector played an important role in development of entrepreneurship activities in cottage industry, where ICAR-CARI, Izatnagar licensed its 20 breeds/ parent stocks to 26 entrepreneurs/public and private agencies.

x) ***Agriculture and Allied Sector's Value-Added Products:*** Four ICAR institutes had developed specialized value-added technologies viz. Aleuritic Acid, Bleach Lac Preparation Goat Milk Based Natural Herbal Antiseptic Soap, Lac based Nail Polish etc., which were transferred by signing eight licenses for seven such technologies. This field generated eight licenses.

xi) ***Sea Weed and Marine Based Products:*** ICAR-CMFRI, Cochin had developed elven such technologies, which were transferred by signing eight licensing agreements with six public and private agencies.

xii) **Pig Farming Processes and Products:** Pig industry is providing with different products ranges which leads to the employment as well as export orientation. ICAR-NRC on Pig, Guwahati licenses its eight such innovations to six pig farming agencies.

VI. Nationwide Spread of ICAR Innovations

The pan India presence of ICAR gave enormous opportunities to its institutes for working in different agricultural research domains/ environments/problems and spreading the innovations across the borders of the states. In the last 15 years, 72 ICAR institutes spread their 1084 innovations in 28 states and four union territories of the country with 1708 licensees through 3029 license agreements.

Through this licensing process 241 Plant Varieties were reached to 19 States/UTs for their multiplication and sale, where Punjab (23%),

Table 15. State and Sector Wise Technology Licensing Details of ICAR Innovations

S No.	STATE	A&ASVAP	AHN	CHB	CPT	F&MT	F&TT	FFP&VA	FP&PHT	PF&P	PB&PT	SW&MBT	S&PM	Total	Rank
1	Andhra Pradesh			3	30	7		7	14				19	80	
2	Arunachal Pradesh					2								2	
3	Assam				4				3	1				8	
4	Bihar				7	2			6		1		7	23	
5	Chhattisgarh	3		2	8	2		6	6				25	52	
6	Goa							1	5					6	
7	Gujarat		13	6	79	7		2	11	1	4		35	158	IX
8	Haryana		3	4	20	12			17		2	1	221	280	IV
9	Himachal Pradesh				3	1								4	
10	Jharkhand					3			1	1				5	
11	Karnataka		12	51	166	36	5	6	70	1	4		49	400	II
12	Kerala		2	8	46	6	3	28	67	1		3	9	173	VI
13	Madhya Pradesh		4	5	59	26	2	2	3				12	113	
14	Maharashtra	4	5	36	116	44	37	4	34		1		134	415	I
15	Manipur								1					1	
16	Meghalaya		1						2					3	
17	Nagaland	1												1	
18	New Delhi		2	19	48	9	3	2	27		2		44	156	X
19	Odisha			3	1	8		16					28	56	
20	Punjab		1	4	24	12			11		1		245	298	III

S No.	STATE	A&ASVAP	AHN	CHB	CPT	F&MT	F&TT	FFP&VA	FP&PHT	PF&P	PB&PT	SW&MBT	S&PM	Total	Rank
21	Rajasthan		1	1	22	1			11		3		25	64	
22	Tamil Nadu		2	14	48	23	8	14	40			1	21	171	VII
23	Telangana		20	27	56	6	1	5	26	1	1	3	86	232	V
24	Tripura				2					1				3	
25	Uttar Pradesh		17	2	46	16	1		23		13		50	168	VIII
26	Uttarakhand			1	17	8					1		18	45	
27	West Bengal		1		33	7	17	7	6				19	90	
UNION TERRITORY															
28	Andaman and Nicobar Islands								1					1	
29	Chandigarh								3					3	
30	Jammu & Kashmir			2									3	5	
31	Lakshadweep										3			3	
32	Pondicherry				10									10	
Grand Total		**8**	**84**	**188**	**845**	**238**	**77**	**100**	**388**	**7**	**36**	**8**	**1050**	**3029**	

Sector-Wise Classification of Licensed Technologies	Abbreviation
Agriculture and Allied Sector Value Added Products	A&ASVAP
Animal-Health and Nutrition	AH&N
Crop Husbandry and Biotechnology	CH&B
Crop Protection Technologies	CPT
Farm Machinery and Tools	FM&T
Fibre and Textile Technologies	F&TT
Fish Farming Process and Value Addition	FFP&VA
Food Processing and Post-Harvest Technologies	FP&PHT
Pig Farming and Processes	PF&P
Poultry Breeds and Production Technology	PB&PT
Sea Weed and Marine Based Technologies	SW&MBT
Seed and Planting Material	S&PM

Haryana (21.04%), and Maharashtra (12.76%) were the leading States, with 600 licenses. In the same line Crop Protection Technologies reached to 22 States/UTs of the country, viz. Karnataka (166), Maharashtra (116), Gujarat (79), Madhya Pradesh (59), Telangana (56) and others; where as expansion Food Processing and Post-Harvest Technologies happened in Karnataka (70), Kerala (67), Tamil Nadu (40), Maharashtra (34), and Telangana (26) and other states. Farm Machinery and Tools reached to Maharashtra (43), Karnataka (36), Madhya Pradesh (26), Tamil Nadu (23).

The presence of ICAR's innovations can be observed from all corners of the country, but very specifically, Maharashtra is the leading state with 415 licensing agreements, followed by Karnataka (400), Punjab (298), Haryana (280), Telangana (232), Kerala (173), Tamil Nadu (171), Uttar Pradesh (168), Gujarat (158), New Delhi (156). The sector and state-wise spread of these innovations are at **Table 15.**

Fifty-two ICAR institutes were involved in disseminating their 258 technological innovations in seven states of the Southern region of the country, where 1069 licenses were given to 622 public and private entities, followed by Northern region (807/433); Western (579/323); Central (381/208); Eastern (174/107); North-eastern (18/13); and Bay of Bengal (1/1). The region-wise details about the licensing agreements are in **Table 16.**

Table 16. Zone-wise Summary of Technology Licensing

S No.	Zone	Licenses	% Share in Licenses
1	Bay of Bengal	1	0.03
2	Central	381	12.58
3	Eastern	174	5.74
4	North-Eastern	18	0.59
5	Northern	807	26.64
6	Southern	1069	35.29
7	Western	579	19.12
Grand Total		**3029**	**100.00**

VII. IP Protected Technology Licensing

ICAR institutes are using different IP tools to protect their intellectual assets viz. patents, trademarks, copyrights and designs. Upto March,

2022, 1377 patents, 287 copyrights, 171 trademarks, 58 designs, and 1389 plant variety applications were filed at different IP registration offices of the country by 67 institutes of ICAR. Out of these protected assets 10.53% patent applications, which generated 383 partnerships and most of the trademarks were transferred to different public and private organisations and stake holder. These assets accounts for 41.65% overall licensing, which is a successful indicator for ICAR as a research organization. The details are in **Table 17**. The institute-wise list of licensed patents is at ***Annexure-II.***

Table 17. IP Protected Licensing

S No.	Items/Activity	IPRs Filed	% Share
1	Commercialization of Filed Patents	145	10.53
2	IP Protected Licenses (Patents)	383	12.64
3	IP Protected Licenses (Patents/Trademark/ Copyright/Design/PVP&FR)	1261	41.65
4	Institutes Licensed IP Protected Technologies	50	69.44

VIII. High Revenue Generated Technologies of ICAR

In this licensing process ICAR institutes are earning the licensing fee, which becomes a source of revenue generation. In an analysis for the period of 2016 to 2020 (ICAR-Annual Report Period), it has been found that 73 technologies earned more than five lakh rupees, which belongs to the Crop Protection Processes, and Seed Planting Material technologies. These technologies were transferred through 793 licensing agreements to 495 licensees, by 25 ICAR institutes. The IP protected technologies (44) shared 63.68% of total licensing agreements. These innovations were spreaded in 21 states of the country. Horticultural Science generated highest revenue followed by Crop Science, Fisheries Science, and Animal Science. Crop Protection Measures earned the highest revenue, followed by Seed Planting Material. The brief details of these technologies are given in ***Annexure-III***.

ANNEXURE-I

INSTITUTE AND SECTOR-WISE LIST OF INNOVATIVE TECHNOLOGIES

S NO	ICAR INSTITUTE	INNOVATION/TECHNOLOGY
AGRICULTURE AND ALLIED SECTOR VALUE ADDED PRODUCTS		
1.	CIPHET, LUDHIANA	MICROBIAL METHOD FOR PRODUCTION OF PROTEIN ISOLATE/CONCENTRATE FROM OILSEED CAKES/MEALS
2.	CIRCOT, MUMBAI	DESIGNING OF A PROCESS FOR MAKING PULP AND PAPER USING AGRICULTURAL WASTE
3.	CIRCOT, MUMBAI	DEVELOPMENT AND PROMOTION OF NOVEL VALUE-ADDED PRODUCTS BASED ON ARGO BIOMASS
4.	CIRG, MAKHDOOM	AJAS ANTISEPTIC GOAT MILK BASED NATURAL HERBAL ANTISEPTIC SOAP
5.	IINRG, RANCHI	LAC BASED NAIL POLISH
6.	IINRG, RANCHI	PREPARATION OF ALEURITIC ACID
7.	IINRG, RANCHI	TECHNOLOGY FOR BLEACH LAC PREPARATION
ANIMAL-HEALTH AND NUTRITION		
8.	CIRB, HISAR	AREA SPECIFIC MINERAL MIXTURE (ASMM)
9.	CIRB, HISAR	MODIFIED ARTIFICIAL VAGINA FOR SEMEN COLLECTION FROM BULLS
10.	CIRG, MAKHDOOM	HERBODIN- HERBAL ANTI DIARRHEAL POWDER
11.	CIRG, MAKHDOOM	TOPIVET-G HERBAL ANTISEPTIC GEL
12.	DPR, HYDERABAD	CONTROL OF ALV INFECTION IN POULTRY
13.	ICAR RC FOR NEH REGION, UMAIM	RC- LOW COST SPECIALIZED MULTI-UTILITY REARING KIT

14.	IVRI, IZATNAGAR	ANIMAL HEALTH INFORMATION SYSTEM IN MARATHI LANGUAGE (SOFTWARE)
15.	IVRI, IZATNAGAR	BRUCELLA ABORTUS COTTON STRAIN-19 VACCINE
16.	IVRI, IZATNAGAR	CLASSICAL SWINE FEVER CELL CULTURE VACCINE
17.	IVRI, IZATNAGAR	FEED BLOCK MAKING MACHINE
18.	IVRI, IZATNAGAR	FETAL EXTRACTOR
19.	IVRI, IZATNAGAR	FOOT AND MOUTH DISEASE (FMD) VACCINE
20.	IVRI, IZATNAGAR	FRACTURE FIXATION DEVICE (BILATERAL)
21.	IVRI, IZATNAGAR	FRACTURE FIXATION DEVICE (CIRCULAR)
22.	IVRI, IZATNAGAR	HERBAL ACARICIDE TO CONTROL TICKS INCLUDING ACARICIDE RESISTANT SPECIES INFESTING LIVESTOCK AND PET ANIMALS
23.	IVRI, IZATNAGAR	LIVE ATTENUATED GOAT POX VACCINE
24.	IVRI, IZATNAGAR	LIVE ATTENUATED HOMOLOGOUS PESTE DES PETITES RUMINANTS (PPR) VACCINE
25.	IVRI, IZATNAGAR	LIVE ATTENUATED INDIGENOUS CSF CELL CULTURE VACCINE (IVRI-CSF-BS)
26.	IVRI, IZATNAGAR	LOW COST MULTIPLICATION TECHNOLOGY OF SALT TOLERANT BIO – GROWTH ENHANCERS
27.	IVRI, IZATNAGAR	LOW COST TECHNOLOGY FOR PREVENTION AND TREATMENT OF SUB CLINICAL MASTITIS IN BOVINES
28.	IVRI, IZATNAGAR	MINERAL BASED TECHNOLOGY FOR ESTRUS INDUCTION AND SYNCHRONIZATION IN BOVINES

29.	IVRI, IZATNAGAR	NON-STRUCTURAL PROTEIN 3ABC BASED DIAGNOSTIC ASSAY (ELISA) FOR FOOT AND MOUTH DISEASE TO DIFFERENT INFECTED FROM VACCINATED ANIMALS (DIVA)
30.	IVRI, IZATNAGAR	PORTABLE RESTRAINING DEVICE (TRAVIPORT) FOR CATTLE AND BUFFALO
31.	IVRI, IZATNAGAR	PPR HYBRIDOMA CLONE-4311
32.	IVRI, IZATNAGAR	PPR VACCINE AND GOAT POX VACCINE
33.	IVRI, IZATNAGAR	RAPID TEST FOR DETECTION OF NON-STRUCTURAL PROTEIN (NSP) 3ABC ANTIBODIES FROM FOOT AND MOUTH (FMD) DISEASE VIRUS INFECTED ANIMALS
34.	IVRI, IZATNAGAR	RECOMBINANT ANTIGEN (VP7 PROTEIN) BASED INDIRECT ELISA BLUE TONGUE ANTIBODY DETECTION KIT
35.	IVRI, IZATNAGAR	SHEEP POX VACCINE (SPV)
36.	IVRI, IZATNAGAR	UREA MOLASSES MINERAL BLOCKS (UMMB)
37.	IVRI, IZATNAGAR	VERO CELL BASED SHEEP POX VACCINE
38.	NBAGR, KARNAL	KIT FOR PARENTAGE VERIFICATION IN BUFFALOES
39.	NBAGR, KARNAL	KIT FOR PARENTAGE VERIFICATION IN CAMELS (SINGLE AND DOUBLE HUMPED)
40.	NBAGR, KARNAL	KIT FOR PARENTAGE VERIFICATION IN INDIAN RUMINANT LIVESTOCK
41.	NBAGR, KARNAL	KIT FOR PARENTAGE VERIFICATION IN ZEBU CATTLE (BOS INDICUS)
42.	NDRI, KARNAL	ANIONIC MINERAL MIXTURE FOR PREPARTUM DAIRY ANIMALS

43.	NDRI, KARNAL	ANIONIC MINERAL MIXTURE FOR REDUCING POST-PARTUM PROBLEMS IN CATTLE AND BUFFALOES
44.	NDRI, KARNAL	CATION AND ANION MINERAL MIXTURE TECHNOLOGY
45.	NDRI, KARNAL	USE OF RICE BRAN LECITHIN AND PHOSPHOLIPIDS IN DAIRY CATTLE FEEDING
46.	NIANP, BANGALORE	MINERAL MIXTURE FOR SMALL RUMINANTS
47.	NIANP, BANGALORE	PINEAPPLE FRUIT RESIDUE SILAGE TECHNOLOGY
48.	NIHSAD, BHOPAL	INDIRECT ELISA KIT FOR DETECTION OF AVIAN INFLUENZA VIRUS (AIV) ANTIBODIES IN CHICKEN
	CROP PROTECTION TECHNOLOGIES	
49.	CPCRI, KASARAGOD	COCONUT LEAF VERMICOMPOSTING TECHNOLOGY
50.	CPCRI, KASARAGOD	KALPA ORGANIC GOLD
51.	CPCRI, KASARAGOD	KALPA SOIL CARE
52.	CSSRI, KARNAL	CSR GROWSURE
53.	CSSRI, KARNAL	HALO-CRD
54.	CSSRI, KARNAL	HALO-MIX
55.	CSSRI, KARNAL	ICAR FUSICONT
56.	DGR, JUNAGARH	NUTMAGIC
57.	IARI, NEW DELHI	AZOTOBACTER CARRIER BASED
58.	IARI, NEW DELHI	BGA BIOFERTILIZER
59.	IARI, NEW DELHI	BIOSYNTHESIS OF METAL NANO-PARTICLE FROM FUNGI
60.	IARI, NEW DELHI	COMPOST INACULANT
61.	IARI, NEW DELHI	ENTOMOPATHOGENIC NEMATODE BASED GALLERIA CADAVER TECHNOLOGY
62.	IARI, NEW DELHI	LIQUID BIOFERTILIZER FOR AZOTOBACTER

63.	IARI, NEW DELHI	LIQUID FORMULATION OF ZINC SOLUBILIZING BACTERIA
64.	IARI, NEW DELHI	NANO-INDUCED BACTERIAL POLYSACCHARIDE PRODUCTION
65.	IARI, NEW DELHI	NOVEL BIO-PESTICIDAL FORMULATION WITH IMPROVED SHELF-LIFE AND THE METHOD FOR ITS PREPARATION (NEMAGEL)
66.	IARI, NEW DELHI	NPK LIQUID BIOFERTILIZER
67.	IARI, NEW DELHI	SAMFUNGIN: A NOVEL FUNGICIDE AND THE PROCESS FOR MAKING THE SAME
68.	IARI, NEW DELHI	VAM TECHNOLOGY (ARBUSCULUR MYCORRHIZA)
69.	ICAR RC FOR NEH REGION, UMAIM	GRANULAR ORGANIC FORMULATION FOR CROP PRODUCTION
70.	IIHR, BANGALORE	ARKA DECOMPOSER
71.	IIHR, BANGALORE	ARKA DORSOLURE-F TECHNOLOGY
72.	IIHR, BANGALORE	ARKA HERBIWASH
73.	IIHR, BANGALORE	ARKA MICROBIAL CONSORTIUM
74.	IIHR, BANGALORE	ARKA VEGETABLE MICRONUTRIENT FORMULATION TECHNOLOGY
75.	IIHR, BANGALORE	NEEM AND PONGAMIA SOAP
76.	IIHR, BANGALORE	NEEM SOAP TECHNOLOGY
77.	IIHR, BANGALORE	PONGAMIA SOAP
78.	IIOR, HYDERABAD	DOR BT-1 TECHNOLOGY
79.	IISR, CALICUT	PGPR MICROBIAL CONSORTIUM FOR GROWTH PROMOTION IN BLACK PEPPER
80.	IISR, CALICUT	STORING AND DELIVERING PGPR/MICROBES THROUGH BIOCAPSULES
81.	IVRI, IZATNAGAR	VERMICULTURE TECHNOLOGY
82.	NBAIR, BANGALORE	AQUEOUS FORMULATION OF SPODOPTERA FRUGIPERD ANUCLEO POLYHEDRO VIRUS (SPFRNPV) N

83.	NBAIR, BANGALORE	BLACK SOLDIER FLY MEDIATED BIOCONVERSION OF FARM AND KITCHEN WASTES
84.	NBAIR, BANGALORE	HERBAL BASED REPELLANT FOR TERMITES ON WOODYTREES – REPTER
85.	NBAIR, BANGALORE	HERBAL SWABBER FOR THE MANAGEMENT OF WHITE STEM BORER XYLOTRECHUS QUADRIPES IN COFFEE (ORGANIC AND NON-PESTICIDAL)
86.	NBAIR, BANGALORE	METARHIZIUM ANISOPLIAE ICAR-NBAIR MA 4 FOR MANAGEMENT OF WHITE GRUBS IN SUGARCANE
87.	NRC ON POMEGRANATE, SOLAPUR	BIO-FORMULATION FOR POTASSIUM FERTILIZER SUPPLEMENT AND PROCESS OF PREPARATION THEREOF
88.	SBI, COIMBATORE	EPN BIOPESTICIDE FORMULATION
89.	CPCRI, KASARAGOD	METARHIZIUM ANISOPLIAE
90.	IARI, NEW DELHI	ARBUSCULUR MYCORRHIZA
91.	IIHR, BANGALORE	BACILLUS PUMILIS
92.	IIHR, BANGALORE	BACILLUS SUBTILIS
93.	IIHR, BANGALORE	PAECILOMYCES LILACINUS
94.	IIHR, BANGALORE	POCHONIA CHLAMYDOSPORIA
95.	IIHR, BANGALORE	PSEUDOMONAS FLUORESCENS
96.	IIHR, BANGALORE	PSEUDOMONAS PUTIDA
97.	IIHR, BANGALORE	TRICHODERMA HARZIANUM
98.	IIHR, BANGALORE	TRICHODERMA VIRIDAE
99.	IIHR, BANGALORE	VERTICILLIUM CHLAMYDOSPORIA
100.	IISR, LUCKNOW	GLUCONACETO BACTERSACCHARI
101.	NBAIR, BANGALORE	BACILLUS MEGATERIUM
102.	NBAIR, BANGALORE	BACILLUS THURINGIENSIS
103.	NBAIR, BANGALORE	CHRYSOPERLA ZASTROWI ARABICA
104.	NBAIR, BANGALORE	CHRYSOPERLA ZASTROWI SILLEMI

105.	NBAIR, BANGALORE	ENCARSIA GUADELOUPAE
106.	NBAIR, BANGALORE	HETERORHABDITIS INDICA
107.	NBAIR, BANGALORE	ISARIA FUMOSOROSEA
108.	NBAIR, BANGALORE	TRICHOGRAMMA CHILONIS
109.	NBAIR, BANGALORE	ISARIA FUMOSOROSEA
110.	NBAIR, BANGALORE	SPODOPTERA FRUGIPERDA
111.	NRC ON BANANA, TRICHY	BEAUVERIA BASSIANA
CROP HUSBANDRY AND BIOTECHNOLOGY		
112.	CICR, NAGPUR	BT-EXPRESS QUICK STRIPS TO DETECT CRY1AC BT PROTEIN
113.	CICR, NAGPUR	BT-GUS TO DETECT REPORTER GENE IN BOLLGARD-II
114.	CICR, NAGPUR	HIGH DENSITY PLANTING SYSTEM (HDPS)
115.	CISH, LUCKNOW	PROQUINAZID 20EC TESTING AGAINST POWDERY MILDEW OF MANGO
116.	CPCRI, KASARAGOD	NANOMATRIX FOR DELIVERY OF PHEROMONE FOR THE MANAGEMENT OF RED PALM WEEVIL AND RHINOCEROS BEETLE
117.	CPRI, SHIMLA	AEROPONIC SYSTEM TECHNOLOGY
118.	CPRI, SHIMLA	IN VITRO PLANT ACCLIMATIZATION
119.	CPRI, SHIMLA	RB GENE TRANSFORMED LATE BLIGHT RESISTANCE POTATOES
120.	CPRI, SHIMLA	VEGFAST TECHNOLOGY
121.	CSSRI, KARNAL	CSR-BIO A POTENTIAL BIO-GROWTH ENHANCER FOR CROPS GROWN IN SODIC AND NORMAL SOILS
122.	CSSRI, KARNAL	GYPKIT
123.	DGR, JUNAGARH	PRODUCTION OF CELLULASE ENZYME FROM GROUNDNUT SHELL

124.	DGR, JUNAGARH	PRODUCTION OF PROTEASES FROM DE-OILED GROUNDNUT CAKE BY MICROBIAL FERMENTATION
125.	DOGR, PUNE	BIFENAZATE FLORAITE 240 SC
126.	DOGR, PUNE	PROGIBB 40 WSG IN GRAPES
127.	DOPR, PEDAVEGI	TISSUE CULTURE PROTOCOL FOR OIL PALM
128.	IARI, NEW DELHI	AEROBIC METABOLISM AND PERSISTENCE OF 14C BISPYRIBAC-SODIUM IN SOIL
129.	IARI, NEW DELHI	ANTHOCYANIN EXTRACTION FROM BLACK CARROT
130.	IARI, NEW DELHI	EVENT FOR TOSPO RESISTANCE IN TOMATO
131.	IARI, NEW DELHI	GENE CONSTRUCT CRY1FA1 GENE IN BT-BRINJAL
132.	IARI, NEW DELHI	GENE CONSTRUCT FOR UTILIZING TECHNOLOGY
133.	IARI, NEW DELHI	GENE CONSTRUCT WITH CRY1AABC GENE FOR AGRICULTURAL AND HORTICULTURAL CROPS
134.	IARI, NEW DELHI	GENE CONSTRUCT WITH CRY1 FA1 TRANSGENIC BRINGAL
135.	IARI, NEW DELHI	LIGHT TRAP TECHNOLOGY
136.	IARI, NEW DELHI	MANAGEMENT OF RICE AND BRINJAL DISEASES THROUGH BIOPRODUCTS- BIOGOLD AND MC TEC-2
137.	IARI, NEW DELHI	PLANT VIRUS DETECTION KIT
138.	IARI, NEW DELHI	PSB CARRIER BASED
139.	IARI, NEW DELHI	RNAI TECHNOLOGY
140.	IARI, NEW DELHI	SOIL TEST FERTILIZER RECOMMENDATION METER (STFR)
141.	IARI, NEW DELHI	SUPER ABSORBENT HYDROGEL OF SEMISYNTHETIC ORIGIN

142.	IARI, NEW DELHI	SUPERABSORBENT HYDROGEL/S AND THE METHOD OF OBTAINING THE SAME
143.	IARI, NEW DELHI	TRANSGENIC TOMATO TECHNOLOGY
144.	IARI, NEW DELHI	TRUNCATED REP GENE CONSTRUCT
145.	IARI, NEW DELHI	WEATHER AND REMOTE SENSING BASED CROP YIELD MODELLING FOR USE IN CROP INSURANCE
146.	IIHR, BANGALORE	ARKA FERMENTED COCO-PEAT
147.	IIHR, BANGALORE	ARKA VEGETABLE SPECIAL TECHNOLOGY
148.	IIHR, BANGALORE	FORMULATION FOR THE MANAGEMENT OF BORERS (SEALER CUM HEALER)
149.	IIHR, BANGALORE	MANGO MICRO NUTRIENT FORMULATION TECHNOLOGY
150.	IIHR, BANGALORE	OKRA SSR MARKERS
151.	IIHR, BANGALORE	PARAPHEROMONE TRAP TECHNOLOGY
152.	IIHR, BANGALORE	SEEDPRO-TECHNOLOGY
153.	IIRR, HYDERABAD	MODIFIED LEAF COLOUR CHART (MLCC)
154.	IISR, CALICUT	SEED COATING COMPOSITION AND PROCESS FOR ITS PREPARATION
155.	IISR, INDORE	HIGH OLEIC ACID AND KTI FREE SOYBEAN GENOTYPES
156.	IISR, INDORE	RESPONSE OF WELLGRO-SOIL ON GROWTH AND YIELD OF SOYBEAN
157.	IISS, BHOPAL	MRIDAPARIKSHAK MINI LAB OF SOIL TESTING
158.	NBPGR, NEW DELHI	DUPLEX TAQMAN® REAL-TIME PCR BASED GMO SCREENING
159.	NBPGR, NEW DELHI	GMO DETECTION IN RICE AND OTHER CROPS
160.	NBPGR, NEW DELHI	PCR BASED DETECTION ASSAYS, PROTOCOLS AND KIDS FOR GM CROPS

161.	NBPGR, NEW DELHI	TAQMAN® REAL TIME PCR BASED MULTITARGET SYSTEM TARGETING 47 TARGETS
162.	NBPGR, NEW DELHI	VISUAL LOOP-MEDIATED ISOTHERMAL AMPLIFICATION (LAMP) BASED GMO SCREENING TARGETING EIGHT TRANSGENIC ELEMENTS
163.	NRCPB, NEW DELHI	BT-BRINJAL EVENT 142
164.	NRCPB, NEW DELHI	DEVELOPMENT OF GLYPHOSATE TOLERANT RICE
165.	NRCPB, NEW DELHI	GENE CONSTRUCT CRY 1AA-B GENE
166.	NRCPB, NEW DELHI	GENE CONSTRUCT CRY 1F GENE
167.	NRCPB, NEW DELHI	GENE CONSTRUCT CRY 2 AA
168.	NRCPB, NEW DELHI	GENE CONSTRUCT CRY1AA-B GENE
169.	NRCPB, NEW DELHI	GENE CONSTRUCT CRY1AC-F GENE
170.	NRCPB, NEW DELHI	GENE CONSTRUCT CRY1FA1
171.	NRRI, CUTTACK	CUSTOMISED LEAF COLOUR CHART (CLCC)
172.	NRRI, CUTTACK	PRODUCTION OF INNOVATIVE AGROCHEMICALS PRODUCT FOR MANAGEMENT OF PEST IN AGRICULTURAL CROPS
173.	NRRI, CUTTACK	RICE DOUBLED HAPLOID TECHNOLOGY
174.	NRRI, CUTTACK	RICE-FISH & SALT TOLERANT RICE CULTIVATION
175.	CAZRI, JODHPUR	NANO NUTRIENT TECHNOLOGY
176.	CCRI, NAGPUR	HIGH-TECH NURSERY MANAGEMENT FOR PRODUCTION OF DISEASE-FREE PLANTING MATERIAL IN CITRUS
177.	CIRCOT, MUMBAI	DEVELOPMENT OF NANO-FORMULATION FOR FERTILIZER APPLICATIONS
178.	CIRCOT, MUMBAI	INNOVATIVE COMMUNITY BASED INCLUSIVE FARMING SYSTEM

179.	IARI, NEW DELHI	NANO SULPHUR-MONOCLINIC
180.	IARI, NEW DELHI	NANO SULPHUR-ORTHORHOMBIC
181.	IARI, NEW DELHI	NANO-ENCAPSULATED HEXACONAZOLE: A NOVEL FUNGICIDE AND THE PROCESS FOR MAKING THE SAME
182.	IIHR, BANGALORE	ARKA MICRONUTRIENT FORMULATION
183.	IIHR, BANGALORE	BOILED GRAIN AND CHALK POWDER MIXER CUM BAG FILLER
184.	IIHR, BANGALORE	COMPOSITION TO MANAGE STEM BORER BACTOCERE RUFOMACULATA AND THE METHOD OF PREPARATION THEREOF
185.	IIHR, BANGALORE	NEEM SEED POWDER PELLET FORMULATION TECHNOLOGY
186.	IISR, CALICUT	METHOD OF ENCAPSULATING PGPR/MICROBES THROUGH BIOCAPSULES
187.	IISR, CALICUT	MICRONUTRIENT COMPOSITION FOR BLACK PEPPER AND A PROCESS FOR ITS PREPARATION
188.	IISR, CALICUT	MICRONUTRIENT COMPOSITION FOR GINGER AND A PROCESS FOR ITS PREPARATION
189.	IISR, CALICUT	MICRONUTRIENT COMPOSITION FOR TURMERIC AND A PROCESS FOR ITS PREPARATION
190.	NIANP, BANGALORE	HYDROPONIC FODDER PRODUCTION PROTOCOL
191.	NRC FOR GRAPES, PUNE	DECISION SUPPORT SYSTEM FOR GRAPES (DSS)
192.	CICR, NAGPUR	RAPID DETECTION OF CRY-1 AC TOXINS ON LATERAL FLOW STRIP
193.	CPCRI, KASARAGOD	ENTOMOPATHOGENIC NEMATODE ACQUA FORMULATION
194.	IIHR, BANGALORE	LIGHT CUM SUCTION TRAP
195.	IIHR, BANGALORE	PHEROMONE TRAP

196.	IIHR, BANGALORE	VEGETABLE AND BANANA MICRONUTRIENT FORMULATION
197.	IIMR, LUDHIANA	AERIAL INSECT TRAP
198.	IIMR, LUDHIANA	CORCYRA REARING CAGE
199.	IIMR, LUDHIANA	HELICOVERPAOVIPOSITION CAGE
200.	IIMR, LUDHIANA	INSECT HANDLING DEVICE
201.	IIMR, LUDHIANA	INSECT REARING CAGE
202.	IIMR, LUDHIANA	SPODOPTERA REARING CAGE
203.	IIMR, LUDHIANA	UV-C STERILIZATION CHAMBER
204.	NBAIR, BANGALORE	ADSORPTION AND DELIVERY OF MOLECULES USING NANOPOROUS MATERIALS
205.	NBAIR, BANGALORE	CLOSED SYSTEM FOR MASS PRODUCTION OF PREDATORY MITES
206.	NBAIR, BANGALORE	ENDOSULFAN TOLERANT STRAIN OF TRICHOGRAMMA CHILONIS
207.	NBAIR, BANGALORE	PROTOCOL FOR DESIGNING LURE FOR IMPREGNATING PARAPHEROMONE 4[4- ACETOXY) PHENYL-BUTANONE
208.	NBAIR, BANGALORE	SPODOPTERA FRUGIPERDA NUCLEOPOLYHEDRO VIRUS (SPFRNPV) NBAIR STRAIN FOR THE MANAGEMENT OF FAW
209.	NBAIR, BANGALORE	TECHNIQUE FOR REARING OF HOUSEFLY PARASITOID NASONIAVITRIPENNIS
210.	NBAIR, BANGALORE	TECHNIQUE FOR REARING OF HOUSEFLY PARASITOID SPALANGIA
211.	NBAIR, BANGALORE	TECHNIQUE FOR REARING OF PARASITOID NESOLYX THYMUS (GIRAULT) AND THEIR USE IN HOUSEFLY, MUSCA DOMESTICA MANAGEMENT
212.	NBAIR, BANGALORE	TECHNIQUE OF REARING BRINJAL SHOOT AND FRUIT BORER

213.	NBAIR, BANGALORE	VOLATILE ATTRACTANT FOR TRAPPING UZI FLY, EXORISTA BOMBYCIS, PRASITIOD PEST ON MULBERRY SILKWORM BOMBYX MORI BASED ON PHEROMONAL COMPOUNDS AND BISEXUAL ATTRACTANT
214.	NCIPM, NEW DELHI	ARIEL INSECT TRAP; UV CHAMBER FOR CORCYRA EGGS; EGG CLEANING DEVICE
215.	NCIPM, NEW DELHI	COW URINE BASED BIO-PETICIDE FORMULATION
216.	NCIPM, NEW DELHI	COW-URINE BASED HERBAL PLANT GROWTH REGULATOR
217.	NCIPM, NEW DELHI	DEVICE FOR BENEFICIAL INSECTS (ECONOMY MODEL) WITH HOST INSECT CULTURE AND ITS FOOD
218.	NCIPM, NEW DELHI	DEVICE FOR CLIMBING PESTS
219.	NCIPM, NEW DELHI	GPS ENABLED PEST MONITORING DATA LOGGE GPMD
220.	NCIPM, NEW DELHI	LIGHT TRAP SAFER TO BENEFICIAL INSECTS
221.	NRRI, CUTTACK	ALTERNATE ENERGY LIGHT TRAP
222.	VPKAS, ALMORA	VL WHITE GRUB BEETLE TRAP-1
	FARM MACHINERY AND TOOLS	
223.	CAZRI, JODHPUR	PV WINNOWER-CUM-DRYER AND SOLAR DRYER
224.	CIAE, BHOPAL	ALOEVERAGEL EXTRACTION EQUIPMENT
225.	CIAE, BHOPAL	ANIMAL DRAWN PLANTER
226.	CIAE, BHOPAL	ANOLA DESEEDING/ SEGMENTATION UNIT
227.	CIAE, BHOPAL	ARECANUT SHEATH SHREDDER
228.	CIAE, BHOPAL	AUGER DIGGER
229.	CIAE, BHOPAL	BANANA PSEUDO STEM INJECTOR
230.	CIAE, BHOPAL	BRIQUETTING MACHINE
231.	CIAE, BHOPAL	BULLOCK DRAWN AUTOMATIC 3 ROW SEED CUM FERTILIZER DRIL

232.	CIAE, BHOPAL	BULLOCK DRAWN THREE ROW PLANTERS WITH FERTILIZER DRILL FOR MILLETS
233.	CIAE, BHOPAL	CHARRING KILN
234.	CIAE, BHOPAL	COMMERCIAL PNEUMATIC PLANTER
235.	CIAE, BHOPAL	CURRY LEAF STRIPER
236.	CIAE, BHOPAL	CYCLE WHEEL HOE
237.	CIAE, BHOPAL	DAL MILL
238.	CIAE, BHOPAL	FRUIT CUM VEGETABLE GRADER
239.	CIAE, BHOPAL	GRAIN FLOUR SEPARATOR
240.	CIAE, BHOPAL	GROUNDNUT DIGGER
241.	CIAE, BHOPAL	GRUBBER WEEDER
242.	CIAE, BHOPAL	HAND HELD VEGETABLE TRANSPLANTER (MODEL-I SINGLE ROW)
243.	CIAE, BHOPAL	HOLDER WITH GRAIN CLEANER PADDY TRANSPLANTER
244.	CIAE, BHOPAL	INCLINED PLATE PLANTER
245.	CIAE, BHOPAL	INTEGRAL EXTRUSION EXPELLING UNIT FOR SOYBEAN
246.	CIAE, BHOPAL	LIGHT WEIGHT POWER TILLER
247.	CIAE, BHOPAL	MAIZE SHELLER
248.	CIAE, BHOPAL	MANUALLY OPERATED CONON WEEDER - PLASTIC MOULDED CONES
249.	CIAE, BHOPAL	MANUAL NAVEEN DIBBLER
250.	CIAE, BHOPAL	MANUAL PEG TYPE DRY LAND WEEDER
251.	CIAE, BHOPAL	MANUAL RICE PLANTER
252.	CIAE, BHOPAL	MANUAL TWIN WHEEL HOE, MODEL–II (TWO ROW)
253.	CIAE, BHOPAL	MANUAL/MOTORIZED SOYBEAN DEHULLER
254.	CIAE, BHOPAL	MANUALLY OPERATED PULL TYPE THREE ROW PLANTER FOR MILLETS – MULTI-CROPS MODEL I–(INCLINED PLATE TYPE)

255.	CIAE, BHOPAL	MANUALLY OPERATED PULL TYPE THREE ROW PLANTER FOR MILLETS – MULTI-CROPS MODEL-II-(VERTICAL PLATE TYPE)
256.	CIAE, BHOPAL	METALLIC CONOWEEDER
257.	CIAE, BHOPAL	MILLET MILL
258.	CIAE, BHOPAL	MODULAR BACKYARD POULTRY CAGE
259.	CIAE, BHOPAL	MODULAR ONION STORAGE STRUCTURE
260.	CIAE, BHOPAL	MORINGA LEAF STRIPPER
261.	CIAE, BHOPAL	MOTORIZED DOUBLE HEADED SUGARCANE SINGLE BUD CUTTING MACHINE.
262.	CIAE, BHOPAL	MULTI-NUTRIENT BISCUITS
263.	CIAE, BHOPAL	MULTIPLIER ONION PEELER
264.	CIAE, BHOPAL	MULTIPURPOSE MINI GRAIN MILL
265.	CIAE, BHOPAL	MULTI-PURPOSE TRAY
266.	CIAE, BHOPAL	PADDLE CUM POWER OPERATED GRAIN CLEANER CUM GRADER WITH OR WITHOUT MOTOR
267.	CIAE, BHOPAL	PADDLE OPERATED POTATO PEELER
268.	CIAE, BHOPAL	PADDLE OPERATED POTATO SLICER
269.	CIAE, BHOPAL	PADDY THRESHER
270.	CIAE, BHOPAL	PEDAL CUM POWER OPERATED GRAIN/ CLEANER CUM GRADER
271.	CIAE, BHOPAL	PEDAL CUM POWER OPERATED SEED CLEANER CUM GRADER WITH AND WITHOUT MOTOR
272.	CIAE, BHOPAL	PEG TYPE PUDDLER
273.	CIAE, BHOPAL	PNEUMATIC PLANTER
274.	CIAE, BHOPAL	PORTABLE WEIGHING MACHINE AND SYSTEMS FOR LIVE ANIMAL SECURITY SYSTEMS
275.	CIAE, BHOPAL	POTATO PEELER
276.	CIAE, BHOPAL	POTATO SLICER

277.	CIAE, BHOPAL	POWER OPERATED POTTING MACHINE
278.	CIAE, BHOPAL	POWER TILLER DRAWN SEED CUM FERTILIZER DRILL
279.	CIAE, BHOPAL	POWER WEEDER
280.	CIAE, BHOPAL	ROPE MAKING FROM OUTER SHEATH OF BANANA PSEUDOSTEM
281.	CIAE, BHOPAL	ROTARY DIBBLER
282.	CIAE, BHOPAL	SCARRATED SCIKLE SACK
283.	CIAE, BHOPAL	SELF-PROPELLED MULTIPURPOSE HYDRAULIC LIFT SYSTEM (FOR ORCHARDS)
284.	CIAE, BHOPAL	SERRIATED SICKLE
285.	CIAE, BHOPAL	SICKLE ANIMAL DRAWN PLANTER
286.	CIAE, BHOPAL	SICKLE MANUFACTURING TECHNOLOGY
287.	CIAE, BHOPAL	SOYA DEHULLER
288.	CIAE, BHOPAL	SOYA PANEER PLANT
289.	CIAE, BHOPAL	SOYABEAN CLEANER CUM GRADER
290.	CIAE, BHOPAL	SPAD METER
291.	CIAE, BHOPAL	SUGARCANE RIND REMOVING EQUIPMENT FOR JUICE MAKING
292.	CIAE, BHOPAL	SUGARCANE SETT TREATMENT DEVICE
293.	CIAE, BHOPAL	TOUCH FREE HAND WASH SYSTEM
294.	CIAE, BHOPAL	TRACTOR DRAWN VEGETABLE TRANSPLANTER
295.	CIAE, BHOPAL	TRACTOR OPERATED CASSAVA HARVESTER CUM LIFTER
296.	CIAE, BHOPAL	TRACTOR OPERATED CASSAVA STAKE CUTTER PLANTER
297.	CIAE, BHOPAL	TRACTOR OPERATED TURMERIC HARVESTOR
298.	CIAE, BHOPAL	TWIN WHEEL HOE
299.	CIAE, BHOPAL	TWO ROW SEED CUM FERTILIZER DRILL (FOR SMALL SEED)

300.	CIAE, BHOPAL	ZERO TILL DRILL
301.	CICR, NAGPUR	SOLAR POWERED KNAPSACK SPRAYER WITH TILTING ARRANGEMENT
302.	CIPHET, LUDHIANA	CIPHET-POTATO PEELER CUM WASHER
303.	CIPHET, LUDHIANA	HIGH VOLUME LOW SPEED (HVLS) FAN
304.	CIPHET, LUDHIANA	LIVE FISH CARRIER SYSTEM AND METHOD
305.	CIPHET, LUDHIANA	MECHANIZED SYSTEM FOR POPPING AND DECORTICATIONS OF MAKHANA SEEDS
306.	CIPHET, LUDHIANA	MUSTARD DE-HULLING PILOT PLANT
307.	CIPHET, LUDHIANA	NO-TOUCH AUTOMATIC DISPENSER FOR HAND SANITIZATION
308.	CIPHET, LUDHIANA	OZONE BASED FRUITS AND VEGETABLE WASHER-CUM-PURIFIER (OZO-C)
309.	CIPHET, LUDHIANA	PORTABLE SMART ULTRAVIOLET-C DISINFECTION SYSTEM" (UVIC)
310.	CIPHET, LUDHIANA	PRE-GRINDER FOR SIZE REDUCTION OF MUSTARD SEED
311.	CIPHET, LUDHIANA	WADI MAKING MACHINE
312.	CIRCOT, MUMBAI	MULTIPURPOSE FARM EQUIPMENT FOR SEEDING, WEEDING AND FERTILIZING
313.	CIRCOT, MUMBAI	PEDAL DRIVEN BANANA FIBRE SPINNING SYSTEM, "CIRCOT-PHOENIX CHARKHA"
314.	CIWA, BHUBNESHWAR	HAND OPERATED MAIZE DEHUSKER CUM SHELLER
315.	CPCRI, KASARAGOD	COCONUT DE-SHELLING MACHINE
316.	CPCRI, KASARAGOD	COCONUT PULVERISER
317.	CPCRI, KASARAGOD	COCONUT SAP CHILLER
318.	CPCRI, KASARAGOD	COCONUT SHELL REMOVING MACHINE

319.	CPCRI, KASARAGOD	DESIGN AND DRAWING OF VCO COOKER
320.	CPCRI, KASARAGOD	DOUBLE SCREW COCONUT MILK EXPELLER
321.	CPCRI, KASARAGOD	SAFETY DEVICE FOR CHEMBERI MODEL OF PADDLE TYPE COCONUT CLIMBING MACHINE
322.	CPCRI, KASARAGOD	SNAWBALL TENDERNUT MACHINE
323.	CPCRI, KASARAGOD	TENDER COCONUT TRIMMING MACHINE
324.	CPRI, SHIMLA	COUNTING MACHINE
325.	CRIDA, HYDERABAD	CRIDA 9 ROW PLANTER
326.	CRIDA, HYDERABAD	CRIDA RIDGER PLANTER
327.	CRIDA, HYDERABAD	GROUNDNUT STRIPPER
328.	CRIDA, HYDERABAD	ORCHARD SPRAYER
329.	CRIDA, HYDERABAD	RIDGER PLANTER/BBF PLANTER (TRACTOR DRAWN)
330.	CRIDA, HYDERABAD	ROW PLANTER
331.	CRIJAF, BARRACKPORE	CRIJAF JUTE SEEDER
332.	CRIJAF, BARRACKPORE	HERBICIDE APPLICATOR
333.	CRIJAF, BARRACKPORE	MULTIROW SEED DRILL
334.	CRIJAF, BARRACKPORE	NAIL WEEDER
335.	CRIJAF, BARRACKPORE	SEED SOWING MACHINE
336.	CTCRI, THIRUVANANTHAPURAM	CASSAVA CHIPPING MACHINE (MOTORIZED)
337.	CTCRI, THIRUVANANTHAPURAM	CASSAVA CHIPPING MACHINE (SS)
338.	CTCRI, THIRUVANANTHAPURAM	HAND OPERATED CASSAVA CHIPPING MACHINE
339.	CTCRI, THIRUVANANTHAPURAM	MOBILE STARCH EXTRACTION UNIT
340.	CTCRI, THIRUVANANTHAPURAM	MOTORISED ONION GRADER
341.	CTRI, RAJAHMUNDRY	BANANA FIBER EXTRACTOR
342.	CTRI, RAJAHMUNDRY	PALMYRAH FIBER SEPARATING MACHINE
343.	DCR, PUTTUR	CASHEW PROCESSING SYSTEM

344.	DCR, PUTTUR	CONCENTRIC DRUM TYPE ROTARY SIEVE GRADER FOR RAW APPLE JUICE EXTRACTOR
345.	DCR, PUTTUR	DUAL MODE DRYER FOR RAW CASHEWNUTS
346.	DCR, PUTTUR	RADIAL ARM TYPE CASHEW KERNEL EXTRACTING MACHINE
347.	DCR, PUTTUR	ROTATING DRUM ROASTING MACHINE FOR RAW CASHEWNUTS
348.	DCR, PUTTUR	UPDRAFT GASIFIER FOR CASHEW SHELL CAKE
349.	IARI, NEW DELHI	HYDROGEL APPLICATOR
350.	IARI, NEW DELHI	PUSA AQUA FERTI SEED DRILL
351.	IARI, NEW DELHI	PUSA FRUIT AND VEGETABLE GRADER
352.	IARI, NEW DELHI	PUSA POWER OPERATED WINNOWER
353.	IARI, NEW DELHI	SAFETY GADGETS FOR CHAFF CUTTERS
354.	IARI, NEW DELHI	SOLAR POWERED SPRAYER
355.	ICAR RC FOR NEH REGION, UMAIM	ADJUSTABLE ROW MARKER
356.	ICAR RC FOR NEH REGION, UMAIM	CONONWEEDER
357.	IIHR, BANGALORE	ANIMAL AND MANUAL DRAWN ONION SEEDER
358.	IIHR, BANGALORE	ANIMAL DRAWN ONION SEEDER
359.	IIHR, BANGALORE	ARKA HIGH HUMIDITY BOX
360.	IIHR, BANGALORE	ARKA LIME HARVESTER
361.	IIHR, BANGALORE	ARKA MANGO HARVESTERS
362.	IIHR, BANGALORE	ARKA MANUALLY DRAWN ONION SEEDER
363.	IIHR, BANGALORE	ARKA NEELACHAL MACHANISED RAW JACKFRUIT PEELER
364.	IIHR, BANGALORE	ARKA POMEGRANATE ARIL REMOVER TECHNOLOGY
365.	IIHR, BANGALORE	ARKA RAW MANGO PROCESSING MACHINERY (SIZE GRADER)

366.	IIHR, BANGALORE	CONTINUOUS HOT WATER TREATMENT UNIT FOR MANGOES
367.	IIHR, BANGALORE	FRUIT AND VEGETABLE VENDING VAN
368.	IIHR, BANGALORE	LIME HARVESTER
369.	IIHR, BANGALORE	MANNUAL DRAWN ONION SEEDER
370.	IIHR, BANGALORE	MANUFACTURING OF MUSHROOM MACHINERY
371.	IIHR, BANGALORE	MOBILE VENDING VAN
372.	IIHR, BANGALORE	MUSHROOM SPAWN PRODUCTION MACHINERY
373.	IIHR, BANGALORE	POWER OPERATED ONION DE-TOPPER
374.	IIHR, BANGALORE	SAPOTA HARVESTER
375.	IIHR, BANGALORE	SOLAR POWER INTEGRATED OUTDOOR MUSHROOM GROWING UNIT
376.	IIHR, BANGALORE	SOLAR POWER OPERATED TRICYCLE CART FOR FRESH FRUITS AND VEGETABLE VENDING
377.	IIHR, BANGALORE	SOLAR POWERED TRICYCLE CART FOR VENDING FRESH FRUITS AND VEGETABLES
378.	IIHR, BANGALORE	TRACTOR OPERATED HYDRAULIC PLATFORM, ONION SEEDER ONION EXTRACTOR
379.	IIMR, LUDHIANA	DYNAMIC VOLATILE COLLECTION SYSTEM
380.	IIMR, LUDHIANA	GRAIN AND CHAFF SEPARATOR
381.	IINRG, RANCHI	SMALL SCALE LAC PROCESSING UNIT (CAP-100KG/DAY)
382.	IIPR, KANPUR	IIPR MINI DAAL CHAKKI TECHNOLOGY
383.	IIPR, KANPUR	NO-TRILL DRILL (DOUBLE DISC TYPE) TECHNOLOGY

384.	IIPR, KANPUR	NO-TRILL DRILL (INVERTED 'T' TYPE) TECHNOLOGY
385.	IISR, INDORE	BROAD BED FURROW MACHINE
386.	IISR, INDORE	BROAD BED FURROW SEED DRILL
387.	IISR, INDORE	FIRBS MACHINE
388.	IISR, INDORE	FIRBS SEED DRILL
389.	IISR, INDORE	SOYBEAN SEED DRILL CUM PLANTER
390.	IISR, INDORE	SUBSOILER MACHINE
391.	IISR, INDORE	SWEEP SEED DRILL MACHINE
392.	IISR, LUCKNOW	DEEP FURROW SUGARCANE CUTTER PLANTER
393.	IISR, LUCKNOW	IISR MODEL JAGGERY UNIT
394.	IISR, LUCKNOW	IISR SUGARCANE CUTTER PLANTER
395.	IISR, LUCKNOW	SUGARCANE MACHINES (PLANTERS)
396.	IISR, LUCKNOW	SUGARCANE PROCESS MACHINERIES
397.	NDRI, KARNAL	CONTINUOUS PANEER MAKING MACHINE
398.	NRCSS, AJMER	CRYOGENIC GRINDER FOR SPICES
399.	NRRI, CUTTACK	DRUM SEEDER
400.	NRRI, CUTTACK	FINGER WEEDER
401.	NRRI, CUTTACK	FIVE PANEL CLCC WITH FOLDER
402.	NRRI, CUTTACK	MANUAL TRANSPLANTER
403.	NRRI, CUTTACK	MINI PARBOILING UNIT
404.	NRRI, CUTTACK	NRRI FARM IMPLEMENTS
405.	SBI, COIMBATORE	QUATRO SUGARCANE SINGLE BUD CUTTER MACHINE
406.	SBI, COIMBATORE	SOIL MOISTURE INDICATOR
407.	SBI, COIMBATORE	SUGARCANE DETRASHING DEVICE
408.	SBI, COIMBATORE	TWO ROW TRACTOR DRAWN MECHANICAL PLANTER FOR SUGARCANE BUD CHIP/SINGLE BUD SETTLINGS RAISED IN PORTRAYS

409.	VPKAS, ALMORA	VIVEK MADUA THRESHER-1
410.	VPKAS, ALMORA	VL METALLIC PLOUGH
411.	VPKAS, ALMORA	VL PADDY THRESHER
412.	VPKAS, ALMORA	VL PORTABLE POLYHOUSE-A GREENHOUSE EFFECT CREATING APPARATUS
413.	VPKAS, ALMORA	VL SEED CUM FERTILIZER DRILL
414.	VPKAS, ALMORA	VL SMALL TOOL KIT
415.	VPKAS, ALMORA	VL SOLAR DRIER
FIBRE AND TEXTILE TECHNOLOGIES		
416.	CIRCOT, MUMBAI	ANTIBACTERIAL TREATMENT OF TEXTILE MATERIALS
417.	CIRCOT, MUMBAI	CONTINUOUS FEEDING PELLET STOVE (CFPS) WITH PELLETS AS FUEL
418.	CIRCOT, MUMBAI	DESIGN AND DEVELOPMENT OF MINIATURE GINNING MACHINES
419.	CIRCOT, MUMBAI	DESIGN AND DEVELOPMENT OF AUTOGROOVING MACHINE FOR ROLLER GINNING SYSTEM
420.	CIRCOT, MUMBAI	DESIGN AND DEVELOPMENT OF COTTON BASED NANO FINISHED SLEEPING BAGS
421.	CIRCOT, MUMBAI	DESIGN AND DEVELOPMENT OF EFFICIENT MACHINERIES FOR GINNING AND PRESSING
422.	CIRCOT, MUMBAI	DESIGN AND DEVELOPMENT OF FIBRE REINFORCED PAPER CARRY BAGS
423.	CIRCOT, MUMBAI	DESIGN AND DEVELOPMENT OF MINIATURE SPINNING SYSTEM
424.	CIRCOT, MUMBAI	DESIGN AND DEVELOPMENT OF NATURAL PRODUCT BASED FORMULATION I.E. NANOFIBROUS MATS USING ELECTROSPINNING EQUIPMENT
425.	CIRCOT, MUMBAI	DESIGN AND DEVELOPMENT OF NEW DOUBLE ROLLER GINNING MACHINE WITH SELF GROOVING RUBBER ROLLER

426.	CIRCOT, MUMBAI	DESIGN AND DEVELOPMENT OF SMALL GINS FOR FARMERS
427.	CIRCOT, MUMBAI	DESIGN AND MACHINERY FOR AUTOMATIC COTTON GINNING AND PRESSING PLANTS
428.	CIRCOT, MUMBAI	DESIGN AND MACHINERY FOR AUTOMATIC COTTON GINNING PLANT
429.	CIRCOT, MUMBAI	DESIGN AND MANUFACTURING OF PRE-CLEANER, DOUBLE ROLLER GIN, BALING PRESSES AND FEEDING SYSTEMS
430.	CIRCOT, MUMBAI	DEVELOPMENT OF STANDARD PROTOCOL FOR ENSURING TRANSPARENCY IN EVALUATION OF QUALITY AND LOT WISE ANALYSIS OF COTTON FULLY PRESSED (FP) BALES
431.	CIRCOT, MUMBAI	DEVELOPMENT OF STARCH BASED FILM
432.	CIRCOT, MUMBAI	DEVELOPMENT OF THERMAL SEAT COVERS FOR AUTOMOTIVE APPLICATIONS
433.	CIRCOT, MUMBAI	DOUBLE ROLLER GINNING MACHINES WITH HINGED KNIFE, LEAF SPRING PRESSURE MECHANISM AND RECIPROCATING FINGER TYPE SEED METERING DEVICE
434.	CIRCOT, MUMBAI	ECO-FRIENDLY DYEING AND FINISHING OF KHADI AND HANDLOOM FABRIC
435.	CIRCOT, MUMBAI	ECOFRIENDLY, EFFICIENT AND RAPID BURNING CREMATORIUM USING COTTON STALK/BIOMASS BRIQUETTES
436.	CIRCOT, MUMBAI	EXTRACTION OF BUTTER FROM MANGO KERNEL FOR USE IN SKIN CREAM AND COSMETIC INDUSTRY
437.	CIRCOT, MUMBAI	FIBRE REINFORCED NATURAL RUBBER BASED GARDEN POTS

438.	CIRCOT, MUMBAI	FORMULATION WITH ANTIFUNGAL AGENTS FOR APPLYING AS LUBRICANTS ON SYNTHETIC YARNS
439.	CIRCOT, MUMBAI	GIN COTTON LINT OPENER
440.	CIRCOT, MUMBAI	GIN TRASH HANDLING SYSTEM TO DESTROY PINK BOLLWORM FROM COTTON GINNERIES
441.	CIRCOT, MUMBAI	GINNING AND PRESSING TECHNOLOGY
442.	CIRCOT, MUMBAI	KNOW-HOW OF TEXTILE BASED COTTAGE INDUSTRY
443.	CIRCOT, MUMBAI	LYSIMETER BASED WATER MANAGEMENT SYSTEM
444.	CIRCOT, MUMBAI	MANUFACTURING MINIATURE GINNING MACHINES
445.	CIRCOT, MUMBAI	MECHANICAL PROPERTY TESTING OF PADDY STRAW PARTICLE BOARDS
446.	CIRCOT, MUMBAI	NANOCELLULOSE APPLICATION IN TEXTILE-YARN SPINNING
447.	CIRCOT, MUMBAI	NANOCELLULOSE PRODUCTION TECHNOLOGY
448.	CIRCOT, MUMBAI	NANOFIBRES
449.	CIRCOT, MUMBAI	NANO-ZNO FINISHING OF TEXTILE MATERIAL AND ITS CHARACTERIZATION
450.	CIRCOT, MUMBAI	QUALITY IMPROVEMENT OF COTTON CELLULOSIC BIOPOLYMER
451.	CIRCOT, MUMBAI	REAL TIME RECORDER AND MONITOR OF REEFER MARINE CONTAINER ON ROAD TRANSPORTATION
452.	CIRCOT, MUMBAI	REPOL POLYPROPYLENE BASED NON-WOVEN FABRIC
453.	CIRCOT, MUMBAI	SMALL GINS SUCH AS CLOY GIN, LILIPUT GIN
454.	CIRCOT, MUMBAI	SMALL PORTABLE GIN OF CIRCOT/ LILLIPUT GIN

455.	CIRCOT, MUMBAI	SPECIALTY FILTER PAPER FROM BLEACHED COTTON LINTER
456.	CIRCOT, MUMBAI	SPINNING PERFORMANCE OF SPIN FINISH FOR P/V BLEND
457.	CIRCOT, MUMBAI	TECHNOLOGY FOR BLEACHED COTTON PREPARATION
458.	CIRCOT, MUMBAI	TECHNOLOGY FOR PARTICLE BOARDS PREPARATION
459.	CIRCOT, MUMBAI	TECHNOLOGY FOR VALUE ADDED PRODUCTS USING NATURALLY COLOURED COTTON
460.	CIRCOT, MUMBAI	THERMAL CHARACTERIZATION OF PROTEIN SAMPLES
461.	NINFET, KOLKATA	AUTOMATIC ELECTRONIC FIBRE BUNDLE STRENGTH TESTER FOR MULTIPLE FIBRE
462.	NINFET, KOLKATA	BANANA PSEUDOSTEM FIBRE EXTRACTOR
463.	NINFET, KOLKATA	DESIGNER JUTE BAGS
464.	NINFET, KOLKATA	DIGITAL COLOUR LUSTRE METER (LABORATORY TYPE)
465.	NINFET, KOLKATA	DIGITAL COLOUR RANGE INDICATOR
466.	NINFET, KOLKATA	DIGITAL FINENESS METER FOR MULTIPLE FIBRES (RAMIE, SUNHEMP, SISAL, FLAX)
467.	NINFET, KOLKATA	DIGITAL MOISTURE METER (LABORATORY TYPE WITH PROBES)
468.	NINFET, KOLKATA	ELECTRONIC FIBRE BUNDLE STRENGTH TESTER FOR JUTE (SEMI-AUTO)
469.	NINFET, KOLKATA	JUTE BASED AGRO TEXTILES
470.	NINFET, KOLKATA	JUTE BASED DECORATIVE HANDLOOM FABRIC FOR DRESS MATERIALS
471.	NINFET, KOLKATA	JUTE BASED DECORATIVE YARN
472.	NINFET, KOLKATA	JUTE BASED HANDMADE PAPER
473.	NINFET, KOLKATA	JUTE STICK PARTICLE BOARD & JUTE BASED HANDLOOM FABRIC

474.	NINFET, KOLKATA	LIGHT WEIGHT NON-WOVEN FABRICS
475.	NINFET, KOLKATA	MANUFACTURE OF NETTLE FIBRE BASED YARN
476.	NINFET, KOLKATA	NINFET SATHI (A RETTING ACCELERATOR OF JUTE AND MESTA)
477.	NINFET, KOLKATA	PINEAPPLE LEAF FIBRE EXTRACTOR
478.	NINFET, KOLKATA	PORTABLE HARD FIBRE TENSILE TESTER
479.	NINFET, KOLKATA	PRODUCTION OF JUTE/MAT STICK FABRIC
480.	NINFET, KOLKATA	THERMAL INSULATION VALUE TESTER
481.	CIRCOT, MUMBAI	CIRCOT GREEN CREMATORIUM
482.	CIRCOT, MUMBAI	BANANA FIBRE BASED COMPOSITE MATERIALS AND PREPARATION OF MICROCRYSTALLINE CELLULOSE (MCC)
483.	CIRCOT, MUMBAI	CHARACTERIZATION OF NANOCELLULOSE
484.	CIRCOT, MUMBAI	NANOCELLULOSE FROM COTTON LINTERS AND USE OF ELECTROSPUN NANOFIBERS IN FILTERS
485.	CIRCOT, MUMBAI	TEXTILE REINFORCED RUBBER COMPOSITE SHEETS
FISH FARMING PROCESS AND VALUE ADDITION		
486.	CCARI, GOA	PROCESS FOR MANUFACTURING OF ORNAMENTAL FISH FEED
487.	CIBA, CHENNAI	AMMONIA
488.	CIBA, CHENNAI	ASIAN SEABASE FEED PRODUCTION TECHNOLOGY
489.	CIBA, CHENNAI	ASIAN SEABASS (LATES CALCARIFER)
490.	CIBA, CHENNAI	BACTERIAL CONSORTIUM FOR THE DEVELOPMENT OF BIOAUGMENTOR

491.	CIBA, CHENNAI	CBA
492.	CIBA, CHENNAI	CIBAMOX - WATER PROBIOTIC TECHNOLOGY
493.	CIBA, CHENNAI	CIBASTIM
494.	CIBA, CHENNAI	CMH MINERAL
495.	CIBA, CHENNAI	COLOR FISH PLUS-CIBA ORNAMENTAL FISH FEED
496.	CIBA, CHENNAI	ECO- FRIENDLY BIOFLOC BASED TECHNOLOGY
497.	CIBA, CHENNAI	FISH AND SHRIMP FEED PROCESSING TECHNOLOGY
498.	CIBA, CHENNAI	FISH FEED PROCESSING AND PRODUCTION
499.	CIBA, CHENNAI	FORMULATION TO CONTROL PARASITIC INFESTATIONS IN FISH
500.	CIBA, CHENNAI	HATCHERY TECHNOLOGY FOR SEABASS SEED PRODUCTION
501.	CIBA, CHENNAI	IMMOBILIZATION MATRIX FOR BACTERIAL BIOMASS
502.	CIBA, CHENNAI	KNOW-HOW FOR ON SHRIMP FEED PROCESSING AND PRODUCTION
503.	CIBA, CHENNAI	MICRO BRACKISHWATER KIT
504.	CIBA, CHENNAI	MILKFISH (CHANOS CHANOS) SEED REARING AND CAPTIVE BROODSTOCK DEVELOPMENT
505.	CIBA, CHENNAI	NITRITE
506.	CIBA, CHENNAI	PCR KIT FOR DETECTION OF WHITE SPOT SYNDROME VIRUS
507.	CIBA, CHENNAI	PENAEID SHRIMP NURSERY TECHNOLOGY
508.	CIBA, CHENNAI	PH & DO KIT
509.	CIBA, CHENNAI	POLYCULTURE FEED PROCESSING AND PRODUCTION
510.	CIBA, CHENNAI	REAL TIME PCR KIT FOR DETECTION OF WHITE SPOT SYNDROME VIRUS (WSSV) AND ENTEROCYTOZOON HEPATOPENAEI (EHP)
511.	CIBA, CHENNAI	SEABASS FEED PROCESSING AND PRODUCTION TECHNOLOGY

512.	CIBA, CHENNAI	SHRIMP AND SEABASS FEED PROCESSING AND PRODUCTION
513.	CIBA, CHENNAI	SHRIMP FEED TECHNOLOGY
514.	CIBA, CHENNAI	SHRIMP LARVAL FEED
515.	CIBA, CHENNAI	SMALL SCALE INTEGRATED FEED MILL FOR PRODUCTION OF FISH & SHRIMP FEED
516.	CIBA, CHENNAI	TECHNOLOGY ON PLANKTON
517.	CIBA, CHENNAI	VITAMIN AND MINERAL MIXTURE FOR SHRIMP
518.	CIFA, BHUBNESHWAR	CARP-GROWER
519.	CIFA, BHUBNESHWAR	CARP-STARTER
520.	CIFA, BHUBNESHWAR	CIFABROOD
521.	CIFA, BHUBNESHWAR	CIFA-CRYO
522.	CIFA, BHUBNESHWAR	CIFACURE
523.	CIFA, BHUBNESHWAR	CIFAX
524.	CIFA, BHUBNESHWAR	DOT ELISA KIT
525.	CIFA, BHUBNESHWAR	FEED BINDER CUM ADDITIVE
526.	CIFA, BHUBNESHWAR	FISH FEED TECHNOLOGY
527.	CIFA, BHUBNESHWAR	FISH-HYDROLYSATE
528.	CIFA, BHUBNESHWAR	FRP CARP HATCHERY
529.	CIFA, BHUBNESHWAR	FRP MAGUR HATCHERY
530.	CIFA, BHUBNESHWAR	FRP PORTABLE CARP HATCHERY
531.	CIFA, BHUBNESHWAR	IMMUNOBOOST –C
532.	CIFA, BHUBNESHWAR	JAYANTI ROHU
533.	CIFA, BHUBNESHWAR	NANOPLUS@CIFA
534.	CIFA, BHUBNESHWAR	SPOT AGGLUTINATION KIT
535.	CIFE, MUMBAI	FISH BASED EXTRUDED PRODUCT USING FISH POWDER/ FISH MEAT/ FISH OIL
536.	CIFRI, BARRACKPORE	CIFRI ARGCURE
537.	CIFRI, BARRACKPORE	CIFRI CAGE GROW FISH FEED
538.	CIFRI, BARRACKPORE	CIFRI PEN HDPE: PEN CULTURE TECHNOLOGY
539.	CIFT, COCHIN	CHILLED FISH AND DRY FISH PRODUCTION

540.	CIFT, COCHIN	CHILLED STORAGE FACILITY AT RETAIL FISH VENDING HUB IN AROOR AND TECHNOLOGY FOR REFRIGERATED MOBILE FISH VENDING KIOSK (CIFTEQ CHILLFISH- RKVK)
541.	CIFT, COCHIN	CIFTEST RAPID DETECTION KITS FOR FINDING ADULTERANTS IN FISH
542.	CIFT, COCHIN	CLAM SHUCKING EQUIPMENT
543.	CIFT, COCHIN	DRYER JSDL – 55 SM
544.	CIFT, COCHIN	DRYER JSDL -110 SM
545.	CIFT, COCHIN	DRYER SDE – 5
546.	CIFT, COCHIN	EMBEDDED TECHNOLOGY FOR DESCALING MACHINE (10 KG)
547.	CIFT, COCHIN	ENZYME BASED DE-PROTEINIZATION OF SHRIMP SHELL WASTE AND HYDROLYSATE PRODUCTION
548.	CIFT, COCHIN	EXTRACTION PROTOCOL OF SEAWEED SULPHATED POLYSACCHARIDE AND FUCOXANTHIN FROM SEAWEED
549.	CIFT, COCHIN	FEED FROM FISH WASTE
550.	CIFT, COCHIN	FISH COLLAGEN PEPTIDE AND FISH CALCIUM
551.	CIFT, COCHIN	FISH COLLAGEN PEPTIDE AND HYDROXYAPATITE
552.	CIFT, COCHIN	FISH/ SHRIMP FEED FROM FISH PROCESSING DISCARDS
553.	CIFT, COCHIN	FOLIAR SPRAY FROM FISH WASTE
554.	CIFT, COCHIN	FRESH FISH HANDLING, CLEANING AND ITS PACKAGING
555.	CIFT, COCHIN	GROWTH ENHANCER AND SPRAY DRIED FEED SUPPLEMENTS FROM SHRIMP SHELL WASTE
556.	CIFT, COCHIN	HYBRID SOLAR DRYER AND PRODUCTION OF DRY FISH
557.	CIFT, COCHIN	HYGIENIC FRESH FISH HANDLING, CLEANING AND PACKAGING

558.	CIFT, COCHIN	MANUFACTURE OF COLLAGEN CONCENTRATED FISH SKIN FOR COLLAGEN/GELATIN/COLLAGEN-PEPTIDE EXTRACTION
559.	CIFT, COCHIN	METHOD FOR EXTRACTION OF CHITIN AND CHITOSAN FROM PRAWN SHELL WASTE
560.	CIFT, COCHIN	OPTIMIZATION OF PROCESS CONDITIONS FOR THE PRODUCTION OF VALUE-ADDED PRODUCTS FROM JACKFRUIT
561.	CIFT, COCHIN	PRE-PROCESSING OF SELECTED MARINE AND INLAND FISH AND PRAWNS
562.	CIFT, COCHIN	PRODUCTION OF HYDROXY APATITE
563.	CIFT, COCHIN	PROTEIN HYDROLYSATE FROM FISH, SHRIMP AND DISTILLERY BY PRODUCTS
564.	CIFT, COCHIN	READY-TO-SERVE FISH CURRY IN RETORTABLE POUCHES
565.	CIFT, COCHIN	REFRIGERATION ENABLED MOBILE FISH VENDING KIOSK (STRAIGHT LINE - I SHAPE)
566.	CIFT, COCHIN	SOLAR ELECTRICAL FISH DRYER (100 KG CAPACITY) FOR HYGIENIC DRYING OF FISH
567.	CIFT, COCHIN	SOLAR ELECTRICAL FISH DRYER (2 UNITS WITH 300 KG CAPACITY EACH) FOR HYGIENIC DRYING OF FISH
568.	CIFT, COCHIN	SOLAR FISH DRYER WITH LPG BACKUP (300 KG) FOR HYGIENIC DRYING OF FISH
569.	CIFT, COCHIN	SOLAR-LPG HYBRID DRYER (100 KG CAPACITY) FOR DEHYDRATION OF GOOSEBERRY PRODUCTS
570.	CIFT, COCHIN	SOLAR-LPG HYBRID DRYER (100 KG CAPACITY) FOR DRY FISH PROCESSING

571.	CIFT, COCHIN	SOLAR-TUNNEL DRYER (50KG CAPACITY) FOR DRY FISH PROCESSING
572.	CMFRI, COCHIN	BREEDING TECHNOLOGY OF AMPHIPRION OCELLARIS
573.	CMFRI, COCHIN	DEVICE FOR BREEDING AND CULTURING MARINE FISH IN OPEN SEA
574.	CMFRI, COCHIN	VARSHA-ORNAMENTAL FISH FEED
575.	DCFR, BHIMTAL	DEVELOPMENT AND VALIDATION OF COMPLETE RANGE OF RAINBOW TROUT FEEDS
FOOD PROCESSING AND POST-HARVEST TECHNOLOGIES		
576.	CARI, IZATNAGAR	PROCESS OF PREPARATION OF CHICKEN MEAT WAFERS
577.	CARI, IZATNAGAR	PROCESS OF PREPARATION OF FUNCTIONAL CHICKEN MEAT BITES
578.	CARI, IZATNAGAR	SALTED CHICKEN EGGS
579.	CCARI, GOA	PROCESS FOR MANUFACTURING OF NUTMEG PERICARP TAFFY
580.	CCARI, GOA	PRODUCTION OF BYPASS FAT INDIGENOUSLY
581.	CIAE, BHOPAL	NUTRI BAR
582.	CIAE, BHOPAL	PROCESS TECHNOLOGY FOR SOYA CHAAP
583.	CIAE, BHOPAL	SOY FORTIFIED NUTRITIOUS HEALTHY NOODLES
584.	CIAE, BHOPAL	SOY-BUTTER
585.	CIFT, COCHIN	DRY FISH, DRIED SHRIMP, AND LOW SALT DRIED FISH PRODUCTS
586.	CIFT, COCHIN	DRY PRAWN FRY
587.	CIFT, COCHIN	FISH AND CHICKEN SAUSAGES
588.	CIFT, COCHIN	FISH AND PRAWN PICKLES
589.	CIFT, COCHIN	FISH CHEESE BALL
590.	CIFT, COCHIN	FISH CUTLETS
591.	CIFT, COCHIN	FISH PICKLE
592.	CIFT, COCHIN	FISH PROTEIN “FISH PRO”
593.	CIFT, COCHIN	FISH SILAGE

594.	CIFT, COCHIN	FISH/PRAWN PICKLES AND CHUTNEY POWDER
595.	CIFT, COCHIN	HANDLING OF FRESH FISH
596.	CIFT, COCHIN	MASALA FRIED CLAM
597.	CIFT, COCHIN	PRAWN CHUTNEY POWDER
598.	CIFT, COCHIN	PRE-PROCESSING AND PACKAGING OF FRESH FISH
599.	CIFT, COCHIN	PROCESSING OF FROZEN STUFFED MUSSEL RECIPES
600.	CIFT, COCHIN	PRODUCTION OF FISH MEAT AND OIL
601.	CIFT, COCHIN	RETORT PROCESSED READY TO COOK/FRY STUFFED MUSSELS AND MUSSEL MEATS
602.	CIFT, COCHIN	RTE ROASTED COCONUT PASTES FOR SQUID, CRAB, PRAWN, SAMBAR, CHICKEN AND MEAT.
603.	CIFT, COCHIN	SEAWEED NUTRI-POWDER, CALCIUM-IRON FORTIFIED FISH SOUP POWDER AND HAND SANITIZER
604.	CIFT, COCHIN	SHRIMP PICKLE
605.	CIFT, COCHIN	TUNA SALAD
606.	CIFT, COCHIN	VALUE ADDED FROZEN FISHERY PRODUCTS
607.	CIPHET, LUDHIANA	ALCOHOLIC BEVERAGE WITH NUTRACEUTICAL PROPERTIES FROM KINNOW PEELS
608.	CIPHET, LUDHIANA	APPARATUS FOR PRODUCTION OF MICROCAPSULES
609.	CIPHET, LUDHIANA	EXTRUSION TECHNOLOGY FOR SNACK FOODS
610.	CIPHET, LUDHIANA	FAT FREE FLAVOURED MAKHANA
611.	CIPHET, LUDHIANA	GREEN CHILLI POWDER AND GREEN CHILLY PUREE
612.	CIPHET, LUDHIANA	LOW FAT MEAT EMULSION AND PROCESS FOR MAKING THE SAME
613.	CIPHET, LUDHIANA	MEAT PROCESSING AND VALUE ADDITION TECHNOLOGY

614.	CIPHET, LUDHIANA	NUTRITIOUS FUNCTIONAL CHAPATTI FLOUR
615.	CIPHET, LUDHIANA	READY TO CONSTITUTE MAKHANAKHEER MIX
616.	CIRCOT, MUMBAI	MULBERRY GREEN TEA AND OTHER BY-PRODUCTS PRODUCTION
617.	CISH, LUCKNOW	ANOLA CIDER
618.	CISH, LUCKNOW	ANOLA TEA
619.	CISH, LUCKNOW	AONLA BISCUIT
620.	CISH, LUCKNOW	AONLA PRASH
621.	CISH, LUCKNOW	HERBAL PRASH
622.	CISH, LUCKNOW	MANGO WINE
623.	CISH, LUCKNOW	RTS AND SQUASH FROM CORIANDER/RTS
624.	CISH, LUCKNOW	SQUASH FROM DILL/RTS AND SQUASH FROM FENNEL
625.	CPCRI, KASARAGOD	BEAN TO BITE CHOCOLATE
626.	CPCRI, KASARAGOD	COCONUT CHIPS
627.	CPCRI, KASARAGOD	FROZEN COCONUT DELICACY
628.	CPCRI, KASARAGOD	KALPARASA AND NATURAL COCONUT SUGAR PRODUCTION
629.	CPCRI, KASARAGOD	MATURED COCONUT WATER BASED VALUE ADDED PRODUCTS
630.	CPCRI, KASARAGOD	PALM NEERA PRODUCTION
631.	CPCRI, KASARAGOD	PRESERVATION OF CARBONATED TENDER COCONUT WATER
632.	CPCRI, KASARAGOD	PRESERVATION PROTOCOL FOR TRIMMED TENDER COCONUT
633.	CPCRI, KASARAGOD	PRODUCTION OF KALPA KRUNCH
634.	CPCRI, KASARAGOD	VIRGIN COCONUT OIL (VCO)
635.	CTCRI, THIRUVANANTHAPURAM	FRIED CASSAVA CHIPS
636.	CTCRI, THIRUVANANTHAPURAM	FRIED PRODUCTS AND FRIED CHIPS FROM TAPIOCA
637.	CTCRI, THIRUVANANTHAPURAM	FRIED SNACK FOODS AND FRIED CHIPS FROM TAPIOCA AND PROTEIN ENRICHED PASTA

638.	CTCRI, THIRUVANANTHAPURAM	PROCESS FOR THE PRODUCTION OF LOW MOIST GELATINIZED DOUGH
639.	DCR, PUTTUR	CASHEW APPLE RTS BEVERAGE (CASHLIME)
640.	DMR, SOLAN	MUSHROOM BISCUIT /COOKIES
641.	DMR, SOLAN	MUSHROOM FORTIFIED MULTIGRAIN BREAD
642.	DMR, SOLAN	MUSHROOM FORTIFIED PAPAD
643.	IARI, NEW DELHI	CAPSICUM SALSA
644.	IARI, NEW DELHI	CAROTENOID RICH COMPOSITION AND PROCESS OF ITS PREPARATION
645.	IARI, NEW DELHI	GLUTIN BASED BAZRA
646.	IARI, NEW DELHI	HEAT STABLE ANTHOCYANIN RICH COMPOSITION AND PROCESS OF ITS PREPARATION
647.	IARI, NEW DELHI	LYCOPENE EXTRACTION FROM TOMATO
648.	IARI, NEW DELHI	MAIZE ATTA
649.	IARI, NEW DELHI	MODIFIED ATMOSPHERIC PACKAGING FOR VEGETABLES
650.	IARI, NEW DELHI	PUSA FRUIT DRINK
651.	IARI, NEW DELHI	PUSA NUTRI COOKIES
652.	IARI, NEW DELHI	PUSA VITA
653.	IARI, NEW DELHI	PUSA-B
654.	IARI, NEW DELHI	STEVIOL GLYCOSIDE EXTRACTION FROM STEVIA LEAVES
655.	ICAR RC FOR NEH REGION, UMAIM	BAY LEAF BEVERAGES
656.	ICAR RC FOR NEH REGION, UMAIM	CHICKEN FEATHER PROTEIN HYDROLYSATE
657.	ICAR RC FOR NEH REGION, UMAIM	CHOCOLATE (KACHAI LEMON AND KING CHILLY FLAVOR)
658.	IIHR, BANGALORE	ARKA JACKIES
659.	IIHR, BANGALORE	ARKA JACKOLATE
660.	IIHR, BANGALORE	ARKA MINIMALLY PROCESSED ONION

661.	IIHR, BANGALORE	AVACADO POWDER
662.	IIHR, BANGALORE	BANANA WINE TECHNOLOGY
663.	IIHR, BANGALORE	BUTTER FRUIT SPREAD
664.	IIHR, BANGALORE	CRUSHED TOMATO TECHNOLOGY
665.	IIHR, BANGALORE	DRIED FLOWER TECHNOTOGY (FOUR PROCESSES, FOUR CROPS & FOUR PRODUCTS)
666.	IIHR, BANGALORE	FRUIT BAR FOR MANGO, GUAVA AND PAPAYA
667.	IIHR, BANGALORE	FRUIT WINE TECHNOLOGY
668.	IIHR, BANGALORE	GUAVA SQUASH
669.	IIHR, BANGALORE	JACKFRUIT SEED POWDER AND MUSHROOM BASED BISCUITS/ COOKIES (ARKA JACKIES)
670.	IIHR, BANGALORE	KOKUM RTS BEVERAGE
671.	IIHR, BANGALORE	MUSHROOM FORTIFIED ARKA RASAM POWDER-1
672.	IIHR, BANGALORE	MUSHROOM RASAM POWDER
673.	IIHR, BANGALORE	OD TECHNOLOGIES AND FRUIT BAR TECHNOLOGY
674.	IIHR, BANGALORE	OD TECHNOLOGY OF PINEAPPLE
675.	IIHR, BANGALORE	OD-AONLA SEGMENTS WITH KOKUM JUICE, PAPAYA FRUIT BAR, GUAVA FRUIT BAR
676.	IIHR, BANGALORE	ONION PASTE MAKING
677.	IIHR, BANGALORE	OSMO DEHYDRATED JACKFRUIT
678.	IIHR, BANGALORE	OSMO DEHYDRATED PINEAPPLE
679.	IIHR, BANGALORE	OSMOTICALLY DEHYDRATED MANGO, PAPAYA AND FRUIT BAR TECHNOLOGY
680.	IIHR, BANGALORE	PASSION FRUIT SQUASH
681.	IIHR, BANGALORE	POMEGRANATE RTS TECHNOLOGY
682.	IIHR, BANGALORE	PRESERVATION OF MANGO SLICES
683.	IIHR, BANGALORE	RAW MANGO PRESERVATION IN BRINE TECHNOLOGY
684.	IIHR, BANGALORE	RTS BEVERAGE FROM AMLA
685.	IIHR, BANGALORE	RTS BEVERAGE FROM GUAVA
686.	IIHR, BANGALORE	RTS BEVERAGE OF PINEAPPLE

687.	IIHR, BANGALORE	RTS PROBIOTIC PINEAPPLE BEVERAGE
688.	IIHR, BANGALORE	SEALER CUM HEALER
689.	IIHR, BANGALORE	SHELF LIFE EXTENSION OF FRESH CUT CAPSICUM AND ONION
690.	IIHR, BANGALORE	SHELF LIFE EXTENSION OF MINIMALLY PROCESSED VEGETABLES
691.	IIHR, BANGALORE	SHELF LIFE EXTENSION OF PEELED GARLIC
692.	IIHR, BANGALORE	SHRINK WRAP TECHNOLOGY FOR CAPSICUM
693.	IIMR, HYDERABAD	FOXTAIL MILLET PASTA
694.	IIMR, HYDERABAD	FOXTAIL MILLET VERMICELLI
695.	IIMR, HYDERABAD	JOWAR BASED MULTI-GRAIN ATTA
696.	IIMR, HYDERABAD	JOWAR BASED MULTI-GRAIN ROTIS
697.	IIMR, HYDERABAD	JOWAR BISCUITS
698.	IIMR, HYDERABAD	JOWAR COOKIES
699.	IIMR, HYDERABAD	JOWAR FLAKES
700.	IIMR, HYDERABAD	JOWAR IDLI RAVA
701.	IIMR, HYDERABAD	JOWAR MUESLI
702.	IIMR, HYDERABAD	JOWAR PUFFS
703.	IIMR, HYDERABAD	JOWAR RAWA POWDER
704.	IIMR, HYDERABAD	JOWAR RICH MULTIGRAIN ATTA
705.	IIMR, HYDERABAD	MILLET FLOUR
706.	IIMR, HYDERABAD	MULTI MILLET COOKIES
707.	IIMR, HYDERABAD	RAGI COOKIES
708.	IIMR, HYDERABAD	ROASTED FLAKES
709.	IIMR, HYDERABAD	SORGHUM BASED ENERGY BAR
710.	IIMR, HYDERABAD	SORGHUM FLAKES
711.	IIMR, HYDERABAD	SORGHUM INSTANT IDLI MIX
712.	IIMR, HYDERABAD	SORGHUM INSTANT KHICHADI MIX
713.	IIMR, HYDERABAD	SORGHUM RICH MULTI GRAIN ATTA
714.	IIMR, HYDERABAD	SORGHUM VALUE ADDED FOOD PRODUCT

715.	IINRG, RANCHI	COATING FORMULATION FOR CLAY WARE
716.	IINRG, RANCHI	LAC BASED FRUIT COATING FORMULATION
717.	IISR, CALICUT	CHEMICAL FREE EXTRACTION OF ESSENTIAL OIL FROM TURMERIC, GINGER AND VALUE ADDITION TO ITS BY-PRODUCTS
718.	IISR, CALICUT	MASALA SPICE MIXES FOR VEGETARIAN AND NON-VEGETARIAN CURRIES
719.	IISR, CALICUT	SPICE MIX AS ADJUVANT IN MILK AND MILK PRODUCTS
720.	IIVR, VARANASI	DRIED GREEN CHILLI POWDER
721.	IVRI, IZATNAGAR	CHICKEN MEAT CHIPS
722.	IVRI, IZATNAGAR	EMULSION BASED CHICKEN PRODUCTS
723.	IVRI, IZATNAGAR	PREMIUM CHICKEN SOUP
724.	IVRI, IZATNAGAR	READY TO COOK MILK CHIPS
725.	IVRI, IZATNAGAR	VEGETABLE INCORPORATED MEAT PRODUCTS
726.	NDRI, KARNAL	ACIDO-WHEY
727.	NDRI, KARNAL	ARJUNA HERBAL GHEE
728.	NDRI, KARNAL	BAJRA LASSI
729.	NDRI, KARNAL	BIOPROCESS FOR DIRECT VAT SET (DVS) MISTI DAHI CULTURE
730.	NDRI, KARNAL	COLOUR BASED TEST FOR RAPID DETECTION OF DETERGENT IN MILK
731.	NDRI, KARNAL	DNA BASED METHOD FOR DIFFERENTIATION OF COW, BUFFALO, SHEEP, GOAT AND CAMEL MILK
732.	NDRI, KARNAL	EPS PRODUCING CULTURE FOR PREPARATION OF LOW-FAT DAHI
733.	NDRI, KARNAL	EXOPOLYSACCHARIDES PRODUCING LACTIC CULTURES FOR PREPARATION OF LOW-FAT LASSI

734.	NDRI, KARNAL	FAST ACIDIFYING YOGHURT CULTURE FOR GREEK STYLE YOGHURT
735.	NDRI, KARNAL	IMPROVED TEXTURE DAHI
736.	NDRI, KARNAL	IRON FORTIFIED BISCUITS
737.	NDRI, KARNAL	KHEER MOHAN PRODUCTION FROM BUFFALO MILK
738.	NDRI, KARNAL	KIT FOR DETECTION OF DETERGENT IN MILK
739.	NDRI, KARNAL	KIT FOR DETECTION OF B-LACTUM ANTIBIOTIC GROUP IN MILK
740.	NDRI, KARNAL	LOW CHOLESTEROL GHEE
741.	NDRI, KARNAL	MILK PROTEIN ENRICHED IRON FORTIFIED BAJRA BISCUIT
742.	NDRI, KARNAL	MILK-BASED SPRAY DRIED NANOENCAPSULATED CURCUMIN FORMULATION
743.	NDRI, KARNAL	MISTI DOI WITH FAST ACIDIFYING HIGH SUGAR TOLERATING LACTIC CULTURE
744.	NDRI, KARNAL	PALADA PAYASAM MIX
745.	NDRI, KARNAL	PAPER STRIP ASSAY FOR RAPID DETECTION OF PESTICIDE RESIDUES
746.	NDRI, KARNAL	PAPER STRIP BASED ASSAY FOR DETECTION OF ANTIBIOTIC RESIDUES IN MILK
747.	NDRI, KARNAL	PCR BASED METHOD FOR DIFFERENTIATING COW AND BUFFALO MILK
748.	NDRI, KARNAL	RAPID TEST FOR DETECTION OF DETERGENT IN MILK
749.	NDRI, KARNAL	READY TO RECONSTITUTE KHEER MIX
750.	NDRI, KARNAL	READY TO RECONSTITUTE RASMALAI MIX
751.	NDRI, KARNAL	SELF-STABLE, NUTRITIONALLY RICH SMOOTHIES U

752.	NDRI, KARNAL	SOUR DAHI USING PROLIFIC ACIDIFYING LACTIC CULTURES
753.	NDRI, KARNAL	SPORE BASED KIT FOR DETECTION OF ANTIBIOTIC RESIDUES IN MILK
754.	NDRI, KARNAL	STRIP BASED TEST FOR DETECTION OF ADDED UREA IN MILK
755.	NDRI, KARNAL	STRIP BASED TEST FOR DETECTION OF GLUCOSE IN MILK
756.	NDRI, KARNAL	STRIP BASED TEST FOR DETECTION OF HYDROGEN PEROXIDE IN MILK
757.	NDRI, KARNAL	STRIP BASED TEST FOR DETECTION OF MALTODEXTRIN IN MILK
758.	NDRI, KARNAL	STRIP BASED TEST FOR DETECTION OF NEUTRALIZERS IN MILK
759.	NDRI, KARNAL	SUGAR TOLERATING LACTIC CULTURE FOR PREPARATION OF MISTI DOI
760.	NDRI, KARNAL	TEST FOR ANIONIC DETERGENT IN MILK
761.	NDRI, KARNAL	WHEY BASED MEDIUM FOR LACTIC ACID BACTERIA
762.	NDRI, KARNAL	WHEY JALJEERA DRINK
763.	NINFET, KOLKATA	WINE FROM LITCHI FRUITS
764.	NRC ON BANANA, TRICHY	BANANA CENTRAL CORE (STEM) JUICE
765.	NRC ON BANANA, TRICHY	BANANA CHIPS
766.	NRC ON BANANA, TRICHY	BANANA FIBRE EXTRACTION
767.	NRC ON BANANA, TRICHY	BANANA FIG
768.	NRC ON BANANA, TRICHY	BANANA FLOUR
769.	NRC ON BANANA, TRICHY	BANANA FLOUR BASED BABY FOOD

770.	NRC ON BANANA, TRICHY	BANANA FLOUR BASED BISCUITS
771.	NRC ON BANANA, TRICHY	BANANA FLOUR BASED HEALTH DRINK
772.	NRC ON BANANA, TRICHY	BANANA FLOUR BASED WEANING FOOD
773.	NRC ON BANANA, TRICHY	BANANA FLOUR SOUP MIX
774.	NRC ON BANANA, TRICHY	BANANA RTS BEVERAGE
775.	NRC ON BANANA, TRICHY	EXTRACTION OF BANANA STARCH & STARCH MODIFICATION
776.	NRC ON BANANA, TRICHY	EXTRACTION OF CELLULOSE AND OTHER UTILITY COMPOUNDS
777.	NRC ON BANANA, TRICHY	LOW FAT FORTIFIED CHIPS
778.	NRC ON BANANA, TRICHY	LOW GLYCEMIC PREBIOTIC EXTRUDED SNACKS LIKE NOODLES, PASTA
779.	NRC ON BANANA, TRICHY	POST-HARVEST HANDLING, PACKING AND STORAGE OF BANANA CENTRAL CORE STEM
780.	NRC ON BANANA, TRICHY	RIPE BANANA POWDER
781.	NRC ON EQUINES, HISAR	DONKEY MILK BASED BATHING SOAP
782.	NRC ON EQUINES, HISAR	DONKEY MILK BASED BODY BUTTER
783.	NRC ON EQUINES, HISAR	DONKEY MILK BASED LIP BALM
784.	NRC ON MEAT, HYDERABAD	EMULSION MEAT PRODUCTS
785.	NRC ON MEAT, HYDERABAD	PROCESS FOR PRODUCTION OF EMULSION BASED PRODUCTS
786.	NRC ON MEAT, HYDERABAD	RETORT POUCH TECHNOLOGY FOR SHELF STABLE MEAT PRODUCTS
787.	NRC ON MEAT, HYDERABAD	RETORT PROCESS TECHNOLOGY FOR SHELF STABLE HALEEM
788.	NRC ON MEAT, HYDERABAD	VALUE ADDED MEAT PRODUCTS PROCESSING

789.	NRC ON POMEGRANATE, SOLAPUR	HARDWOOD CUTTING PROTOCOL OF POMEGRANATE INCLUDING BIOHARDENING
790.	NRC ON POMEGRANATE, SOLAPUR	JUICE AND RTS BEVERAGE FROM POMEGRANATE
791.	NRC ON POMEGRANATE, SOLAPUR	PROCESS FOR EXTRACTION OF POMEGRANATE SEED OIL
792.	NRC ON POMEGRANATE, SOLAPUR	PROCESS FOR MINIMAL PROCESSING AND SHELF LIFE EXTENSION OF MINIMALLY PROCESSED ARILS
793.	NRC ON POMEGRANATE, SOLAPUR	PROCESS OF MINIMAL PROCESSING AND SHELF LIFE EXTENSION OF MINIMALLY PROCESSED ARILS
794.	NRCC, NAGPUR	CARBONATED DRINKS AND RTS FROM NAGPUR MANDARIN AND ACID LIME
795.	NRCSS, AJMER	CORIANDER BASED RTS
796.	NRCSS, AJMER	CORIANDER BASED SQUASH
797.	NRCSS, AJMER	DILL BASED RTS
798.	NRCSS, AJMER	DILL BASED SQUASH
799.	NRCSS, AJMER	FENNEL BASED RTS
800.	NRCSS, AJMER	FENNEL BASED SQUASH
801.	SBI, COIMBATORE	CANE DIETARY FIBRE FOOD PRODUCTS
802.	SBI, COIMBATORE	CANE JAM PRODUCTION FROM SUGARCANE JUICE
803.	SBI, COIMBATORE	PROCESS FOR PREPARATION OF SUGARCANE JUICE POWDER
804.	SBI, COIMBATORE	STANDARDIZED LIQUID JAGGERY PROCESS
PIG FARMING AND PROCESSES		
805.	NRC ON PIG, GUWAHATI	PIGMIN TECHNOLOGY
806.	NRC ON PIG, GUWAHATI	QUALITY TESTING OF PORK PRODUCTS
807.	NRC ON PIG, GUWAHATI	TECHNOLOGY ESTABLISHING MICRO PIG ABATTOIR

808.	NRC ON PIG, GUWAHATI	TECHNOLOGY FOR ESTABLISHING A MICRO PIG ABATTOIR
809.	NRC ON PIG, GUWAHATI	TECHNOLOGY FOR ESTABLISHING ARTIFICIAL INSEMINATION SUPPORT
810.	NRC ON PIG, GUWAHATI	TECHNOLOGY FOR ESTABLISHING COMMERCIAL PIG BREEDING FARM
811.	NRC ON PIG, GUWAHATI	TECHNOLOGY FOR ESTABLISHING MICRO PIG ABATTOIR
812.	NRC ON PIG, GUWAHATI	TECHNOLOGY FOR PROCESSING OF COMMON VALUE-ADDED PORK PRODUCTS
POULTRY BREEDS & PRODUCTION TECHNOLOGY		
813.	CARI, IZATNAGAR	ASEEL KAGAR PARENT LINE
814.	CARI, IZATNAGAR	BROILER (CHICKEN) PRODUCTION TECHNOLOGY
815.	CARI, IZATNAGAR	CARI BRO-MULTI COLOURED PARENT STOCK FERTILE EGGS
816.	CARI, IZATNAGAR	CARI PRIYA
817.	CARI, IZATNAGAR	CARI RED
818.	CARI, IZATNAGAR	CARI VIRAT (TURKEY)
819.	CARI, IZATNAGAR	CARIBRO-DHANRAJA
820.	CARI, IZATNAGAR	CARIBROWN
821.	CARI, IZATNAGAR	CARISUNHARI
822.	CARI, IZATNAGAR	CARISWETA
823.	CARI, IZATNAGAR	CARISWETATM
824.	CARI, IZATNAGAR	CARIUJJAWAL
825.	CARI, IZATNAGAR	CARIUTTAM
826.	CARI, IZATNAGAR	CSFL PARENT LINE
827.	CARI, IZATNAGAR	KADAKNATH PARENT LINE
828.	CARI, IZATNAGAR	KADAKNATH PURE LINE
829.	CARI, IZATNAGAR	MAKE FEED DAIRY SOFTWARE TECHNOLOGY
830.	CARI, IZATNAGAR	MAKE FEED POULTRY SOFTWARE
831.	CARI, IZATNAGAR	QUAIL GERMPLASM AND THE QUAIL PRODUCTION TECHNOLOGY

832.	CARI, IZATNAGAR	RIR PURE LINE
SEA FOODS AND MARINE PRODUCTS		
833.	CMFRI, COCHIN	ANTIDIABETIC EXTRACT (CADALMINTM ADE)
834.	CMFRI, COCHIN	ANTIHYPERTENSIVE EXTRACT (CADALMINTM AHE)
835.	CMFRI, COCHIN	ANTIHYPOTHYROIDISM NUTRACEUTICAL: CADALMIN ANTI-HYPOTHYROIDISM EXTRACT
836.	CMFRI, COCHIN	ANTIOSTEOPOROTIC EXTRACT (CADALMINTM AOE)
837.	CMFRI, COCHIN	CADALMINANTIDIABETIC EXTRACT FOR TYPE-2 DIABETES FROM SEAWEEDS
838.	CMFRI, COCHIN	CADALMIN ANTIHYPERCHOLESTEROLEMIC EXTRACT (CADALMIN ACE) FROM SEAWEEDS
839.	CMFRI, COCHIN	CADALMIN GREEN ALGAL EXTRACT (CADALMINTM GAE)
840.	CMFRI, COCHIN	NUTRACEUTICALS CADALMIN IMMUNOBOOST EXTRACT (CADALMINTM IBE)
841.	CMFRI, COCHIN	PROCESS TO CONCENTRATE ANTI-INFLAMMATORY PRINCIPLES FROM GREEN MUSSEL
842.	CMFRI, COCHIN	PROCESS TO PREPARE ANTIOXIDANT AND ANTI-INFLAMMATORY CONCENTRATES FROM BROWN AND RED SEAWEEDS
843.	CMFRI, COCHIN	PRODUCT CONTAINING ANTI-INFLAMMATORY PRINCIPLES FROM BROWN SEAWEEDS
SEED AND PLANTING MATERIAL		
844.	CIAH, BIKANER	GOMA PRIYANKA (JAMUN)
845.	CIAH, BIKANER	GOMA YASHI (BAEL)
846.	CIAH, BIKANER	THAR DIVYA (BAEL)
847.	CICR, NAGPUR	BT COTTON VARIETIES BT-1

848.	CICR, NAGPUR	BT COTTON VARIETIES BT-2
849.	CICR, NAGPUR	BT COTTON VARIETIES BT-3
850.	CICR, NAGPUR	BT COTTON VARIETIES BT-4
851.	CICR, NAGPUR	BT COTTON VARIETIES BT-5
852.	CITH, SRINAGAR	CITH-W-1 (WALNUT)
853.	CITH, SRINAGAR	CITH-W-2 (WALNUT)
854.	CITH, SRINAGAR	CITH-W-3 (WALNUT)
855.	CITH, SRINAGAR	CITH-W-4 (WALNUT)
856.	CITH, SRINAGAR	CITH-W-5 (WALNUT)
857.	CPCRI, KASARAGOD	CHANDRA KALPA (COCONUT)
858.	CPCRI, KASARAGOD	CHOWGHAT ORANGE DWARF (COCONUT)
859.	CPCRI, KASARAGOD	KALPA HARITHA (COCONUT)
860.	CPCRI, KASARAGOD	KALPA JYOTHI (COCONUT)
861.	CPCRI, KASARAGOD	KALPA PRATIBHA (COCONUT)
862.	CPCRI, KASARAGOD	KALPA RAKSHA (COCONUT)
863.	CPCRI, KASARAGOD	KALPA SURYA (COCONUT)
864.	CPCRI, KASARAGOD	KALPA VARDHINI (COCONUT)
865.	CPCRI, KASARAGOD	KALPASREE (COCONUT)
866.	CPCRI, KASARAGOD	KALPATHARU (COCONUT)
867.	CPCRI, KASARAGOD	KERA BASTAR (COCONUT)
868.	CPCRI, KASARAGOD	KERA CHANDRA (COCONUT)
869.	CPCRI, KASARAGOD	KERA KERALAM (COCONUT)
870.	CPCRI, KASARAGOD	VTLAH2 (DWARF HYBRID) (COCONUT)
871.	CPRI, SHIMLA	KUFRI FRYOM (POTATO)
872.	CRIJAF, BARRACKPORE	CRIJAF SONA (JUTE)
873.	CRIJAF, BARRACKPORE	JRO-128 (JUTE)
874.	DCR, PUTTUR	H-130 (CASHEW)
875.	DCR, PUTTUR	HYDRAULIC TYPE CASHEW
876.	DOGR, PUNE	BHIMA DARK RED (ONION)
877.	DOGR, PUNE	BHIMA KIRAN (ONION)
878.	DOGR, PUNE	BHIMA RED (ONION)
879.	DOGR, PUNE	BHIMA SHAKTI (ONION)
880.	DOGR, PUNE	BHIMA SUPER (ONION)
881.	DOGR, PUNE	WHITE ONION VARIETIES

882.	DRMR, BHARATPUR	DRMRIJ- 31 (GIRIRAJ) (MUSTARD)
883.	DRMR, BHARATPUR	NRCDR-2 (MUSTARD)
884.	DRMR, BHARATPUR	NRCHB- 102 (MUSTARD)
885.	DRMR, BHARATPUR	NRCHB 506 (MUSTARD)
886.	DRMR, BHARATPUR	NRCHB-101 (MUSTARD)
887.	IARI, NEW DELHI	BITTERGOURD GYNOECIOUS LINE
888.	IARI, NEW DELHI	CSW-18 (WHEAT)
889.	IARI, NEW DELHI	GYNOECIOUS LINE OF CUCUMBER
890.	IARI, NEW DELHI	HD 2967 (WHEAT)
891.	IARI, NEW DELHI	HD 3057- (WHEAT)
892.	IARI, NEW DELHI	HD 3086 (WHEAT)
893.	IARI, NEW DELHI	HD 3090 (WHEAT)
894.	IARI, NEW DELHI	HD 3118 (WHEAT)
895.	IARI, NEW DELHI	HD 3226 (WHEAT)
896.	IARI, NEW DELHI	HD 3227 (WHEAT)
897.	IARI, NEW DELHI	HDCSW 18 (WHEAT)
898.	IARI, NEW DELHI	HI 1544 (WHEAT)
899.	IARI, NEW DELHI	HI 1563 (WHEAT)
900.	IARI, NEW DELHI	MUSTARD 30
901.	IARI, NEW DELHI	MUSTARD PM 26
902.	IARI, NEW DELHI	MUSTARD PM 27
903.	IARI, NEW DELHI	MUSTARD PM 28
904.	IARI, NEW DELHI	MUSTARD PM 29
905.	IARI, NEW DELHI	OKRA DOH-3
906.	IARI, NEW DELHI	PB 1121 (RICE)
907.	IARI, NEW DELHI	PB 1460 (RICE)
908.	IARI, NEW DELHI	PB 1509 (RICE)
909.	IARI, NEW DELHI	PB 1612 (RICE)
910.	IARI, NEW DELHI	PB 1637 (RICE)
911.	IARI, NEW DELHI	PB 1692 (RICE)
912.	IARI, NEW DELHI	PB 1718 (RICE)
913.	IARI, NEW DELHI	PB 1728 (RICE)
914.	IARI, NEW DELHI	PEEHM-5 (MAIZE)
915.	IARI, NEW DELHI	PEEHM-6 (MAIZE)
916.	IARI, NEW DELHI	PJHM 1 (MAIZE)

917.	IARI, NEW DELHI	PRH 10 (RICE)
918.	IARI, NEW DELHI	PUSA ANMOL (BRINJAL)
919.	IARI, NEW DELHI	PUSA ARUNIMA (MANGO)
920.	IARI, NEW DELHI	PUSA ARUNODAY (MARIGOLD)
921.	IARI, NEW DELHI	PUSA BARKHA (CUCUMBER)
922.	IARI, NEW DELHI	PUSA BHINDI-5 (OKRA)
923.	IARI, NEW DELHI	PUSA CENTENARY (CHRYSANTHEMUM)
924.	IARI, NEW DELHI	PUSA DEEPALI (CAULIFLOWER)
925.	IARI, NEW DELHI	PUSA GAURAV (TOMATO)
926.	IARI, NEW DELHI	PUSA JWALA (CHILLI)
927.	IARI, NEW DELHI	PUSA KESARI (CHRYSANTHEMUM)
928.	IARI, NEW DELHI	PUSA LALIMA (MANGO)
929.	IARI, NEW DELHI	PUSA MANMOHAK (GLADIOLUS)
930.	IARI, NEW DELHI	PUSA MEGHNA (CAULIFLOWER)
931.	IARI, NEW DELHI	PUSA RED VALENTINE (GLADIOLUS)
932.	IARI, NEW DELHI	PUSA RIDDHI (ONION)
933.	IARI, NEW DELHI	PUSA SAMBA-1850 (RICE)
934.	IARI, NEW DELHI	PUSA SHARAD (CAULIFLOWER)
935.	IARI, NEW DELHI	PUSA SHRESHTHA (MANGO)
936.	IARI, NEW DELHI	PUSA SNEHA (SPONGE GOURD)
937.	IARI, NEW DELHI	PUSA UNNATI (GLADIOLUS)
938.	IARI, NEW DELHI	PUSA UTTAM (BRINJAL)
939.	IARI, NEW DELHI	PUSA-A (OKRA)
940.	IARI, NEW DELHI	SHOBHA (ONION)
941.	ICAR-RC-ER, PATNA	SWARANA MANJHARI (RIDGE GOURD)
942.	ICAR-RC-ER, PATNA	SWARANA PARBHA (SPONGE GOURD)
943.	ICAR-RC-ER, PATNA	SWARANA SAMPADA (TOMATO)
944.	ICAR-RC-ER, PATNA	SWARANA SHAKTI (BRINJAL)
945.	ICAR-RC-ER, PATNA	SWARANA UPHAR (RIDGE GOURD)
946.	ICAR-RC-ER, PATNA	SWARNA HARITA (COWPEA)
947.	ICAR-RC-ER, PATNA	SWARNA LALIMA (TOMATO)
948.	ICAR-RC-ER, PATNA	SWARNA SWETA (COWPEA)

949.	ICAR-RC-ER, PATNA	SWARNA VIJAYA (TOMATO)
950.	IIHR, BANGALORE	ARKA RASHMI (GUVAVA)
951.	IIHR, BANGALORE	ARKA AGNI (MARIGOLD)
952.	IIHR, BANGALORE	ARKA AMOGH (DOLICHOS)
953.	IIHR, BANGALORE	ARKA ASAWA (GERBERA)
954.	IIHR, BANGALORE	ARKA BANGARA (MARIGOD)
955.	IIHR, BANGALORE	ARKA BANGARA-2 (MARIGOLD)
956.	IIHR, BANGALORE	ARKA BHEEM (TOMATO)
957.	IIHR, BANGALORE	ARKA COORG EXCEL (BLACK PEPPER)
958.	IIHR, BANGALORE	ARKA HARITHA (CHILLI)
959.	IIHR, BANGALORE	ARKA KHYATHI (CHILLI)
960.	IIHR, BANGALORE	ARKA KIRAN (GUVAVA)
961.	IIHR, BANGALORE	ARKA MEGHANA (CHILLI)
962.	IIHR, BANGALORE	ARKA NESARA (GERBERA FLOWER)
963.	IIHR, BANGALORE	ARKA POORNA (GUVAVA)
964.	IIHR, BANGALORE	ARKA RAKSHAK (TOMATO)
965.	IIHR, BANGALORE	ARKA RASHMI (GUVAVA)
966.	IIHR, BANGALORE	ARKA RED (GERBERA)
967.	IIHR, BANGALORE	ARKA SAMRAT (TOMATO)
968.	IIHR, BANGALORE	ARKA SAVI (ROSE)
969.	IIHR, BANGALORE	ARKA SHARATH (FRENCH BEAN)
970.	IIHR, BANGALORE	ARKA SUPREME (AVOCADO)
971.	IIHR, BANGALORE	ARKA VIKRAM (RIDGE GOURD)
972.	IIHR, BANGALORE	GMS 4 OKRA LINE
973.	IIHR, BANGALORE	IIHR 385-5-1 (OKRA)
974.	IIHR, BANGALORE	IIHR-2853 (TOMATO)
975.	IIHR, BANGALORE	IIHR-2902 (TOMATO)
976.	IIHR, BANGALORE	IIHR-386-7-2 (OKRA)
977.	IIHR, BANGALORE	MS48 A&B (ONION)
978.	IIHR, BANGALORE	MS-65 (ONION)
979.	IIHR, BANGALORE	OKMHS-3 (GMS-4X IIHR-299-1)
980.	IIHR, BANGALORE	OKRA GMS LINE
981.	IIHR, BANGALORE	WBNV RESISTANT PREBRED LINE OF WATERMELON

982.	IIMR, HYDERABAD	CSH 20 MF (SORGHUM)
983.	IIMR, HYDERABAD	CSH 24 MF (SORGHUM)
984.	IIMR, HYDERABAD	CSH 30 (SORGHUM)
985.	IIMR, HYDERABAD	CSH 41 (SORGHUM)
986.	IIMR, HYDERABAD	CSV33 MF (SORGHUM FODDER)
987.	IIMR, HYDERABAD	SPV2018 (SORGHUM)
988.	IIMR, LUDHIANA	DMRH 1301 (MAIZE)
989.	IIMR, LUDHIANA	DMRH 1305 (MAIZE)
990.	IIMR, LUDHIANA	DMRH 1308 (MAIZE)
991.	IIMR, LUDHIANA	IMHB 1539 (BABY CORN)
992.	IIMR, LUDHIANA	IQMH 203 (MAIZE)
993.	IIMR, LUDHIANA	LPCH 3 (IMHP 1540) (MAIZE)
994.	IIMR, LUDHIANA	LQMH 1 (IMHQPM 1530) (MAIZE)
995.	IIRR, HYDERABAD	DRR DHAN 45
996.	IIRR, HYDERABAD	DRR-BL-31
997.	IIRR, HYDERABAD	DRRH-2 (RICE)
998.	IIRR, HYDERABAD	DRRH-3 (RICE)
999.	IIRR, HYDERABAD	SAMBA MAHSURI (RICE)
1000.	IISR, CALICUT	IISR ALLEPPEY SUPREME
1001.	IISR, CALICUT	IISR PRAGATI (TURMERIC)
1002.	IISR, CALICUT	IISR PRATHIBHA (TURMERIC)
1003.	IISR, CALICUT	IISR VARADA (GINGER)
1004.	IISR, CALICUT	IISR VISWASHREE (NUTMEG)
1005.	IISR, INDORE	LIPOXYGENASE -2
1006.	IIVR, VARANASI	K ABHIMAN (TOMATO)
1007.	IIVR, VARANASI	K ADARSH (TOMATO
1008.	IIVR, VARANASI	K GAURAV (CHILLI)
1009.	IIVR, VARANASI	K GOBHI-25 (CAULIT FLOWER)
1010.	IIVR, VARANASI	K RAKSHITA (SPONGE GUARD)
1011.	IIVR, VARANASI	K SANDESH (BRINJAL)
1012.	IIVR, VARANASI	K SRISHTI (OKRA)
1013.	IIVR, VARANASI	K TARU (BRINJAL)
1014.	IIVR, VARANASI	K TEJ (CHILLI)
1015.	IIVR, VARANASI	KASHI ADARSH (TOMATO)
1016.	IIVR, VARANASI	KASHI AMAN (TOMATO)

1017.	IIVR, VARANASI	KASHI ANMOL (CHILLI)
1018.	IIVR, VARANASI	KASHI ARUN (CARROT)
1019.	IIVR, VARANASI	KASHI BHAIRAV (OKRA)
1020.	IIVR, VARANASI	KASHI EARLY (CHILLI)
1021.	IIVR, VARANASI	KASHI GANGA (BOTTLE GOURD)
1022.	IIVR, VARANASI	KASHI KANCHAN (COWPEA)
1023.	IIVR, VARANASI	KASHI KIRTI (BOTTLE GOURD)
1024.	IIVR, VARANASI	KASHI KRANTI (OKRA)
1025.	IIVR, VARANASI	KASHI LALIMA (OKRA)
1026.	IIVR, VARANASI	KASHI MOOLI-40 (RADISH)
1027.	IIVR, VARANASI	KASHI NANDINI (PEA)
1028.	IIVR, VARANASI	KASHI NIDHI (COWPEA)
1029.	IIVR, VARANASI	KASHI SANDESH (BRINJAL)
1030.	IIVR, VARANASI	KASHI SATDHARI (OKRA)
1031.	IIVR, VARANASI	KASHI SURKH (CHILLI)
1032.	IIVR, VARANASI	KASHI SWETA (REDISH)
1033.	IIVR, VARANASI	KASHI UDAY (PEAS)
1034.	IIVR, VARANASI	KASHI VIBHUTI (OKRA)
1035.	IIVR, VARANASI	VRO109 (ADV. LINE) (OKRA)
1036.	IIVR, VARANASI	VRO110 (ADV. LINE) (OKRA)
1037.	IIVR, VARANASI	VRO113 (ADV. LINE) (OKRA)
1038.	IIVR, VARANASI	VRO115 (ADV. LINE) (OKRA)
1039.	IIVR, VARANASI	VRO120 (ADV. LINE) (OKRA)
1040.	IIVR, VARANASI	VRO125 (ADV. LINE) (OKRA)
1041.	IIVR, VARANASI	VRPLK-2 (PALAK)
1042.	IIWBR, KARNAL	DBW 173 (WHEAT)
1043.	NRC ON POMEGRANATE, SOLAPUR	SOLAPUR LAL (POMOGRANTE)
1044.	NRCPB, NEW DELHI	BRASSICA CMS SYSTEM
1045.	NRCSS, AJMER	AJMER AJWAIN-93
1046.	NRCSS, AJMER	AJMER CORIANDER-1
1047.	NRCSS, AJMER	AJMER CORIANDER-2
1048.	NRCSS, AJMER	AJMER DILL-2
1049.	NRCSS, AJMER	AJMER FENNEL-1
1050.	NRCSS, AJMER	AJMER FENUGREEK-1
1051.	NRCSS, AJMER	AJMER FENUGREEK-2

1052.	NRRI, CUTTACK	AJAY (CRHR-7) (RICE)
1053.	NRRI, CUTTACK	CR DHAN 101
1054.	NRRI, CUTTACK	CR DHAN 102
1055.	NRRI, CUTTACK	CR DHAN 203
1056.	NRRI, CUTTACK	CR DHAN 205
1057.	NRRI, CUTTACK	CR DHAN 307
1058.	NRRI, CUTTACK	CR DHAN 308
1059.	NRRI, CUTTACK	CR DHAN 310
1060.	NRRI, CUTTACK	CR DHAN 311
1061.	NRRI, CUTTACK	CR DHAN 312
1062.	NRRI, CUTTACK	CR DHAN 407
1063.	NRRI, CUTTACK	CR DHAN 409
1064.	NRRI, CUTTACK	CR DHAN 501
1065.	NRRI, CUTTACK	CR DHAN 507
1066.	NRRI, CUTTACK	CR DHAN 508
1067.	NRRI, CUTTACK	CR DHAN 601
1068.	NRRI, CUTTACK	CR DHAN 701
1069.	NRRI, CUTTACK	CR DHAN 800
1070.	NRRI, CUTTACK	CR DHAN 801
1071.	NRRI, CUTTACK	CRHR-5 (RAJALAXMI)
1072.	NRRI, CUTTACK	MOUDAMANI (RICE)
1073.	NRRI, CUTTACK	NAVEEN (RICE)
1074.	NRRI, CUTTACK	POOJA (RICE)
1075.	NRRI, CUTTACK	PRADHAN DHAN
1076.	NRRI, CUTTACK	RAJALAXMI (CRHR-5) (RICE)
1077.	NRRI, CUTTACK	SWARNA SUB1 (RICE)
1078.	NRRI, CUTTACK	VARSHADHAN (RICE)
1079.	VPKAS, ALMORA	VIVEK MAIZE HYBRID 47
1080.	VPKAS, ALMORA	VIVEK MAIZE HYBRID 53
1081.	VPKAS, ALMORA	VIVEK QPM 9 (MAIZE)
1082.	VPKAS, ALMORA	VL BABYCORN-1
1083.	VPKAS, ALMORA	VL MAIZE HYBRID 57
1084.	VPKAS, ALMORA	VL SWEET CORN HYBRID 2

ANNEXURE-II

List of Licensed Patents

S No.	ICAR Institute	Patent Application Number
	AGRICULTURAL ENGINEERING	
1.	CIPHET, Ludhiana	541/DEL/2002
2.	CIPHET, Ludhiana	1260/DEL/2004
3.	CIPHET, Ludhiana	2152/DEL/2004
4.	CIPHET, Ludhiana	2418/DEL/2004
5.	CIPHET, Ludhiana	1883/DEL/2008
6.	CIPHET, Ludhiana	2584/DEL/2008
7.	CIPHET, Ludhiana	515/DEL/2008
8.	CIPHET, Ludhiana	683/DEL/2008
9.	CIPHET, Ludhiana	746/DEL/2008
10.	CIPHET, Ludhiana	10/DEL/2011
11.	CIPHET, Ludhiana	3014/DEL/2011
12.	CIPHET, Ludhiana	3049/DEL/2011
13.	CIPHET, Ludhiana	3050/DEL/2011
14.	CIPHET, Ludhiana	1574/DEL/2012
15.	CIPHET, Ludhiana	1049/DEL/2013
16.	CIPHET, Ludhiana	2351/DEL/2013
17.	CIPHET, Ludhiana	674/DEL/2013
18.	CIPHET, Ludhiana	201611032728
19.	CIPHET, Ludhiana	201911012570
20.	CIPHET, Ludhiana	201911036120
21.	CIRCOT, Mumbai	1309/MUM/2009
22.	CIRCOT, Mumbai	1193/MUM/2010
23.	CIRCOT, Mumbai	2167/MUM/2010
24.	CIRCOT, Mumbai	1461/MUM/2011
25.	CIRCOT, Mumbai	1554/MUM/2012
26.	ICAR, New Delhi	1118/KOL/2014
27.	ICAR, New Delhi	897/KOL/2014
28.	NINFET, Kolkata	283/KOL/2006
29.	NINFET, Kolkata	620/KOL/2006
30.	NINFET, Kolkata	354/KOL/2012

31.	NINFET, Kolkata	201631031921
32.	NINFET, Kolkata	201731017801
33.	NINFET, Kolkata	201831017352
	ANIMAL SCIENCE	
34.	CSWRI, Avikanagar	1833/Del/2004
35.	CSWRI, Avikanagar	240/DEL/2009
36.	IVRI, Izatagar	944/DEL/2002
37.	IVRI, Izatagar	945/DEL/2002
38.	IVRI, Izatagar	1399/DEL/2003
39.	IVRI, Izatagar	76/DEL/2008
40.	IVRI, Izatagar	2451/DEL/2010
41.	IVRI, Izatagar	2196/DEL/2011
42.	IVRI, Izatagar	792/DEL/2011
43.	IVRI, Izatagar	3857/DEL/2012
44.	IVRI, Izatagar	1154/DEL/2013
45.	IVRI, Izatagar	2208/DEL/2014
46.	IVRI, Izatagar	3834/DEL/2014
47.	IVRI, Izatagar	201911046164
48.	NBAGR, Karnal	3773/DEL/2011
49.	NBAGR, Karnal	3774/DEL/2011
50.	NBAGR, Karnal	3775/DEL/2011
51.	NBAGR, Karnal	298/DEL/2013
52.	NBAIR, Bangalore	417/CHE/2006
53.	NDRI, Karnal	1078/DEL/2006
54.	NDRI, Karnal	1970/DEL/2006
55.	NDRI, Karnal	1385/DEL/2007
56.	NDRI, Karnal	3677/DEL/2011
57.	NDRI, Karnal	119/DEL/2012
58.	NDRI, Karnal	1357/DEL/2013
59.	NDRI, Karnal	3472/DEL/2013
60.	NDRI, Karnal	2030/DEL/2014
61.	NDRI, Karnal	2097/Del/2014
62.	NDRI, Karnal	2213/DEL/2014
63.	NDRI, Karnal	3819/DEL/2015
64.	NDRI, Karnal	201811030055
65.	NDRI, Karnal	202011033806

66.	NIANP, Bangalore	384/CHE/2012
67.	NIANP, Bangalore	543/CHE/2014
68.	NINFET, Kolkata	59/KOL/2010
	CROP SCIENCE	
69.	CRIJAF, Barrackpore	1367/KOL/2006
70.	CRIJAF, Barrackpore	319/KOL/2010
71.	CRIJAF, Barrackpore	386/KOL/2010
72.	CRIJAF, Barrackpore	418/KOL/2011
73.	IARI, New Delhi	224/DEL/2007
74.	IARI, New Delhi	2395/DEL/2011
75.	IARI, New Delhi	3364/DEL/2015
76.	IIMR, New Delhi	923/DEL/2011
77.	IIOR, Hyderabad	732/DEL/2002
78.	NBAIR, Bangalore	2664/CHE/2010
79.	NBAIR, Bangalore	3490/CHE/2010
80.	NBAIR, Bangalore	2272/CHE/2011
81.	NBAIR, Bangalore	201641015523
82.	NBAIR, Bangalore	201741042208
83.	NBAIR, Bangalore	201741045435
84.	NCIPM, New Delhi	107/DEL/1999
85.	NCIPM, New Delhi	1118/DEL/2001
86.	NCIPM, New Delhi	1507/DEL/2009
87.	NCIPM, New Delhi	1822/DEL/2010
88.	NCIPM, New Delhi	94/DEL/2011
89.	NRCPB, New Delhi	2048/DEL/2006
90.	NRCPB, New Delhi	2049/DEL/2006
91.	NRRI, Cuttack	341/KOL/2014
92.	SBI, Coimbatore	1829/CHE/2006
93.	SBI, Coimbatore	2685/CHE/2010
94.	SBI, Coimbatore	3323/CHE/2011
95.	SBI, Coimbatore	2020411003560
96.	VPKAS, Almora	2404/DEL/2007
	FISHERIES SCIENCE	
97.	CIBA, Chennai	201841010230
98.	CIFA, Bhubaneswar	1403/DEL/2003

99.	CIFA, Bhubaneswar	1123/DEL/2005
100.	CIFT, Cochin	2582/DEL/2004
101.	CIFT, Cochin	2585/DEL/2004
102.	CIFT, Cochin	168/CHE/2010
103.	CIFT, Cochin	169/CHE/2010
104.	CIFT, Cochin	170/CHE/2010
105.	CIFT, Cochin	175/CHE/2010
106.	CIFT, Cochin	177/CHE/2010
107.	CIFT, Cochin	178/CHE/2010
108.	CIFT, Cochin	4322/CHE/2011
109.	CIFT, Cochin	4345/CHE/2011
110.	CIFT, Cochin	2826/CHE/2012
111.	CIFT, Cochin	2828/CHE/2012
112.	CIFT, Cochin	2829/CHE/2012
113.	CIFT, Cochin	226/CHE/2014
114.	CMFRI, Cochin	458/DEL/2001
115.	CMFRI, Cochin	3455/DEL/2005
116.	CMFRI, Cochin	2064/CHE/2010
117.	CMFRI, Cochin	2065/CHE/2010
118.	CMFRI, Cochin	32/CHE/2010
119.	CMFRI, Cochin	5196/CHE/2012
120.	CMFRI, Cochin	5199/CHE/2012
121.	CMFRI, Cochin	2281/CHE/2013
122.	CMFRI, Cochin	3366/DEL/2015
123.	CMFRI, Cochin	201611003277
124.	CMFRI, Cochin	201711018741
125.	CMFRI, Cochin	201911017798
126.	CMFRI, Cochin	201911036205
127.	CMFRI, Cochin	202011011489
HORTICULTURAL SCIENCE		
128.	CPRI, Shimla	201811027244
129.	DCR, Putur	1589/CHE/2007
130.	DCR, Putur	3483/CHE/2013
131.	IIHR, Bangalore	202041029424
132.	IISR, Calicut	3594/CHE/2013

133.	IISR, Calicut	3794/CHE/2013
134.	IISR, Calicut	4465/CHE/2013
135.	IISR, Calicut	4708/CHE/2013
136.	IISR, Calicut	4745/CHE/2013
137.	IISR, Calicut	4754/CHE/2013
138.	IISR, Calicut	1681/CHE/2015
139.	IIVR, Varanasi	919/DEL/2013
140.	NRC on Banana, Trichi	201641010731
141.	NRCSS, Ajmer	2880/DEL/2014
142.	NRCSS, Ajmer	2881/DEL/2014
143.	NRCSS, Ajmer	2882/DEL/2014
NATURAL RESOURCE MANAGEMENT		
144.	CCARI, Goa	201621012414
145.	IISS, Bhopal	2522/DEL/2015

ANNEXURE-II.

High Revenue Generated Licenced Technologies

(Technologies which Licensed with More than 5 Lakh Rupees)

S. No.	Institute	Technology	Technology Description
1.	CIBA, Chennai	Shrimp feed processing and production	A balanced shrimp feed formulation for Starter, Grower and Finisher grade feeds separately for tiger shrimp and the white shrimp based on their dietary nutritional requirements. The feed formulations contain vitamin and mineral mixtures developed exclusively for this shrimp. Besides, the formulations also contain feed attractants and other feed additives required for faster growth of shrimp and producing good feed conversion ratio (FCR).
2.	CIBA, Chennai	CIBAMOX - Water Probiotic Technology	Innovative combination of autotrophic ammonia, nitrite oxidizing and heterotrophic denitrifying bacterial consortia from brackish water environments. Microbes have been selected based on their fast growth, high yield and enhanced detoxification efficiency under standard conditions. Mass production protocols were economized and standardized. Multiple field trials conducted in shrimp ponds at various locations of Gujarat, Andhra Pradesh and Tamil Nadu proved the efficiency of microbial consortia in reducing ammonia and total ammonia nitrogen.

3.	CIBA, Chennai	Seabass Seed Production	To refine and upgrade the technology of seed production, domesticated bloodstock (F4 generation) of Asian seabass, Latescalcarifer (43 fish; 2.2 - 8.0 kg) were maintained under controlled conditions in RCC tanks (100-ton capacity), pond and recirculation system. The travel time was 10-14 hours and the fishes were transported without any mortality. The fishes were kept in the quarantine facility for a period of 10 days and then transferred to the holding facilities.
4.	CIFA, Bhubaneswar	CIFAX	CIFAX is a chemical formulation. It prevents and cures ulcerative diseases of freshwater fishes. It controls the bacterial infections in freshwater fishes. Farmer across India has been benefitted by its application.
5.	CIFA, Bhubaneswar	DOT ELISA KIT	This is for on farm diagnosis of ulcers, red diseases, septicemia and gill diseases caused by *Aeromonas, Edwardsiella, Vibrio, Pseudomonas* and *Flavobacterium sp*. This is an accurate and sensitive method for fish disease detection. It detects bacterial pathogen in tissues of affected and dead fishes, and also suitable for laboratory and farm level diagnosis with refrigerator facility. 30-40 fish serum samples can be tested within a day.

6.	CIFA, Bhubaneswar	Spot Agglutination Kit	Spot agglutination kit is for on farm diagnosis of ulcers, red diseases, septicemia and gill diseases caused by *Aeromonas, Edwardsiella*, *Vibrio, Pseudomonas* and *Flavobacterium sp*. The kit is provided with different bacterial antigens and respective positive control serum. It may be stored in ordinary refrigerator (4-8°C) up to six months and one month in room temperature. Never store the kit in deep freezer. The test is done in ordinary room temperature without sophistication. It is a fast method for fish disease detection/health certification. Suitable to be carried for farm level diagnosis. 30-40 fish serum samples can be tested within an hour
7.	CIFA, Bhubaneswar	FRP Carp technology	The technology is fully packaged in the fiber reinforced plastic material with the various components like spawing pool, hatching pool, egg collection chamber along with its accessories. It is portable and convenient to operate in a limited space with limited water availability. It is ready to use with longevity of more than 15 years in field conditions. With the technology about 1.0 million spawn can be produced in a single operation and in each year 20 to 30 such operations can be made. In each operation around 30 ha of cultured water bodies can be stocked with produced seed and hence, single hatchery has the capacity to produce seed, which can cover 400 to 600 ha of water areas.
8.	CIFRI, Barrackpore	CIFRI CAGE GROW Fish Feed	This technology is for large water bodies through meticulous research on cage construction, size and shape of cage, selection of fish species for the enclosure culture and economic evaluation of the technologies. This has led to successful raising of carp fingerlings as stocking material in reservoirs and wetlands, as well as, table size production of carp and prawn through these enclosure techniques.

9.	CIFT, Cochin	CIFT Test Rapid Detection Kits for Finding Adulterants in Fish	This kit detects contamination of chemical preservatives formalin and ammonia in fish, which is set for commercial production. These detection methods are simple, rapid and based on visual observation of colour development within a span of 2-3 minutes.
10.	CIRB, Hisar	Area Specific Mineral Mixture	Technology developed aims at correcting mineral imbalance in the animal body thereby improving reproductive efficiency and production. As this technology aims at providing only most deficient micronutrients, it avoids antagonistic effects of excess levels of other minerals thereby improving the bioavailability of micro/macronutrients.
11.	CISH, Lucknow	CISH AmlaPrash	Amla is a rich source of antioxidants. Since time immemorial *Chywanprash* is being consumed to maintain vitality. However, traditional recipe for Chywanprash include Desi Ghee and sugar along with other ingredients. Now a day's these ingredients are avoided by most patients suffering from cholesterol or diabetes problems. The process also involves lot of heating for kwath preparation, which reduces the nutritional value of the product. CIH has developed an improved product without these ingredients and with minimal heat treatment.
12.	CMFRI, Cochin	Cadalmin™ Anti hyper cholesterolemic Extract (Cadalmin™ Ace) from Seaweeds	Cadalmin Anti-hypercholesterolemic extract (Cadalmin™ ACe) is a nutraceutical product as a natural remedy for obesity and dyslipidemia from seaweeds. Bioactive pharmacophore leads from seaweeds were used to develop the nutraceutical product, and were found to inhibit hydroxymethyl glutaryl coenzyme A reductase, various target receptors and other rate limiting enzymes, which are responsible to cause obesity and dyslipidemia.

13.	CMFRI, Cochin	Anti-hypothyroidism Nutraceutical: Cadalmin™ Anti-hypothyroidism Extract	Cadalmin™ATe is a nutraceutical product, which provides a unique blend of 100% natural marine bioactive ingredients with anti-hypothyroidism principles extracted from seaweed, with an ecofriendly "green" technology. The bioactive leads concentrated in Cadalmin™ATe were found to stimulate thyroid releasing hormone and increase the activity of selenodeiodinase to produce metabolically active thyroid hormones tetraiodothyronine (T4) and 3, 5, 3′-triiodothyronine (T3).
14.	CMFRI, Cochin	Cadalmin™ Antidiabetic Extract for Type-2 Diabetes from Seaweeds	Antidiabetic nutraceutical: CadalminT™ Antidiabetic extract (CadalminTMADe) for type-2 diabetes from seaweeds contains 100% natural marine bioactive ingredients from selected seaweeds by a patented technology. The bioactive ingredients in CadalminTMADe competitively inhibit dipeptidyl peptidase-IV and tyrosine phosphatase 1B thereby hindering the occurrence of type-2 diabetes. The results demonstrated the potential of the nutraceutical to effectively inhibit various mediators, which are responsible to induce type-2 diabetes through various metabolic pathways.
15.	CPCRI, Kasargod	Nanomatrix for Delivery of Pheromone for Management of Red Palm Weevil and Rhinoceros Beetle	The non-dispenser with ordered proer channels is for loading the pheromone and kairomone blends of pests like red palm weevil and rhinoceros beetle to ensure delayed dissipation and consequently longer life in the field. The novel delivery platform using nanomatrix needs lower load of pheromone and is effective in the field for extended period 4-5 months as compared to commercial lure that is active for only three months. Decreased load of pheromone in nanomatrix helps to scale down the cost involved in crop health management.

16.	CPRI, Shimla	Aeroponic System Technology	Aeroponic is the process of growing plants in an air or mist environment without the use of soil or an aggregate media. This is an alternative method of soilless culture in nutrient solutions under controlled environments. Aeroponics is one of the most rapid method of propagation for seed potato production using in vitro plants. The technique allows to produce large numbers of healthy minitubers in one generation, thus eliminating the need for more field multiplications thereby reducing costs and saving time.
17.	CRIJAF, Kolkata	CRIJAF SONA	CRIJAF SONA is talc based retting consortium made up of three pectinolytic bacterial strains strains of B. pumilus having xylanase activity without any cellulose activity, which facilitates the jute retting process by reducing the retting time and improving fiber quality particularly in stagnant water retting. The dose of CRIJAF SONA is 25 to 30 kg for retting of jute plants harvested from 1 ha area. By applying CRIJAF SONA, retting duration reduces by 6 to 7 days, fiber productivity increases by 8 to 10%, fiber quality improves by 1 to 2 grades.

18.	IARI, New Delhi	STFR Meter	Soil Test and Fertilizer Recommendation (STFR) Meter is highly useful particularly for the areas where soil testing facility is not available. It serves as robust complement to the existing STL network. It is a low cost, user friendly, digital embedded system and programmable instrument. Pusa STFR Meter consists of a meter, a mini shaker, a reagent-kit (for 50 samples) and other important accessories needed for soil testing. It analyzes as many as fourteen soil parameters i.e., soil reaction (pH), lime requirement for acid soil, gypsum requirement for alkali soil, salt content (EC), Organic carbon, available nitrogen, phosphorus and available potassium, available sulphur, available boron, available zinc, copper, iron and manganese.
19.	IARI, New Delhi	HD-3226	HD-3226 (PusaYashaswi) has been developed by ICAR-IARI, New Delhi which is significantly resistant to Yellow, Brown and Black Rust. It is also highly resistant to Karnal Bunt besides other fungal pathogen diseases such as flag smut, powdery mildew and foot rot. It has been recommended for commercial cultivation in North-Western Zone of India. It is a medium tall variety (106 cm) with semi-spreading habitat early stage, dark green, waxy with 40.3g weight per 1000 grains. It reaches maturity in 142 Days. The average yield of HD 3226 is 57.5 q/ha.
20.	IARI, New Delhi	HD-3086	The variety has semi-erect growth habit and green foliage colour and anthocyanin pigmentation was absent on coleoptile at boot stage. HD3086 possesses amber coloured, oblong, medium sized, hard grain with medium germ width.

21.	IARI, New Delhi	PB-1718	This variety is resistant to bacterial leaf blight and is suitable for cultivation in Delhi, Punjab and Haryana. Approximate days of harvestable maturity are 136-138 days after sowing. 5 kg seed is sufficient for per acre of transplantation; Spacing (during transplanting): row to row 20 cm and plant to plant 20 cm. Average yield is around 18-20 q/acre
22.	IARI, New Delhi	VAM Biofertilizer	Developed Arbuscular Mycorrhizal inoculum for all crops especially horticultural crops and nursery grown vegetables and commercialized under the trade name 'Nutrilink'. It mobilizes phosphorus and trace elements like zinc, iron, copper, cobalt, magnesium, molybdenum. Also reduces salt stress, checks soil erosion, degradation and reduces losses caused by nematodes. Increases grain yield by 15-50 %.
23.	IARI, New Delhi	Entomopatho-genic Nematode Based Galleria Cadaver Technology	Entomopathogenic Nematodes (EPN) are parasitic roundworms that infect and quickly kill insect pests that live underground. Galleria mellonella cadavers infected with EPN can be applied in sugarcane fields for managing the white grubs. The nematodes emerge from the cadavers in soil within 3-4 days to infect the grubs coming in their contact. Rearing galleria is simple and cheap, Infecting galleria with EPN takes 24 hours, cadavers applied in the field at 2-3 inches depth, Upto 2,50,000 EPN emerge from one cadaver, have ability to search for insect pests, Kill the grubs within 48-96 hours and turn them red, have potential to reproduce after application, Safe to non-target organisms and environment.

24.	IARI, New Delhi	PB-1728	This variety is resistant to bacterial blight disease and is suitable for cultivation in Punjab, Haryana, Delhi, Uttarakhand and Western UP. The crop is recommended for irrigated transplanted conditions and it needs water throughout the growing period. Approximate days of harvestable maturity are 140 to 145 days after sowing. 5 kg seed is sufficient for per acre of transplantation; Spacing (during transplanting): row to row 20 cm and plant to plant 20 cm. Average yield is around 20.0 to 24.0 q/acre
25.	IARI, New Delhi	PB-1637	Pusa Basmati 1637 (IET 24570) is a MAS derived near isogenic line of Pusa Basmati 1 possessing Pi9 gene for blast resistance released for commercial cultivation in the Basmati growing regions of the Western Uttar Pradesh, National Capital Region of Delhi, Uttarakhand, Haryana and Punjab. Average yield 4.2 t/ha in 130 days. Resistant to leaf blast with an SI of 2.7 (2014) and 2.9 (2015) as compared with its Pusa Basmati 1 which is highly susceptible reaction with SI of 6.1 (2014) and 6.5 (2015). Possesses long slender grains (7.3 mm) with very occasional grain chalkiness, very good kernel length after cooking (13.8 mm) and strong aroma.
26.	IARI, New Delhi	NPK Liquid Biofertilizer	No loss in plant growth promoting activities, even on long storage. Highly effective and can be used in different types of soils. Has Nitrogen fixing- Azotobacter, P-solubilizing – Pseudomonas striata and K- solubilizing- Bacillus sp. The cultures are compatible and coexist and maintain a high cfu count throughout its storage. Shelf life of a year. Maintains soil health and keeps soils biologically active. Inoculation with this product helps augment 25-30 kg N, 20-25 kg P2O5 and 10-15 kg K/ha-1

27.	IIHR, Bangalore	*Trichoderma viridae*	A component of IPM that decrease the use of chemical pesticides, increases yield, helps in developing disease suppressive soils and controls bacteria, fungi and Root Knot nematodes in all Horticultural Crops
28.	IIHR, Bangalore	*Pseudomonas fluorescens*	A component of IPM that decrease the use of chemical pesticides, increases yield, helps in developing disease suppressive soils and controls bacteria, fungi and Root Knot nematodes in all Horticultural Crops.
29.	IIHR, Bangalore	*Trichoderma harzianum*	A component of IPM that decrease the use of chemical pesticides, increases yield, helps in developing disease suppressive soils and controls bacteria, fungi and Root Knot nematodes in all Horticultural Crops.
30.	IIHR, Bangalore	*Verticillium chlamydosporia*	A component of IPM that decrease the use of chemical pesticides, increases yield, helps in developing disease suppressive soils and controls bacteria, fungi and Root Knot nematodes in all Horticultural Crops.
31.	IIHR, Bangalore	Arka Microbial Conortium	Arka Microbial Consortium is a carrier-based product which contains N fixing, P & Zn Solubilizing and plant growth promoting microbes as a single formulation. The novelty of this technology is that farmers need not apply n fixing, phosphorous solubilizing and growth promoting bacterial inoculants individually. It can be conveniently, applied either through seed, soil, water and nursery media like coco-peat.
32.	IIHR, Bangalore	ArkaRakshak	India's first triple disease (ToLCV, BW & EB) resistant tomato F1 hybrid *Arka Rakshak*. Adoption of Precision Farming Practices to Harness Full Yield Potential. Fruits of the hybrid are square round, large (90-100 g), deep red with very firm fruits and suitable for both fresh distance marketing as well as processing. Yields Up To 18 Kg/Plant.

33.	IIHR, Bangalore	Paecilomyces-lilacinus	A component of IPM that decrease the use of chemical pesticides, increases yield, helps in developing disease suppressive soils and controls bacteria, fungi and Root Knot nematodes in all Horticultural Crops
34.	IIHR, Bangalore	Vegetable Micronutrient Formulation	Unique, safe and cost-effective method, 'foliar sprays' of micronutrient formulations for all vegetables have been developed based on symptoms, leaf and soil analysis to enhance the yield, quality and taste of vegetables.
35.	IIHR, Bangalore	*Pochoniachla-mydosporia*	A component of IPM that decrease the use of chemical pesticides, increases yield, helps in developing disease suppressive soils and controls bacteria, fungi and Root Knot nematodes in all Horticultural Crops
36.	IIHR, Bangalore	Neem & Pongamia Soap	This technology provides optimum quantity hence no deficiency or toxicity symptoms in crop. Doesn't require besal dose of micronutrients. Prevent flower drop & fruit drop. Improve quality & post-harvest life of vegetables. Increase yield up to 20 to 30%. For best result 3 spray require: First spray 25 to 30 days after transplantation or 40 to 45 days after sowing, subsequent sprays interval of 20 to 25 days after first spray. Foliar Application Dosage: - Tomato, Cabbage, Cauliflower, Capsicum -5 Gm/Ltr water. Chilly, Brinjal, Onion, Potato & Winter Vegetable – 3 Gm/Ltr water.
37.	IIHR, Bangalore	Mango Micronutrient Formulation	Unique, safe and cost-effective method, 'foliar sprays' of micronutrient formulations for mango have been developed based on symptoms, leaf and soil analysis to enhance the yield, quality and taste of fruits.

38.	IIHR, Bangalore	Banana Micronutrient Formulation	The product has Zn, B & Fe in a chemically active, water soluble combination. The nutrients that are incorporated and the ratio have been identified by intensive research in identifying predominant nutrient disorders in all cultivars of Banana growing regions of Southern India considering the common limiting micronutrients by visual diagnosis, confirmed by soil and leaf analysis. The chemicals are water soluble and toxicity is avoided. Hence any farmer with less skill can also use it whereas the existing market formulation result in toxicity if handled improperly. This formulation can be used in semi-arid, sub humid and humid regions.
39.	IIHR, Bangalore	Arka Vegetable Micronutrient Formulation Technology	Arka Vegetable Special is crop specific micronutrient technology for higher & quality yield. It provides optimum quantity, no deficiency or toxicity symptoms in crop. Does not require besal dose of micronutrients, and prevent flower drop & fruit drop. Also, improve quality & post-harvest life of vegetables, and Increase yield up to 20 to 30%
40.	IIHR, Bangalore	ArkaActino Plus	Process can be adopted for large scale production. Less energy requirement than the traditional process. The product has colour, flavour and taste similar to the market ghee.
41.	IIHR, Bangalore	Arka Mango Micronutrient Formulation Technology	it contains most of the micronutrients such as Zn, B, Fe, Cu, Mn, Mo and Cl and secondary nutrients such as ca, mg, s and k. enhance fruit quality in terms of fruit appearance, fruit keeping quality and taste. recommended for all mango varieties. it can be used twice before flowering & twice after flowering recommended at 5g/l along with adjutants and lime juice can be mixed with any fungicide or insecticide.

42.	IIHR, Bangalore	Crushed Tomato Technology	Tomato could be made into crushed tomato having a shelf life of more than six months. Can be sold in off-season where it fetches higher price. Can be used as a substitute to the fresh tomato for various recipes at home as well as in hotels. Can be used as a raw material for other processed tomato products.
43.	IIMR, Hyderabad	CSH24MF	Released in 2009 for cultivation in Uttarakhand, U.P., Gujarat, Haryana, Punjab and Delhi. Green fodder yield: 914 q/ha (3-4 cuts) dry fodder yield: 232 q/ha, high protein (7.5-8.0%), high digestibility (49-51% IVDMD). Has thick, juicy and semi-sweet stem; 2-3 tillers, resistant to lodging. Resistant to foliar diseases –anthracnose, zonate leaf spot & grey leaf spot. Resistant to major insects (stem borer and shoot fly) under natural field condition. Highly responsive to the fertilizers dose up to N of 150 q/ha. Erect plant type suitable for high density sowing and mixed cropping with fodder cowpea. Tolerant to drought and water logging. Good hybrid seed yielding ability (20-25q/ha)
44.	IIOR, Hydeabad	Process for Multiplication, and Production of DOR Bt -1 WP	A local strain of *Bacillus thuringiensis* var. *kurstaki*, DOR Bt-1 has been multiplied for the first time through solid state fermentation and formulated as wettable powder. This formulation is effective against gram pod borer and castor semilooper. The technology package includes DOR Bt-1 strain along with data for permanent registration and training in the production technology. Biopesticides production in India is being promoted commercially by medium range entrepreneurs.

45.	IIRR, Hyderabad	DRR Dhan 45	IET 23832 is a biofortified semi-dwarf, medium duration (125 days) variety with non-lodging plant type and long slender grains for irrigated conditions. It is the first high zinc rice variety notified at national level with over all mean zinc content of 22.6ppm (24.0ppm in AP, KA&TN) in polished rice. Based on high zinc content and yield performance over 5 t/ha. It has good cooking quality with desirable amylose content (20.7%). It is moderately resistant to blast, sheath rot and rice tungro virus.
46.	IISR, Calicut	Micronutrient Composition for Cardamom	Crop specific, soil pH-based micronutrient mixtures for foliar application in cardamom crop which guarantees 15 to 25% increase in yield and quality
47.	IISR, Calicut	Novel Method of Storing and Delivering PGPR/ Microbes	The technology involves encapsulation of the microorganisms of interest in a gelatin capsule for delivery to agricultural crops for the enhanced soil nutrient solubilization, enhanced growth and yield.
48.	IISR, Calicut	Seed Coating Composition and a Process for its Preparation	It is a novel process of coating efficient strains of PGPR on seed spices. The components consist of live plant growth promoting rhizo bacteria (PGPR), inert material and a binding agent. The process of coating is done at particular temperature which is congenial for the organisms to survive and the coated seeds can be stored at room temperature. It is free from any storage pest incidence. Enhances yield from 15 to 30% compared to uncoated seeds, and reduces the use of weedicides.
49.	IISR, Indore	Lipoxygenase -2 Free Soybean Line (NRC 109)	Lipoxygenase -2 free soybean line (NRC 109) is highly useful in manufacturing soymilk, tofu and other soy food products with good flavour and aroma. Samrat is a farmers' variety of soybean cultivated widely in Central India.

50.	IISS, Bhopal	Mridaparikshak Mini Lab of Soil Testing	To assess the soil health and can be used in the preparation of soil health cards. It is a digital mobile quantitative mini lab to provide soil-testing service at farmers' doorsteps. It comes with balance, shaker, hot plate, and Smart Soil Pro, an instrument for determining the soil parameters and displaying of fertilizer nutrient recommendations. It determines all the important soil parameters i.e. soil pH, EC, organic carbon, available nitrogen, phosphorus, potassium, sulphur and micronutrients like zinc, boron and iron. The results as obtained by Mridaparikshak' are stable, reproducible and correspond (up to 90%) to the standard laboratory procedures employed in India. It is highly compatible with soil health card.
51.	IIWBR, Karnal	DBW 187	DBW-187 (Karan Vandana) has registered significant yield of 48.8 q/ha in North Eastern Plane Zone (NEPZ) coupled with better inbuilt resistance against leaf rust, leaf blight and a blast like disease. DBW187 has a potential to yield 64.7 q/ha. The variety takes about 120 days to mature and attains a height of 100 cm in cultivation conditions of NEPZ. This variety is endowed with better chapatti making quality with 7.7/10 score and high iron content (43.1 ppm) in grains.
52.	NBAIR, Bangalore	Novel Insecticidal WP Formulations of *Heterorhabditis Indica*	Entomopathogenic nematodes (EPN) refer to beneficial nematodes that are parasitic to more the 200 species of insects and belong to *Steinernematidae* and the *Heterorhabditidae*. The infective juveniles of EPN infect insect hosts by entering via natural body openings, mouth, anus, spiracles or areas of thin cuticle, and in association with mutualistic bacterium cause host mortality within 48 h. The use of EPN has now become an integral part of crop protection.

53.	NBAIR, Bangalore	Herbal Based Repellant for Termites on Woody Trees – Repter And Herbal Swabber for the Management of White Stem Borer Xylotrechus Quadripes	Termites are the most destructive insects and cause severe damage to crops, woody trees and woods. The present technology describes a plant-based repellent which is very effective for several months the product is developed by ICAR-National Bureau of Agricultural Insect Resources. The product is prepared from several botanicals. The product has shown repellent action and resistant from reinfestation by termites on the woody trees for more than four months. It is effective against all kinds of woody trees.
54.	NCIPM, New Delhi	LIGHT TRAP Technology	LIGHT TRAP is one of the important IPM tools. These are widely used visual traps to control the menace of agricultural pests. It helps to catch all the Flying Nymphs and Adult insects like Leaf folder, Stem borer moths, Fruit borer moths, Hoppers, Fruit Weevil and Beetles etc., thereby reduce adult population and subsequent progenies in the fields. Helps to identify the Pest and Insects pattern to develop Pest Management and control plan. Helps distinguishing and controlling pest and insects damaging the crop and enabling pollination to improve the productivity. Portable across the crop area without any changes.
55.	NDRI, Karnal	Misti Doi With Fast Acidifying High Sugar Tolerating Lactic Culture	Optimized process for production of Misti dahi culture biomass under batch scale fermentation, also suitable for fed batch scale fermentation. Standardized protocol for harvesting and preservation of cell biomass as freeze-dried powder. Viable counts: 11 to 12 log cfu/g; stable until 90 days' storage at -20°C studied. Textural, physiochemical, microbiological and sensory qualities of may be Misti doi prepared using DVS are comparable with fresh propagated milk culture.

56.	NDRI, Karnal	A Process for Preparation of Low Cholesterol Ghee	Process for preparation of low-cholesterol ghee wherein the cholesterol removal rate of 85% has been claimed. Low-cholesterol ghee meets the standard physico-chemical parameters as specified for ghee under FSSAI, 2011 and AGMARK rules. The process has been developed in such a way that the final product has a flavour comparable to that of regular desi ghee.
57.	NDRI, Karnal	A New Rapid Test for Detection of Detergent in milk	This method requires addition of only 400 µl of milk to detecting reagent followed by inverting the tubes 20 times gently. The results are available within 100 seconds and it can detect the presence of 20 mg commercial anionic detergent (LABOLENE) in 100 ml of pure milk. This qualitative test can be easily performed at milk collection centers. The method has been validated by Punjab Biotechnology Incubator, Mohali – a NABL accredited laboratory.
58.	NDRI, Karnal	Strip Based Test for Detection of Maltodextrin in Milk	A rapid paper-based strip test has been developed for the detection of maltodextrin in milk. The prepared strip is white in colour. The test involves putting a drop of milk onthe strip followed by visualization of change in colour of the strip. The colour change to yellow after about 3 minutes in case of milk is adulterated with altodextrin. The intensity of yellow colour produced in the strip is proportional to the amount of maltodextrin present in milk sample. The test can detect presence of 0.15% level of maltodextrin in milk. The test can be used at milk reception centres and also at house hold.

59.	NDRI, Karnal	Paper Strip Assay for Rapid Detection of Pesticide Residues	Paper-based sensors are new alternative technology for fabricating simple, low-cost, portable and disposable analytical devices for many applications. The test involves pre-dipping of strip in milk, germination of spores in presence of germinant mixture when incubated at 64°C for 1 hr. Development of blue color on paper strip indicates absence of antibiotic residues, and no color development indicates presence of antibiotic residues in milk. Assay is cost effective, rapid, robust, reproducible, selective & sensitive to larger group of antibiotic residues.
60.	NDRI, Karnal	Strip based Test for Detection of Neutralizers in Milk	The prepared strip is yellow in color. The test involves dipping of the strip in milk samples followed by immediate visualization of color of the strip. The color of the strip changes to green or deep blue depending on the amount of neutralizer in the milk while in pure milk samples, the strip retained its original yellow color. The teststrip responds immediately when brought in contact withthe milk samples. Normal processing of milk such aspasteurization, boiling etc does not affect the efficacy of the strip. The shelf life of the strip is more than 6 months at room temperature. The test can be used at milk reception centres and also at house hold.
61.	NDRI, Karnal	Whey Based Medium for Lactic acid Bacteria	Invention relates to formulation of cost-effective food grade medium for Lactic acid bacteria. A key feature of the invention is the use of whey - a potential dairy processing by-product/waste. Cost of the whey-based media is less than the commercially available media for lactic acid bacteria. Dry formulation of medium is stable at room temperature. The developed whey-based medium is suitable for culturing and production of lactic acid bacteria (Lactobacillus sp., S. thermophilus, Lactococcus sp.) biomass.

62.	NDRI, Karnal	A PCR Based Method for Differentiating Cow and Buffalo Milk	This is an innovative process for the isolation of DNA from milk and milk products. Milk and milk products contain a large but highly variable number of milk somatic cells, ranging from 104 to l07/ml, depending on the status of the cow (parity, season, stage of lactation, and health). These cells are predominantly leukocytes but also include a small proportion (<2%) of epithelial cells. Use of these cells would facilitate obtaining genetic material (DNA) from cows. The DNA samples obtained from the milk and milk products were used for differentiation of A1 and A2 beta-casein by using allele-specific PCR.
63.	NDRI, Karnal	Strip based Test for Detection of Hydrogen Peroxide in Milk	A rapid paper-based strip test has been developed for thedetection of hydrogen peroxide in milk. The prepared strip is white in colour. The test involves putting a drop of milk onthe strip followed by visualization of change in colour of the strip. The colour change to pink after about 1 minute in case of milk is adulterated with hydrogen peroxide. The intensity of pink colour produced in the strip is proportional to the amount of hydrogen peroxide present in milk sample. The test can detect presence of 0.001% level of hydrogen peroxide in milk. The test can be used at milk reception centers and also at house hold.

64.	NDRI, Karnal	Strip based Test for Detection of Added Urea in Milk	The prepared strip is yellow in color. The test involves dipping of the strip in milk samples followed by visualization of color of the strip after 3 min. The color of the strip changes to dark red in urea adulterated milk samples while in pure milk samples, the strip color remains yellow. The intensity of the dark red color produced in the strip is proportional to the amount of urea present in the milk sample. Normal processing of milk such as pasteurization, boiling etc does not affect the efficacy of the strip. The developed strip can detect presence of more than 80 mg/100 ml of added urea in milk. The shelf life of the strip is more than 5 months at refrigeration temperature. The test can be used at milk reception centers and also at house hold.
65.	NDRI, Karnal	Spore based Kit for Detection of Antibiotic Residues in Milk at Dairy Farm	The developed technology is working on principle of sporegermination and its inhibition in presence of antibiotic residues in milk. In case when antibiotic residues are absent in milk, marker metabolites are released during germination which change the color of the indicator. However, in presence of antibiotic residues in milk, the spore germination processis inhibited at ≥ MRL level of contaminants and no change incolor indicates the presence of drug residues in milk when incubated at 64°C for 2.30 hrs.
66.	NDRI, Karnal	DNA Based Method for Differentiation of Cow, Buffalo, Sheep, Goat & Camel Milk	This is an innovative process for the isolation of milk somatic cells. The invention relates to a process for purifying and isolating milk somatic cells from raw and packed milk. Subsequently nucleic acids are isolated from the milk somatic cells. The basis of the invention is a method of isolation and disruption of the milk somatic cells, protecting the nucleic acids and finally purifying them.
67.	NDRI, Karnal	Arjuna Herbal Ghee	A functional ghee. Extracts from Arjuna terminalia. Less energy requirement than the traditional process.

68.	NDRI, Karnal	Strip based Test for Detection of Glucose in Milk	A rapid paper-based strip test has been developed for the detection of glucose in milk. The prepared strip is white in colour. The test involves putting a drop of milk on the strip followed by visualization of change in colour of the strip. The colour change to pink after about 5 minutes in case of milk is adulterated with glucose. The intensity of pink colour produced in the strip is proportional to the amount of glucose present in milk sample. The test can detect presence of 0.04% level of glucose in milk. The test can be used at milk reception centers and also at house hold.
69.	NIANP, Bangalore	Mineral Mixture for Small Ruminants	The deficiency and or imbalance of micro- and macro-nutrients is one of the most important factors responsible for low productivity. As such there are no specific mineral mixtures available for small ruminants. The requirement of minerals for small ruminants vary considerably as compared to large ruminants due to their physiological needs. Specific mineral mixtures for small ruminants have been developed and are found to be useful in improving productive efficiency and immunity in small ruminants.

70.	NRCPB, New Delhi	Bt-genes viz; cry1Fa1, cry1Ac-F and cry2Aa	The cry1Fa1 is codon optimized to express under plant system. Cry1Fa1 developed has immense potential in helping the development of resistance to *Spodoptera spp*. The chimeric Bt gene cry1Ac-F with cry1Ac (domain I & II) and cry1F (domain III) was developed to improve the broad spectrum insecticidal property of the toxin. Cry1Ac-F developed has immense potential in helping the development of broad-spectrum insect resistant transgenic plant. The cry2Aa gene was mainly developed for the development of transgenic plants resistant to *Helicoverpaarmigera*. This codon optimized Bt ICP is effective against both Lepidopteran as well as Dipteran insects. This gene has been deployed in important crops like cotton, chick pea and pigeonpea.
71.	NRCPB, New Delhi	Mori base CMS & Restorer system of Indian Mustard	NIPB has developed three perfect pollination control systems viz, Bethauti and Erucoides cytoplasmic male sterility system (CMS) and Moricandia restorer system in mustard through somatic cell hybridization techniques involving wild alien species of Brassica. All-natural Brassica juncea (mustard) accessions serve as maintainer lines for propagating male sterile stocks. These CMS lines carry cytoplasm from different wild species and confer cent percent male sterility. The fertility restorer stocks carrying genes transferred from the wild species confer male fertility to male sterile lines. Thus, these genetic stocks could be used to develop hybrid mustard.

72.	NRRI, Cuttack	Hybrid Rice CR Dhan-701 (CRHR 32)	It is the first late duration (142-145 days) hybrid variety in India, released and notified (2010 and 2012 respectively) for cultivation in shallow lowland areas of Bihar and Gujarat. It has medium slender grains with average productivity of 6.0 -6.5 t/ha. It can withstand water logging and low light conditions. It shows moderate resistance to rice tungro, bacterial leaf blight, green leaf hopper and leaf blast. It can also be cultivated during dry season if sown in December.
73.	NRRI, Cuttack	Hybrid Variety Rajalaxmi (CRHR 5)	It is a medium duration (125-135 days), semi-dwarf (105-110 cm) popular hybrid variety. It possesses seedling stage cold tolerance and suitable for irrigated and boro ecosystems. It has good quality long slender grains with an average productivity of 7.0- 7.5 t/ha. It has capability to tolerate stem borer, brown plant hopper, white backed plant hopper, gall midge, leaf blast and bacterial leaf blight. This hybrid can tolerate water stagnation (7-10 days) at tillering stage.

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