

Sl	Name of the technology and process techniques developed	Year of development	Title of the project from which it was developed	Period of execution of the project	Expenditure incurred in the project (Rs in lakh)	Whether the developed technology has transferred/commercialized
1	Immunostimulant 'Immunoboost-C' developed for use in brood fish to raise healthy larvae.	2005	E-21 Passive transfer of immunity mother to.... seed production.	2003-2006	3.0 lakhs	Commercialized
2	CIFACURE developed to protect bacterial and fungal infections of ornamental fish.	2004	I-21 Production of freshwaterCyprinidae and poecilidae	1999-2004	2.0 lakhs	Commercialized
4	Development of manual handy cryofreezer	2005	I-24 Long term effect of pituitary....gametes of carps	2001-2004	3.0 lakhs	Filed for patent
5	Development of mechanized fish harvesting system	2007	I-54 (i) Design ... aquaculture ponds	2007-09	20.0	Applied for patent
6	Development of Mechanical pond applicator	2006				Patent received

7	Development of a weaning diet for magur larvae (Starter-M)	2005	I-30 Breeding and culture of <i>Pangasius</i> spp. And growout culture of <i>Clarias batrachus</i>	2002-2007	5.0	Released for farmers
8	Development of RT-PCR based diagnostic to identify <i>M. rosenbergii</i> nodavirus and extra small virus associated with white tail disease with high degree of sensitivity and specificity.	2006	Student's Dissertation work	6 months	1.0	Released for farmers
9	Diagnostic kits developed for diagnosis of bacterial diseases of freshwater fishes include: i) Dot-ELISA kit ii) Indirect ELISA kit, iii) Spot agglutination kit, iv) Antigen captured ELISA kit and v) Competitive ELISA kit for diagnosis of several pathogenic bacteria in freshwater fish species.	2003	Young scientist Award Scheme on Development ...diseases	1999-2003	10.0	Patent filed, Released and disseminated to farmers
10	Development of portable FRP carp hatchery	2003	AICRP on Plastics in Aquaculture	1995-continuing	10.0	Commercialized and installed in over 40 location in the country
11	Selective breeding of rohu with average of 17% higher genetic gain per generation after five	2001 and refined in every year	Genetic improvement of rohu for	1997-2003	30.0	Propagation of <i>Jayanti rohu</i> culture in 4,000 ha in Krishna-Godavari delta and other

	generations		growth through selective breeding			states showing increased production
12	Mass scale seed production, nursery rearing and grow-out culture of medium carps, viz. <i>P. sarana</i> and <i>L. calbasu</i> for species diversification	2007	AP Cess Project on 'Evaluation of production performance of a few medium carp species...	May, 2004-May, 2007	Rs. 13.40 lakh	Disseminated to farmers
13	Multiple cropping of carps with reduced production cost and increased production	2003	I-02: Optimization of carp production.	April, 1996-March, 2004	25.0	Disseminated to farmers
14	Species diversification with <i>P. gonionotus</i> as component species for short-term cropping	2004	-Do-	-Do-	-Do-	-Do-
15	Cages for carp culture and for large-scale rearing in open waters	2006	I-54b Cage culture and its impact on the environment	2006-2009	10.0	Demonstrated in Chattishgarh, Orissa and Meghalaya and other places of the country
16	Breeding and seed production of catfish <i>Horabagrus brachysoma</i> and <i>Pangasius pangasius</i>	2006	I-30 Breeding and culture of <i>Pangasius</i> spp. And growout culture of	2002-2007	35.0	Would be transferred after more on-station trials

			<i>Clarias batrachus</i>			
17	Multiple breeding of climbing perch and its grow-out culture with production of 1500 kg/ha	2007	I-54(d) Farming of... technological package	2006-09	18.0	Would be transferred after more on-station trials
18	Grow-out culture of <i>M. rosenbergii</i>	2001	I-22 Refinement of ... <i>M.</i> <i>rosenbergii</i>	2000-2004	15.0	Disseminated
19	Practices for raising high quality captive broodstock of <i>M. rosenbergii</i>	2005	I-42 Development ... <i>M.</i> <i>rosenbergii</i>	2004-2007	16.0	Disseminated
20	Breeding of Rosy barb (<i>Puntius conchoni</i>)	2004	I-21 Production of freshwater ...Cyprinidae and poeciliidae	1999-2004	25.0	Disseminated
21	Development of hybrid of <i>Puntius conchoni</i> and <i>P. ticto</i> showing better coloration and colour improvement in rosy barb with leafy stuffs	2007	I-41 Standardization and breeding... indigenous fishes	2004-2007	5.0	Disseminated
22	Multiple breeding of <i>L. fimbriatus</i>	2005	I-35 Standardization of peninsular	2002-2005	16.0	Disseminated

			carps			
23	Breeding and seed rearing of <i>Ompok pabda</i> and <i>Mystus vittatus</i>	2004	I-07 Breeding and culture... <i>Ompak pabda</i>	1997-2004	32.0	Disseminated
24	Use of diary waste for carp rearing	2007	I-25 Waste recycling in aquaculture	2001-2006	22.0	Disseminated
25	Addition of micronutrients-cobalt and zinc for enhanced production	2003	I-10 Management of pond productivitysustainable aquaculture	1998-2004	20.0	Disseminated for enhancing production
26.	35 microsatellite markers isolated and characterized in rohu.	2002, 2003, 2004	I-12 Age effect of parents....in carps	1998-2004	40.0	Polymorphic microsatellites are the versatile DNA markers and provide ideal biotechnological tool for genetic research, genetic diversity and conservation
27	A linkage-mapping panel (back-cross) generated from rohu x calbasu hybrid	2006	E-29 Molecular characterization of backcross...ca tla catla	2004-2007	17.0	Would be helpful to study marker to marker linkage.
28	Species-specific RAPD profiles of <i>M. rosenbergii</i> , <i>M. malcolmsonii</i> and <i>M. gangeticum</i> generated.	2007	I-37 (b) Brood stock characterization	2003-2007	15.0	Offers possibility of developing species- and genus-specific markers and

			on... technological tools			tracing relationship	phylogenetic
29	<p>Two vitellogenin cDNA fragments were cloned and sequenced from catla</p> <p>Two cDNA fragments of ~185 bp and ~113 bp of GnRH were amplified from rohu brain cloned and sequenced.</p> <p>Two cDNA fragments of ~258 bp and ~192 bp of GTH were amplified from mature rohu pituitary cloned and sequenced.</p>	2007	I-53 Differential hormonal gene .. <i>Labeo rohita</i>	2006-09	25.0	Sequence submitted to the NCBI Genbank database (Acc.# EF190987). (Acc# EF198467 and EF428123) (Acc#EF494675 and EF494676).	

