

**CENTRE OF ADVANCED FACULTY TRAINING IN AGRONOMY
DEPARTMENT OF AGRONOMY
TAMIL NADU AGRICULTURAL UNIVERSITY
COIMBATORE – 641 003
REPORT, 2020**

Introduction

Centre for Advance Studies in Agronomy (CAS) was sanctioned during 1994-95 by the Indian Council of Agricultural Research (ICAR) for the improvement of the faculty, education and research activities. The Centre was inaugurated on the 15th of May, 1995. It was renamed as Centre of Advanced Faculty Training in Agronomy.

Scheme	:	Establishment of Centre of Advanced Studies
Name of CAS	:	Centre of Advanced Faculty Training in Agronomy
Date of start	:	15 th May, 1995
Name of Course Director	:	Dr. C.R. Chinnamuthu
Name of University	:	Tamil Nadu Agricultural University Coimbatore – 641003
ICAR Approval	:	F.No.1 - 2 / 93 CAS HRD - II dated 11.11.1994 of ICAR, New Delhi
Continuation Approval	:	F.No.F1 (37) / 2002 – CAS / HRD II dated 31.7.2003 of ADG (HRD II) ICAR, New Delhi

Objectives

- To provide training to young scientists and teachers and update their knowledge and skills in the field of frontier research for future agriculture.
- To provide them an opportunity to discuss and exchange ideas with experts / resource persons who are involved in advanced sustainable technological research for agriculture in future.
- To disseminate the recent advanced technologies in agriculture to the clients in different regions of the nation through trainees for enhancing the productivity, profitability and food security.

Programme

- Providing infrastructure facilities like teaching equipments, research materials, preparation of teaching manuals and strengthening the faculty library.
- Providing laboratory equipments, computer facilities and field research support
- Conducting training programmes in instrumentation techniques, conduct of field experiments, data processing and analysis and advanced areas of research

Human Resource Development

Particulars of training programmes for HRD conducted

The title of the training programmes so far conducted and number of participants for each of the training courses are given below:

No.	Title	Duration (days)	Date	No. of Participants
1.	Recent Advances in weather forecasting and dryland management	14	10.04.1996 - 23.04.1996	18
2.	Sustainable crop production through cropping systems and organic farming	14	22.01.1997 - 04.02.1997	20
3.	System analysis and modeling in crop production and management	14	23.07.1997 - 05.08.1997	20
4.	Recent advances in rice production technology	21	03.08.1998 - 20.08.1998	15
5.	Resource management for sustainable dryland agriculture	14	17.02.1999 - 02.03.1999	20
6.	Soil fertility management in cropping systems	21	28.07.1999 - 17.08.1999	18
7.	Advances in chemical weed control and residue estimation and management	10	18.01.2000 - 27.01.2000	19
8.	Recent advances in pulse crop production technology	21	13.09.2000 - 03.10.2000	21
9.	Land use planning and watershed management in rainfed agriculture	21	23.01.2001 - 12.02.2001	18
10.	Advances in integrated nutrient management system for sustaining crop productivity and soil fertility	21	04.10.2001 - 24.10.2001	18
11.	Recent advances in irrigation management for field crops	21	22.01.2002 - 11.02.2002	20
12.	Sustainable ecosystem maintenance through farming system approach	21	27.02.2003 - 19.03.2003	20
13.	Integrated weed management technology present status and future challenges	21	19.02.2004 - 10.03.2004	20
14.	Precision Farming	21	25.03.2004 - 14.04.2004	18
15.	Paradigm shift in Rice Research and development	21	22.12.2004- 11.01.2005	6
16.	Farming for the future : Ecological and economic issues and strategy	21	9.11.2005- 29.11.2005	14

No.	Title	Duration (days)	Date	No. of Participants
17.	Enabling technologies for enhancing productivity of watershed and rainfed farming	21	18.01.2006-07.02.2006	16
18	Perspectives of Organic Agriculture	21	10.10.2006-30.10.2006	17
19	Renewable energy sources through biofuel crops	21	20.02.2007-12.03.2007	16
20	Natural Resource Management For Sustainable Agriculture-A New paradigm	21	15.10.2007-04.11.2007	17
21	Commercial Agriculture	21	21.01.2008-10.02.2008	20
22	Recent advances in the production and utilization of pulses and oilseed crops	21	10.09.2008-30-09-2008	20
23	Strategies for profitable agriculture	21	21.01.2009-10.02.2009	19
24	Conservation Agriculture	21	03.03.2010-23.03.2010	18
25	Productivity enhancement in drylands through diversified farming options	21	27.01.2011-16.02.2011	20
26	Alternative farming system options for food and nutritional security	21	09.11.2011-29.11.2011	21
27	Natural resource management for sustainable agriculture	21	09.02.2012-29.02.2012	20
28	Sustainable weed management options: Approaches and applications	21	21.09.2012–11.12.2012	17
29	Farming systems for the future: Approaches and applications	21	06.02.2013-26.02.2013	10
30	Recent Advances in Micro Irrigation and Fertigation	21	04.09.2013-24.09.2013	16
31	Organic Farming: Approaches and Applications	21	22.01.2014-11.02. 2014	18
32	Advances in production technology of millets and pulses	21	10-09-2014 - 30-09-2014	11
33	Natural resource conservation technologies for sustainable agriculture	21	28.01.2015 - 17.02.2015	19
34	Farming Systems for the Future: Approaches and Applications	21	20.01.2016-09.02.2016	19

No.	Title	Duration (days)	Date	No. of Participants
35	Advanced Weed Management Technology Options for Crop Production in Indian Agriculture	21	22.02.2018-14.03.2018	14
36	Frontier Technologies for Future Profitable and Sustainable Agriculture	21	28.11.2018-18.12.2018	22
37	Advanced Agro-techniques and Agronomic interventions for doubling farmer's income	21	28.11.2019-18.12.2019	17

Faculty Strength (as on 01.01.2020)

S. No	Name	Designation & Address
1.	Dr.C.R.Chinnamuthu	Prof. & Head (Agron.), Dept. of Agronomy, TNAU, CBE - 3
2.	Dr.V.Geethalakshmi	Director (Crop Management), TNAU,CBE-3
3.	Dr.S.Panneerselvam	Director (WTC), TNAU,CBE-3
4.	Dr.E.Somasundaram	Prof. & Head, Dept. of SOA TNAU,CBE-3
5.	Dr.SP.Ramanathan	Prof. & Head, Dept. of AC&RC TNAU,CBE-3
6.	Dr.N.Maragatham	Prof. & Head, Dept. of Animal Husbandry TNAU,CBE-3
7.	Dr.S.Pazhanivelan	Prof. & Head, Dept. of RS&GIS TNAU,CBE-3
8.	Dr.M.Mohamed Yassin	Prof. (Agron.), O/o the D/Research TNAU,CBE-3
9.	Dr.C.Jayanthi	Prof. (Agron.), Dept. of Agronomy, TNAU, CBE - 3
10.	Dr.K.Ramamoorthy	Prof. (Agron.), Dept. of Agronomy, TNAU, CBE - 3
11.	Dr.K.R.Latha	Prof. (Agron.), Dept. of Agronomy, TNAU, CBE - 3
12.	Dr.A.Velayutham	Prof. (Agron.), Dept. of Agronomy, TNAU, CBE - 3
13.	Dr.K.Vaiyapuri	Prof. (Agron.), Dept. of Agronomy, TNAU, CBE - 3
14.	Dr.S.Muralikrishnasamy	Prof. (Agronomy), O/o the D(P&M) TNAU,CBE-3

S. No	Name	Designation & Address
15.	Dr.A.Christopher Lourduraj	Prof. (Agronomy), O/o the WTC, TNAU,CBE-3
16.	Dr.R.Krishnan	Prof. (Agronomy), O/o the Dean(Agri.) TNAU,CBE-3
17.	Dr.Subbalakshmi Lokanadhan	Prof.(Agronomy), O/o D(WTC), TNAU,CBE-3
18.	Dr.V.K.Duraisamy	Professor (Agronomy), O/o the D/Research TNAU,CBE-3
19.	Dr.K.Srinivasan	Special Officer (V&DP), TNAU,CBE-3
20.	Dr.V.Manivannan	Assoc. Prof. (Agron.), O/o the COE, TNAU,CBE-3
21.	Dr.N.K.Sathyamoorthy	Assoc. Prof. (Agron.), O/o the Dept. of AC&RC TNAU,CBE-3
22.	Dr.P.Murali Arthanari	Assoc. Prof. (Agron.) & PI-AICRP(WM), Dept. of Agronomy, TNAU, CBE - 3
23.	Dr.N.Sakthivel	Assoc. Prof. (Agron.) & CFU, Dept. of Agronomy, TNAU, CBE - 3
24.	Dr. Kalpana, R	Assoc. Prof. (Agron.), O/o the Director(P&M,) TNAU, CBE- 3
25.	Dr. Sanbagavalli, S	Assoc. Prof. (Agron.), Dept. of Agronomy, TNAU, CBE- 3
26.	Dr.N.Thavaprakaash	Assoc. Prof. (Agron.),CFU, Dept. of Agronomy, TNAU, CBE - 3
27.	Dr.N.Vadivel	Assoc.Prof. (Agron.), Dept. of Agronomy, TNAU, CBE - 3
28.	Dr.S.D.Sivakumar	Assoc.Prof. (Agron.), Dept. of Agronomy, TNAU, CBE - 3
29.	Dr.Ga.Dheebakaran	Asst. Prof. (Agron.), O/o the Dept. of AC&RC TNAU,CBE-3
30.	Dr.S.Marimuthu	Asst. Prof. (Agron.), O/o the Dept. of NS&T TNAU,CBE-3
31.	Dr.S.Natarajan	Asst.Prof. (Agron.), Dept. of Agronomy, TNAU, CBE - 3
32.	Dr.S.P.Sangeetha	Asst.Prof. (Agron.), Dept. of Agronomy, TNAU, CBE - 3
33.	Dr.S.Thirumarassan	Asst.Prof. (Agron.), Dept. of Agronomy, TNAU, CBE - 3
34.	Dr.M.Senthivelu	Asst.Prof. (Agron.), Dept. of Agronomy, TNAU, CBE - 3

S. No	Name	Designation & Address
35.	Dr.A.P.Sivamurugan	Asst.Prof. (Agron.), Dept. of Agronomy, TNAU, CBE - 3
36.	Dr.G.Senthil Kumar	Asst.Prof. (Agron.), Dept. of Agronomy, TNAU, CBE – 3
37.	Dr.T.Selvakumar	Asst.Prof. (Agron.), Dept. of Agronomy, TNAU, CBE - 3
38.	Dr.S.Anitta Fanish	Asst.Prof. (Agron.), Dept. of Agronomy, TNAU, CBE - 3
39.	Dr. R. Karthikeyan,	Asst.Prof. (Agron.), CFU, Dept. of Agronomy, TNAU, CBE- 3
40.	Dr.S.K.Natarajan	Asst.Prof. (Agron.), CFU, Dept. of Agronomy, TNAU, CBE - 3
41.	Dr.A.Renukadevi	Asst.Prof. (SS&AC), Dept. of Agronomy, TNAU, CBE - 3
42.	Dr.C.Bharathi	Asst.Prof. (SS&AC), Dept. of Agronomy, TNAU, CBE - 3

Infrastructure Development (Action Plan 2017-2020 periods)

From 2017 to till date many types of equipment have been purchased under various schemes and installed in the Department laboratory for the benefit of the post graduate students for analysis. The equipments purchased under CAFT are furnished hereunder.

1. Quartz Double Distilled Water Still
2. Dish Washer for Glass washer
3. Vertical Autoclave
4. Microwave oven
5. Leaf Area meter
6. Digital Flame Photometer
7. Microprocessor based Digital pH Meter with
8. Microprocessor based conductivity Meter

In addition to above renovation works for Rs. 2 lakhs has been done during this period.

Improvement of Faculty library

The contingencies provided under book purchase for every financial year were utilized to purchase text books on Agronomy and allied subjects. A separate library is being maintained at this Department. These text books are adequately referred by faculty as well as PG students.

CAFTA books abstract upto 2018 -19

S.No.	Subject	No.of books
1.	Agronomy and crop production	166
2.	Crops	110
3.	Weed management	49
4.	Irrigation management	66
5.	Dryland agriculture	45
6.	Agro meteorology	44
7.	Farming system and Organic farming	63
8.	Soil science	127
9.	Agroforestry and wasteland development	50
10.	Soil and water conservation	17
11.	General agriculture related books	94
	Total	831

Impact of CAFTA

Education

All the post –graduate scholars are availing the lab facilities, audio-visual aids LCD projector, computer systems created under CAFT for their research work. Instrumentation technique was taught to them for operating the latest equipments. They are also attending the invited guest lecturers delivered during the training programme. To maintain working condition of equipments viz., Xerox machine, limited accessibility is extended to P.G.students.

Research

Latest lab equipments provided under CAFT aided in accurate and fast analysis of research materials. Post graduate students and teachers are utilizing the laboratory, audio-visual aids and computer facilities created under CAFT. The students from other departments are also utilizing the laboratory facilities freely.

Awards Received (Action Plan 2017-2020 periods)

Awards received by the scientists

S. No.	Name of the scientists	Name of the Award	Year
1.	Dr.C.R.Chinnamuthu Professor and Head, Dept.of Agronomy	Fellow of Indian Society of Weed Science	2017
2.	Dr.C.Chinnusamy, Professor (Agron.)	Achiever Award 2016	2017
3.	Dr.N.Viji, Research Scholar, Dept. of Agronomy	Best Thesis Award	2017
4.	Dr.K.R.Latha Professor (Agronomy)	Nalla Venkitappa Award for 2016 (Best Research Worker in Redgram)	2017
5.	Dr.M.Senthivelu Asst.Prof. (Agron.)	Best Poster Presentation Award	2017
6.	Dr.P.Murali Arthanari, Asst. Prof. (Agron.)	Fellow of Society of Krishi Vigyan, Punjab	2018
7.	Dr.C.R.Chinnamuthu	Special Recognition Award in the niche area “Nanotechnology Applications in Weed Management” by TNAU, Coimbatore	2019
8.	Dr.K.Vaiyapuri	Best Scientist Award	2019
9.	Dr.S.D.Sivakumar	Achievements in AICRP ON FCU	2019
10.	Dr.N.Vadivel, Assoc. Prof. (Agronomy)	Best AICRP centre award, IIMR,Hyderabad CCS HAU,Hisar	2019
11.	Dr.S.K.Natarajan, Asst.Prof. (Agron.)	Best Seed Production Scientist Award	2019
12.	Dr.M.Senthivelu Asst.Prof. (Agron.)	Third Prize for the Best Poster Presentation	2019

Book with ISBN, Chapters in Books with ISBN, Booklets (without ISBN number) & Articles in journals*: (Action Plan 2017-2020 periods)

S. No	Name of the Faculty	Name of the book	ISBN No	Name of the Publisher	Year of Publication
Book with ISBN only (Indicate ISBN Number) :					
1.	Balasubramanian, P., K.Senthil and C.R.Chinnamuthu	Compendium of Agronomy (One for all-all for one)	ISBN:978- 93-272- 9725-6	Kalyani Publishers	2017

S. No	Name of the Faculty	Name of the book	ISBN No	Name of the Publisher	Year of Publication
2.	P.Devasenapathy, C. Chinnusamy, K.R.Latha, P.Murali Arthanari, T.Selvakumar, C.Bharathi and A.Ramalakshmi	Advanced Weed Management Technology Options for Crop Production in Indian Agriculture. Edited Book (CAFTA Training).	ISBN:978-93-87314-57-3.	Thanambikai Publication, CBE-1; Pp: 1-476.	2017
3.	C.Chinnusamy, P.Murali Arthanari, R.Sathya Priya and V.Hariharasudhan	Tropical Weeds: Biology and Identification.	ISBN No.978-93-86110-00-0.	Published by Jaya Publishing House, Delhi.	2017
4.	P.Devasenapathy, C. Chinnusamy, K.R.Latha, P.Murali Arthanari, T.Selvakumar, C.Bharathi and A.Ramalakshmi.	Advanced Weed Management Technology Options for Crop Production in Indian Agriculture. Edited Book (CAFTA Training)	ISBN:978-93-87314-57-3.	Thanambikai Publication, CBE-1	2018
5.	K.R.Latha, V. Vasuki, S.Padama Rani, K.Sathiya Bama and P.Devasenapathy.	Malai pradesangallukana orunginatha pannaya thittam – oru kannotam	ISBN No : 978-93-83799-93-0	TNAU University Press	2018
6.	P.Balasubramanian, K.Senthil and C.R.Chinnamuthu,	Compendium of Agronomy (One for all-all for one).	ISBN 978-93-272-9725-6	Kalyani Publishers	2018
7.	C.R.Chinnamuthu, C.Chinnusamy, K.Ramamorthy, S.Sanbagavalli and T.Selvakumar.	Frontier technologies for future profitable and sustainable agriculture.	ISBN 978-93-89235-16-6	Jaya Publishing house, H-160, Sector – 16, Rohini, Delhi – 110089	2018

S. No	Name of the Faculty	Name of the book	ISBN No	Name of the Publisher	Year of Publication
8.	P.Janaki and R.Kalpana	Hand book on Laboratory techniques	ISBN 978-93-272-9783-6	Kalayani Publisher, New Delhi	2019
9.	A.P.Sivamurugan and S.Pazhanivelan,	Agronomy for Civil Services main examination	978-93-5359-905-8	Kalayani Publisher, New Delhi	2019
10.	R.Kalpana, P.Murali Arthanari Chelvi Ramessh	Textbook on Organic Farming	978-93-89477-46-7	Kalayani Publisher, New Delhi	2019
Chapters in Books with ISBN					
11.	Sathiya Bama, K., K.R Latha.V.Vasuki and S.Padmarani	Issuing of Soil health card to the tribal farmers under integrated farming system- An overview	ISBN: 9789387314-04-7. p.no122-124.	Tamilal eyalum-Agriculture, Vertinary and fishery	2017
12.	Sathiya Bama, K., K.R Latha. V.Vasuki and S.Padmarani	Carbon foot printing in integrated farming system-	ISBN:97893 87314-04-7. p.no125-127.	Tamilal eyalum-Agriculture, vertinary and fishery	2017
13.	Sathiya Bama, K., P.M.Shanmugam and E.Somasundaram	Soil quality as influenced by different nutrient sources and cropping sequences	ISBN:97893 87314-04-7. p.no128-130.	Tamilaleyalu m-Agriculture, vertinary and fishery.	2017
14.	Sathiya Bama, K., P.M.Shanmugam and E.Somasundaram	Influence of Tillage methods and planting techniques on soil carbon dynamics	ISBN:97893 87314-04-7 p.no131-133.	Tamilal eyalum-Agriculture, vertinary and fishery.	2017

S. No	Name of the Faculty	Name of the book	ISBN No	Name of the Publisher	Year of Publication
15.	Chinnamuthu, C.R and N.Viji	Trends and developments of nanotechnology application in weed management in India. In: Fifty years of Weed Research in India. Edited by Sushil Kumar and J.S.Mishra.	ISBN: 978-81-931978-7-5	Indian Society of Weed Science, ICAR-Directorate of Weed Research (DWR), Jabalpur-482004, India.	2018
16.	Chinnamuthu, C.R.	Designing Nanomaterials and Nanocomposites for the Management of Weeds and Herbicide Residue. Edited by. K. Sahayaraj and P. Selvaraj.	ISBN: 978-1-9164009-1-7	Smith and Franklin Books in Biosciences	2017
17.	K.R. Latha and L. Vimalendran	Improving cultivation of pigeonpea. Sivasankar, S. et al. (ed.), Achieving sustainable cultivation of grain legumes Volume 2:	(ISBN: 978 1 78676 1408	Burleigh Dodds Science Publishing, Cambridge, UK . www.bdspublishing.com) Chapter 15, p.1-40.	2017
18.	C. Chinnusamy	Agronomic management of herbicide tolerant crops. Edited Book (CAFTA Training) “Advanced Weed Management Technology Options for Crop Production in Indian Agriculture”.	ISBN:978-93-87314-57-3.	Thanambikai Publication, CBE-1; 401-409.	2017

S. No	Name of the Faculty	Name of the book	ISBN No	Name of the Publisher	Year of Publication
19.	C. Chinnusamy and R.Sathiya Priya.	Skill development on layout and planning of field experiments on herbicide tolerant crops. Edited Book (CAFTA Training) "Advanced Weed Management Technology Options for Crop Production in Indian Agriculture".	ISBN:978-93-87314-57-3.	Thanambikai Publication, CBE-1; 31-43.	2017
20.	Chinnamuthu, C.R.	Nanotechnology Applications in Agriculture: Nanoherbicides.		Dept.of Nano Science and Technology, TNAU, Coimbatore.	2017
21.	Latha, K.R. and L.Vimalendran	Achieving sustainable cultivation of grain legumes; Vol.2. In: Improving cultivation of particular grain legume	ISBN:No. 978- 178676 1408	Published by Burleigh Dodds Science Publishing Limited, 82 High Street, Sawston, Cambridge, CB22 3HJ, UK. pp. 1-40.	2018
Booklets (without ISBN number) :					
22.	Murali Arthanari, P. and C.Chinnusamy	Manavari velanmayil kalai nirvagam(Tamil).		Manavari Velanmai:Tho zhinutpa kayedu2017-18: Page No.24 to 38(SAMETI Training Manual).	2018
23.	Dr.K.Vaiyapuri and Dr.P.Devasenapathy.	Insitu Moisture conservation technologies in rainfed farming-SSEPERs-ATMA		Director SAMETI,ST AMIN,Kudumiyamali and TNAU	2018

S. No	Name of the Faculty	Name of the book	ISBN No	Name of the Publisher	Year of Publication
		2017-18-Rainfed technologies. Technology Guide.			
24.	Dr.C.Jayanthi, Dr.P.Devasenapathy Dr.K.Vaiyapuri and Dr.P.Murali Arthanari	Rainfed technologies. Technology Guide		Director SAMETI,ST AMINKudum iyanmali and TNAU.	2018

Research Articles in journals

S. No	Name of the Faculty	Name of the Research Paper	Year of Publication	Name of the Journal, Volume, Issue and Page No.
1.	Agila, C. and C.R.Chinnamuthu	Yield and Economics of Irrigated Blackgram under Lay by Method of Pre-Emergence Herbicide Application	2017	Int.J.Curr.Res.Aca.Rev. 5(8): 25-29.
2.	Ravisankar, D., C.R. Chinnamuthu and P. Srimathi	Assessment of tuber viability and sprouting behavior of purple nutsedge (<i>Cyperus rotundus</i>) - A prelude study for control of world worst weed.	2017	Int.J.Curr.Microbiol.App.Sci. 6(9): 886-895
3.	Pradeesh Kumar, T and C. R. Chinnamuthu	Assembly of nanoencapsulated pendimethalin herbicide using solvent evaporation method for season long weed control under irrigated ecosystem	2017	Int. J. Pure App. Biosci. 5(1):349-357.
4.	Brindha, K. and C.R.Chinnamuthu	Zinc oxide nanorods to degrade phenolics and stored starch of <i>Cyperus rotundus</i> tubers management	2017	Journal of Crop and Weed, 13(3): 184-188.

S. No	Name of the Faculty	Name of the Research Paper	Year of Publication	Name of the Journal, Volume, Issue and Page No.
5.	Ravisankar, D and C. R. Chinnamuthu	Study on purple nutsedge (<i>Cyperus rotundus</i>) tuber dormancy and its control through combined application of growth regulator and herbicides	2017	Chem Sci Rev Lett. 6(22): 727-731
6.	Gangadharan, S. C.R. Chinnamuthu, G. Mariappan and S.Boja Raj.	Weed dynamics of red rice + <i>Sesbania aculeate</i> intercropping system.	2017	Agric. Update, 12 (4):1067-1072
7.	Balasubramanian, P and C.R. Chinnamuthu	Charred rice husk to improve the soil moisture retention and nutrient management under rainfed groundnut (<i>Arachis hypogaea</i> L.).	2017	Journal of Agroecology and Natural Resource Management. 4 (4): 325-330
8.	Hariharasudhan. V, C. Chinnusamy and N. K. Prabhakaran	Effect of Pre and Post Emergence Herbicides on Growth and Yield of <i>Bt</i> Cotton under Varied Agro Meteorological Environments.	2017	Chem Sci Rev Lett 2017, 6 (21), 514-519.
9.	Sanbagavalli S. Marimuthu S. and Chinnusamy C.	Economic viability of weed management practices on productivity of blackgram (<i>Phaseolus mungo</i> L.).	2017	International Journal of Agriculture Sciences. 8(58):3167-3170.
10.	Sanbagavalli S., C. Chinnusamy S. Marimuthu and A.P.Sivamurugan	Weed Management Strategies in Black gram (<i>Phaseolus mungo</i> L.) : A Review.	2017	International Journal of Agriculture Sciences. 8(61):3481-3486.
11.	Sanbagavalli S., C. Chinnusamy, S. Thirumarassan and S.Marimuthu	Evaluation of Efficient Weed Management Practices on Growth and Yield of Groundnut.	2017	International Journal of Agriculture Sciences. 8(59):3310-3313.

S. No	Name of the Faculty	Name of the Research Paper	Year of Publication	Name of the Journal, Volume, Issue and Page No.
12.	M.Dhananivetha M. Mohamed Amnullah, P. Murali Arthanari and S. Mariappan	Weed management in onion: A review	2017	Agricultural Review, 38 (1) 2017 : 76-80.
13.	Vasuki, V.	Integrated Farming System for enhanced water productivity Part –I. Kisan World	2017	A journal of Agriculture and rural development ISSN 0971- 9229 April, VOL. 44 No. 4 Pg. 43-45.
14.	Sathiya Bama,K, E. Somasundaram, K.R.Latha and, R.Sathya Priya	Development of Innovative Farming Practices to Mitigate the Effects of Climate Change.	2017	Indian Journal of Ecology.
15.	V. Kartika, P. Thangavel, C. Ponniah and M. Mohamed Amanullah.	Assessment of Chromium fixation capacity of sandy loam soil.	2017	International journal of chemical studies.
16.	Masila Mani, P., C.Chinnusamy, V.Abert Alex and M. Govindaraj,	Compatibility and efficiency of Pre Emergence Herbicides on weed control and seedling growth of Teak (<i>Tectona grandis</i> L.f.) nursery.	2017	Indian J. Forestry, 40(1):9-13.
17.	Uma Maheswari M and P Murali Arthanari	Nutrient removal by weeds and organic Brinjal (<i>Solanum melongena</i> L.) Through weed management interventions	2017	International Journal of Chemical Studies -5.31.
18.	M. Dhananivetha, M. Mohammed Amnullah, P. Murali Arthanari and S. Mariappan	Weed management in onion: A review	2017	Agricultural Review - 4.37.

S. No	Name of the Faculty	Name of the Research Paper	Year of Publication	Name of the Journal, Volume, Issue and Page No.
19.	G Vinothini and P Murali Arthanari	Pre emergence herbicide application and hand weeding for effective weed management in irrigated kodo millet (<i>Paspalum scrobiculatum</i> L.).	2017	International Journal of Chemical Studies -5.31.
20.	Sivakami, K. C.Chinnusamy and P.Parasuraman.	Weed management options in transgenic stacked and non transgenic maize (<i>Zea mays</i>) hybrids-A review.	2017	Agricultural Reviews: 38(4) 2017 : 245-259
21.	Sathiya Bama, K	Yield, quality and soil fertility status as influenced by different nutrient sources in Cumbu Napier hybrid fodder grass.	2017	International journal of chemical studies. 5(6): Pg 2010-2015.
22.	Ramalakshmi, A.P. MuraliArthanari and C. Chinnusamy	Effect of Pyrasosulfuron Ethyl, Bensulfuron Methyl, Pretilachlor and Bispyribac Sodium on Soil Microbial Community and Soil Enzymes under Rice-Rice Cropping System.	2017	International Journal of Current Microbiology and Applied Sciences Volume 6 Number 12 (2017) pp. 990-998.
23.	Hariharasudhan, V., C. Chinnusamy and N.K.Prabhakaran	Integrated weed management for <i>Bt</i> cotton hybrid.	2017	Journal of Crop and Weed, 13(3): 160-164 (2017).
24.	Janaki P, Archana M, Priya SR, Nithya C, C. Chinnusamy.	Effect of Herbicides on Potato and their Persistence in Acid Soil under Semiarid Tropical Condition.	2017	Adv Plants Agric Res 7(3): 00254. DOI: 10.15406/apar.2017.07.00254.

S. No	Name of the Faculty	Name of the Research Paper	Year of Publication	Name of the Journal, Volume, Issue and Page No.
25.	Vimalendran Loganathan, D. Udhaya Nandhini and K.R. Latha	Effect of drip fertigation on pigeonpea [<i>Cajanus cajan</i> (L.) Millsp] – A review.	2017	Agricultural Reviews, 38(4) 2017: 304-310. Print ISSN:0253-1496 / Online ISSN:0976-0539.
26.	Sathiya Bama, K., E. Somasundaram, S.D. Sivakumar and K.R. Latha	Soil health and nutrient budgeting as influenced by different cropping sequences in an vertisol of Tamil Nadu.	2017	IJCS 2017; 5(5): 486-491.
27.	Sathiya Bama, K., E. Somasundaram, K.R. Latha and R. Sathya Priya	Soil health and carbon stock as influenced by farming practices in vertisol of Tamil Nadu.	2017	IJCS 2017; 5(5): 2313-2320.
28.	C. Chinnusamy	Feeding potential of <i>Zygogramma bicolorata</i> on <i>Parthenium hysterophorus</i> during different months at western zone of Tamil Nadu.	2018	<i>J. of Entomology and Zoology Studies</i> 2018; 6(3): 702-704
29.	V.Geethalakshmi	Impact of planting window and N levels on tomato productivity and quality.	2018	The Pharma Innovation Journal 7(5): 327-330
30.	S. Anitta Fanish	Evaluation of growth and yield performance of aerobic rice under different irrigation intervals in furrow irrigated raised bed (FIRB) system of cultivation.	2018	Farming & Management, Vol.3 (1), Gaurav Publication, Hisar, India
31	P.Janaki	Persistence of Quizalofop Ethyl in Soil and Safety to Ground Nut by Ultrasonic Bath Extraction and HPLC-DAD Detection.	2018	Journal of Research in Weed Science 1 (2) 1-12

S. No	Name of the Faculty	Name of the Research Paper	Year of Publication	Name of the Journal, Volume, Issue and Page No.
32.	C. Chinnusamy	Herbicide Tolerant Crops: problems and prospectus.	2018	Indian Farming 68(11):29-32
33.	K.Vaiyapuri	Planting techniques in sugarcane as influenced by growth, yield and water productivity in western agro climatic zones of Tamil Nadu	2019	Journal of Pharmacognosy and Phytochemistry, SP2: 572-576
34.	V.Manivannan, C.Harisudhan, K. Vaiyapuri and R.Vaidyanathan	Maximization of sesame (sesame indicum l.) Production through integrated nutrient management practices for summer irrigated condition	2019	Multilogic in Science Vol IX Issue xxx pages 160-162
35.	S.D.Sivakumar and Vasuki.V	Growth, yield and economics of Bajra Napier hybrid grass CO (BN) 5 as influenced by drip fertigation -	2019	Madras Agric.J.,10.29321/MAJ 2019.000306.
36.	T.Saranraj, R.Chandrasekaran and C. Chinnusamy	Effect of planting rows and intercropping on physiological parameters of sugarcane under sustainable sugarcane initiative	2018	<i>J.Pharmacognosy and Phytochemistry</i> 7(4):1229-1232.
37.	Saranraj,T., R.Chandrasekaran and C. Chinnusamy	Influence of planting rows and intercropping on quality parameters of sugarcane under sustainable sugarcane initiative.	2018	Internl. J. of Farm Sci., 8(4):47-50.
38.	Leema Mathew, S.Sanbagavalli and C.Chinnusamy	Yield and economics of rainfed chickpea as influenced by time and method of sowing.	2018	International Journal of Chemical Studies, 6(5):1781-1784

S. No	Name of the Faculty	Name of the Research Paper	Year of Publication	Name of the Journal, Volume, Issue and Page No.
39.	P.Balasubramanian, R. Babu, C.R. Chinnamuthu, K. Kumutha And P.P. Mahendran	A climatological approach based irrigation scheduling on groundnut (<i>Arachis hypogaea</i> L.) in rabi season.	2018	Green Farming 9(6) : 973-977
40.	L.Kiruthika, Srinivasan S, Sritharan N, Selvakumar T.	Synchronization of pod maturity in groundnut by using plant growth regulators and nutrients	2018	International Journal of Farm Sciences 2018; 8(4): 25-28.
41.	I.Chinnamani, M. Aasif, N. Senthil Kumar, A. Velayutham and S. Suresh. 2018.	Influence of weed management practices on weed dynamics and yield of drum seeded rice under puddle condition.	2018	International Journal of Advances in Agricultural Science and Technology, 5 (7): 17-23.
42.	E.Sobhana, A. Velayutham and P. Sujithra.	Effect of pre and early post emergence herbicides on the growth and yield of rainfed greengram.	2018	International Journal of Advances in Agricultural Science and Technology, 5 (7): 52-60.
43.	M.David Israel Mansingh, S. Suresh, V. Arunkumar and A. Velayutham.	Influence of liming on yield of rice and soil properties in acidic soils of high rainfall zone.	2018	International Journal of Advances in Agricultural Science and Technology, 5 (7): 84-94.
44.	J.A.Sakthi, Velayutham, M. Hemalatha and D. Vasanthi.	Economics of herbicides against weeds of black gram (<i>Vigna mungo</i> (L.) Hepper) under irrigated condition.	2018	International Journal of Advances in Agricultural Science and Technology, 5 (7): 133-143.
45.	Vinoth Kumar, M. A. Velayutham, N.Senthil Kumar and D. Vasanthi.	Influence of different Organic manure on the growth and Yield of Baby Corn.	2018	International Journal of Advances in Agricultural Science and Technology, 5 (7): 167-174.
46.	C.A.Divya Bharathi, Velayutham, M. Hemalatha and A. Senthil.	Manipulation of Source-Sink for higher yield through Foliar nutrition in black gram (<i>Vigna mungo</i> (L.) Hepper).	2018	International Journal of Advances in Agricultural Science and Technology, 5 (7): 245-253.

S. No	Name of the Faculty	Name of the Research Paper	Year of Publication	Name of the Journal, Volume, Issue and Page No.
47.	E.Sobhana, A. Velayutham and P. Sujithra.	Evolving viable weed management practices for rainfed greengram.	2018	Madras Agricultural Journal, 105 (1-3): 13-15
48.	J.A.Sakthi, Velayutham and M. Hemalatha.	Effect of pre and early post emergence herbicides on weeds and productivity of blackgram under irrigated conditions.	2018	Madras Agricultural Journal, 105 (1-3): 16-19.
49.	M.Sayed Ibrahim, A Ammaiyappan, H Naseer, K Varunkumar, T Selvakumar and R .Karthikeyan	Evaluation of suitable pre emergence herbicide for Sunnhemp seed production.	2019	International Journal of Chemical Studies 2019; 7(1): 1303-1305
50.	K. Sivagamy, C. Chinnusamy and P. Parasuraman	Influence of Post Emergence Application of K Salt of Glyphosate on Weed Control and Yield of Transgenic Stacked and Non Transgenic Maize Hybrids in Summer Irrigated Eco systems of Tamil Nadu, India.	2019	<i>Int.J.Curr.Microbiol.App.Sci.</i> 8(01):1275-1284.
51.	V. Hariharasudhan and C. Chinnusamy	Effect of time of sowing and weed management on weed incidence, productivity and profitability of <i>Bt</i> cotton.	2019	<i>Indian J. Weed Sci.</i> 50(2): 153 - 158
52.	L.Kiruthika, Srinivasan S, Sritharan N, Selvakumar T	Synchronization of pod maturity in groundnut by using plant growthregulators and nutrients	2019	International Journal of Farm Sciences 2018; 8(4): 25-28
53.	M.Sayed Ibrahim, A Ammaiyappan, H Naseer, K Varunkumar, T Selvakumar and R Karthikeyan	Evaluation of suitable pre emergence herbicide for Sunnhemp seed production	2019	International Journal of Chemical Studies 2019; 7(1): 1303-1305

S. No	Name of the Faculty	Name of the Research Paper	Year of Publication	Name of the Journal, Volume, Issue and Page No.
54.	C.Agila and C.R. Chinnamuthu.	Integrated weed management in blackgram under irrigated condition	2019	Green Farming Vol. 10 (2) : 243-245
55.	M.R.Nandha-kumar, K. Velayudham, N. Thavaprakash & R. Govindhan	Assessment of phyllochron and tillers contribution to grain yield of rice	2019	Oryza, 55(3): 438-444.
56.	P.Sundara Pandian and N. Thavaprakash	Influence of weed management methods on weed characteristics, yield and economics of machine-transplanted rice	2019	International Journal of Farm Sciences 9(1): 80-84.
57.	B.S. Vidyashree, P.Murali Arthanari and E.Somasundaram	Effect of biomulches on weed flora in irrigated sunflower	2019	Journal of Pharmacognosy and Phytochemistry 2019; 8(3): 441-443
58.	M.Uma Maheswari and P. Murali Arthanari	Sunflower dried stalk extract: A natural Preemergence herbicide: Effect on crops and weeds seed germination	2019	Journal of Pharmacognosy and Phytochemistry 2019; 8(3): 135-137
59.	N. Bommayasamy and C.R. Chinnamuthu	Entrapped pre-emergence oxadiargyl on growth and yield of rice under various agro-ecosystems	2019	Indian Journal of Weed Science 50(4): 315–319, 2018
60.	B. Vimalrajiv, C. R. Chinnamuthu, E. Subramanian and K. Senthil	Management of Weed Seed Bank Using Nanoparticles in Combination with Pendimethalin and Hydrogen Peroxide in Irrigated Blackgram (Vigna mungo L.)	2019	Madras Agric. J., V 106 (1-3): 26-31

S. No	Name of the Faculty	Name of the Research Paper	Year of Publication	Name of the Journal, Volume, Issue and Page No.
61.	N. Bommayasamy and C.R.Chinnamuthu	Residual Effect of Slow Release Herbicide Formulations on Weed and Bhendi in the Rice-Bhendi Crop Sequence	2019	Madras Agric. J., V 106 (4-6): 344-348
62.	S.Iswarya, K.R. Latha and K. Srinivasan.	Evaluation of seaweed extract on growth determinants, yield and biochemical parameters of greengram (<i>Vignaradiata</i>).	2019	Journal of Pharmacognosy and Phytochemistry 2019; 8(3): 1861-1864
63.	K.Divya, M.K. Kalarani, Jeyakumar P, Latha K.R. & Nirmala Kumari A.	Screening for drought and heat tolerance in foxtail millet by physiological and biochemical indices.	2019	The Pharma Innovation Journal 2019; 8(5): 665-669
64.	K.Divya, M.K. Kalarani, Jeyakumar P, Latha K.R. & Nirmala Kumari A.	Influence of drought at anthesis on physiological traits of barnyard millet (<i>Echonochoafrument acaeaL.</i>) genotypes.	2019	Journal of Pharmacognosy and Phytochemistry 2019; 8(3): 3209-3212
65.	Jangam Bhavana, Sanbagavalli.S & C. Chinnusamy	Influence of nipping and spacing on growth and yield of rainfed horsegram(<i>Macrotylo mauniflorum</i>)	2019	Journal of Pharmacognosy and Phytochemistry Vol. 8(3): 3206 - 3208
66.	T. Kanchana, N Sakthivel, N Thavaprakash and J Balamurugan	Performance of compact cotton (<i>Gossypiumhirsutum L.</i>) genotypes to varied nutrient levels under high density planting system in winter irrigated condition	2019	Journal of Pharmacognosy and Phytochemistry. 8(3): 3084-3088.

S. No	Name of the Faculty	Name of the Research Paper	Year of Publication	Name of the Journal, Volume, Issue and Page No.
67.	Sandra Maria Saju, N. Thavaprakaash, N Sakthivel and P Malathi	Influence of high density planting on growth and yield of rice (<i>Oryza sativa</i> L.) under modified system of rice intensification(English)	2019	Journal of Pharmacognosy and Phytochemistry. 8(3): 3376-3380.
68.	A.Tharun Kumar, Somasundaram E and Thavaprakaash N	Influence of organic manures on growth and yield of vegetable Clusterbean (<i>Cyamopsistetragonoloba</i> (L.) Taub.)	2019	Journal of Pharmacognosy and Phytochemistry. 8(3): 3331-3334.
69.	G.Tamil Amutham, R. Karthikeyan, N. Thavaprakaash and C. Bharathi	Agronomic bio-fortification with zinc on growth and yield of babycorn under irrigated condition.	2019	Journal of Pharmacognosy and Phytochemistry. 8(3): 434-437.
70.	P.Sundra Pandian, and Thavaprakaash, N.	Effect of weed management practices on growth and yield of machine transplanted rice English	2019	Madras Agricultural Journal, 105 (10-12):553-557.
71.	J.Indhumathi, N. Muthukrishnan, C. Durairaj, N. Thavaprakaash, P. Soundararajan,	Effect of methyl salicylate on rice leaf folder <i>Cnaphalococis medinalis</i> (Guenee), parasitoid <i>Xanthopimpla flavolineata</i> (Cameron) and predator <i>Micraspis</i> sp.	2019	Madras Agricultural Journal, 106 (1-2):74-79.
72.	S.Mohan Kumar, N. Thavaprakaash, S. Panneerselvam, R.Jagadeeswaran, N. Sritharan	Effect of high density planting on light interception, growth and yield of rice (<i>Oryza sativa</i> L.) under modified system of rice intensification	2019	International Journal of Agricultural Sciences. 11 (12):8640-8642.

S. No	Name of the Faculty	Name of the Research Paper	Year of Publication	Name of the Journal, Volume, Issue and Page No.
73.	J. Bhuvaneshwari, G Thiyagarajan, M Manikandan, SK Natarajan, S Thenmozhi and NK Prabhakaran.	Operational research project on drip fertigation in sugarcane	2019	The Pharma Innovation Journal 8(4): 991-993
74.	Veeravalli Ashok Babu, Shoba Thingalmaniyan, K. and S.K. Natarajan	Influence of Drip Fertigation on Yield, Quality parameters and Economics of Aggregatum Onion	2019	Madras Agricultural Journal Volume 105 Issue 10-12 492 - 496
75.	Punitha Anbalagan and N. Sakthivel,	Chemical Weed Management options for irrigated Fingermillet	2019	Trends in Biosciences journal Vol. 12(17), September, 2019
76.	Veeravalli Ashok Babu, Shoba Thingalmaniyan, K. and S.K. Natarajan	Influence of Drip Fertigation on Yield, Quality parameters and Economics of Aggregatum Onion	2019	Madras Agricultural Journal Volume 105 Issue 10-12 492 - 496
77.	G. Vinithashri*, N. Manivannan, PL. Viswanathan and T. Selvakumar 2019	Genetic variability, heritability and genetic advance of yield and related traits in F3 generation of groundnut (<i>Arachis hypogaea</i> L.)	2019	Electronic Journal of Plant Breeding 10 (3): 1292 - 1297(Sep 2019)
78.	C. Chinnusamy	Genetic Analysis of Resistance to Northern Leaf Blight in Maize (<i>Zea mays</i> L.) Reveals its Population Specificity	2018	Int.J.Curr. Microbiol.App.Sci. 7(04): 3084- 3090
79.	C. Chinnusamy	Promotion of Germination in Teak (<i>Tectona grandis</i> Linn. f). Using Pre - Emergence Herbicides	2018	Indian Journal of Forestry 41 (1) 43 - 47, 2018
80	C.R.Chinnamuthu	Effect of sand mix application of Pendimethalin in irrigated blackgram.	2018	International Journal of Chemical Studies 2018; 6(5):832-834 IJCS

S. No	Name of the Faculty	Name of the Research Paper	Year of Publication	Name of the Journal, Volume, Issue and Page No.
81.	T.Selvakumar	Performance of Chemical Weed Management in Irrigated Sunflower.	2018	International Journal of Agriculture Sciences Volume 10, Issue 20, 2018, pp.-7395-7397.
82.	N.Thavaprakash	Farmers' participatory performance evaluation of TRY 3 rice variety in high rainfall zone of Tamil Nadu	2019	International Journal of Farm Sciences 9(1): 1-5.
83.	N.Thavaprakash	Evaluating high yielding rice varieties for high rainfall zone of Tamil Nadu	2019	International Journal of Farm Sciences 9(2): 1-6.
84.	N.Thavaprakash	Evaluation of high yielding rice varieties for high rainfall zone of Tamil Nadu (English)	2019	International Journal of Farm Sciences. 9(2):1-6
85.	N.Thavaprakash	Farmers' participatory performance evaluation of TRY 3 rice variety in high rainfall zone of Tamil Nadu (English)	2019	International Journal of Farm Sciences. 9(2):7-11

Total number of research papers presented by faculty at conferences in India & abroad

S.No	Name of the Faculty	Title of the Paper	Conference details (Conference title, venue and date)
1.	C. Chinnusamy	Importance Herbicides in crop production in Tamil Nadu.	In Souvenir & Abstracts on National Conference on "Recent Trends in Pesticides Development and Registration" Organised by IIBAT, Padappai, Chennai on 07.09.2018 and 08.09.2018; Page, 23-24.

S.No	Name of the Faculty	Title of the Paper	Conference details (Conference title, venue and date)
2.	C.R. Chinnamuthu and N. Viji.	Effect of nanoparticles on the absorption and translocation of glyphosate in purple nutsedge and its management.	Proceedings ISWS Golden Jubilee International Conference. Pp 29
3.	N. Bommayasamy and C.R. Chinnamuthu	Evaluation of suitable encapsulation and loading materials for engineering slow release herbicide formulations for season-long weed management.	Proceedings ISWS Golden Jubilee International Conference. Pp 34
4.	S. Selvakumar and C.R. Chinnamuthu.	Optimizing pre-emergence herbicide oxyflourfen dose based on sorption and desorption studies for effective weed control in different soil types.	Proceedings ISWS Golden Jubilee International Conference. Pp 392
5.	C. Chinnusamy, P. Murali Arthanari, C. Bharathi and A.Ramalakshmi,	Long-term herbicidal weed management on weed control, yield and soil environment in transplanted lowland rice-rice cropping system.	ISWS Golden Jubilee International Conference on " <i>Weeds and Society: Challenges and Opportunities</i> ", ICAR-Directorate of Weed Research, Jabalpur, India during 21-24 November 2018; 21.
6.	K. Nalini and C. Chinnusamy,	Influence of weather parameters on weed characters of winter irrigated cotton	ISWS Golden Jubilee International Conference on " <i>Weeds and Society: Challenges and Opportunities</i> ", ICAR-Directorate of Weed Research, Jabalpur, India during 21-24 November 2018; 153
7.	P. Murali Arthanari , C. Chinnusamy and A. Ramalakshmi,	Conservation agricultural practices: A weed management tool to enhance the productivity of irrigated maize – sunflower cropping system.	ISWS Golden Jubilee International Conference on " <i>Weeds and Society: Challenges and Opportunities</i> ", ICAR-Directorate of Weed Research, Jabalpur, India during 21-24 November 2018; 84

S.No	Name of the Faculty	Title of the Paper	Conference details (Conference title, venue and date)
8.	C. Bharathi and C. Chinnusamy.	Mitigation measures for atrazine in soil under maize.	ISWS Golden Jubilee International Conference on " <i>Weeds and Society: Challenges and Opportunities</i> ", ICAR-Directorate of Weed Research, Jabalpur, India during 21-24 November 2018; 120
9.	V. Hariharasudhan & C. Chinnusamy.	Weed management in <i>Bt</i> cotton	. ISWS Golden Jubilee International Conference on " <i>Weeds and Society: Challenges and Opportunities</i> ", ICAR-Directorate of Weed Research, Jabalpur, India during 21-24 November 2018; 377
10.	Latha, K.R., V.Vasuki and K. Sathiya Bama.	Integrated farming system for western zone of Tamil Nadu.	Abstract in National symposium on “IFS for 3 Es” held at TNAU, Coimbatore
11.	Vasuki, V., K.R.Latha and K.Sathiya Bama.	Suitable complementary cropping systems for farming system modules of Western zone of Tamil Nadu.	Abstract in National symposium on “IFS for 3 Es” held at TNAU, Coimbatore
12.	Sathiya Bama, K., K.R.Latha and V.Vasuki.	Identification of hot spot of GHG emission in Integrated farming system model of western zone of Tamil Nadu through prediction tool.	Abstract in National symposium on “IFS for 3 Es” held at TNAU, Coimbatore
13.	G. Thiyagarajan, M. Manikandan, M. Nagarajan and S.K. Natarajan.	Moisture wetting patterns in surface and subsurface drip irrigation systems.	Published by Convenor, Biotic Science Congress (BioSCon,19) and National Conference on Challenges and Innovative approaches in Agriculture & Allied Sciences Research on behalf of Society for Biotic and Environmental Research (SBER), Tripura, India
14.	S.P.Sangeetha, K.R.Latha and A.Renukadevi,	Integrated farming system for irrigated dryland ecosystem In	National conference proceeding “Doubling farmers income through scientific approaches” p.no.150-152, at AEC&RI, Kumulur, Trichy, 978-93-5001, held on Dec 20-21, 2019

Budget

Financial Statement Expenditure under CAFT (Action Plan 2017-2020 periods)

S. No.	Budget Head	Amount(Rs.)		
		2017-18	2018-19	2019-20*
1.	Training component	4,66,509	5,99,727	656500
2.	TA &DA	36,703	46,640	50000
3.	Recurring contngencies	4,00,000	3,99,573	4,00,000
4.	Books	35,000	35,000	35,000
5.	Minor repair work		2,00,000	
6.	Equipments		5,00,000	
	Total	9,38,212	17,80,910	11,41,500

* Sanctioned budget