

KERALA UNIVERSITY OF FISHERIES AND OCEAN STUDIES (KUFOS)

FACULTY PROFILE

School:

1	Name (in Block Letters)	Dr.DAISY.C.KAPPEN
2	Father's Name/ Mother's Name	C.T.Cherian
3	Nationality	Indian
4	Date and Place of Birth	25/5/1964, Kodikulam, Thodupuzha
5	Sex	Female
6	Marital Status	Married
7	Indicate Category SC/ ST/ OBC/ General Category	General
8	Date and Post of Joining Service at KAU/KUFOS with UO reference	20/3/1999, No.GA/C3/8247/99(i) dt Vellanikkara 17/3/1999
9	Audit Number and UPF No.	Kufos/fin3/Sc/20/2011-12,10016
10	Date of Last Promotion with Post/Grade promoted to with U.O. reference	24/2/2010, Associate Professor, No.GA/C2/19462/2010(iii) Vellanikkara Dt 1/6/2010
11	Current Designation and Grade pay	Associate Professor, Rs.9,000/-
12	Which position and grade pay are you an applicant under CAS	Professor, Rs.10,000/-
13	Date of eligibility for promotion	24- 2-2016
14	Permanent Address with PINCODE	Margretvilla, Edavanakkad, Ernakulam, 682002
15	Address for Communication with PINCODE	Qr.No.IV/1, Staff Quarters, KUFOS, Panangad
16	Phone numbers (Off. Res. Mob) and email	0484-2700598, 0484-2703013, 09446353013

17. Academic Qualification (10th STD onwards):

Qualification	Subject/ Specialization	University/ Board	Duration of study from to dates	Date of award	% of marks obtained
SSLC	History & Civics, Economics, Geography Physics, chemistry, biology, mathematics,	Board of public examinations		1979	

PDC	Physics, Chemistry, Biology	Calicut University	2years, 1979 to 1981	1981	
BFSc	Fishery Science	Keraqla Agricultural University	4years ,1981 to 1987	1987	
MFSc	Fishery Extension	Keraqla Agricultural University	2years, 1987 to 1990	1990	
Ph.D	Fisheries	Cochin University of Science and Technology	2years (Part time registration	2007	

18. Record of Academic service prior to joining KUFOS

Institution	Designation	Essential Qualification for the post at the time of appointment	Nature of appointment (Regular/ Fixed term/ Temporary/ Ad hoc)	Nature of Duties (Teaching/ Research/ Others)	Pay Scale	Date of joining and Date of Leaving	Reasons of leaving

19. Record of Service in KUFOS

Designation	Essential Qualification for the post at the time of appointment	Nature of appointment (Regular/ Contract/ Temporary/ Ad hoc/ Guest)	Nature of Duties (Teaching/ Research/ Guidance of Research/ Administration)	Pay Scale	Date from – to dates	Total period Yr. M. Days
Asst.Professor	M.F.Sc	Regular	Teaching and Extension	2,200-75-2800-100-4000	20/3/1999 to 20/3/2005	6 years
Asst.Professor (SS)	M.F.Sc	Regular	Teaching and Extension	10,000-15200	20/3/2005 to 24/2/2010	4years,11months and 4days
Associate Professor	M.F.Sc	Regular	Teaching and Extension	37,400-9000-67,000	24/2/2010 to continuing	6 years as on 24/2/2016 (continuing)

20. Period of Teaching experience: PG Classes (in years and months)

17 years, 4 months

17 years, 4 months

UG Classes (in years and months)

21. Research Experience excluding years spent in M.Phil/Ph.D.
(in Years and Months)

22. Field of Specialization under the Subject/ Discipline: Fishery Extension

23. UGC/AICTE/ISTE recognized Orientation/Refresher/ Winter Courses attended:

14. Participation in Refresher Course/Summer Institute

Sl.No.	Name of the course/Summer school	Place	Duration	Sponsoring Agency
1.	Shrimp Culture and Hatchery Management	Vallarpadom, Kochi	22-4-1991 to 31-5-1991	MPEDA at Vallarpadom
2.	Advances in Harvest in harvest Technology	CIFT, Kochi	20-11-2002 to 19-12-2002	CIFT, Kochi
3.	Life Sciences	CUSAT, Kochi	1-12-2003 to 20-12-2003	Dept. of Marine Biology, CUSAT
4.	Modern Approaches in Fisheries science	CUSAT, Kochi	25-10-2006 to 15-11-2006	School of Industrial Fisheries, CUSAT
5.	ICAR Winter School on "Advanced Biological Techniques for fisheries"	Tuticorin	5-11-2008 to 25-11-2008	Fisheries College and Research Institute, Tamil Nadu Veterinary and Animal Science University, Tuticorin
6.	Training course on Gender analysis & Mainstreaming in Agriculture	Vellanikkara, Trissur	2-1-2016 to 22-1-2016	Division of Agricultural Extension Delhi
7.	Training programme on Preparation, Appraisal, monitoring & Evaluation of Fishery projects	Hyderabad	25-4-2016 to 29-4-2016	NFDB, Hyderabad

24. List of five most significant publications

Research Publications

Sl No.	Title of Paper	Name of Journal/ Publisher	Date of Publication and impact factor if any	Vol., Number and pages
1	Extent of Adoption of Improved Practices in Fish curing.	Journal of Extension Education	2010,	Vol.22 (4),4541-4546
2	Knowledge level of Brackishwater Shrimp Framers	Journal of Extension Education	2011.	Vol.23(2), 4616-4620
3	Adoption of improved practices in freshwater fish farming	J. of Fishery Technology	2013,	vol 50,No.2 191-195
4	Preferential indices of Tribal fisherfolk on selected attributes of indigenous Fishes in three colonies Existing on the banks of river chalakkudy, Kerala	Journal of Extension Education	2014,	vol.26,no.3,5280-5287
5	Aquaculture Indices of Deccan mahseer, <i>Tor khudree</i> transplanted to the low lands of Kerala while stocked with Indian major carps	International journal of Science, Environment and Technology,	2015	vol.4,1080-1088

Popular articles

- 1.Setting up of an aquarium
- 2.Feed preparation for aquarium fishes
- 3.Fresh water fish farming
- 4.Suitable fishes for fresh water fish farming
- 5.Hand book on brackish water shrimp farming
- 6.composite fish farming
- 7.Cage culture

8. Report of the various activities of RKVY funded project Samagramatsyagramam published in "Karshakasree "

9. News articles/ news stories in various news papers/journals about the success stories of the fresh water fish farming and cage culture of various fishes – 25 nos.

10. Brochures – ornamental fish culture, freshwater fish farming, cage culture

ii) Other Publications/Presentations in Conference/Seminar/Workshop

1. P.J. Cecily, Mercy Thomas and Daisy.C. Kappen, Post harvest Technology of Fish and Shell Fish, Brochure on Training Programme on Marine Products and Allied Industries for Domestic/ Export Market. Organized by Small Industries Service Institute (Government of India, Ministry of Industry) and Association of Food Scientists and Technologists (India), Co-Sponsored by Marine Products Export Development Authority

2. Compendium of the National level Model Training Course on Gender Concerns in Fisheries organized at College of Fisheries, Panangad from 11 to 18, December 2007.

3. Dinesh, K, Daisy C. Kappen, Nair, C.M, Induchooden, N.C and Abraham, J, 2008. Final Report of the project entitled "Studies on Feasibility of Ranching in Chalakudy River for Empowering Tribal Communities of Vazhachal Forest Division, Western Ghats" prepared to submit to the Department of Science and Technology, New Delhi 108 p

4. Joice Abraham, Dinesh, K, Nair, C.M, Daisy.C Kappen, Induchooden, N.C. and Shiju, P. (2007). Potential of two endemic herbivores of the Western Ghats as candidate species for rural aquaculture. Paper presented at the National Conference

5. "Bio-Secured Aquaculture-an eco friendly approach" 28&29, June 2007 at Tuticorin (Conference abstract proceedings) organized by Fisheries Bio-technology Centre, Fisheries college and Research Centre, Tamil Nadu Veterinary and Animal Sciences University, India,

6. Dinesh, K, Abraham, J, Nair, C.M, Daisy .C. Kappen, Induchoodan, N.C., Shyama, S and Shaji, C.P. 2007. Preferential index of 12 endemic fish species among the tribal fisher folk of Vazhachal Forest Division, Western Ghats. *In*: Fisheries and Aquaculture: Strategic outlook for Asia, Book of Abstracts- 8th Asian Fisheries Forum (organized by Asian Fisheries Society Indian Branch), November 20-23, 2007, Kochi, India, p, 251

7. Daisy.C.Kappen, K.Dinesh, C.M.Nair, N.C.Induchoodan, C.Bose Soumya, K.S.Shijil, Fishing and Per capita Fish availability of the forest dwelling tribes of the three colonies of the Western Ghats . Paper presented at the Asian-Pacific Aquaculture held at Kochi from 17-1-2011 to 20-1-2011.

8. Daisy.C.Kappen, , C.M.Nair, M.S. Raju, K.Dinesh , K.R.Salin and N.S.Saneer , Report of the RKVY funded project “ Sustainable Fisheries Development for Rural Empowerment and Food security in Puthenvelikkara grama Panchayatt, Ernakulam.(2nos.)

9. . Daisy.C.Kappen, , C.M.Nair, M.S. Raju, K.Dinesh , K.R.Salin and N.S.Saneer, Standardization of cage culture practices of *Lates calcarifer* (Seabass) using farmer participatory approach paper presented in the World Ocean Science Congress 2015 organized jointly by swadeshi Science congress Movement, Kerala and KUFOS, Panangad from 5-2- 2015 to 8-2-2015 at Kochi, Kerala

10. Daisy.C.Kappen, Madhusoodanakurup. B, C.M.Nair, M.S. Raju, K.Dinesh , K.R.Salin and N.S.Saneer, Participatory Approach for Standardizing cage culture of giant trevally *Caranx ignobilis* in Thiruthipuram back waters, Kochi, Kerala Paper presented in the 5th International Symposium on Cage Aquaculture in Asia (CAA5) organized by CMFRI, Asian Fisheries Society and ICAR from 25-11-2015 to 28-11-2015 st Kochi, Kerala.

11. Daisy.C.Kappen, Madhusoodanakurup. B, C.M.Nair, M.S. Raju, K.Dinesh , K.R.Salin and N.S.Saneer, Cage Aquaculture of pearlspot *Etroplus Suratensis* for livelihood enhancement of the fisherwomen of Central Kerala, Paper presented in the 5th International Symposium on Cage Aquaculture in Asia (CAA5) organized by CMFRI, Asian Fisheries Society and ICAR from 25-11-2015 to 28-11-2015 st Kochi, Kerala.

12. Daisy.C.Kappen, Madhusoodanakurup. B, C.M.Nair, M.S. Raju, K.Dinesh , K.R.Salin N.S.Saneer and Mithun Sukumaran, Pen culture of Giant trevally *Caranx ignobilis* as a livelihood for the fisherfolk in Central Kerala, paper presented in the International Conference on “Towards a Sustainable Blue Economy : production, Strategies and Policies” KUFOS, Panangad and Nansen Environmental Research Center, India from 4-2-2016 to 6-2-2016

25. Any other relevant information

26. PART B: ACADEMIC PERFORMANCE INDICATORS

CATEGORY 1. TEACHING, LEARNING AND EVALUATION RELATED ACTIVITIES

- (i) Lectures, Seminar, Tutorials, Practicals, Contact Hour (give semester-wise details, where necessary) during the year 1999 to 2016

Sl. No.	Course/ Paper	Level	Mode of Teaching	No. of classes per week allotted	No. of classes conducted	% of classes/ practical's taken as per documented record
1.	Mgt.St.311 Fisheries Extension (3 + 0) B.F.Sc (1996batch)	UG	L	3		100%
2.	Mgt.St 212 Extension Teaching Methods and communication (1+1) B.F.Sc(1997 batch to 2003 batch)	UG	L,P	5		100%
3.	Mgt.St.221 Fisheries Extension and Rural sociology (1+ 1)B.F.Sc (1997 batch to 2003batch)	UG	L,P,S	5		100%
4.	Mgt.St.609 Fisheries extension and rural development (1+1) M.F.Sc(1999 batch to 2010 batch)	UG	L,P,S	5		100%
5.	Fisheries Extension, Communication and rural sociology (2+1) B.F.Sc (2004 batch, 2006)	UG	L,P,S	6		100%
6.	Fisheries Extension Education (2+1) B.F.Sc(2007 batch onwards)	UG	L,P,S	6		100%
7.	Information Technology (1+1) (course is shared with smt.Malika) B.F.Sc 2007 batch onwards	UG	L	8 hrs/ sem		

8.	Project work Socio-economic studies and Extension (0+3)RAWE , shared B.F.Sc, 1999 onwards	UG	L,P			
9.	Fish.2201,Aquaculture (1+1)C&B, KAU,2005, 2006,2007, 2009,2011	UG	L,P	3		
10.	Fish 3102 Fish Processing Technology(1+1)C&B, KAU2004,2006	UG	L,P	3		
11.	MBAC517 Indian and Global Fisheries Industry(3+0) half of the paper MBA 2012&2013 batch	PG	L			
9.	MS.527,Agricuture & Allied subject research, research ethics and rural development 2009 ,2010,2013,2014	PG	L, S			

* Lecture (L), Seminar (S), Tutorial (T), Practical (P), Contact Hours (C)

(a)	Classes Taken (max 50 for 100% performance & proportionate score up to 80% performance, below which no score may be given)	50
(b)	Teaching Load in excess of UGC norm	

(ii) Reading / Instructional material consulted and additional knowledge resources provided to students

Sr. No.	Course / Paper	Consulted	Prescribed	Additional Resource provided
1.	Fisheries Extension Education			Regularly arranging field visits to the students and provide opportunity for the students to interact with the farmers so as to learn from the farmers

2.				Participating both BFSc & MFSc students in various National and International exhibitions and equip them in setting up the stall by displaying models, specimens, setting up of aquarium etc and also to act them as interpreters of the various technologies in the field of fisheries to the public
				Arranging group discussions and seminar for equipping the students for the effective transfer of technology to the farmers.

(iii) Use of Participatory and Innovative Teaching- Learning Methodologies, Updating of Subject content, Course improvement etc.

Sl. No.	Short Description
1.	Students are interacting with the farmers to know the technologies and training the students in using several media like flashcards, flannel graphs, charts, use of models, dramatized experience, PowerPoint etc. in disseminating the technology effectively to the farmers.
2.	Training the students in preparing scripts in local language for the efficient transfer of the technology to the farmers.
3.	Providing opportunities for the students to participate in the training programmes arranged in the field so as to share the knowledge and experiences of farmers

(iv) Examination Duties Assigned and Performed (1997 to 2016)

Sr. No.	Type of Examination Duties	Duties Assigned	Extent to which carried out (%)
	Invigilation duties, entrance exams etc.	129 nos	100%

CATEGORY : II. CO-CURRICULAR, EXTENSION, PROFESSIONAL DEVELOPMENT RELATED ACTIVITIES

Sr. No.	Type of Activity	Average Hrs/Week
	(i) Extension, Co-curricular & field based Activities	20hrs/week
	<ol style="list-style-type: none"> 1. Conducted/Participated in 37 exhibitions (number of days =197) ,from 1/2011 to 4/ 2016 and secured prizes and awards for the best designed aquarium, indigenous fishes collection etc. In addition to these for setting up of the stall and dismantling the same is a tedious process which involves at least two days efforts for each exhibition(total number of days=271days) 2. Training programmes organized -18nos (2010-2016) 3. Resource persons for various training programmes organized by NGO/State/ Central institutions- 38nos. 4. Advices and technical guidance provided to the farmers visiting the university (2010-2016)- 500(approx.) 5. Advices and technical guidance provided to the farmers over telephone2010-2016 -500(approx 	
	Advices and technical guidance provided to the Staff/students visiting KUFOS	130 nos (1999 to 2016)
	<p>Technologies transferred to the fish farmers</p> <ol style="list-style-type: none"> 1.Freshwater fish farming- 1.Composite fish culture 2. Culture of Nile Tilapia 2.Brackishwater fish farming- 1.Culture of Pearlspot & milkfish 3.Brackishwater shrimp farming – <i>P.monodon</i> 4.Ornamental fish culture 5.Cage culture of Seabass, pearlspot, redsnapper, giant trevally, nile tilapia (5species) 6.Penculture of 1.pearlspot and milkfish 	

	<p>2.Giant trevally & Tilapia</p> <p>Regularly providing technical advice to the farmers by direct contact and over telephone. On an average spending 1 hr/farmer for direct contact</p> <p>TV Programmes broadcasted</p> <p>1.TV Programme on cage aquaculture telecasted on 1/11/2015 at 10pm and retelecasted on 7/11/2015 at 7.30am in the Surya TV programme “Varthakkappuram”</p> <p>2.TV Programme telecasted by the Delhi Doordarshan National Kissan Channel in the programme “ Kheth Khalian” on 13/1/2016 at 7am and retelecasted at 1pm.</p> <p>3.Engaged classes to the farmers as Resource persons in 34 training programmes organized by various institutions.</p> <p>4.Training programmes organized (2010 to 2016)-20nos.</p>	
	(ii) Contribution to Corporate Life and Management of the Institution	Yearly / Semester wise responsibilities
	1.Asst.Warden of Ladies Hostel	Managing the hostel, 10hrs/week
	2.Advisor of 16 students (2012,2014 BFSc students)	
	(iii) Professional Development Activities	

27. RESEARCH AND ACADEMIC CONTRIBUTIONS

A) Published Papers in Journals(List attached)

Sr. No.	Full Journal paper Eg: Amjit K. M & Chatterjee B, <i>Optimisation of Cellular layout using Simulated Annealing</i> , Int. J of Production Research, Vol 26 No. 4, Dec 2009, pp 25-34.	ISSN/ ISBN No.	Whether peer reviewed	Impact Factor, if any

B (i) Articles / Chapters published in Books (List attached)

Sr. No.	Full Articles/ Chapters in books. Eg: Benson, R., Crow P.S. & Stien R, <i>Benchmarking lessons in the process industries</i> , Chapt: Ed: May Amy, <i>Manufacturing Excellence</i> , 2 nd Edition, 1998 Haymarket Business Publications, London	ISSN/ISBN No.	Whether peer reviewed	Publisher International/ National/ Regional

(ii) Full Papers in Conference Proceedings

Sr. No.	Full Papers in Conference proceedings Eg: Bumstead, J and Cannons, K, <i>From 4PL to managed supply chain operations</i> , Proc. Int. Conf. on Supply Chain, NTU, Singapore, May 12-15, 2004, pp 18-25.	ISSN/ISBN No.	Detail of Conference International/ National/ Regional

(iii) Books Published as author or as editor

Sr. No.	Book Published (Reference in the format given below with author names in the order published, Eg: Christopher, M. and Peck H (2003) <i>Marketing Logistics</i> , 2 nd edition, Butterworth Heinemann, Oxford)	ISSN/ ISBN No.	International/ National/ Regional	Editor/ Author

C (i & ii) Ongoing Completed Research Projects and Consultancies

Sr. No.	Title	Agency	Period	Principal Investigator or Co-PI	Grant / Amount in (Rs. Lakh)
1.	Engendering Agricultural Research and Extension” -	NRCWA, Bhubaneswer.- 11.39lakhs	1 year, 2004	Co PI	11.39lakh
2.	Survey on the Knowledge and Practices of Processing Technology Aspects of Fish Among Selected Women from Ernakulam and Alleppey districts.	KSCSTE (completed)	(2004 to 2006)	Co-PI	Rs.2,56,300/-
3.	Thanneermukkam Samagra Matsya Gramm Project (completed -2009)	Plan projecxt	2009	Co-PI	
4.	Improving the tribal livelihood of Western Ghats through Ornamental Fish Culture-	3years 11lakhs funded by Western Ghats Cell (completed)	2009-2012	Co-PI	11lakhs
5.	Fish seed production and ranching in Chalakudy river for improving the tribal livelihood of Vazhachal Forst Division	DST	2009-2012 ,	Co-PI	Rs.15,33,050
6.	Farm Advisory services for Fisheries,	Plan project	2015	PI	10lakh
7.	Studies on feasibility of ranching in Chalakkudy River for empowering Tribal Communities of Vazhachal Forest Division, Western Ghats” funded by	Science & Society Division. Department of Science and Technology, New Delhi.(completed)	2015	Co-PI	
8.	Establishment of ornamental fish culture unit at Pokalappara, Trissur for improving livelihood of tribal communities	NABARD,	2012 2015	Co-PI	8,78,375
9.	Sustainable Fisheries Development for Rural Empowerment and Food Security ih Puthenvelikkara	RKVY, Govt of India,	2010-2014	PI	77,95,000

	Grama Panchayath, Ernakulam, Kerala,				
10.	Exhibition Unit - (ongoing)	Plan project		PI	23.56lakhs
11.	Village Adoption for Empowerment and capacity building ensuring livelihood of Fisherfolk in Central Kerala,	Plan project		PI	20lakhs (ongoing)
12.	. Establishment of a Fisheries Technical portal and knowledge center,)	Plan project		PI	20lakhs (ongoing)
13.	Earn while you learn	Plan project		PI	10lakhs (ongoing)
14.	7.Farm Radio Station	Plan project		PI	20lakhs (ongoing)
15.	Establishment of a Mangrove Research Center at Fisheries Station)	Plan project		Co-PI	5lakh
16.	Trial Culture of Litipenaeus vennami at Fisheries Station, Puthuveypu,	Plan project		Co-PI	15lakhs (ongoing)
17.	Finding out non- conventional species for brackishwater and marine species for Aquaculture	Plan project		Co-PI	10lakhs (ongoing)
18.	RMP Canal cage culture-)	Plan project		Co-PI	5lakhs (ongoing)

C (iii & iv) Completed Research outcomes: quality and outcomes

Sr. No.	Title	Agency	Period	Principal Investigator or Co-PI	Report Accepted/ Patent/ Technology transferred

(D) Research Guidance

Sr. No.	Number Enrolled	Thesis submitted	Degree awarded	API Score claimed	API Score awarded
M.Phil*					
Ph.D. *					

* **Note:** Attach list of students with title of Thesis and year and name of Co-guides if any

(E)(i): Training Courses, Teaching-Learning-Evaluation Technology Programmes, Faculty Development Programmes

Sr. No.	Programme	Duration	Organized by	API Score

(E) (ii): Papers presented in Conferences, Seminars, Workshops, Symposia*(List attached)

Sr. No.	Full papers presented. (In format given below with author names in the order published Eg: Arun KP & Vidhya CR, <i>Co-ordinating two level supply chains</i> , Int. Conf. on Supply Chain, IIT-KGP, Kharagpur, Dec 16-18, 2011)	Date(s) of the event	Organized by	API Score
1				
2				

(E) (iii): Invited Lectures/ Refresher/ Orientation course class and Chairmanships at National or International Conference/Seminar etc.

Sr. No.	Details of event (Eg: Refresher Course in Commerce by ASC, Kerala Univ June 5, 2010)	Class/ Talk or Chair	International/ National/ Regional
1			
2			
3			
4			
5			

OTHER RELEVANT INFORMATION

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

Membership in organizations

Sl.No	Name of the organization	Remarks
1.	Indian Society of Extension, Division of Agricultural Extension, I.A.R.I., New Delhi-110012	Life Member

2.	Society of Fishery Technologists (India), Cochin	Life Member
3.	Society of Extension Education, TNAU, Coimbatore	Life Member
4.	Member of various committees constituted at the college/university level-50nos.	

Awards/Distinctions received if any.

1. Letter of appreciation from the Hon'ble Vice Chancellor for the efforts in organizing KAU pavilion at Thrissur Pooram Exhibition.2008

2. Letter of appreciation from the Hon'ble Vice Chancellor for the efforts in organizing KAU pavilion at Haritholsavam 2009, held at Maradu, Kochi.

3. A letter of appreciation from the hon,ble Vice Chancellor for the success in Vannamei shrimp culture.

Extension contributions

1.Freshwater fish culture

- Total area covered under the fresh water fish culture - 14.25acre
- Total number of freshwater fish seeds distributed to the farmers - 80,480
- (Catla, Rohu, grass carp, Pearlspot)
- Total number of freshwater prawn seeds distributed to the farmers - 1,24,000
- Total number of beneficiary farmers -62
- A growth rate of 1.250kg and 2.600kg for rohu and catla respectively was achieved in a period of 7months culture.
- Catla-2.600kg(7months)
- One of the great achievements of the project is the fresh water fish stocked in the public pond had shown a record growth rate of 5 kg in a period of 15 months.

2.Brackish water Fish culture

- Total area covered under the brackishwater fish culture - 67.6acre

- Total number of shrimp seeds distributed to the farmers -13,02,000
- No. of beneficiary farmers -12

- **3.Integrated Farming**

- Total area covered -16acres
- Total number of beneficiary farmers -41
- Chanose seeds distributed to the farmers -2,25,400
- Ducklings distributed to the farmers -865
- Vegetable production(bitterguard, cowpea, Ladies finger, cucumber etc.) -891kg
- Total number of beneficiary farmers -12

- **4.Ornamental Fish Culture**

- Number of ornamental fish culture units started -41
- Inputs supplied to the farmers - Glass tanks 3x1x1ft (1no.) 2x1x1ft(1no), Fiber tank 8x4x1.5ft (2nos), air pumps(1no), Filter unit(2nos), air tubing (50m), switch board (1no),Powerhead(900L/H, 1no), Hand net(2nos), Handnet/strainer for collecting youngones(2nos), sponde filter(1no), seeds , feeds, breeders of various ornamental fishes viz.guppy, gourami, angel, moonlight, platy etc.

- **5.Cage culture**

- No. of beneficiary groups formed -30 (two groups consists only women beneficiaries)
- Total number of beneficiaries -255
- Production -40-45kg/m³
- Total number of Cages distributed -181 (inner and outer cages with varying mesh size, Thickness etc.)

- **6.Natural enhancement**

- Total number of seeds released in public waterbodies
- Penaeus monodon -2,00,000
- Catla, Rohu and mrigal -1,91,000

