


## BIO-DATA

1	Name	:	Dr. Ritesh Vallabhbhai Borichangar	
2	Designation	:	Principal	
3	Present Address	:	College of Fisheries Science, Kamdhenu University Navsari – 396450 (Gujarat)	
4	Permanent Address	:	Q-46, Avadh Queensbury, Near Canal Road, Eru, Navsari - 396450	
5	Nationality	:	Indian	
6	Date of Birth	:	30- 11-1975	
7	Language known		Gujarati, Hindi and English	
8	Contact Nos.	:	Mobile: 8128203823 (O) 8980271114 E.mail. ID: ritesh.borichangar@gmail.com	

### Qualification /Academic Record

Examination passed	Subject	Year of passing	Class ranks, distinction	University or Institution	Other information
<b>B.F.Sc.</b>	Fisheries Science	1997	6.99/10.0 First class	GujaratAgricultural University, S.K.Nagar	
<b>M.Sc.</b>	Marine Science	2000	73.64 % Distinction	MarineScience Dept., Bhavnagar University	1 <sup>st</sup> in Dept. Uni. - II <sup>nd</sup> <b>Silver medal</b>
<b>Ph. D</b> (Marine Science)	“Study of Tiger Shrimp ( <i>Penaeus monodon</i> , Fabricius, 1798) culture: pond design, operation and management in Diu”	2009	Notification: Acad/PhD/86/226/09, Dt 18.04.2009	MarineScience Dept., Bhavnagar University, Bhavnagar	

Sr. No.	Name of Examination (Pls. Specify Degree)	Year of Passing	Name of Board/ University	Final Grade	Field of Specialization		Remarks special achievements
				Class percent	Major	Minor	
i.	Bachelor Degree B.F.Sc.	1997	Gujarat Agricultural University	6.99			
				First			
ii.	MasterDegree M.Sc.	2000	Bhavnagar University	73.64 %	Marine Science		I <sup>st</sup> in Dept. II <sup>nd</sup> in Uni. <b>Silver medal</b>
				Distinction			
iii.	Doctorate	2009	Bhavnagar		Notification: Acad/PhD/		

	Degree Ph.D.		University		86/226/09, Dt 18.04.2009		
iv.	NET	Waived			Animal Production		
v.	CCC CCC+	2004-05 2008-09	DET SPIPA	Pass 62% Pass 84%.			

**EXPERIENCE: (EMPLOYMENT RECORD):**

Sr. No.	Designation/Posting place	Work Assign	Duration
<b>4(i)</b>	<b>Private Job:-</b> Cham Ice and Cold Storage – Porbandar ( <b>9 Months</b> ) <b>Job Profile : Production Supervisor</b>		1/09/1997 to 01/06/1998
<b>4(ii)</b>	<b>Government :-</b> State Fisheries Department, Govt. of Gujarat		
	<b>Designation : Fisheries Officer / Assistant Superintendent (8 year 8 months)</b> <b>Salary : Rs. 9300-34800 + GP Rs. 4600</b>		<b>29-12-1999 to 20-09-2008</b>
<b>1</b>	Fisheries Officer, <b>Rajpipala</b>	Tribal Youth <b>Training, Narmada dam and Extension</b>	29-12-99 to 19-9-01
<b>2</b>	Fisheries Officer, <b>Bhavngar</b>	<b>Manager, Akavada Fish Farm &amp; Extension</b>	20-9-01 to 10-4-03
<b>3</b>	Fisheries Officer, <b>Porbandar</b>	Diesel Sale Tax Subsidy, <b>Training &amp; Extension.</b>	11-4-03 to 7-10-07
<b>4</b>	Fisheries Officer, <b>Gandhinagar</b>	<b>P.A.(Technical)</b> to the <b>Commissioner of Fisheries, Gandhinagar</b>	08-10-07 to 05-8-08
<b>5</b>	<b>Asstt. Superintendent of Fisheries (Promotion)</b>	<b>Aquaculture Branch – Fisheries Commissionerate, Gandhinagar</b>	06-8-08 to 20-9-08
	<b>Total Tenure (Govt. of Guj)</b>	<b>8 year 8 Month</b>	
<b>4(iii)</b>	<b>Anand Agricultural University Job:-</b>		
	<b>Designation : Asst. Prof &amp; equivalent Subject Matter Specialist – Fisheries</b> <b>Salary : Pay Band: Rs. 15600-39100 + GP Rs. 6000</b>		<b>22-09-2008 to 05-10-2012</b>
<b>6</b>	Asst. Prof & equivalent Subject Matter Specialist – Fisheries Krushi Vigyan Kendra, Anand Agril. University, Devataj.	Fisheries related activities viz. On and Off campus training, FLD, OFT, Departmental studies, Khedut Shibir etc and Extra charge of SMS - Extension Education – Prepared Annual Progress Report, QRT report, Monthly report etc to ICAR, ZEARC & AGRESCO report etc. Organized Seminar during Krishi Mahotsav-2009 (as <u>Seminar Co-ordinator</u> ) <b>MoU between CIFA-AAU</b>	22-09-2008 to 18-05-12
<b>7</b>	Asst. Prof – Fisheries Inland Fisheries Demonstration cum Training Centre, Anand Agril. University, DEE office, Anand	Prepared and established new plan scheme ‘Inland Fisheries Training cum Demonstration Centre’. The Objective of Plan Scheme is to impart training and demonstrate the inland fisheries technologies	19-05-2012 to 05-10-2012

		amongst farmers of middle Gujarat by training, arranged FLD, produced fish seeds etc. Establishment of demonstration ponds at Navali fodder farm	
	<b>Total Tenure of Asst. Prof. (Fish)</b>	<b>4 years 15 days</b>	
<b>4(iv)</b>	<b><u>Navsari Agricultural University</u></b>		
	<b>Designation</b> : Associate Prof & equivalent; Associate Res. Sci. (Fisheries); Nodal Officer (COF) <b>Salary</b> : Pay Band: Rs. 37,400-67,000 + GP Rs.9000		
<b>8</b>	Associate Res. Sci., SWMRU (B.H. 12023)	Inland aquaculture, CIBA-NAU Project, Aqua-Agro-Forestry Project, MoU CIBA-NAU, COF proposal etc.,	6-10-2012 to
<b>9</b>	Nodal Officer, Esta. of College of Fisheries Science	<b>Establishment of COF – Admission, teaching, SRC, administration, DDO, Purchase etc.,</b>	01.02.2015 to <b>30.11.2020</b>
<b>10</b>	I/c., Principal, College of Fisheries Science, NAU, Navsari	<b>Unit Head – COFS – Administration of college, DDO, Teaching, Research</b>	01.12.2020 to till date
	<b>Total Tenure of Associate Professor and equivalent</b>	<b>As on dated 30-06-2021</b>	8 years 8 months
	<b>Total Tenure of Job (as on date)</b>	<b>22 years 01 months (Govt. + SAUs + Pvt.)</b>	

**Note: Invitee Visiting Faculty for PG (UGC), M.Sc. Marine Science, Bhavnagar University (2002-2007)**

Sr. No.	Period		Post or position held	Employer's Name and Address	Salary drawn Basic	Reason of Leaving Service
	From	To				
1	01-09-1997	01-06-1998	Production Supervisor	Cham Ice and Cold Storage – Porbandar	Rs. 2500/- P.M.	For PG study
2	29-12-1999	20-09-2008	Fisheries Officer & Assistant Superintendent	Commissioner of Fisheries, GoG, Gandhinagar	Rs. 9300-34800 + GP Rs. 4600	Direct selection as A.P. in AAU
3	22-09-2008	05-10-2012	Asst. Prof & equivalent SMS (Fisheries)	Anand Agricultural University, Navsari	Rs. 15600-39100 + GP Rs. 6000	Selected as Associate Professor at NAU

4	06-10-2012	05-10-2015	Associate Prof & equivalent; Associate Res. Sci. (Fisheries)	Navsari Agricultural University, Navsari	Rs. 15,600 – 39,100/- + GP Rs.8000	Direct Selection as Associate Professor
5	06-10-2015	Continue	Associate Prof & equivalent; Associate Res. Sci. (Fisheries)	Navsari Agricultural University, Navsari	Rs. 37,400-67,000 + GP Rs.9000	Full Pay in Associate Professor
<b>Note: Invitee Visiting Faculty for PG (UGC), M.Sc. Marine Science, Bhavnagar University (2002-2007)</b>						

Post graduate students guided within university: **Ph.D. – Three in-service students**



**DR. S.R.CHAUDHARY**  
DIRECTOR OF RESEARCH & DEAN  
FACULTY OF P.G.STUDIES

**DIRECTOR OF RESEARCH**  
NAVSARI AGRICULTURAL UNIVERSITY  
ERU CHAR RASTA  
NAVSARI-396 450 (GUJARAT)

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- Read:**
1. Board of Management resolution no.287/2011 (NAU/DR/PGT/BOM18/905-44/2011 dated: 20-01-2011
  2. Common academic regulation for Post Graduate Study Programmes circulated vide resolution number NAU/REG/Academic/1284-1323/2016, dated 2/9/2016.
  3. Minutes of Committee made for post-facto approval/special case held on 07.10.2015
  4. Minutes of Tenth Meeting of Committee made for post facto- approval/special case held on 17.11.2018

**OFFICE ORDER**

In pursuance of the authority vested under Rule 22.0 and 23.0 of Common Academic Regulation for Post Graduate Programme-2016 for recognition of Post Graduate Teachers/Guide for Master and Doctoral degree programme a committee was constituted as per PG regulation vide rule no. 23.3. The Director of Research and Dean P.G. Studies is pleased to accord recognition for PG teaching/Guiding to the following teachers based on recommendation of said committee as per Resolution no. NAU/VCN/496-527/2018 dated 12/01/2018. This order is issued in the interest of the University.

The details of recognized PG teacher/ guide are given below.

SN	Name	Discipline	Recognition accorded for				Remark
			Masters Degree Programme		Doctoral Degree Programme		
			Teaching	Guiding	Teaching	Guiding	
1	Dr. R. V. Borichangar Asso. Research Scientist (Fisheries), SWMRU, Navsri	Aquaculture (Fisheries Science)	--	--	Yes	Yes	Teaching and guiding for Ph. D. for in-service candidate only

*Handwritten notes:*  
H.S.K.  
20.11.18  
B  
20/11/18

No. NAU/DR/T.3/12328-320/2018  
Date: 19/11/2018

*Handwritten signature:* S.R. Chaudhary  
19.11.18  
**DIRECTOR OF RESEARCH & DEAN**  
**FACULTY OF P.G.STUDIES**

Copy f.w.cs to:-

1. Registrar, NAU, Navsari.
2. Dean & Principal, Faculty of Veterinary Sci. & A.H., NAU, Navsari
3. Recognized Post-graduate Teacher through his office

*Handwritten notes:*  
B  
20/11

*Handwritten notes:*  
Rupa Birk  
20/11/18  
ચરુચિકિત્સી પરિપાલન મહાવિદ્યાલય  
ન.કે.યુ. નવસારી.  
આવક નં. ૭૦૨૨  
તારીખ: ૨૦/૧૧/૧૮

**Courses Taught/Teaching UG, College of Fisheries Science, NAU/KU, Navsari**

<b>Sr. No</b>	<b>Title of course</b>	<b>Course No.</b>	<b>Credit</b>	<b>Course for</b>
1	Taxonomy of Finfish	FRM 101	1+2	<b>College of Fisheries Science, NAU/KU, Navsari</b>
2	Taxonomy of Shellfish	FRM-103	1+1	
3	Aquatic Mammals, Reptiles and Amphibians	FRM-203	1+0	
4	Marine Biology	AEM-104	2+1	
5	Fishery Oceanography	AEM-203	1+1	
6	Aquaculture in Reservoir	AQC-104	1+1	
7	Information and Communication Technology	FEES-102	1+1	
8	ELP + RFWEP – Convener			

**Courses Taught/Teaching Ph.D, College of Fisheries Science, NAU/KU, Navsari**

<b>Sr. No</b>	<b>Title of course</b>	<b>Course No.</b>	<b>Credit</b>	<b>Course for</b>
1	Advances in aquaculture production system	AQC-601	2+1	<b>In-service PhD students - College of Fisheries Science, NAU/KU, Navsari</b>
2	Advances in seed production & hatchery management	AQC-602	2+1	
3	Aquaculture & ecosystem management	AQC-603	2+1	
4	Aquaculture animal health management & quarantine	AQC-604	1+1	
5	Advance in Fish genetics	AQC-606	2+1	
6	Intensive farming system for Tilapia and Catfishes	AQC-607	1+1	
7	Aquaculture development planning and management	AQC-608	1+1	
8	Fresh water Aquaculture	AQC-510	2+1	
9	Doctoral seminar -I	AQC-691	0+0	

### ANNEXURE-III

**Thesis evolution (external referee) and examiner for post graduate and Ph.D. : (PG-16 + Ph.D-20) – 36**

Sr. No.	Name of Student	Subject	Dept./ Institute	Type of evolution
<b>Thesis evolution of P. G. Students – M. F. Sc. (Aquaculture) – College of Fisheries, JAU, Veraval</b>				
1	Mr. Sumara M. Ayazkulu <b>(PG student)</b> <b>J4-00957-2011</b>	“Effect of higher salinities on growth and survival of Pacific white shrimp ( <i>Litopenaeus vannamei</i> )”	<b>Aquaculture Department, Fisheries College, JAU, Veraval</b>	M.F.Sc. thesis, External referee
2	Mr. Patel M. R. <b>(PG student)</b> <b>J4-00985-2012</b>	“Effect of partial replacement of fishmeal with aquatic macrophyte, <i>Eichhornia crassipes</i> in the diet of <i>Labeo rohita</i> (Hemilton, 1822) juveniles”		M.F.Sc. thesis, External referee May-2014
3	Ms. Vadher Kiran Karshanbhai <b>J4-00989-2012</b>	“Effect of partial supplementation of duckweed ( <i>Lemna minor</i> ) in the diet of <i>Labeo rohita</i> (Hamilton, 1822 Juveniles”		M.F.Sc. thesis, External referee June-2014
4	Ms. Mer R.R. <b>(PG student)</b> <b>J4-00982-2012</b>	“Effect of seaweed, <i>Gracilaria sp.</i> as a feed additive in diets on growth and survival of <i>Labeo rohita</i> ”		PG thesis viva-major examiner June-2014
5	Mr. Makvana Nayan Lakhmanbhai <b>J4-01225-2013</b>	“Effect of <i>Spirulina spp.</i> as a feed additive on growth and survival of <i>Labeo rohita</i> ”		PG thesis viva-major examiner July-2015
6	Naik Namita Dayal <b>J4-01226-2013</b> <b>(PG student)</b>	“Effect of different feeding rate of <i>Isochrysis galbana</i> on growth and survival rate of pearl oyster <i>Pinctada fucata</i> (Gould, 1850) spat”		PG thesis viva-major examiner July-2015
7	Ms. Vyas Upasna Dhirajlal J4-01482-2014 <b>(PG student)</b>	“Ichthyofaunal diversity of Bhadar-I reservoir, Gujarat”	<b>Fisheries Resource Management (FRM) Dept., COF, JAU, Veraval</b>	P.G. Thesis External referee June-2016
8	Bhukya Bhaskar <b>2030315001</b> <b>(PG student)</b>	Fishery biology and stock assessment of the Thinspine sea cat fish		P.G. Thesis External major referee July-2017
9	Mr. Krishna 2030316005 <b>(PG student)</b>	“Effect of probiotics on growth performance, survival and haematological parameter of <i>Labeo rohita</i> fry”	<b>Aquaculture Department, Fisheries College, JAU, Veraval</b>	P.G. Thesis External major referee July-2018
10	Ms. Neerudu Harika 2030316009 <b>(PG student)</b>	“Study on the effect of Garlic and Tureric powder on growth performance, innate immunity and challenge against pathogenic <i>Aeromonas sp.</i> infection in <i>Cirrhinus mrigala</i> fingerlings”		PG thesis viva-major Aug-2018
11	Mr. Hemang M. Chudasama J4-01471-2014 <b>(PG student)</b>	“Study on growth performance of <i>Gracilaria sp.</i> at three different culture sites”		P.G. Thesis External referee Sep-2018
12	Mr. Khava Rajanibhai Sanjaybhai 2017010070041007 <b>(PG student)</b>	Effect of replacement of fish meal by roasted guar korma on growth performance and feed utilization of <i>Oreochromis niloticus</i> advance fry	<b>PGIFER, Rajpur (Nava), Kamdhenu Uni., Himmatnagar</b>	PG thesis viva-major March -2020
13	Mr. Kandoria Bharat <b>(PG student)</b>			PG thesis viva-major March -2020

14	Mr. Sagar Khara <b>(PG student)</b>			PG thesis viva- major March -2020
15	Mr. Vadher Dipesh <b>(PG student)</b>			PG thesis viva- major March -2020
16	Mr. Sapara Dharmesh <b>(PG student)</b>			
<b>Member/External Examiner – Ph.D. Students (Aquaculture/Fisheries Resource Management), College of Fisheries, JAU, Veraval</b>				
17	Mr Solanki Y. B. <b>(Ph.D. student)</b> J4-00956-2011	Major subject : Aquaculture Conducted viva-voce on dated 25 <sup>th</sup> August, 2014 at COF, JAU, Veraval	<b>Aquaculture Department, Fisheries College, JAU, Veraval</b>	Ph.D Preliminary viva-voce external examiner
18	Mr Solanki Y. B. <b>(Ph.D. student)</b> J4-00956-2011	Major subject : Aquaculture Conducted viva-voce on dated 27 <sup>th</sup> March, 2015 at COF, JAU, Veraval		Ph.D final viva-voce - external examiner
19	Mr.Smit R. Lende <b>(Ph.D. student)</b> (J4012232013)	Major subject : Aquaculture Advisory committee Member and Conducted viva-voce on dated 5 <sup>th</sup> December, 2015 at COF, JAU, Veraval		Ph.D Preliminary viva-voce external examiner
20	Mr. Parvez J. Mahida <b>(Ph.D. student )</b> (J4012242013)			Ph.D Preliminary viva-voce external examiner
21	Mr. Ishakani Ajaj Haji <b>(Ph.D. student )</b> (J4014722014)	Major subject : Aquaculture Conducted viva-voce on dated 09 <sup>th</sup> September, 2016 at COF, JAU, Veraval	<b>Aquaculture Department, Fisheries College, JAU, Veraval</b>	Ph.D Preliminary viva-voce external examiner
22	Mr. Parmar P. V. <b>(Ph.D. student )</b> (J4012922013)	Major subject : Aquaculture Conducted viva-voce on dated 09 <sup>th</sup> September, 2016 at COF, JAU, Veraval		Ph.D Preliminary viva-voce external examiner
23	Mr. Tank Praful R. <b>(Ph.D. student )</b> (J4014882014)	Major subject : Aquaculture Conducted viva-voce on dated 22 <sup>nd</sup> September, 2017 at COF, JAU, Veraval		Ph.D Preliminary viva-voce external examiner
24	Mr. Parmar Hitesh V. <b>(Ph.D. student )</b> (J4014852014)	Major subject : Aquaculture Conducted viva-voce on dated 21 <sup>st</sup> December, 2017 at COF, JAU, Veraval		Ph.D Preliminary viva-voce external examiner
25	Mr. Ishakani Ajaj Haji <b>(Ph.D. student )</b> (J4014722014)	Major subject : Aquaculture Conducted viva-voce on dated 09 <sup>th</sup> September, 2016 at COF, JAU, Veraval		Ph.D thesis viva- voce Major examiner
26	Mr. Tushar H. Dave <b>(PhD student)</b> J4-01484-2014 The Registrar, JAU letter no. JAU/EXAM/PGT/T-1/ 112-15/2019, dated 09.01.2019	“STATUS OF SEAWEED FLORA AND BIODIVERSITY OF ASSOCIATED SHELLFISHES FROM INTERTIDAL ZONE AT OKHA (GULF OF KACHCHH), GUJARAT” Major subject : Fisheries Resource Management (FRM)		<b>Fisheries Resource Management (FRM) Dept., COF, JAU, Veraval</b>
27	Mr. Sumara M. Ayazkalu <b>(PhD student)</b> 1030316003	Major subject : Aquaculture Conducted viva-voce on dated 1 <sup>st</sup> March, 2019 at COF, JAU, Veraval	<b>Aquaculture Department, Fisheries College, JAU, Veraval</b>	Ph.D Preliminary viva-voce external examiner
28	Mr. Patel Mukesh R. <b>(PhD student)</b> (J4-01486-2014)	Major subject : Aquaculture Conducted viva-voce on dated 3 <sup>rd</sup> May, 2019 at COF, JAU, Veraval		Ph.D thesis viva- voce Major examiner
29	Ms. Anita <b>(PhD student)</b>	“EVALUATION OF SELECTED MICROBIAL SYMBIONTS FROM		Ph.D. thesis evaluation -



	<b>(1030316001)</b> The Registrar, JAU letter no. JAU/EXAM/PGT/T-1/4079-82/2019, dated 25.06.2019	GASTROINTESTINAL TRACT OF GIFT TILAPIA ( <i>Oreochromis niloticus</i> ) AS POTENTIAL PROBIOTICS IN <i>Litopenaeus vannamei</i> (BOONE, 1931)” <b>Major subject : Aquaculture</b>		External referee
30	Mr. Tank Ketan V. (PhD student) 1030315005	Major subject : Aquaculture Conducted viva-voce on dated 1 <sup>st</sup> July, 2019 at COF, JAU, Veraval		Ph.D thesis viva-voce Major examiner
31	Ms. Chitra V. University of Madras, Chennai	“Role of pond soil fertility and water salinity on essential minerals availability in coastal shrimp farming”	Aquatic animal health and environment division ICAR-central institute of brackishwater aquaculture, Chennai	Ph.D. thesis evaluation - External referee
32	Mr. Tushar H. Dave (PhD student) J4-01484-2014	Major subject : <b>Fisheries Resource Management (FRM)</b> Conducted viva-voce on dated 21 <sup>st</sup> September, 2019 at COF, JAU, Veraval	<b>Fisheries Resource Management (FRM)</b> Dept., COF, JAU, Veraval	Ph.D thesis viva-voce Major examiner
33	Mr. Ramchandra Khileri (PhD student) 1030315004	Major subject : <b>Fisheries Resource Management (FRM)</b> Conducted viva-voce on dated 21 <sup>st</sup> September, 2019 at COF, JAU, Veraval		Ph.D thesis viva-voce Major examiner
34	Panja Tehseen Hamid (PhD student) 1030316002	Major subject : <b>Fisheries Resource Management (FRM)</b> Conducted viva-voce on dated 22 <sup>nd</sup> November, 2019 at COF, JAU, Veraval		Ph.D thesis viva-voce Major examiner
35	Ms. Anita (PhD student) (1030316001)	Major subject : Aquaculture Conducted viva-voce on dated 22 <sup>nd</sup> November, 2019 at COF, JAU, Veraval	<b>Aquaculture Department, Fisheries College, JAU, Veraval</b>	Ph.D thesis viva-voce Major examiner
36	Mr. Bajaniya V.C. (PhD student) 1030315001	Major subject : Aquaculture Conducted viva-voce on dated 21 <sup>st</sup> May, 2020 – Online medium The Principal, COF, JAU, Veraval letter no. JAU/COF/ACAD/PG/22215-25/2020, Dt. 21/05/2020		Ph.D thesis viva-voce Major examiner

**ANNEXURE-IV**  
**Sheet No. – 5[A] Research Papers Publications:-**

**5 (A) Paper published:-**

<b>International Journal</b>	
<b>1</b>	P. Mahalakshmi, C. Gopal, H. G. Solanki, <b>R. V. Borichangar</b> and J. G. Vanza, 2016. Asynchronous E-learning module for aquaculture development in Gujarat, <i>International Journal of Management and applied science</i> , 10 (2): 73-76.
<b>2</b>	Vanza, J. G.; Solanki, H. G.; <b>Borichangar, R. V.</b> ; Patel, M. R. and Vala, R. B. 2018. Effect of salinity levels on growth and survival of Indian White Shrimp ( <i>Fenneropenaeus indicus</i> ). <i>Int.J.Curr.Microbiol.App.Sci</i> ,7(7): 2295-2304.
<b>National Journal</b>	
<b>1.</b>	Malli, P. C. and <b>Borichangar, R. V. (2006)</b> . Giant Freshwater Prawn Fishery Development in Kalindri Reservoir Gujarat. <i>Fishing Chimes</i> 26 (9): 58-59.
<b>2.</b>	Malli, P. C.; <b>Borichangar, R. V.</b> and Bhatt P. T.(2008).Surimi production in Saurashtra certain aspects of raw material scenario. <i>Fishing Chimes</i> 27 (10/11): 59-62.
<b>3.</b>	P. Mahalakshmi, C. Gopal, M. Muralidhar, M. Kailasam, Prem Kumar, P. K. Patil, H. G. Solanki, <b>R. V. Borichangar</b> and J. G. Vanza., 2014, Needs Assessment of tribal and Farmers for Disseminating Aqua Cultural Information through ICT in Gujarat, <i>ARPN Journal of Science and Technology</i> , 4 (6): 371-376.
<b>4.</b>	P. K. Patil, H. G. Solanki, M. Muralidhar, <b>R. V. Borichangar</b> , C. Gopal, S. M. Pillai, and A. G. Ponniah. 2014. Judicious use of probiotics in shrimp culture system. <i>Fishing chimes</i> ,34(1): 42-44.
<b>5.</b>	Premkumar, M. Kailasam, P. Mahalakshmi, <b>R. V. Borichangar</b> , J. G. Vanza and C. Gopal 2016. Length-weight relationship, condition factor and cannibalism in Asian seabass <i>Lates calcarifer</i> (Bloch, 1790) reared in nursery, <i>Indian J. Fish.</i> , 63(3): 131-134.
<b>6.</b>	P. Mahalakshmi, C. Gopal, M. Muralidhar, M. Kailasam, Prem Kumar, P. K. Patil, H. G. Solanki, <b>R. V. Borichangar</b> and J. G. Vanza, 2017. Perception and willingness to adapt brackishwater aquaculture technologies among aqua farmers in South Gujarat, <i>Indian Journal of Social Research.</i> , 58 (2): 131-142.
<b>7.</b>	Sheetal K Bharda, AY Desai, Tandel Rutvikkumar P, RV Borichangar, PV Taral and Modi. (2020). Correlation of limpet diversity with physico-chemical parameter at three different habitats along Saurashtra coast of Gujarat, India, <i>Journal of Entomology and Zoology Studies</i> , 8(3): 771-777
<b>Policy Paper (Government of Gujarat)</b>	
<b>8.</b>	Comprehensive District Agriculture Plan (C-DAP) Kheda District (2012). Fisheries Development (Chapter), Aanand Agricultural Uni. and Government of Gujarat.
<b>9.</b>	Vyas, A. A.; Vakani, G. C.; <b>Borichangar, R. V.</b> ; Yusufzai, S. I.; Misra and C. K. (2015). Fisheries (Theme – 31), Sate Agricultural Plan (SAP). SAUs and Government of Gujarat. <b>P: 727-751.</b>
<b>10.</b>	Thakar, K.A.; Boghara, V. R.; Jahla, M. K.; Korat, D. M.; Mohnat, P.; Subbaiah, R.; Devada, B. S.; Patel, H. B.; Vyas, H. U.; <b>Borichangar, R. V.</b> and Desai, J. D. (2015) Sate Agricultural Plan and State Infrastructure Development Plan, overall compilation and editing. SAUs and Government of Gujarat. <b>P:987</b>

11.	Vyas, A. A.; <b>Borichangar, R. V.</b> ; Yusufzai, S. I.; Misra and C. K. (2018). Fisheries (Theme – 31), State Agricultural Plan (SAP). SAUs and Government of Gujarat. ( <i>Submitted to GoG</i> )
<b>National Seminar &amp; published</b>	
12.	Malli, P. C. and <b>Borichangar, R. V.</b> (2006). Status of seaweed aquaculture and industrial application with respect to global scenario presented in National Seminar "Biology, biochemistry & industrial application of marine algae" organized by Marine Science Department, Bhavnagar held on 16-18 Jan 2006 ; pp. 163-186.
13.	Malli, P. C. and <b>Borichangar, R. V.</b> (2007). Fishery resources & conservation in west coast of India presented in National Seminar "Marine Ecology in Marine Environment & its Impact on Industrial Development" organized by Marine Science Department, Bhavnagar held on 4 <sup>th</sup> Feb 2007.
14.	Bhatt P. T. and <b>Borichangar, R. V.</b> (2007). Present scenario of rani, kinmedai, lizard fish landings pertaining to surimi products in fish processing industries of Saurashtra presented in National Seminar "Marine Ecology in Marine Environment & its Impact on Industrial Development" organized by Marine Science Department, Bhavnagar held on 4 <sup>th</sup> Feb 2007.
15.	Bhatt P. T. and <b>Borichangar, R. V.</b> (2008). The study of heavy metal toxicity (Mercury, Cadmium) in loligo species landings with respect to the Saurashtra coast presented in "XXII Gujarat Science Congress" organized by Bhavnagar University, Bhavnagar held on 9 <sup>th</sup> March, 2008; pp.22-32.
16.	Bhatt P. T.; <b>Borichangar, R. V.</b> ; Lashkari, P. I. and Shukla C. B. (2011). Observation on the fishery and biology of the Silver Pomfret <i>Pampus argenteus</i> (Euphrasen, 1788) along the Saurashtra coast present in National Seminar " Conservation of biodiversity and ecosystem of coastal region: In the context of coastal birds" organized by Department of Marine Sciences, Department of Life Sciences, Bhavnagar University and Bird Conservation Society, Gujarat held on 8 <sup>th</sup> – 9 <sup>th</sup> January, 2011. pp. 24.
<b>National Conference &amp; published</b>	
17	Jethva, J. K.; Sreejith, P. T.; Madhu, V. R.; <b>Borichangar, R. V.</b> and Meenakumari, B. (2011). Studies on the macrobenthic invertebrate assemblages in shrimp culture ponds along Diu poster presentation in National Conference " Environment and climate with the theme impact assessment of environment and climate" organized by the Biology department of M. V. Mahila Science and Home Science college, Rajkot held on 13 <sup>th</sup> February, 2011; pp. 34.
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18	<b>Jani, H. J.</b> ; <b>Borichangar, R. V.</b> ; Bhatt, P. N. and Mehta, J. P. (2001). Study of ground water quality of Bhavnagar city especially with respect to salinity ingress and pollution presented in National Seminar "Second all Gujarat Research Scholars meet" organized by Indian Chemical Society, Maharaja Saiyajirao University, Baroda held on 25 <sup>th</sup> Feb, 2001.
19	<b>Borichangar, R. V.</b> (2012). Composite fish culture in village pond presented in State level seminar under Krushi Mahotsav - 12 " <i>Gujaratma Matsyodhyogno Vikas</i> " organized by Fisheries Department, Government of Gujarat, Gandhinagar held on 25 <sup>th</sup> May, 2012.
20	<b>Borichangar, R. V.</b> (2012). " <i>Gujaratma Bhartiya Major Carp na Uchharni Vartaman Sthiti</i> " presented in State level seminar on "Aquaculture in Gujarat: Status, Prospects and Challenges" organized by College of Fisheries, Junagadh Agricultural University, Veraval on 31 <sup>st</sup> May, 2012pp. 33-38.
<b>Workshop</b>	
21	<b>Borichangar, R. V.</b> and Malli, P. C. (2006). Over all view of fishing strategy of west coast of Gujarat (off Umbergau to off Jakhho fishing ground) in relation to various types of fishing

	craft and gear with different species presented in workshop "Fisheries in Gujarat Challenges and Opportunities" organized by Rural Development and Management Institute, Ahemadabad and Janpath, Ahemadabad held on 10 <sup>th</sup> April, 2006.
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**Sheet No. – 5.[B] Articles/Book/Booklet/e-publication/DVD/ Folder/  
Publications:-**

<b>5 B(i) Popular Articles:- 13 (Thirteen)</b>	
1	<b>Borichangar, R. V.</b> (2007). " <i>Comunication ane Nevigation na Sadhano – Sagarkhedutna Sacha Sangathi</i> " <i>Matsyawadi</i> pp. 94-97.
2	<b>Borichangar, R. V.</b> and Patel, H. B. (2009). " <i>Mitha Panima Spawnmathi Fry Matsyabij Uchherni Vaignanik Paddhati</i> " <i>Krushhi Govidhya</i> <b>61</b> (11):17-20.
3	<b>Borichangar, R. V.</b> and Patel, H. B. (2010). " <i>Jalshrushti Parthati Pradusanni Ashar</i> " <i>Parishar</i> <b>15</b> (1):18-20.
4	<b>Borichangar, R. V.;</b> Modi, R. J. and Patel, H. B. (2010). " <i>Mitha Panima Matsya Uchher Apnavo</i> " <i>Krushhi Govidhya</i> <b>63</b> (5):27-29.
5	<b>Borichangar, R. V.;</b> Patel, H. B. and Vakani, G. C. (2010). " <i>Matsyabij Uchherma Purak ane Vadharana Poshak Tatvoni Agyatata Vishe Jano</i> " <i>Krushhi Govidhya</i> <b>62</b> (9):28-31.
6	<b>Borichangar, R. V.;</b> Modi, R. J. and Patel, H. B. (2011). " <i>Matsya Uchher Sathe Pashupalannu Vyavshthapan</i> " <i>Krushhi Govidhya</i> <b>63</b> (11):21-25.
7	<b>Borichangar, R. V.</b> (2011). " <b>Fish fauna in agricultural landscape</b> " Bio-diversity conservation in agricultural landscape, EEI, Anand: pp.115-124.
8	<b>Borichangar, R. V.;</b> Patel P. C.; Dabhi, M. R.; Parmar, P. B. and Vakani, G. C. (2012). " <i>Machhali Gharni Rani - Goldfish</i> " <i>Krushhi Govidhya</i> <b>65</b> (2):31-34.
9	P.Mahalaxmi, C.Gopal, M.Muaralidhar, P.K.Patil, H.G.Solanki, <b>R.Borichangar</b> and J.G.Vanza. (2013). ICT Technology on promoting initiative in BW Aquaculture among tribal and other Aquafarmers – Interaction meet conducted by CIBA-NAU Navsari Agricultural University, Navsari, Gujarat: 8 <sup>th</sup> May, 2013. <i>Fishing Chimes</i> <b>33(8):</b> 22-23
10	P. K. Patil, M. Muralidhar, H. G. Solanki, <b>R. Borichangar</b> , J. G.Vanza and C. Gopal. 2014. Role of environmental factors on shrimp immunity and disease outbreaks. <i>Aqua Star</i> . <b>3: 72-80.</b>
11	H. G. Solanki, <b>R. V. Borichangar</b> , J. G. Vanza , B. K. Patel, R. G. Patil, C. Gopal, S. M. Pillai, P. K. Patil, M. Muralidhar, and Arvind Kumar Ray. 2013. <i>Banana Jinga Palan Padhhati</i> . NBFGR, ICAR, Lucknow. <i>Matsyalok</i> , (3): <b>37-40.</b>
12	H. G. Solanki, <b>R. V. Borichangar</b> , J. G. Vanza. 2015, Mithapanima Matsya Palan. Aadarsh pashupalan ane matsyapalan, Krushi Mahotsav: <b>61-70.</b>
13	P.K. Patil, M. Murlidhar, H. G. Solanki, <b>R. V. Borichangar</b> , J. G. Vanza and C. Gopal. 2014. Role of environmental factors on shrimp immunity and disease outbreaks. <i>Aqua-Star</i> . pp.72-74.
<b>5B(ii) Book – 4 (Four)</b>	
1	<b>Borichangar, R. V.;</b> Soni, N. V.; Bhatt, P. M. and Patel, S. R. (2009). " <i>Mitha Panima Matsya Uchher, Krushi Mahotsav – 2009</i> " published by Director of Extension Education, Anand Agricultural University, Anand.
2	<b>Borichangar, R. V.;</b> Patel, H. B.; Soni, N. V. and Bhatt, P. M. (2010). " <i>Mitha pani ma Matsya Palan</i> ", Published by Rashtriya Krishi Vikas Yojana, Director of Extension

	Education, Anand Agricultural University, Anand.
3	Patel, P.P., Katariya, M.A., <b>Borichangar, R.V.</b> , Timbadiya, C.K. (2013). <i>Gamtalavma Matsaya Palan Vyavsay</i> . Published by Krishi Vigyan Kendra, Navsari Agricultural University, Navsari. P: 74.
4	Patel, P.P., <b>Borichangar, R.V.</b> , Timbadiya, C.K. (2015). ' <i>Aantar Desiya Matsyodhog Kshetrama Udhyogshahsiktano Vikash</i> '. Published by Krishi Vigyan Kendra, Navsari Agricultural University, Navsari. P: 40.
	<b>5B(iii) e-Publication/DVD – 3 (Three)</b>
1	<b>Two video films</b> published on Mud crab fattening and farming in Gujarati language from CIBA, Chennai.
2	P. Mahalakshmi, S.M.Pillai, C. Gopal, M.Muralidhar, H. G.Solanki, P. K.Patil, V. S. Chandrasekaran, A. Panigrahi, S. Sivagyanam, Prem Kumar, <b>R. V. Borichangar</b> and J. G. Vanza. DVD on ' <i>Banana jinga - Tatiya kshetro me kam tapman par vividhikaran aur palan ke liye shambhavit jinga ki prajati</i> '. <i>CIBA technology series No. 23. September 2014.</i>
	<b>5B(iv) Booklets/Training manual – 10 (Ten)</b>
1	<b>Borichangar, R.V.</b> and Patel, H.B. (2009). <i>Mitha Panina Talavma Jinga (Scampy) Uchher</i> published by Krishi Vigyan Kendra, Anand Agricultural Universtiy, Devataj (Sojitra), Dist.: Anand.
2	<b>Borichangar, R.V.</b> and Patel, H.B. (2009). <i>Gram Talavma Matsya Uchher</i> , published by Krishi Vigyan Kendra, Anand Agricultural University, Devataj (Sojitra), Dist.: Anand.
3	Patel, H. B.; Patel, N. B.; <b>Borichangar, R.V.</b> ; Patel, K. H. and Sheikh, A. M. (2009). Krushi Vigyan Kendra – Devataj, published by Krishi Vigyan Kendra, Anand Agricultural Universtiy, Anand – 388110.
4	Patel, H. B.; Patel, N. B.; <b>Borichangar, R.V.</b> ; Patel, K. H. and Modi, R. J. (2010). Krushi Vigyan Kendra – Devataj – Parichay, published by Director of Extension Education, Anand Agricultural University, Anand – 388110.
5	S.M.Pillai, C.Gopal, P.K.Patil, M.Muralidhar, P.Mahalakshmi, V.S.Chandrasekarn, H.G.Solanki and <b>R.V.Borichangar</b> (2013). Overview of brackishwater aquaculture in India. In: NFDB Sponsored training programme on “Farming of Banana shrimp and brackishwater finfishes in Gujarat state” at NAU, Navsari, Gujarat, 15 <sup>th</sup> to 19 <sup>th</sup> January 2013, p1-6.
6	S.M.Pillai, C.Gopal, P.K.Patil, M.Muralidhar, P.Mahalakshmi, V.S.Chandrasekarn, H.G.Solanki and <b>R.V.Borichangar</b> (2013). Overreview of brackishwater aquaculture in India. In: NFDB Sponsored training programme on “Farming of Banana shrimp and brackishwater finfishes in Gujarat state” at NAU, Navsari, Gujarat, 15 <sup>th</sup> to 19 <sup>th</sup> January 2013.
7	S.M.Pillai, C.Gopal, H.G.Solanki <sup>1</sup> and R.V.Borichangar(2013). Biology and identification of shrimp species for diversification in aquaculture. In: NFDB Sponsored training programme on “Farming of Banana shrimp and brackishwater finfishes in Gujarat state” at NAU, Navsari, Gujarat, 15 <sup>th</sup> to 19 <sup>th</sup> January 2013.
8	C. Gopal, M. Muralidhar, P.K. Patil, P. Mahalakshmi, M. Kailasam, Prem Kumar, H.G. Solanki, <b>R. V. Borichangar</b> , J.G. Vanza. 2015. Training Manual on Polyculture of Brackishwater Finfishes: An alternative entrepreneurship in coastal regions of Gujarat, Published by CIBA-NAU. pp: 1-30.
9	R.V Borichangar, H.G. Solanki, J.G. Vanza and P.P. Patel. 2016. <i>Gaam talaavma mishra matsya uchher dwara niymit aavak ane aarthik samrudhee</i> . Published by DEE, NAU, Navsari, Krushi Mahotsav-2016. pp. 68-73

10	H. G. Solanki, <b>R. V. Borichangar</b> , J. G. Vanza and M. R. Bhatt.2016.Training manual : <i>Bhambhara paani Zinga/Matsya uchher taalim</i> . pp. 1-33
<b>5B (v) Folder:- 33 (Thirty three)</b>	
1	<b>Borichangar, R. V.</b> ; Patel, P. C., Misra, C. K. and Dabhi, M. R. (2012). <i>Mitha Panini Machhaliono Parichay</i> published by Establishment of Demonstration cum Training Centre for Inland Fish Culture, Krishi Vigyan Kendra, Anand Agricultural Universtiy, Devataj (Sojitra), Dist.: Anand.
2	<b>Borichangar, R. V.</b> ; Patel, P. C.; Dabhi, M. R. and Parmar, P. B. (2012). <i>Mitha Panini Machhalioni Mulya Vardhit Vangio</i> published by Establishment of Demonstration cum Training Centre for Inland Fish Culture, Krishi Vigyan Kendra, Anand Agricultural Universtiy, Devataj (Sojitra), Dist.: Anand.
3	Misra, C. K.; <b>Borichangar, R. V.</b> ; Sarkar, S. and Bhatt, J. H. (2012). <i>Gam Talavma misra matsya uchher</i> , published by Central Institute of Freshwater Aquaculture, ICAR, Bhubaneswar (Orissa).
4	Misra, C. K.; <b>Borichangar, R. V.</b> and Sarkar, S. (2012). <i>Karp matsyabijno uchher</i> , published by Central Institute of Freshwater Aquaculture, ICAR, Bhubaneswar (Orissa).
5	M. Kailasm, M. Natarajan, Premkumar, C. Gopal, P. Mahalaxmi, P.K. Patil, H. G. Solanki, <b>R. V. Borichangar</b> , M.Muralidhar, V.S. Chandrasekaran, J. G. Vanza, K. Ambasankar, R.G.Patil, S.M.Pillai, R. Subburaj and G. Thiagarajan. 2013. <b>Milkfish (<i>Chanos chanos</i>) A candidate species for farming in Gujarat – A step towards diversification of brackishwater Aquaculture.</b>
6	P.Mahalakshmi, M. Muralidhar, P. K. Patil, C. Gopal, H. G. Solanki, M.Natarajan, M.Kailasam, Prem Kumar, V.S.Chandrasekaran, <b>R. V. Borichangar</b> , J. G. VENZA and R.G.Patil. 2013. <b>Information and Communication Technology based dissemination system in aquaculture.</b>
7	P.K.Patil, M.Muralidhar, P. Mahalakshmi, H.G.Solanki, <b>R. V. Borichangar</b> , J. G. VENZA, M.Natarajan, M.Kailasam, Prem Kumar, V.S.Chandrasekaran, R.G.Patil and C.Gopal. 2013. <b>Information on application of probiotics in shrimp culture through ICT dissemination system</b>
8	M.Natarajan, M.Kailasam, Prem Kumar, M. Muralidhar, P.Mahalakshmi, P.K.Patil, H. G. Solanki, <b>R. V. Borichangar</b> , J. G. Vanza, V.S. Chandrasekaran, R.G.Patil and C. Gopal. 2013. <b>Information on commercially important finfish culture and management in Gujarat through ICT dissemination system.</b>
9	M. Muralidhar, P.Mahalakshmi, P.K.Patil, H. G. Solanki, <b>R. V. Borichangar</b> , J. G. Vanza, M.Natarajan, M.Kailasam, Prem Kumar, V.S. Chandrasekaran, R.G.Patil and C. Gopal. 2013. <b>Info on soil and water suitability and management for brackishwater aquaculture</b>
10	C. Gopal, M.Muralidhar, P. Mahalaxmi, P.K. Patil, H.G. Solanki, <b>R. V. Borichangar</b> , J.G. Vanza, Arvind Kumar Ray, R.G.Patil and S.M.Pillai. 2013. <b>Banana shrimp: potential species for culture in low temperature coastal áreas.</b>
11	Premkumar, A.R.T. Arasu, M. Kailasm, M. Natarajan,C. Gopal, M.Muralidhar, P. Mahalaxmi, P.K. Patil, H.G. Solanki, <b>R.V. Borichangar</b> , J.G. Vanza, V.S. Chandrasekaran, R.G.Patil and S.M.Pillai. 2013. <b>Seabass <i>Lates calcarifer</i> potential species for brackishwater fish culture.</b>
12	C. Gopal, T. Ravishankar, P.K.Patil, S.M.Pillai, Arvind Kumar Ray, P.Srikanth, H.G.Solanki, <b>R.V. Borichangar</b> , M. Muralidhar, P.Mahalaxmi, J.G. Vanza, R.G.Patil. 2013. <b>Immunostimulant ‘CIBASTIM’ for enhanced growth and immunity.</b>

13	M. Kailasm, M. Natarajan, Premkumar, A.R.T. Arasu, C. Gopal, M.Muralidhar, P. Mahalaxmi, P.K. Patil, H.G. Solanki, <b>R. V. Borichangar</b> , J.G. Vanza, R.G.Patil, V.S. Chandrasekaran and S.M.Pillai. 2013. <b>Milkfish <i>Chanos chanos</i> promising candidate species for brackishwater farming.</b>
14	V[DP D]Z,LWZ64 5LP DCF,1DL4 5LP S[P 5F8L,4 V[RP HLP ;M,\SL4 VFZP JLP AMZLRF\UZ4 H[P HLP JF\hF4 V[DP G8ZFHG4 V[DP S{,F;D4 5[[D S]DFZ4 JLP V[;P R\§X[BZG4 VFZP HLP 5F8L, VG[ ;LP UM5F,P Z_!#PEF\EZF5F6LGF\ V[SJFS<RZ DF8[ HDLG VG[ 5F6LGL p5I]STTF VG[ jIJ:YF5G 5ZGL DFICTL
15	5LP S[P 5F8L,4 V[DP D]Z,LWZ45LP DCF,1DL4 V[RP HLP ;M,\SL4 VFZP JLP AMZLRF\UZ4 H[P HLP JF\hF4 V[DP G8ZFHG4 V[DP S{,F;D4 5[[DS]DFZ4 JLP V[;P R\§X[BZG4 VFZPHLP 5F8L, VG[ ;LP UM5F,P Z_!#P VF.;L8L £FZF hL\UF pK[ZDF\ 5[MAFIM8LS;GF\ p5IMU 5ZGL DFICTLP
16	V[DP G8ZFHG4 V[DP S{,F;D4 5[[D S]DFZ4 V[DP D]Z,LWZ4 5LP DCF,1DL4 5LP S[P 5F8L,4 V[RP HLP ;M,\SL4 VFZP JLP AMZLRF\UZ4 H[P HLP JF\hF4 JLP V[;P R\N=;[SZG4 VFZP HLP 5F8L, VG[ ;LP UM5F,P Z_!#P U]HZFTDF\ VF.P;LP8LP £FZF jIF5FIZS ZLT[ VU¡TF WZFJTL DFK,LVMGF[ pK[Z VG[ T[GF jIJ:YF5GGL DFICTL
17	5LP DCF,1DL4 V[DP D]Z,LWZ4 5LP S[P 5F8L,4 ;LP UM5F,4 V[RP HLP ;M,\SL4 V[DP S{,F;D4 V[DP G8ZFHG4 V[DP G8ZFHG4 5[[DS]DFZ4 JLP V[;P R§XBZG4 VFZP JLP AMZLRF\UZ4 H[P HLP JF\hF4 VG[ VFZP HLP 5F8L,P Z_!#P V[SJFS<RZDF\ IJ:TZ6 5wWIT IGWF"ZLT DFICTL VG[ ;\5S" jIJCFZ TSGLSLP
18	;LP UM5F,4 V[DP DZ,LWZG4 5LP DCF,1DL4 5LP S[P 5F8L,4 V[RP HLP ;M,\SL4 VFZP JLP AMZLRF\UZ4 H[P HLP JF\hF4 VZIJ\N S]DFZ Z[4 VFZP HLP 5F8L, VG[ V[;P V[DP 15<.,P Z_!#P AGFGF hL\UF o NIZIFSF\9F IJ:TFZMDF\ GLRF TF5DFG[ pK[Z DF8[ ;\EIT 5 HFITP
19	5[[DS]DFZ4 V[P VFZP 8LP VFZF;]4 V[DPS{,F;D4 V[DPG8ZFHG4 ;LP UM5F,4 V[DP DZ,LWZG4 5LP DCF,1DL4 5LP S[P 5F8L,4 V[RP HLP ;M,\SL4 VFZP JLP AMZLRF\UZ4 H[P HLP JF\hF4 JLP V[;P R\ãX[BZG4VFZP HLP 5F8L, VG[ V[;P V[DP 15<.,P Z_!#P ;LAF; ,/8; S[,S[ZLOZ EF\EZF5F6LGF\ pK[Z DF8[ ;\EIJT 5 HFTLP
20	;LP UM5F,4 V[DP D]Z,LWZG4 5LP DCF,1DL4 5LP S[P 5F8L,4 V[RP HLP ;M,\SL4 VFZP JLP AMZLRF\UZ4 H[P HLP JF\hF4 VZIJ\N S]DFZ Z[4 VFZP HLP 5F8L, VG[ V[;P V[DP 15<.,P Z_!#P J'îâ VG[ ZMU5 ITSFZSTFG[ JWFZJF DF8[ c;LAF:8LDcP
21	V[DP S{,F;D4 V[DP G8ZFHG4 5[[DS]DFZ4 V[PVFZP8LP VFZ];]4 V[DP D]Z,LWZG4 5LP DCF,1DL4 5LP S[P 5F8L,4 V[RP HLP ;M,\SL4 VFZP JLP AMZLRF\UZ4 H[P HLP JF\hF4 VFZP HLP 5F8L,4 ;LP UM5F,4 JLP V[;P R§XBZG VG[ V[;P V[DP 15<.,P Z_!#P DL<SOLX RFGM; RFGM; o EF\EZF5F6LGF\ Dt:I pK[Z DF8[GL VFXF:5N DFK,LP
22	V[DP S{,F;D4 V[DP G8ZFHG4 5[[DS]DFZ4 ;LP UM5F,4 5LP DCF,1DL4 5LP S[P 5F8L,4 V[RP HLP ;M,\SL4 VFZP JLP AMZLRF\UZ4 V[DP D]Z,LWZG4 JLP V[;P R§XBZG4 H[P HLP JF\hF4 S[P V\AFX\SZ4 VFZP HLP 5F8L,4 V[;P V[DP 15<.,4 VFZP ;]aA]ZFH VG[ HLP tIFULP Z_!#P DL<SOLX RFGM; RFGM; o U]HZFTDF\ pK[ZJF,FIS VFXF:5FN DFK,L EF\EZF5F6LGF\ H/S'IQFGL J{IJwITFDF\ V[S 5U,]P

23	V[PVFZP8LP VFZ];]4 V[DP S{,F;D4 H[P S[P ;]\NZZ[4 5[[DS]DFZ4 VFZP ;]A]ZFH4 HLP YLIFUZFHG4 V[RP HLP ;M,\SL4 <b>VFZP JLP AMZLRF\UZ4</b> H[P HLP JF\hFP Z_!#P V[XLIG ;LAF; sE[TSLfGL ;]WFZ[, pK[Z 5wWIT DF8[GF\ <b>TSGLSL IJS&lt;5MP</b>
24	V[;P V[DP 15<,4 ;LP UM5F,4 V[RPHLP ;M,\SL4 V[DP D]Z,LWZG45LP S[P 5F8L,4 5LP DCF,1DL4 5LP5LP58[,4 <b>VFZP JLP AMZLRF\UZ</b> VG[ H[P HLP JF\HFP4 Z_!\$P AGFGF hL\UF pK[Z TSGLSLP
25	5[[DS]DFZ4 V[P VFZP 8LP VFZF;]4 V[DP S{,F;D4V[DP G8ZFHG4 ;LP UM5F,4 V[DP D]Z,LWZG4 5LP DCF,1DL4 5LP S[P 5F8L,4 V[RP HLP ;M,\SL4 <b>VFZP JLP AMZLRF\UZ4</b> H[P HLP JF\HF4 JLP V[;P R\§X[BZG4 VFZP HLP 5F8L,4 VG[ V[;P V[DP 15<,.P4 Z_!\$P ;LAF; ,[8; S[,S[ZLOZ EF\EZF5F6LGF\ pK[Z DF8[ ;\EIJT 5]HFITP
26	V[DP S{,F;D4V[DP G8ZFHG45[[DS]DFZ4 V[P VFZP 8LP VFZF;]4 ;LP UM5F,4V[DPD]Z,LWZG45LP DCF,1DL45LP S[P 5F8L,4V[RPHLP ;M,\SL4 <b>VFZP JLP AMZLRF\UZ4</b> H[PHLP JF\HF4 VFZPHLP 5F8L,4 JLP V[;P R\§X[BZG VG[ V[;P V[DP 15<,.P4 Z_!\$P ID<SOLX RFGF[; RFGF[; EF\EZF5F6LGF\ Dt:I pK[Z DF8[GL VFXF:5N DFK,LP
27	;LP UM5F,4 V[DP D]Z,LWZG4 5LP DCF,1DL4 5LP S[P 5F8L,4 V[RP HLP ;M,\SL4 <b>VFZP JLP AMZLRF\UZ4</b> H[P HLP JF\HF4 VZIJ\NS]DFZ Z[4 VFZP HLP 5F8L, VG[ V[;P V[DP 15<,.P4 Z_!\$P AGFGF Ih\UFo NIZIFSF\9F IJ:TFZF[DF\ GLRF TF5DFG[ pK[Z DF8[ ;\EIJT 5]HFITP
28	<b>VFZP JLP AMZLRF\UZ4</b> V[RP HLP ;M,\SL4 5LP 5LP 58[, VG[ H[P HLP JF\hFP Z_!5P Dt:IIJ7FG DCFIJWF,I GJ;FZLGL ~5Z[BF
29	V[RP HLP ;M,\SL4 <b>VFZP JLP AMZLRF\UZ</b> VG[ H[P HLP JF\hF Z_!5P hL\UF T\FJDF\ S,F[ZLG[XG
30	VFZP JLP AMZLRF\UZ4 V[RP HLP ;M,\SL4 H[P HLP JF\hF VG[ 5LP5LP 58[,P Z_!&P N11F6 U]HZFTDF\ Dt:I5F,GP
31	V[RP HLP ;M,\SL4 VFZP JLP AMZLRF\UZ4 H[P HLP JF\hF4 5LP 5LP 58[,4 V[DP VFZP 58[, VG[ VFZPALP JF/FP Z_!&P V[g8LAFIF[8LS 5]ITSFZ VG[ DFK,LqHL\UFGL T\N]Z:TLP
32	H. G. Solanki, <b>R. V. Borichangar</b> , J. G. Vanza, P. P. Patel, M. R. Patel and R. B. Vala 2016, Antibiotic resistance and fish/shrimp health
33	<b>R. V. Borichangar</b> , H. G. Solanki, J. G. Vanza, M. R. Patel and R. B. Vala. 2017, College of Fisheries Science Profile

Particular - DVD	05
DVD on <i>Banana Jinga- Tatiya kshetro me kam tapmaan par vaividhyakaran aur palan ke liye shambhavit jinga ki prajati</i>	DVD
DVD Fish rearing by AgriMedia	DVD
DVD Shrimp farming by AgriMedia	DVD
DVD Mud Crab rearing coastal women group (Gujarati version) by CIBA, ICAR, Chennai	DVD (6.4.2013)



DVD Mud Crab Fattening (Gujarati version) by CIBA	DVD (6.4.2013)
<b>Fisheries Resource Management – finfish and shellfish Video materials</b>	<b>Video 55</b>
<b>You tube channel – study materials on fish taxonomy</b>	Ritesh.borichangar@.....
Convenor Assessment of Answer Sheets of B.F.Sc (UG)	05 Years
Convenor Question Paper Setting of B.F.Sc (UG)	05 Years
Final exam Senior invigilator	05 Years
Exper lecture	28
<b>Krishi Mahotsav – extension activity - lectures &amp; Krishi Mela</b>	Since year 2005-06 to 2018-19
<b>Organized trainings, Khedut Sibir, Workshops etc</b>	16
<b>Radio talk</b>	03
<b>TV Talk, Inetrview</b>	04
Kishan Call Centre / Diagnostic advice - Call attended with	300 +
Demonstration of new technologies	14 new technologies
In-charge, Help centre College of Fisheries Science for UG admission	05 years
<b>Farm produced amount (Year 2012 to 2018) Rs</b>	<b>32,74,397/-</b>
<b>Sell of fish, shrimp under BH12023.+ Aqua Lab analysis fees</b>	

**Please give details of any other credential, significant contributions, awards received etc. not mentioned earlier**

<b>Sr. No.</b>	<b>Details (Mention Year, Value etc. where relevant)</b>
01	MoU between Central Institute of Freshwater Aquaculture and AAU, Anand (Year 2010-11)
02	Establishment of Inland training cum demonstration centre for middle Gujarat at AAU, Anand (Year 2010-11)
03	MoU between Central Institute of Brackishwater Aquaculture, NAU, Navsari (Year 2014-15 & 2017-18)
04	Establishment of College of Fisheries Science at NAU, Navsari (Year 2014-15 to till date)
05	Aqua farm fish and shrimp produced sell and Aqua Lab analysis fees for the year 2012 to 2018 was realised Rs.32,74,397/-

#### **Recommendations for farmers**

<b>Sr. No.</b>	<b>Year</b>	<b>Details of activity as per above</b>
1	2014	The farmers of coastal area of Gujarat undertaking brackishwater shrimp culture are recommended to maintain pond water salinity of 30 to 40 ppt (parts per thousand) for better growth and economic returns in banana shrimp rearing.
2	2014	The brackish water aquaculture farmers of South Gujarat heavy rainfall zone (AES- IV) are advised to grow salicornia on the waste land available around the ponds. Further, they are recommended to use aquaculture effluent water for irrigating salicornia along with application of fertilizer @ 250-75-50 NPK kg/ha. By adopting these practices, they can get higher fresh biomass yield and net return
3	2015	The fish farmers of the Gujarat region following freshwater carp culture are advised to undergo cage culture at pond site at stocking density of 166

		fingerlings/m <sup>3</sup> for the production of stunted yearlings with higher net profit
4	2016	The brackishwater shrimp growing farmers of coastal areas of Gujarat are recommended to maintain pond water salinity of 25-30 ppt (parts per thousand) in Indian white shrimp rearing for better survival, growth and economical returns.
5	2019	The freshwater fish farmers of Gujarat are recommended to use Oxytetracycline at a concentration of 80mg/kg of fish biomass as feed additive for a period of 7 days to the advance fingerlings of Mrigal
6	2019	The freshwater fish farmers of Gujarat are recommended to observe a withdrawal period of 27 days after use of Oxytetracycline at a concentration of 80 mg/kg of fish biomass as feed additive for a period of 7 days to the advance fingerlings of Mrigal to avoid residue problem.
7	2019	The freshwater fish farmers of Gujarat are recommended to use Emamectin Benzoate at 50 µg/kg of fish biomass as feed additive for a period of 7 days to the advance fingerlings of Mrigal
8	2019	The freshwater fish farmers of Gujarat are recommended that no withdrawal period is required after use of Emamectin Benzoate at 50 µg/kg of fish biomass as feed additive for a period of 7 days to the advance fingerlings of Mrigal.

A) SEMINAR/WORKSHOP/SUMMER INSTITUTE ATTENDED: [Attach certificate/document attended giving number 26(i) to26(iv)].

Sr.No.	Particulars	Number attended
i.	Seminar	12
ii.	Workshop	14
iii.	Summer Institute	03
iv.	Symposium/Conference	03

NEW PROJECTS CONDUCTED:

Particulars	Details of Project/ Research Scheme
PI - PLAN SCHEME Co-PI	05 - BH 12023; 12044;12062;12064; BH 0107030048 03 – Brackishwater Aquaculture development in Gujarat (as per MoU) BH2097 & BH 12943
PI & Co-PI –Research /Technical programme - AGRESCO	25

## MEMBERSHIP:

Sr.No.	Particulars	Details in Format
	<b>Member on</b>	
i.	Scientific / Government Board/Committee	57
ii.	Panel on Editorial Board of National Level Journal	02
iii.	MoUs between AAU and CIFA ICAR NAU and CIBA ICAR	02

Sr.No.	Particulars	Details in Format
	<b>Member on</b>	
1	Member of Agrometeorological Advisory Committee for 'Gramin Krushi Mausam Seva' Bulletin (DR office Guj. letter no: NAU/DR/GKMS/T.2/12592/2015, dt. 8-12-2015).	Committee member of magazine [AGRESCO Report – 13 <sup>th</sup> meeting on Animal Production and Fisheries – pp.157 [11.5.1(11)]
2	Member, Academic council – Navsari Agril. Uni	
3	Chairman, Board of Study Fisheries Science Faculty, COFS, Navsari	Board of studies
4	Chariman, SRC, COFS, NAU, Navsari	
5	<b>Member of NAUTA</b>	Member of scientific society
6	<b>COF alumni association</b>	Member of scientific society
7	<b>Member of Indian Fisheries Association</b>	Member of association
8	<b>Member of Fisheries and Life Science</b>	Member of scientific society
9	<b>Member of SEEG society</b>	Member of scientific society
10	Member, University Agricultural Educatoriam updating committee (Veterinary and fisheries scientist team) – Aug-2017	
11	Inviting member Board of studies veterinary college	Board of studies

12	Anti-ragging committee member, COF, NAU	
13	Student Advisor, COF, NAU	
14	Students council for B.F.Sc Students	
15	"Gujarat State Inter University Staff Tournament 2017" during 23-25, December, 2017.	
16	KVK Seed and feed purchase committee	
17	Fish and shrimp selling committee	
18	Member of 'State Agricultural Development Plan' and 'State Infrastructure Development Plan' committee for fisheries	Member State level committee
19	Member of 'State Agricultural Development Plan' and 'State Infrastructure Development Plan' compilation committee	Member State level publication committee
20	Member of 'New agriculture policy of India' and also contributed in chapter on fisheries policy	Member National level publication committee
21	Member of South Gujarat 'Best ATMA farmers award - 2014-15' selection committee (DEE Guj. letter no: NAU/DEE/D.1/5002-12/2015, dt. 5-11-2015)	Member of South Gujarat 'Best ATMA farmers award
22	Member, All India Survey on Higher Education (AISHE) Gujarat State Unit, Ministry of HRD, GOI	Member Educational [AGRESCO Report – 13 <sup>th</sup> meeting on Animal Production and Fisheries – pp.157 [11.5.1(12)]
23	Member of 'Biodiversity conservation', NAU, Navsari	Member of scientific society
24	Member - <i>Mera Gaon Mera Gaurav</i> committee for NAU,	Member of scientific society
25	ATMA District level award committee member	Member in Farmer award selection committee
26	Member of South Gujarat 'Best ATMA farmers award	Member of South Gujarat 'Best ATMA farmers award - 2014-15' selection committee (DEE Guj. letter no: NAU/DEE/D.1/5002-12/2015, dt. 5-11-2015)
27	Member, Fisheries committee for SAP & SIDP of Gujarat state for the year 2017-18 to 2019-20	Member State level committee
28	Member, SAP & SIDP compilation committee of Gujarat state for the year 2017-18 to 2019-20	Member State level compilation committee

29	Member, Contingencies strategies for South Gujarat	Member Institutional committee
30	B.F.Sc. – UG rules and regulation committee – Kamdhenu University	Member
31	Member, Academic Council – Kamdhenu University, Gandhinagar	
32	Member, Security Committee, Kamdhenu University, Gandhinagar	
33	Member, PG and PhD regulation Committee, Kamdhenu University, Gandhinagar	
34	Member, Lab tech selection committee, NAU, Navsari	
35	Member, Assistant Professro Scrutiny committee, NAU, Navsari	
36	Member, Assitant Professor selection committee, NAU, Navsari	
37	Member, Assistant Professro Scrutiny committee, Kamdhenu University, Gandhinagar	
38	Member, SRF & YF selection Committee, CIBA, ICAR	
39	Member, SRF selection committee, Navari Agril. University, Navsari	
40	Member, UG syllabus committee, M. D. Science College, Probandar	
41	Member, Scientific Advisory Committee, KVK, NAU, Navsari	
42	Member in ‘District Agricultural Development Plan’- Anand district	
43	Member in ‘District Agricultural Development Plan’- Anand district	
44	Convener, Gift and Prize purchase committee ‘Spandan-2018’, Veterinary and Fisheries college, NAU	
45	Member, SAU, PG exam admission for the year 2017-18 – Collection and distribution committee for fisheries faculty	
46	Kishan Call Center Level – 2 Officer	
47	Member, NAU Academic Journal Expert Committee	
48	Member of AGRESCO sub-committee on Animal Production and Fisheries Science, NAU	
49	Member of 12 <sup>th</sup> Joint Combined AGRESCO Animal Production and Fisheries Science	
50	Member, Library Committee, NAU, Navari	

51	Member, Kishan App – NAU, Navari	
52	Examiners for the paper setting subjects: soil and water chemistry (AEM122) and Physiology of finfish (FRM121) Sep-2019	GURU ANGAD DEV VETERINARY AND ANIMAL SCIENCES UNIVERSITY, Ludhiana
53	Expert for presentation & viva-voce by Fishery Officers of GoG	23rd & 24th October 2019
54	Workshop on “Doubling Farmers’ Income by 2022 - A Strategic Initiative” 1-2 June, 2018 at AAU, Anand	Moderator/Facilitator
55	Rapporteur, 14 <sup>th</sup> Combain-Joint AGRESCO - Animal Health, Animal Production And Fisheries Science, SAUs of Gujarat	April - 2018
56	“Latest Technology for Prosperity and Sustainable Development In Agriculture” 18th November, 2018 (Sunday) – NAU, Navsari & Agrivision, Gujarat State, Ahmedabad, Gujarat	State Level, (Gujarat State) Organizing committee member
57	Mukhyamantri Yuva Swavlamban Yojana (MVSU) Help center Incharge – COFS, NAU	6 <sup>th</sup> Oct, 2017 onwards

**EXTRA ACTIVITY:**

Sr.No.	Particulars	Place where you have worked	No. of years
i.	Rector /Assistant Rector	Chief Rector ‘Sagar’ boys’ & ‘Meenakshi girls’ hostel, Fisheries College, NAU, Navsari	5 years
ii.	Chairman/Ex-Officio	Chairman, SRC, Fisheries college, NAU, Navsari	4 years
iii.	UG Academic In charge	Fisheries college, NAU, Navsari	4 Years
iv.	Farm Manager/Drawing Disbursing Officer	DDO, College of Fisheries, NAU, Navsari	DDO 3 Year
v.	Other		

**MEDALS/AWARDS: [Attach certificate giving number 22(i) to 22(ii)]**

Sr.No.	Particulars	Name of Medal/Award	Year in which received	Name of Organization	No. of Medals /Awards
i.	Awarded on Academic	Silver medal First in Dept. &	2000-01	Bhavnagar Uni & Sh. Manubha	02

	Achievements	Second amongst all PG Departments of Bhavnagar uni		Vakhatsinh Rana trust	
ii.	Awarded for Scientific Contribution	“ <i>Sanman Patra</i> ” for PhD research work	2009	Porbandar District Chamber of Comm. & Industries, Porbandar	01
iii.	Apprication letter	Dr Snajay Nandan IAS – Commissioner of Fisheries, GoG, Gandhinagar	2005-06	DSSMS – developed and implemented for fishermen of Gujarat	01