# Brief Profile and Report of Activities for the Financial Year 2022-23

(01 April 2022 to 31 March 2023)



## Ramakrishna Mission Vivekananda Educational and Research Institute (RKMVERI)

[FORMERLY KNOWN AS RAMAKRISHNA MISSION VIVEKANANDA UNIVERSITY] (Declared by Govt. of India as **Deemed University** under Section 3 of UGC Act, 1956) PO Belur Math, Dist Howrah 711202, West Bengal, India

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PO Belur Math, Dist Howrah 711202, West Bengal

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Ramakrishna Mission Vivekananda Educational and Research Institute

#### **DETAILED ANNUAL REPORT OF THE UNIVERSITY – 2022-2023**

#### **Brief Profile of the University**

Swami Vivekananda prophesied on the eve of his passing away on 4 July 1902 that "the spiritual wave that has come to Belur [Math] will last for fifteen hundred years and it shall be a great University. Do not think I imagine it; I see it." He also said on the very last day of his life in the mortal frame that: "Keeping the ancient Indian spiritual ideal and rooted in it, and blending it harmoniously with modern science and technology, we should establish a University at Belur Math." This University therefore, bearing Swami Vivekananda's hallowed name is a humble attempt by Ramakrishna Mission to actualize his vision.

#### Vision and Mission of the University:

#### Vision:

To be a great centre of learning blending the two sciences—'natural and humanistic'—and harmoniously synthesizing the twin excellences of ancient Indian wisdom and modern scientific knowledge and technological skill, imparting life-building, character-making education to the youths for their individual improvement as well as for the collective good as envisioned by Swami Vivekananda.

#### Mission:

- (Pursuit of Excellence) To strive for excellence in teaching, research and all academic endeavors.
- (Blending of Eastern and Western values) To inculcate ancient Indian values like Shraddha (unshakable conviction), purity, truth, selflessness, harmony and peace, blending them with predominantly western values like scientific temper, rational outlook, technological efficiency, teamwork, professional integrity, work ethics, etc., in order to create a band of educated youth with lofty character and integrated personalities with harmonious development of heart, head and hand—faculties of feeling, thinking and willing—bhakti, jnana and karma with yoga or concentration interpenetrating all these.
- (Social responsibility) To train and educate the youth to become socially responsible citizens to collectively rebuild a rejuvenated, glorious India by first of all building an impeccable, lofty character at the individual level.

#### Thrust Areas of the University:

The various 'thrust areas' of the University have been chosen keeping in mind the above vision of Swami Vivekananda. The motivation for the choice of the 'thrust areas' came essentially from the following considerations:

(1) These 'thrust areas are in a sense 'gap areas' in the sense that these areas receive little attention in most of the conventional Universities in India.

(2) These 'thrust areas' are meant to directly benefit the common man, particularly the underprivileged and the rural/tribal sections of the society, thereby fostering social commitment of higher education institutions in India as taught by Swami Vivekananda (which aspect, interestingly, the MHRD and the UGC have recently begun to emphasize).

(3) The Ramakrishna Mission has developed a high degree of expertise and a huge infrastructure and resources at least in some of these areas over several decades of its educational service.

(4) Fundamental science education and research was pioneered in India by Swami Vivekananda by inspiring Sir Jamshedji Tata to start an Institute to impart science education and to promote science research in India, the outcome of this inspiration being the well-known Indian Institute of Science.

The 'thrust areas' are operationalized through Specialized Faculty Centres located at various Ramakrishna Mission Centres (all of which are branch-Centres of Ramakrishna Mission headquartered at Belur Math) which have developed expertise in these areas. These Centres are 'Off-Campus' Centres approved by UGC/MHRD as required by UGC Regulations for Deemed-to-be-Universities.

As of now, the University has the following Campuses housing the Specialized Faculties devoted the various 'thrust areas' with the approval of UGC/MHRD:

(1) **Belur Main Campus**: Mathematical Sciences (Physics, Mathematics, Computer Science), Indian Heritage (Sanskrit, Indian spiritual heritage, yoga, classical music), Sports Science & Yoga.

(2) **Coimbatore Campus:** Disability Management and Special Education, General & Adapted Physical Education, Agriculture and Rural Development, Computer Science and Applications, Data Science.

(3) **Ranchi Campus:** Integrated Rural & Tribal Development and Management, Agricultural Sciences.

(4) **Narendrapur Campus:** Agriculture, Rural Development and Management, Agricultural Bio-technology, Medical Biotechnology, Molecular Biology, Pharmocognosy, Environment and Disaster Management.

This multi-campus University, established under the aegis of Ramakrishna Mission, was

formally inaugurated on 4 July 2005. Declared as Deemed-to-be-University by the then Ministry of Human Resource Development, now called Ministry of Education, Government of India, under Section 3 of UGC Act, 1956, the University has its Head Office at Belur. It runs academic programmes at its Belur main campus as well as at its approved 'Off-Campus' Centres located at the Ramakrishna Mission Centres at Coimbatore (Tamil Nadu), Narendrapur (West Bengal), Ranchi (Jharkhand), and Swami Vivekananda's Ancestral House and Cultural Centre in Kolkata.

#### DETAILS OF THE ACADEMIC PROGRAMMES IN THE VARIOUS CAMPUSES:

#### Belur Main Campus:

- M. Sc. (2 years = 4 semesters) in Physics, Mathematics, Computer Science, Big Data Analytics, Yoga, and Sports Science.
- Ph. D. (3-4 years) in Physics, Mathematics, Computer Science, Sanskrit, Yoga and Sports Science.
- 5-year (= 10 semesters) Integrated M.A. in Sanskrit.

Apart from the core academic programmes, the following certificate courses are also conducted:

- Certificate courses (6 months) in Sanskrit (Preliminary, Intermediate and Advanced, Laghusiddhāntakaumudī (PaniniyaPravesh).
- Certificate courses (once/twice a week for one/two years) in Indian Spiritual Heritage, Yoga, Vedanta and other ancient scriptures, Ramakrishna-Sarada-Vivekananda literature.

#### Narendrapur Campus:

- M. Sc. (2 years = 4 semesters) in Agriculture and Rural Development, Agricultural Bio-technology, Genetics and Plant Breeding, Medical Biotechnology, Agronomy, Medical Laboratory Sciences and Technology, Critical Care Science and Technology and Environment and Disaster Management.
- Ph. D. (3-5 years) in Agriculture and Rural Development, Agricultural Biotechnology, Medical Biotechnology, Genetics & Plant Breeding and Environment and Disaster Management.
- Diploma Course (1 year = 2 semesters) in Post Harvest and Food Technology

#### Ranchi (Morabadi) Campus:

- 5-year (=10 semesters) Integrated M. Sc. in Agriculture, Rural and Tribal Development
- Ph. D. (3-5 years) in Agriculture, Rural and Tribal Development
- M. Sc. (2 years = 4 semesters) in Agriculture, Rural & Tribal Development and in Rural Development & Management
- B. Voc. in Sustainable Agriculture (3 years = 6 semesters)
- B. Sc. (Hons.) in Agriculture (4 years = 8 semesters)
- Diploma (1 year = 2 semesters) in Organic Farming and Agriculture and Rural Development

#### Coimbatore Campus:

- B. Ed. (2 years = 4 semesters) in Special Education (Visual Impairment, Hearing Impairment, Intellectual Disability)
- M. Ed. (2 years = 4 semesters) in Special Education (Visual Impairment, Hearing Impairment, Intellectual Disability)
- Integrated B. Ed. M. Ed. (2 years = 4 semesters) in Intellectual Disability
- Ph. D. (4-6 years) in Special Education and Physical Education
- B. Sc. (3 years = 6 semesters) in Physical Education, Health Education and Sports
- B. Sc. (Hons.) in Agriculture (4 years = 8 semesters)
- B. P. Ed. (2 years = 4 semesters) and M. P. Ed. (2 years = 4 semesters) in Physical Education
- M.Sc/M.A (2 years = 4 semesters) in Rural and Tribal Development, Data Science, Rural Development and Management
- Integrated B.Sc/M.Sc in Rural and Tribal Development
- Integrated M.Sc (5 years = 10 semesters) in Computer Science Applications

#### CENTRES OF INTER-DISCIPLINARY, TRANS-DISCIPLINARY STUDY AND RESEARCH AT THE VARIOUS SCHOOL OF THE UNIVERSITY OFFERING ACADEMIC PRO-GRAMMES SPREAD ACROSS THE FOUR CAMPUSES

Sl No	Name of the Centre	Schools/Depts involved	Principal Coordinator(s)
1	Centre for Artificial Intelligence of Things (AIoT) and Mixed Reality (MR)	Across all the following Schools:MathematicalSciences, IndianIndianHeritage, AgricultureAgricultureandDevelopment, RehabilitationBiological Sciences, Environment and Disaster Management	<ul> <li>Swami Paramashivananda, Computer Software Architect and Technical Lead, Ramakrishna Math Media Lab, Chennai &amp; Adjunct Faculty, Centre for AIoT &amp; MR, RKMVERI, in collaboration with the Advisory Board comprising the following experts:</li> <li>Prof V. Kamakoti, Director, IIT Madras</li> <li>Prof Dilip Pratihar, IIT Kharagpur</li> <li>Dr Babu Sena Paul, Director, Institute for Intelligent Systems, University of Johannesburg, Gauteng, South Africa</li> </ul>
2	Centre for 'Number Theory, Dynamical Systems and Chaos'	Departments of Mathematics and Physics	<ul> <li>(i) Prof. Stephan Baier, Professor of Mathematics, School of Mathematical Sciences, RKMVERI</li> <li>(ii) Prof. Sukumar Adhikari, Dean, School of Mathematical Sciences</li> </ul>
3	Centre for 'One Health'	Schools of: Biological Sciences, Agriculture and Rural Development, Environment and Disaster Management	<ul> <li>(i) Swami Atmapriyananda, Pro- Chancellor &amp; Secretary, RKMVERI</li> <li>(ii) Dr H. Sudarshan, Founder &amp; Secretary, Karuna Trust, Bengaluru</li> </ul>
4	Centre for 'Humanitarian Studies and	Schools of: Indian Heritage, Agriculture and Rural	(i) Dr PG Dhar Chakrabarti, 'Swami Vivekananda Professor' & Head, Environment and Disaster Management,

	Humanistic Sciences'	Development, Environment and Disaster Management	RKMVERI (ii) Dr Paromita Roy, 'Swami Abhedananda Chair', Dept. of Sanskrit and Philosophy, RKMVERI
5	Centre for Consciousness Studies (CHATAK	Schools of: Indian Heritage, Biological Sciences	<ul> <li>(i) Brahmachari Mrinmay, Programme Coordinator, Dept. of Sports Science and Yoga, RKMVERI &amp; Asst. Professor, Dept. of Computer Science (including Data Science)</li> <li>(ii) Dr Arkadeb Dutta, Asst. Professor, Dept. of Sports Science and Yoga, RKMVERI</li> <li>(iii) Swami Paramashivananda, Computer Software Architect and Technical Lead, Ramakrishna Math Media Lab, Chennai &amp; Adjunct Faculty, Centre for AIoT &amp; MR, RKMVERI</li> </ul>
6	Centre for Study and Research on Veda-vedanta, Yoga (VYASA— Veda-vedanta Adhyayana- Samshodhana- Alaya)	School of Indian Heritage	Swami Japasiddhananda, Head of the Dept. of Sanskrit and Philosophy, RKMVERI

#### MEMBERS OF BOARD OF MANAGEMENT OF RKMVERI

S. No.	Composition as per UGC Guidelines	Present Incumbent
1	Vice Chancellor	Swami Sarvottamananda
2	Two Deans of Faculties	Prof. Sukumar Adhikari
3	(by rotation based on seniority)	Prof. Tapash Dasgupta
4		Dr. Bimal Roy
5	Three eminent academicians as nominated by the Chancellor	Prof. Shrinivas Varakhedi
6		Dr. Santanu Kumar Bandyopadhyay
7	A representative of the UGC	yet to be received
8	Two teachers (from Professors,	Dr. N. Muthaiah
9	Associate Professors) by rotation based on seniority	Dr. Dipankar Chatterjee
10		Swami Bodhasarananda
11	Four nominees of the sponsoring	Swami Atmapriyananda
12	Society	Sri Sunil Kumar Barnwal, IAS
13		Dr. A. Santhosh Mathew, IAS (Retired)
14	Controller of Examinations	Swami Kaleshananda
15	Registrar	Swami Kirtipradananda

## Key statistics of the University for 2022-23:

S. No.	Item	No.
1	Off-campus centres	3
2	Students on roll (core programmes)	1678
3	No. of Teachers	124
4 No. of non-teaching staff		250
5	No. of UG programmes	6

S. No.	Item	No.
6	No. of Integrated PG programmes	3
7	PG programmes	21
8	Ph. D. programmes	14
9	P. G. Diploma/ Diploma programmes	3
10	Krishi Vigyan Kendra – A Project Of ICAR	2
11	LokaSiksha Parishad – An Integrated Rural Development Project	1

#### SPECIAL FEATURE OF THE UNIVERSITY:

# A harmonious blend of spiritual wisdom of the East and modern scientific and technological knowledge of the West

The vision of the University is, as stated earlier, the actualization of Swami Vivekananda's educational vision, namely, to impart 'man-making' and character-building education to the youths so that they would not be only acquire knowledge and skills, but also become men and women of character, possessed of the qualities of integrity, truthfulness, honesty, purity, selflessness, feeling for the suffering and the underprivileged, etc. Further, Swami Vivekananda wanted the blend of the ancient moral and spiritual wisdom of the East—the humanistic sciences—with the modern scientific and technological knowledge of the West -the natural sciences. The Deemed University is striving to achieve this unique blend by setting up two Schools: The School of Indian Heritage and School of Mathematical Sciences side by side so that scholars well versed in both could be created in a natural way by proximity and continuous exchange of ideas. The University is also trying to seriously explore the realization of Ramakrishna-Vivekananda ideal of Religious Harmony and Peace, as articulated by Swami Vivekananda in his famous two lectures: 'The Ideal of Universal Religion' and 'The Way to the Realization of a Universal Religion' through an institution for the study of and research into comparative religion and philosophy in its most liberal and widest form, through research programmes and the institution of Vivekananda Chair in Comparative Philosophy and Universal Religion.

#### NAAC ACCREDITATION AND OTHER RECOGNITIONS:

In recognition of our unique thrust areas to create the human resource in the form of trained teachers for disability management, UNESCO has honoured us by creating a Chair in the field of 'Inclusive Adapted Physical Education and Yoga' to promote this unique area. Also, in recognition of our social commitment, the University has been awarded full membership of an organization called GUNI (Global University Network for Innovation), a Europe-based global organization networking Universities across the globe working with social commitment.

The National Assessment and Accreditation Council (NAAC) has awarded the University the highest grade of A++ with Cumulative Grade Point Average (CGPA) 3.66 out of 4. The A++ accreditation will be valid up to 28 March 2024.

## NAME OF THE DEPARTMENT: PHYSICS

#### LIST OF TEACHING FACULTY MEMBERS

S. No.	Name	Designation
1	Abhijit Bandyopadhyay	Associate Professor
2	Amitava Bhattacharyya	Assistant Professor
3	Anwesha Chattopadhyay	Assistant Professor
4	Biswajit Chakraborty	Professor
5	Bobby Ezhuthachan	Assistant Professor
6	Br. Aditya	Monastic Faculty
7	Br. Atreya	Monastic Faculty
8	Sabyasachi Tarat	Assistant Professor
9	Sanjoy Biswas	Assistant Professor

#### NEW PROGRAMMES / COURSES STARTED IN THE YEAR

1. Advanced Quantum Materials [PHY532] has been introduced as a special paper.

#### DETAILS OF STUDENTS ADMISSION DURING THE YEAR

S. No.	Programme	No. of Students
1	MSc in Physics	31
2	PhD in Physics	2
	Total	33

#### STUDENTS PASSED OUT DETAILS OF THE YEAR

S. No.	Programme	No. of Students
1	MSc in Physics	31
2	PhD in Physics	1
	Total	32

#### STUDENTS PLACEMENT AND PROGRESSION DETAILS OF THE YEAR

S. No.	Name	Programme graduated from	Name of the Institution Joined	Name of the Programme admitted to	Qualifying Exams
1	Agnipan Saha	MSc Physics	Albert Katz International School for Desert Studies	PhD	
2	Disha Bandyopadhyay	MSc Physics	IIT Guwahati	PhD	JEST,GATE
3	Rajesh Jana	MSc Physics	SNBNCBS	PhD	JEST,GAT, NET
4	Riju Paria	MSc Physics	IIT Madras	PhD	NET
5	Rwiik Dharmapal Banerjee	MSc Physics	University of Wroclaw	PhD	GATE,TOEFL
6	Shreya Debnath	MSc Physics	IIT Guwahati	PhD	GATE
7	Sreyan Bhowmick	MSc Physics	SNBNCBS	PhD	GATE, NET
8	Subha Maity	MSc Physics	IIT Gandhinagar	PhD	JEST, GATE
9	Subhajit Kala	MSc Physics	IIT Guwahati	PhD	JEST, GATE
10	Sujoy Mondal	MSc Physics	IIT Dhanbad	PhD	

#### DETAILS OF STUDENTS PURSUING HIGHER EDUCATION:

1	1	Kartik Panda	5	Ariel University of Samaria, Israel	Post-Doc Fellow	

#### DETAILS RELATING TO PH. D. SCHOLARS DURING THE YEAR

S. No.	Name of current Ph. D. scholars	Name of Supervisor
1	Arnab Kanti Jana	Amitava Bhattacharyya
2	Baishali Roy	Bobby Ezhuthachan
3	Biswajit Jana	Abhijit Bandyopadhyay
4	Harsharaj Bhattacharya	Sabyasachi Tarat
5	Krishna Tewary	Sanjoy Biswas
6	Kumar Raviranjan	Abhijit Bandyopadhyay
7	Shivam Verma	Sanjoy Biswas
8	Somnath Porey	Bobby Ezhuthachan

#### DETAILS OF ACADEMIC PUBLICATIONS DURING THE YEAR

Details of publications in journals and books

S. No.	Author	Title of Paper	Journal	ISSN/ISBN
1	Abhijit Bandyopadhyay	Inelastic charged-current interactions of supernova neutrinos in two-phase liquid xenon dark matter detectors	Physical Review D	2470-0010
2	Abhijit Bandyopadhyay	Dynamical analysis of k-essence cosmology in the light of Supernova Ia observations	The European Physical Journal Plus	2190-5444
3	Abhijit Bandyopadhyay	Modified scaling in k-essence model in interacting dark energy–dark matter scenario	The European Physical Journal Plus	2190-5444

4	Abhijit Bandyopadhyay	Simulation of Nuclear Recoils due to Supernova Neutrino- induced Neutrons in Liquid Xenon Detectors	Journal of Physics: Conference Series	1742-6588
5	Amitava Bhattacharyya	Effect of 3p- and 5d-electron doping on the Kondo Semiconductor CeFe2Al10	Journal of Physics: Conference Series	1742-6588
6	Amitava Bhattacharyya	Thermal conductivity, thermoelectric power and Mössbauer investigations on atiferromagnetic CeFe1.7Ir0.3Al10 Journal of Magnetism and Magnetic Material	Journal of Magnetism and Magnetic Materials	0304-8853
7	Amitava Bhattacharyya	Quantum critical spin-liquid-like behavior in the S=12 quasikagome-lattice compound CeRh1-xPdxSn investigated using muon spin relaxation and neutron scattering	Physical Review B	2469-9950
8	Amitava Bhattacharyya	Nodeless time-reversal symmetry breaking in the centrosymmetric superconductor Sc5Co4Si10 probed by muon-spin spectroscopy	Physical Review Materials	2475-9953
9	Amitava Bhattacharyya	Multigap superconductivity in the filled-skutterudite compound LaRu4As12 probed by muon spin rotation	Physical Review B	2469-9950
10	Amitava Bhattacharyya	μSR Study of Unconventional Pairing Symmetry in the Quasi- 1D Na2Cr3As3 Superconductor	Magnetochemi stry	2312-7481
11	Amitava Bhattacharyya	Magnetic structure and crystal field states of Pr2Pd3Ge5: µSR and neutron scattering investigations	Physical Review B	2469-9950
12	Shamik Gupta	Stochastic resetting: A (very) brief review	Frontiers in Physics	2296-424X
13	Shamik Gupta	Self-similar inhomogeneous stationary states under constrained dynamics	Physical Review E	2470-0045
14	Shamik Gupta	State-dependent driving: a route	Proceedings of	1471-2946

		to non-equilibrium stationary states	the Royal Society A:	
15	Shamik Gupta	Quantum unitary evolution interspersed with repeated non- unitary interactions at random times: the method of stochastic Liouville equation, and two examples of interactions in the context of a tight-binding chain	Journal of Statistical Mechanics: Theory and Experiment	1742-5468
16	Shamik Gupta	Synchronization in the Kuramoto model in presence of stochastic resetting	Chaos	1054-1500
17	Sanjoy Biswas	Dark photon searches via Higgs boson production at the LHC and beyond	Symmetry	2073-8994

#### DETAILS OF SPECIAL LECTURES / WORKSHOPS / SEMINARS / CONFERENCES / SYMPOSIUMS HOSTED / ORGANISED DURING THE YEAR

S. No.	Date	Details of Lectures / workshops / seminars / conferences / symposiums HOSTED / ORGANISED	
1	20/04/2022	A Brief Introduction to Non-commutative Geometry and Spectral Triple With Real Structure on Fuzzy Sphere	
2	27/04/2022	From Answers to Questions in Fundamental Physics.	
3	02/05/2022	Resolving the singularity by looking at the dot and demonstrating the undecidability of the continuum hypothesis	
4	20/05/2022	Toward precision jet event shapes for DIS in the framework of SCET	
5	09/06/2022	How computational physics is shaping nuclear fusion reactors!	
6	13/06/2022	Wormholes and Quantum Aspects of Gravity	
7	31/08/2022	Fast Scrambling due to Rotating Shockwaves	
8	04/11/2022	Emergent geometry from entanglement structure: application to static and dynamic cases	
9	09/11/2022	Particle dark matter thermal and non-thermal production mechanisms	

10	23/11/2022	Synthetic Fuzzballs: A Linear Ramp from Black Hole Normal Modes	
11	28/11/2022	Magnetic Monopole Noise	
12	28/11/2022	Visualization of Quantum Materials	
13	14/12/2022	Molecular dynamics as tool to study condensed phase properties	
14	08/02/2023	Accessing the Low-Energy Physics of Critical Fermi Surfaces	
15	03/03/2023	Editorial Tips for Successful Manuscript Submissions	
16	16/03/2023 to 18/03/2023	Workshop on 'Ergodicity and its breaking: A view from Many Body, QFT and Holography'	
17	22/03/2023	Entanglement in QFT	
18	29/03/2023	Strong cosmic censorship conjecture for a charged BTZ black hole	

## DETAILS OF PROJECTS UNDERTAKEN DURING THE YEAR

S. No.	Investigator (staff)	Name of the project & other details	Funding Agency
1	Amitava Bhattacharyya (PI)	Design and discovery of quantum materials with emergent properties and potential applications in energy- related technologies	SERB
2	Amitava Bhattacharyya (PI)	Understanding Honeycomb Layered Oxides' Unconventional Magnetism	SERB
3	Amitava Bhattacharyya (Co-PI)	"Understanding Honeycomb Layered Oxides' Unconventional Magnetism"	UGC-DAE CSR
4	Amitava Bhattacharyya (Co-PI)	Quantitative probing of spin-driven multiferroicity and microstructural tuning of magnetoelectric coupling inoxygendeficient perovskites BaRFeO <sub>4</sub> and RBaCuFeO <sub>5</sub> (R=rare-	SERB POWER Grant

		earth)	
5	Bobby Ezhuthachan (PI)	Dynamics and Chaos in strongly coupled QFT: Deformations and Boundaries	Core Research Grant

## NAME OF THE DEPARTMENT: MATHEMATICS

#### LIST OF TEACHING FACULTY MEMBERS

S. No.	Name	Designation
1	Amit Samanta	Assistant Professor
2	Ashish Gupta	Associate Professor, HoD
3	Debaldev Jana	Associate Professor
4	Sagnik Chakraborty	Assistant Professor
5	Shameek Paul	Assistant Professor
6	Stephan Baier	Professor
7	Sukumar Das Adhikari	Professor and Dean

#### DETAILS OF STUDENTS ADMISSION DURING THE YEAR

S. No.	Programme	No. of Students
1	MSc in Mathematics	22
2	PhD in Mathematics	0
	Total	22

#### STUDENTS PASSED OUT DETAILS OF THE YEAR

S. No.	Programme	No. of Students
1	MSc in Mathematics	22
2	PhD in Mathematics	0
	Total	22

#### STUDENTS PLACEMENT AND PROGRESSION DETAILS OF THE YEAR

#### DETAILS OF STUDENTS PURSUING HIGHER EDUCATION:

S. No.	Name	Programme graduated from	Name of the Institution Joined	Name of the Programme admitted to	Remarks (if any)
1	Alapan Ghosh	MSc in Mathematics	IIT Guwahati	PhD	
2	Debotosh Rout	MSc in Mathematics	IIT BHU	PhD	GATE
3	Hrithik Nandi	MSc in Mathematics	TCG CREST	PhD	
4	Krisnakanta Barik	MSc in Mathematics	TCG CREST	PhD	
5	Prabal Das	MSc in Mathematics	TCG CREST	PhD	
6	Ritam Halder	MSc in Mathematics	IIT Kharagpur	PhD	NET, GATE
7	Saayan Mukherjee	MSc in Mathematics	Oklahoma University for the graduate program in Mathematics	PhD	
8	Saikat Mondal	MSc in Mathematics	IISc Bengaluru	MTech	GATE

S. No.	Name	Programme graduated from	Name of the Institution Joined	Name of the Programme admitted to	Remarks (if any)
9	Subhadeep Rana	MSc in Mathematics	IIT Guwahati	PhD	
10	Suman Das	MSc in Mathematics	IIT Madras	Mtech	NET, GATE, SET
11	Swarup Kumar Das	MSc in Mathematics	TCG CREST	PhD	NET, GATE
12	Swarupananda Banerjee	MSc in Mathematics	NA	NA	NET

#### DETAILS RELATING TO PH. D. SCHOLARS DURING THE YEAR

S. No.	Name of current Ph. D. scholars	Name of Supervisor
1	Shruti Hegde	Prof. Sukumar D. Adhikari
2	Md Ibrahim Molla	Prof. Sukumar D. Adhikari
3	Dwaipayan Mazumder	Prof. Stephan Baier
4	Sourav Das	Prof. Stephan Baier
5	Arkaprava Bhandari	Prof. Stephan Baier
6	Anup Haldar	Prof. Stephan Baier
7	Esrafil Ali Molla	Prof. Stephan Baier
8	Madhuparna Pal	Prof. Stephan Baier
9	Sugata Mandal	Dr.Ashish Gupta
10	Snehashis Mukherjee	Dr.Ashish Gupta
11	Sanu Bera	Dr.Ashish Gupta
12	Soumendu Nandy	Dr.Ashish Gupta

S. No.	Name of current Ph. D. scholars	Name of Supervisor
13	Bikramjit Kundu	Dr. Arindam Banerjee
14	Kanoy Kumar Das	Dr. Arindam Banerjee
15	Sirajul Haque	Dr. Arindam Banerjee
16	Susmita Seal	Dr. Sudeshna Basu
17	Shyamal Datta	Dr. Sudeshna Basu
18	Krishnendu Paul	Dr. Shameek Paul
19	Santunu Mondal	Dr. Shameek Paul
20	Aishik Chattopadhyay	Dr. Sagnik Chakraborty
21	Saikat Goswami	Dr. Shameek Paul
22	Shital Lawande	Prof. Sukumar Das Adhikari

#### DETAILS OF ACADEMIC PUBLICATIONS DURING THE YEAR

## Details of publications in journals and books

S. No.	Author	Title of Paper	Journal	ISSN/ISBN
1	Amit Samanta	Boundedness of composition operator on several variable Paley-Wiener space	Linear Algebra and its Applications	0024-3795
2	Shameek Paul	Extremal sequences for a weighted zero- sum constant	Integers	15531732
3	Shameek Paul	On a different weighted zero- sum constant	Discrete Mathematics	0012-365X
4	Shameek Paul	Extremal sequences for the	Integers	15531732

S. No.	Author	Title of Paper	Journal	ISSN/ISBN
		unit-weighted Gao constant of \ mathbb Z_n		
5	Stephan Baier	The large sieve with square moduli in function fields	Journal of Number Theory	0022-314X
6	Stephan Baier	A Bombieri– Vinogradov-type theorem with prime power moduli	Acta Arithmetica	0065-1036
7	Stephan Baier	Diophantine approximation with prime restriction in function fields	Journal of Number Theory	0022-314X
8	Stephan Baier	Asymptotic behavior of small solutions of quadratic congruences in three variables modulo prime powers	Research in Number Theory	2363-9555
9	Sukumar Das Adhikari	On some weighted zero- sum constants	Journal of the Ramanujan Mathematical Society	2320-3110
10	Sukumar Das Adhikari	Some zero-sum constants and their weighted generalizations	The Mathematics Student	0025-5742
11	Sukumar Das Adhikari	Professor Satya Deo As I Knew Him	The Mathematics Student	0025-5742
12	Sukumar Das Adhikari	Discrete Stories : Stray Facts Related To Some Early Ramsey- Type Theorems	The Mathematics Student	0025-5743
13	Br. Dripta	Harmonic structure of wave loads on a surface piercing column in directionally spread and	Journal of Ocean Engineering and Marine Energy	2198-6452

S. No.	Author	Title of Paper	Journal	ISSN/ISBN
		unidirectional random seas		
14	Br. Dripta	Improving multi- scale attention networks: Bayesian optimization for segmenting medical images	The Imaging Science Journal	1368-2199
15	Ashish Gupta	GK dimensions of simple modules over twisted group algebras \$k \ast A\$	Izvestiya Mathematics	1468-4810

### DETAILS OF SPECIAL LECTURES / WORKSHOPS / SEMINARS / CONFERENCES / SYMPOSIUMS HOSTED / ORGANISED DURING THE YEAR

S. No.	Date	Details of Lectures / workshops / seminars / conferences / symposiums HOSTED / ORGANISED
1	9 April 2022	Colloquium talk on 'Peg Solitaire' by Prof. Olivier Ramare (Aix-Marseille University, France)
2	5 May 2022	Thematic lectures on Exponential map in Analysis and Geometry by V. Muruganandam, IIT Pallkad
3	6 May 2022	Lecture series on 'Measure theory' by Varadharajan Muruganandam
4	10 May 2022	Student seminar talk titled 'The converse of the intermediate value theorem'
5	11 May 2022	Prof. V. Muruganandam (IIT Pallkad) gave a colloquium talk titled 'The Legacy of Harish-Chandra: A bird's eye view'
6	19 May 2022	MSc student Aniket Bhattacharyea gave a student seminar talk titled 'Easy or hard? Finding solutions to an equation using elliptic curves'
7	23 May 2022	An Approach to proving the Fundamental Theorem of Algebra via Linear Algebra
8	26 May 2022	Tamoghnna Kar (MSc student) gave a student seminar talk titled 'Mobius transformations'
9	7 June 2022	Colloquium on Linear algebra and K-theory by Prof. Rabeya Basu (IISER Pune)
10	16 June 2022	'Brief Introduction to Fouier Series' by Sayan Ganguly, M.Sc. Student

S. No.	Date	Details of Lectures / workshops / seminars / conferences / symposiums HOSTED / ORGANISED
11	20 June 2022	Project presentation on 'RSA and elliptic curve cryptography' by Saikat Mondal, 2nd year MSc student
12	22 August 2022	Colloquium talk on 'Poissonian pair correlation' by Prof. Anirban Mukhopadyay, IMSC Chennai
13	28 September 2022	Colloquium talk on 'An introduction to Pingalacarya's Chandahsutra' by Prof. Ramasubramanian, IIT Mumbai
14	28 September 2022	Colloquium talk on 'A Result on Zeroes of Holomorphic Functions' by Prof. S.M. Srivastava, Indian Association of Cultivation of Science, Kolkata
15	17 October 2022	Colloquium talk on 'Trace of powers of algebraic numbers' by Prof. Thangadurai, HRI Prayagraj
16	18 November 2022	A homological approach to the Jordan-Brouwer separation theorem [Speaker: MSc student Sohini Mukherjee]
17	11 January 2023	Colloquium talk on 'Tameness of degree functions' by Prof. Sourav Sen, TIFR Mumbai
18	24 March 2023	Colloquium talk on 'An interesting subring of Q[X]' by Prof. Sagnik Chakraborty (Dept. of Maths, RKMVERI)
19	28 March 2023	Lecture series on 'Lie Algebras' by Professor Ilangovan (University of Hyderabad)

### DETAILS OF PROJECTS UNDERTAKEN DURING THE YEAR

S. No.	Investigator (staff)	Name of the project & other details	Funding Agency
1	Sagnik Chakraborty	Algebraic analogue of a result of Mumford	SERB - MATRICS

## NAME OF THE DEPARTMENT: COMPUTER SCIENCE, BELUR CAMPUS

#### LIST OF TEACHING FACULTY MEMBERS

S. No.	Name	Designation
1	Swami Sarvottamananda	Vice Chancellor, Professor
2	Dr. Subir Kumar Ghosh	Professor
3	Swami Dhyanagamyananda	Associate Professor & Head of the Department
4	Swami Shastravidyananda	Assistant Professor
5	Swami Vidyapradananda	Assistant Professor
6	Swami Punyeshwarananda	Assistant Professor
7	Dr. Sudipta Das	Assistant Professor
8	Dr. Joydeep Mukherjee	Assistant Professor
9	Dr. Soumitra Samanta	Assistant Professor

#### NEW PROGRAMMES / COURSES STARTED AND NEW EQUIPMENTS ACQUIRED

S. No.	Programme	No. of Students
1	MSc in Computer Science	7
2	MSc in Big Data Analytics	13
	Total	20

#### New Equipment:

To carry out the Indian Sign language recognition task which is a collaborative project with VECC, Kolkata the department purchased Nvidia A100 GPU worth 8.3 lakhs. The funds have come from VECC, Kolkata.

#### STUDENTS PASSED OUT DETAILS OF THE YEAR

S. No.	Programme	No. of Students
1	MSc in Computer Science (MSc CS)	6
2	MSc in Big Data Analytics (MSc BDA)	14
	Total	20

#### STUDENTS PLACEMENT AND PROGRESSION DETAILS OF THE YEAR

#### DETAILS OF STUDENTS PURSUING HIGHER EDUCATION:

S. No.	Name	Programme graduated from	Name of the Institution Joined	Name of the Programme admitted to
1	Debanjan Dutta	MSc CS	TCG CREST	PhD
2	Pritesh Kumar	MSc CS	IMSC	PhD
3	Ritam Manna Mitra	MSc CS	ISI	PhD
4	Sobyasachi Chatterjee	MSc CS	IMSC	PhD
5	Suvajit Patra	MSc CS	RKMVERI	PhD

#### DETAILS OF STUDENTS PLACED:

S. No.	Name	Programme	Name of the Company/	Year of	
		graduated from	Institution Joined	Joining	
1	Alimpan Barik	MSc BDA	Vista Intelligence	2022	
2	Aritra Raut	MSc BDA	AHFL	2022	
3	Dibyendu Das	MSc BDA	Vista Intelligence	2022	
4	Dipan Banik	MSc BDA	Sravathi AI	2022	
5	Dristanta Das	MSc BDA	Abzooba Inc.	2022	
6	Mahendra Nandi	MSc BDA	TCS Digital	2022	
7	Nilabjanayan Bera	MSc BDA	Vista Intelligence	2022	
8	Nilotpal Sarkar	MSc BDA	Vista Intelligence	2022	
9	Pratik Karmakar	MSc BDA	Abzooba Inc.	2022	
10	Sawan Aich	MSc BDA	AHFL	2022	
11	Sourav Bhattacharjee	MSc BDA	Abzooba Inc.	2022	
12	Sourav Karmakar	MSc BDA	Sravathi AI	2022	
13	Sourjya Chatterjee	MSc BDA	Vista Intelligence	2022	
14	Srijan Mallick	MSc BDA	Vista Intelligence	2022	
15	Suryadeep Dasgupta	MSc CS	Cloudcraftz	2022	

#### DETAILS RELATING TO PH. D. SCHOLARS DURING THE YEAR

S. No.	Name of current Ph. D. scholars	Name of Supervisor
1	Tamojit Saha	Joydeep Mukherjee
2	Rajdeep Mandal	Soumitra Samanta
3	Suvajit Patra	Soumitra Samanta

#### DETAILS OF ACADEMIC PUBLICATIONS DURING THE YEAR

Details of staff who attended and presented papers in conferences, seminars, etc.

S. No.	Name	Date	Title of the paper presented	
1	Sudipta Das	29.12.22	Software reliability based on renewal process modeling for error occurrence due to each bug with periodic debugging schedule.	
2	Joydeep Mukherjee	11.02.23	Relation between broadcast domination and multipacking numbers on chordal graphs.	

#### Details of publications in journals and books

S. No.	Author	Title of Paper	Journal	ISSN/ISBN
1	Joydeep Mukherjee	On dominating set of some subclasses of string graphs	Computational Geometry: 107, (2022)	ISSN: 0925- 7721
2	Joydeep Mukherjee	On approximating MIS over \$B_1\$-VPG graphs	Discrete Mathematics, Algorithms and Applications, 14(07), (2022)	ISSN: 17938317, 17938309
3	Subir Ghosh	Complexity and Algorithms for	ISAAC 2022:	12:1-12:17

		ISOMETRIC PATH COVER on Chordal Graphs and Beyond.		
4	Swami Sarvottamananda	Rectilinear Voronoi Games with a Simple Rectilinear Obstacle in Plane.	CALDAM 2023	89-100

## DETAILS OF SPECIAL LECTURES / WORKSHOPS / SEMINARS / CONFERENCES / SYMPOSIUMS HOSTED / ORGANISED DURING THE YEAR

S. No.	Date	Details of Lectures / workshops / seminars / conferences / symposiums HOSTED / ORGANISED	
1	13 Jan, 2022	Lecture on ML and its real-life real case in the field of fraud & money laundering detection	
2	25 Mar, 2022	Thesis work presentation on "Reaction mechanisms and biological molecular configurations*	
3	9 April, 2022	Awakened Young India Programme	
4	20 April, 2022	Scrabble Tournament	
5	5 May. 2022	Research seminar on Graph Theory(Me, myself and the Four-Color Theorem)	
6	21 May 2022	Invited talk on "Save Soil" - Environment awareness	
7	27 May 2022	Seminar on Machine Aided Generic Persistence Interface & Engine (MAGPIE)	
8	28th May, 2022	Talk on "Exploring Entrails of Entrepreneurship"	
9	June 3, 2022	Talk on "Intelligent Optimization Algorithms	
10	July 1, 2022	Talk on career opportunities in Data Science	

11	Aug 18, 2022	Inauguration - Fresher Batch	
	1145 10, 2022		
12	Aug 29, 2022	Session on Resume Building	
13	Sep 28, 2022	Talk on Analytics and IoT in Manufacturing and Quantum Computing	
14	Oct 28, 2022	Presentation on WeMindYou App, Narendra Smart Toy, Shaktiman chatbot app, Neuroscience of Meditation	
15	Nov 1, 2022	Placement talk of Abzooba	
16	Nov 25, 2022	Talk on graph databases and Neo4j	
17	Dec 6, 2022	Placement talk of Ernst & Young	
18	Dec 13, 2022	Placement talk of PrediQt	
19	Dec 26, 2022	Talk on Copula	
20	Dec 28, 2022	Student's Poster Competition in IISA 2022 Conference won 2nd prize	
21	Jan 10, 2023	Talk on Computational Topology	
22	Jan 13 - 14, 2023	Perceptron'23 - Inter College/University Techfest - programmes included quiz, poster presentation, programming, seminar etc.	
23	Feb 14, 2023	Placement talk of Cloudcraftz	

### DETAILS OF PROJECTS UNDERTAKEN DURING THE YEAR

S. No.	Investigator (staff)	Name of the project & other details	Funding Agency
1	Soumitra Samanta	A two-phased project on Avatar (animation) based automatic generation and automated recognition of	VECC, Kolkata

	signs and gestures in Indian Sign Language	
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#### ANY OTHER ACTIVITY DURING THE YEAR WORTH MENTIONING

- Approval of a DST FIST grant to set up an AI Lab on Server. The total grant value is 1.06 crores. 25% of the cost will be borne by RKMVERI.
- Prof. Subir Ghosh was the chairperson in the International Conference on Algorithms and Discrete and Applied Mathematics held in Dhirubhai Ambani Institute of Information and Communication Technology, Gandhinagar, India February 09-11, 2023. Swami Sarvottamanda was a member in the steering committee, and Swami Dhyanagamyananda was a member of the organizing committee in this conference.
- Collaboration between the Department of Computer Science in the Belur Campus, and the Department of Indian Sign Language, FDMSE, Coimbatore Campus for creating Indian Sign Language dataset. The first phase of the ISL videos creation started on 29 October 2022 and ended on 12 January 2023.
- Professor Indranil Sengupta from University of North Dakota, USA lectured online a 60 hr course on Probability and Stochastic Processes to the first year students of MSc BDA, 2022-24 batch, during the July-Dec'22 semester.
- Professor Emeritus Sukumar Ghosh from University of IOWA, USA lectured 24 hours on Distributed Computing Systems to the first year students of MSc Computer Science, 2022-24 batch during the Jan-June'23 Semester.
- Profs Gopal Basak, and Samarjit Das from Indian Statistical Institute, Kolkata together conducted a full course of 60 hrs on Introduction to Econometrics and Finance during the July-Dec'22 semester to the MSc BDA students of 2021-23 batch.
- All the above mentioned tutoring were rendered by the experts as labour of love.

## NAME OF THE DEPARTMENT/DIVISION: COMPUTER SCIENCE, COIMBATORE CAMPUS

#### LIST OF TEACHING FACULTY MEMBERS

S. No.	Name	Designation
1	Dr.R.Sridhar	Professor & Head
2	Sri.V.Dineshkumar	Assistant Professor

#### DETAILS OF STUDENTS ADMISSION DURING THE YEAR

S. No.	Programme	No. of Students
1	M.Sc Computer Science Applications (CSA)	Nil
2	M.Sc Data Science	Nil
Total		Nil

#### STUDENTS PASSED OUT DETAILS OF THE YEAR

S. No.	Programme	No. of Students
1	M.Sc Data Science	8
2	M.Sc Computer Science Applications (CSA)	9
	Total	17

#### STUDENTS PLACEMENT AND PROGRESSION DETAILS OF THE YEAR

#### DETAILS OF STUDENTS PLACED:

S. No.	Name	Programme graduated from	Name of the Company/ Institution Joined	Year of Joining
1	Barath N	M.Sc CSA	AES Technologies, Coimbatore	2022
2	Deepak S	M.Sc CSA	Utthunga Technologies, Bangalore	2022
3	Deepak Kumar G	M.Sc CSA	Synophic system Pvt, Coimbatore	2022
4	Kameswaran R	M.Sc CSA	Texmo Industry, Coimbatore	2022
5	Karunakaran S	M.Sc CSA	AES Technologies, Coimbatore	2022
6	Sarana K M	M.Sc CSA	AES Technologies, Coimbatore	2022
7	Thangamithukumar M	M.Sc CSA	AES Technologies, Coimbatore	2022
8	Vasanthakumar C	M.Sc CSA	Wiptron, Coimbatore	2022
9	Vasu L	M.Sc CSA	AES Technologies, Coimbatore	2022
10	Boopathi K	M.Sc Data Science	Aggregate Intelligence India Private Limited, Coimbatore.	2022
11	Dharshan S	M.Sc Data Science	Aggregate Intelligence India Private Limited, Coimbatore.	2022
12	Gowtham K	M.Sc Data Science	Intense Technologies, Secunderabad.	2022
13	Janarthanan K	M.Sc Data Science	Aggregate Intelligence India Private Limited, Coimbatore	2022
14	Kirubakaran R	M.Sc Data Science	Zoho Corporation, Chennai	2022
15	Kishore R	M.Sc Data Science	Aggregate Intelligence India Private Limited, Coimbatore	2022
16	Raman R	M.Sc Data Science	RISE Corp, Coimbatore 2022	
17	Ramesh S	M.Sc Data Science	Aggregate Intelligence India Private Limited, Coimbatore	2022

#### DETAILS OF ACADEMIC PUBLICATIONS DURING THE YEAR

#### Details of publications in journals and books

S. No.	Author	Title of Paper	Journal	ISSN/ISBN
1	Dr.R.Sridhar Professor & Head	Time Series forecasting using GMDH neural networks for Chikungunya in Mysore District, India	International Journal of Mosquito Research	2348 -5906

#### DETAIL OF SPECIAL LECTURES / WORKSHOPS / SEMINARS / CONFERENCES / SYMPOSIUMS HOSTED / ORGANISED DURING THE YEAR

S. No.	Date	Details of Lectures / workshops / seminars / conferences / symposiums HOSTED / ORGANISED
1	09.07.2022	One Day Workshop on "Building Compute Intelligence using Machine Learning" conducted by Sri. Prashanth Radhakrishnan, Big Data Engineer, Gerald Technologies
2	09.04.2022	Guest Lecture on "Types of Clustering " by Ms. Sowkarthika B, Ph.D Research Scholar, NIT, Bhopal
3	10.09.2022	Guest Lecture on "Fuzzy Sets in Neural Networks" by Sri.G.Suresh, Associate Professor, Bannari Amman Institute of Technology, Coimbatore
4	23.07.2022	Special Lecture on "Job Roles and Opportunities in Data Science" by Sri. Navaneeth Malinga, Chief Technology Officer, ANTPOD, Coimbatore
5	20.08.2022	Special Lecture on "Practical Applications on Big Data" by Sri. Prashanth Radhakrishnan, Big Data Engineer, Gerald Technologies, Coimbatore

# ANY OTHER ACTIVITY DURING THE YEAR WORTH MENTIONING

#### Knowledge Sharing by Alumni

- Sri. Surya A, Junior Data Analyst, Indium Software (India) Limited, Bangalore reviewed II-M.Sc Data Science students project and shared his real-time experience on Data Analysis with python programming on 24.02.2023.
- Sri. S. Bharath, Junior Data Scientist, Neoware Technologies, Chennai interacted with M.Sc Data Science students and shared his real time experience in data science field on 20.08.2022.

# NAME OF THE DEPARTMENT:

# **SPORTS SCIENCE AND YOGA**

# LIST OF TEACHING FACULTY MEMBERS

S. No.	Name	Designation
1	Dr. Rupayan Bhattacharya	Professor
2	Dr. Kalipada Pal	Associate Professor
3	Dr. Kunal Sikder	Assistant Professor,
4	Dr. Arkadeb Dutta	Assistant Professor,
5	Dr. Subhadip Paul	Assistant Professor,
6	Dr Arnab Das	Assistant Professor
7	Dr Manohar Pahan	Assistant Professor
8	Swami Samarpanananda	Monastic Faculty
9	Swami Kaleshananda	Monastic Faculty
10	Swami Vidyapradananda	Monastic Faculty & Academic Coordinator

# DETAILS OF STUDENTS ADMISSION DURING THE YEAR

S. No.	Programme	No. of Students
1	M.Sc Yoga	6
2	P.G Diploma in Yoga	0
3	M.Sc Sports Science	8
4	M.Phil-PhD Yoga	1
5	M.Phil-PhD Sports Science	2

# STUDENTS PASSED OUT DETAILS OF THE YEAR

S. No.	Programme	No. of Students
1	PG Diploma in Yoga	3
2	M.A /M.Sc Yoga	6
3	MPhil Yoga	2

### STUDENTS PLACEMENT AND PROGRESSION DETAILS OF THE YEAR

#### DETAILS OF STUDENTS PURSUING HIGHER EDUCATION:

Sl.	. No.	Name of the student	Institution joined and course pursuing
	1	Rama Arya	RKMVERI, Phd Yoga

# PARTICIPATION DETAILS IN COMPETITIONS, CULTURAL EVENTS ETC

Six Students of M.Sc Yoga participated in All India Inter University Yogasana Championship (men's category) held in KIIT Bhubaneswar – 26-29 December 2022. Our team scored overall **rank 33 out of 186 universities** participating in University games 2022- Yogasana (Male) competition. The individual rank of our boys are as follows

- Bikash Dey 98 out of 1027 participants ( **in top 10%**)
- Debraj Karak 210
- Rajdip Santra 238
- Soutik Ghosh 259
- Debraj Das 267

# DETAILS RELATING TO PH. D. SCHOLARS DURING THE YEAR

S. No.	Name of current Ph. D. scholars	Name of Supervisor
1	Bankim Biswas	Dr. Kunal Sikder
2	Gopinath Bhowmik Bhunia	Dr. U S Ray
3	Subhasis Biswas	Dr. Rupayan Bhattacharya
4	Sanjoy Majhi	Dr Arnab Das
5	Debabrata Chatterjee	Dr Arkadeb Dutta
6	Debjit Das	Dr Arnab Das

# DETAILS OF ACADEMIC PUBLICATIONS DURING THE YEAR

- Rama Arya, Soumyajyoti Ghoshal, Kalipada Pal, Gopesh Mangal, Arkadeb Dutta (2023). A Systematic Review on Panchakarma-Based Ayurveda Treatment in Janu Sandhigata Vata. *International Journal of Ayurvedic Medicine*, *14*(1), 29–41. https://doi.org/10.47552/ijam.v14i1.3282
- Jasmine Saunders, Kunal Sikder, Elizabeth Phillips, Anurag Ishwar, David Mothy, Kenneth B. Margulies, and Jason C. Choi. Med25 Limits Master Regulators That Govern Adipogenesis. *International Journal of Molecular Sciences*. 2023, *24*, 6155. <u>https://doi.org/10.3390/ijms24076155</u>
- Arnab Das<sup>\*</sup>, S Azarudheen, Bhaskaran Chandrasekaran, Shifra Fernandes<sup>\*</sup>, Fiddy Davis. The plausible effects of wearing face masks on sports performance A scoping review. *Science et Sports*. 2023 (in press).
- J. Michael Maurer, Keith A. Harenski, **Subhadip Paul**, et al. Machine learning classification of chronic traumatic brain injury using diffusion tensor imaging and NODDI: A replication and extension study. *Neuroimage:Reports.* 2023, 3, 100157, https://doi.org/10.1016/j.ynirp.2023.10015
- **Gopinath Bhowmik Bhunia**, Uday Sankar Ray. Training and detraining management of performance measures by Yoga among middle-aged blue-collar men. *International Journal of Ayurvedic Medicine*. 2023; 13(4): 984–990. https://doi.org/10.47552/ijam.v13i4.3065.
- **Tanugatri Majumder**, Virginia De Martin Topranin, Øyvind Sandbakk, and Dionne A. Noordhof. Indian Endurance Athletes' Menstrual Cycle: Practices, Knowledge, Communication, Health, and Changes in Perceptions Across the Phases. *International Journal of Sports Physiology and Performance*. 2022; 17(12): 1706-1715. <u>doi</u>:

<u>10.1123/ijspp.2022-0131</u>. (https://pubmed.ncbi.nlm.nih.gov/36351428/)

- Subhashis Biswas, Supratim Guha, Rupayan Bhattacharya. Validity And Reliability Of Polar V800 Smart Watch To Measure Cricket-Specific Movements. Physical Education Theory and Methodology. 2022; 22(3), 316-322. https://doi.org/10.17309/tmfv.2022.3.03.
- Subhashis Biswas, Rupayan Bhattacharya. Effect of physical and physiological parameters on the performance of sub-elite Indian upper order batsmen in T20 matches: a pilot study. MOJ Sports Med. 2022; 5(2): 51–55. doi: 10.15406/mojsm.2022.05.00118.
- J. Michael Maurer, Subhadip Paul, Bethany G. Edwards, Nathaniel E. Anderson, Prashanth K. Nyalakanti, Carla L. Harenski, Jean Decety, Kent A. Kiehl. Reduced structural integrity of the uncinate fasciculus in incarcerated women scoring high on psychopathy. Brain Imaging and Behavior. 2022; 1-9. <u>https://doi.org/10.1007/s11682-022-00684-z</u>
- Vikas Pareek, **Subhadip Paul**, Prasun K. Roy. Corpus Callosum Remodeling in Glioma: Constancy of Fiber Density and Anisotropy in MRI. Canadian Journal of Neurological Sciences. 2022; 49(2):282-286. (<u>https://doi.org/10.1017/cjn.2021.64</u>)
- Manohar Kumar Pahan, Mahendra Kumar Singh. Effect of Day Time on Cognitive Performances of Preadolescent Athletes Nurtured in a Controlled Environment. Physical Education Theory and Methodology. 2022 Jun 25; 22(2): 268-275.
- Manohar Kumar Pahan, Mahendra Kumar Singh. Reactive Stress Tolerance in Preadolescent Sports Participants: A Comparison of Six Individual Non-Contact Sports. Teorìâ Ta Metodika Fìzičnogo Vihovannâ. 2022; 22(1): 121-127.
- Arnab Das, Usha S. Kaniganti, Shruti J. Shenoy, Pralay Majumdar, Alak K. Syamal. Monitoring training load, muscle damage, and body composition changes of elite Indian rowers during a periodized training program. Journal of Science in Sport and Exercise. 2022; 1-12. <u>doi: 10.1007/s42978-022-00197-7</u>.
- Gargi Ray Chaudhuri, **Arnab Das**, Swaraj Bandhu Kesh, Koushik Bhattacharya, Sulagna Dutta, Pallav Sengupta, Alak Kumar Syamal. Obesity and male infertility: multifaceted reproductive disruption. Middle East Fertility Society Journal. 2022; 27(1): 1-2.
- Debdatta Talukdar, Akash Kumar Haldar, Rinini Dastidar, Soumitra Kumar, Manojit Lodha, Ajanta Banerjee, Swapan Karmakar, **Kunal Sikder**. Inflammation-related Biomarkers Are Associated With Severity Of Idiopathic Dilated Cardiomyopathy (IDCM): A Brief Report On Patients Of West Bengal, India. Journal of Cardiovascular Disease Research. 2022. 3(1).
- Asmita Chakraborty, Sheta Halder, Purvi Kishore, Disha Saha, Sujata Saha, **Kunal Sikder,** Arnab Basu. The structure-function analysis of Obg-like GTPase proteins

along the evolutionary tree from bacteria to humans. Genes to cells. 2022 Jul;27(7):469-481.

# DETAILS OF WORKSHOPS / SEMINARS / CONFERENCES / SYMPOSIUMS AT-TENDED DURING THE YEAR

• Dr Arnab Das attended APPICON 2022 at PGI Chandigarh on 12 December 2022

# DETAILS OF SPECIAL LECTURES / WORKSHOPS / SEMINARS / CONFERENCES / SYMPOSIUMS HOSTED / ORGANISED DURING THE YEAR

Date	Seminar / Workshop
11-12 March 2023	Two day Symposium and Workshop on 'Sports Medicine and Rehabilitation'- <b>85 registrations</b>
	https://sy.rkmvu.ac.in/symp-wrksp-sports-medicine-rehabilitation- 11-12-mar-2023/
21-22 January 2023	Two day Symposium and Workshop on 'Advances in Brain & Cognition Research'- <b>85 registrations</b>
	https://sy.rkmvu.ac.in/symp-wrksp-advances-in-brain-cognition- research-jan-2023/
12 December 2022	One day APPICON sponsored workshop on Assessing exercise- induced stress on cardio-respiratory & neuro-cognitive responses'- <b>22 registrations</b>
	https://sy.rkmvu.ac.in/appicon-2022-workshop/
28 November - 3 December	One week long immersion program on "Adapted and Sports Biomechanics" - <b>30 participants</b>
2022	https://sy.rkmvu.ac.in/one-week-immersion-program-in-adapted- sports-sports-biomechanics-nov-dec-2022/
11-12 June 2022	Two day workshop on 'Science of Yoga'-11-12 June 2022 – <b>45</b> participants
	https://sy.rkmvu.ac.in/workshop-on-science-of-yoga-june-2022/

# ANY OTHER ACTIVITY DURING THE YEAR WORTH MENTIONING

The UNESCO Chair in Inclusive Adapted Physical Education and Yoga was renewed till 2025. Prof R Giridharan, HoD GAPEY is the new UNESCO Chair and Prof Arkadeb Dutta is the new UNESCO Co-Chair . The Chair position has been held by RKMVERI since 2012, and now it has been extended till 2025. The announcement came to us via email on 26.9.2022

# ANY OTHER INFORMATION

#### **Educational Excursion and Extension activitites**

- The students of MSc in Sports Sc.(batch 2022-2024) attended a seven days training at Jharkhand State Sports Promotion Society (JSSPS) from 30 January to 5 February 2023.
- The students of MSc in Sports Sc.(batch 2022-2024) conducted Physical Fitness Test Camp of U-19 Footballers of Chandannagore Sporting Association (CSA) on 10 Dec 2022. Total 60 players were tested.
- The students of MSc in Sports Sc.(batch 2022-2024) conducted two day Physical Fitness Test and assessment of Long Tennis Players at Bengal Tennis Association Salt Lake on 7 & 8 May 2023
- A 3-day Yoga camp was organised at IIM Ranchi during 3-5 February 2023.

# NAME OF THE DEPARTMENT:

# SANSKRIT AND PHILOSOPHY

# LIST OF TEACHING FACULTY MEMBERS

SL.	Name	Designation	
1	Swami Japasiddhananda	MA, PhD, Head of the Department, Dept. of Sanskrit and Philosophy, RKMVERI, Belur Math	
2	Dr. Rakesh Das	Ācārya (Navya-Vyākaraṇa), M.Phil., Ph.D., NET – JRF, Assistant Professor, Dept. of Sanskrit and Philosophy, RKMVERI, Belur Math	
3	Dr. Venkataramana Bhat	MA, Sāhitya-vidvān, Ph.D., M.Phil, NET – JRF, Assistant Professor, Dept. of Sanskrit and Philosophy, RKMVERI, Belur Math	
4	Dr. Gopikrishnan Reghu	Ācārya (Vyākaraṇa), M.Phil., Ph.D., NET, Vyākaraṇacārya, Dept. of Sanskrit and Philosophy, RKMVERI, Belur Math	
5	Dr. Nagaraja Bhat	Ācārya (Advaita-Vedānta), Ph.D, NET – JRF, Assistant Professor, Dept. of Sanskrit and Philosophy, RKMVERI, Belur Math	
6	Dr. Neeraj Kumar Bhargave	Ācārya (Vyākaraṇa), Ph.D, NET-JRF, Assistant Professor, Dept. of Sanskrit and Philosophy, RKMVERI, Belur Math	
7	Swami Vedarthananda	MA, MPhil, PhD, NET, Dept. of Sanskrit and Philosophy, RKMVERI, Belur Math	
8	Dr. Paromita Roy	MA, PhD, NET – JRF Abhedananda Chair, Dept. of Sanskrit and Philosophy, RKMVERI, Belur Math	
9	Dr. Shantanu Ambadas Ayachit	Ācārya (Advaita-Vedānta), M.Phil, Ph.D, NET, Assistant Professor, Dept. of Sanskrit and Philosophy, RKMVERI, Belur Math	
10	Dr. Sukhdev Bhatt	Ācārya (Navya-Vyākara), M.Phil, PhD, NET, Assistant Professor, Dept. of Sanskrit and Philosophy, RKMVERI, Belur Math	

# DETAILS OF STUDENTS ADMISSION DURING THE YEAR

Sl.	Programme	No. of Students			
Core P	Core Programmes:				
1	MA Integrated in Sanskrit (MAIS)	17			
2	PhD in Integrated in Sanskrit (PHDIS)	7			
	Total (Core programmes)	24			
Outrea	ach Programmes:				
3	Communicative Sanskrit				
	Communicative Sanskrit: Preliminary (Jul – Dec 2022)	67			
	Communicative Sanskrit: Intermediate (Jul – Dec 2022)	36			
	Communicative Sanskrit: Advance (Jul – Dec 2022)	39			
	Communicative Sanskrit: Preliminary 1 (Jan - Jun 2023)	34			
	Communicative Sanskrit: Preliminary 2 (Jan - Jun 2023)	21			
	Communicative Sanskrit: Preliminary 3 (Jan - Jun 2023)	27			
	Communicative Sanskrit: Intermediate (Jan - Jun 2023)	32			
	Communicative Sanskrit: Advance (Jan - Jun 2023)	17			
	Total (Communicative Sanskrit)	273			
4	Pā <b>ņ</b> inīya-praveśa (Outreach Programme):				
	Laghusiddhāntakaumudī 2 (Paniniya Pravesh) (Jul – Dec 2022)	11			
	Laghusiddhāntakaumudī 1 (Paniniya Pravesh) (Jan - Jun 2023)	10			
	Total (Pā <b>ņ</b> inīya-praveśa)				
	Grand Total (Core programmes plus Outreach Programmes)	318			

### STUDENTS PASSED OUT DETAILS OF THE YEAR

Sl. Programme		No. of Students
1	MA Integrated in Sanskrit	16
2	PhD Integrated in Sanskrit (PhD Awardees)	9

#### STUDENTS PLACEMENT AND PROGRESSION DETAILS OF THE YEAR

#### **Details Of Students Pursuing Higher Education:**

Sl.	Name	Programme graduated from	Name of the Institution Joined	Name of the Programme admitted to
1	Aneek Kumar Das	MA Integrated in Sanakrit	RKMVERI, Belur Math	PhD
2	Animesh Roy	MA Integrated in Sanakrit	Sree Sankaracharya University of Sanskrit, Kalady	PhD
3	Anupam Maity	MA Integrated in Sanakrit	University of Lucknow, Uttar Pradesh	PhD
4	Apurba Das	MA Integrated in Sanakrit	NA	NA
5	Debjyoti Kundu	MA Integrated in Sanakrit	Banaras Hindu University, Varanasi, Uttar Pradesh	PhD
6	Debkumar Pujari	MA Integrated in Sanakrit	Sabang Sajanikanta Mahavidyalaya research centre of Vidyasagar University	PhD
7	Kartick Ruidas	MA Integrated in Sanakrit	Bankura University, West Bengal	PhD
8	Nayan Chowdhury	MA Integrated in Sanakrit	RKMVERI,Belur Math	PhD
9	Nityagopal Patra	MA Integrated in Sanakrit	Sabang Sajanikanta Mahavidyalaya research centre of Vidyasagar University	PhD
10	Provat Kumar Mondal	MA Integrated in Sanakrit	RKMVERI, Belur Math	PhD
11	Sauvik Patra	MA Integrated in Sanakrit	Government College of Education (CTE), Banipur,	B.Ed

			North 24 Parganas	
12	Somnath Barman	MA Integrated in	Central Sanskrit	PhD
		Sanakrit	University: Ganganath Jha	
			Campus, Prayagraj, Uttar	
			Pradesh	
13	Somnath Singha	MA Integrated in	Sevayatan Sikshan	B.Ed
		Sanakrit	Mahavidyalaya, Jhargram	
14	Sourav Porel	MA Integrated in	RKMVERI, Belur Math	PhD
		Sanakrit		
15	Sujoy Barman	MA Integrated in	Sarif College of Education,	B.Ed
		Sanakrit	Jalpaiguri, West Bengal	

#### **DETAILS OF STUDENTS PLACED:**

Sl.	Name	Programme graduated from	Name of the Company/ Institution Joined	Year of Joining
1	Krishna Gopal Patra	PhD in Integrated Sanskrit	Sri Sri Sitaram Das Omkarnath Sanskrita Sikhsha Samsad, Taligunge, Kolkata	May, 2022
2	Soumitra Acharya	PhD in Integrated Sanskrit	Shree Swaminarayan Gurukul Rajkot Sansthan, Navsari, Gujarat	August 2022
3	Amit Kumar Sahoo	PhD in Integrated Sanskrit	Udaynath College of Science and Technology, Cuttack, Odisha (NFSC)	August, 2022
4	Chandan Mukherjee	PhD in Integrated Sanskrit	Amrita Vishwa Vidyapeetham, Kerala (NFSC)	August, 2022
5	Shanti Ghosh	PhD in Integrated Sanskrit	Central Sanskrit University, Rajiv Gandhi Campus	March, 2023
6	Avijit Ghosh	MA Integrated in Sanakrit	Indian Institute of Technology, Hyderabad (NFSC)	August, 2022
7	Biswarup Bej	MA Integrated in Sanakrit	Indian Institute of Technology Jammu, Jammu and Kashmir (NFSC)	August, 2022
8	Sombhunath Ghosh	MA Integrated in Sanakrit	Ambedkar College, Unakoti Fatikroy, Tripura 799290 (NFSC)	August, 2022
9	Sandip Chatterjee	MA Integrated in Sanakrit	Astamgam Ayurved Medical College, Kerala (NFSC)	August, 2022

# DETAILS RELATING Int. Ph.D./Ph.D SCHOLARS DURING THE YEAR

Sl.	Name	Name of Supervisor	
1	Alok Sen (B2250003)	Dr.Neeraj Kumar Bhargave, AssistantProfessor, RKMVERI, Belur Math	
2	Amit Kumar Garai (B2250004)	Dr.Rakesh Das, Assistant Professor, RKMVERI, Belur Math	
3	Aneek Kumar Das (B2250005)	Dr. Shantanu Ayachit, RKMVERI, Belur Math	
4	Nayan Chowdhury (B2250006)	Dr.Rakesh Das, Assistant Professor, RKMVERI, Belur Math	
5	Provat Kumar Mondal (B2250007)	Swami Japasiddhananda, Head, Department of Sanskrit and Philosophy	
6	Saikat Mohanta (B2250008)	Swami Japasiddhananda, Head, Department of Sanskrit and Philosophy	
7	Sourav Porel (B2250009)	Swami Japasiddhananda, Head, Department of Sanskrit and Philosophy	
8	Basudev Gorai (B2150001)	Dr.Neeraj Kumar Bhargave Assistant Professor, RKMVERI, Belur Math	
9	Pritam Bera (B2150002)	Dr.Sukhdev Bhatt, Assistant Professor, RKMVERI, Belur Math	
10	Prolay Nandi (B2150003)	Dr.Gopikrishnan Reghu, Assistant Professor, RKMVERI, Belur Math	
11	Subhadeep Das (B2150004)	Dr.Nagaraja Bhat, Assistant Professor, RKMVERI, Belur Math	
12	Tirthankar Dey (B2150006)	Dr.Shantanu Ayachit, Assistant Professor, RKMVERI, Belur Math	
13	Subarna Paul (B2150011)	Paromita Roy, Abhedananda Chair, RKMVERI, Belur Math	
14	Dhriti Rani Saha (B2150012)	Paromita Roy, Abhedananda Chair, RKMVERI, Belur Math	
15	Amit Kumar Sahoo (B2050001)	Dr.Sukhdev Bhatt, Assistant Professor, RKMVERI, Belur Math	
16	Buddhadev Das (B2050002)	Dr.Shantanu Ayachit, Assistant Professor, RKMVERI, Belur Math	
17	Chandan Mukherjee (B2050003)	Dr.Nagaraja Bhat, Assistant Professor, RKMVERI, Belur Math	
18	Rajesh Adhikari (B2050004)	Dr.Nagaraja Bhat, Assistant Professor, RKMVERI, Belur Math	
19	Rajkumar Mondal (B2050005)	Dr.Gopikrishnan Reghu, Assistant Professor, RKMVERI, Belur Math	
20	Shanti Ghosh (B2050006)	Swami Japasiddhananda, Assistant Professor, RKMVERI, Belur Math	

Sl.	Name	Name of Supervisor	
21	Subhankar Das 1 (B2050007)	Dr.Shantanu Ayachit, Assistant Professor, RKMVERI, Belur Math	
22	Subhankar Das 2 (B2050008)	Dr.Sukhdev Bhatt, Assistant Professor, RKMVERI, Belur Math	
23	Tuhin Mandal (B2050009)	Assistant Professor, RKMVERI, Belur Math         Dr.Rakesh Das,         Assistant Professor, RKMVERI, Belur Math	
24	Uttam Ghosh (B2050010)	Dr.Gopikrishnan Reghu, Assistant Professor, RKMVERI, Belur Math	
25	Rahul Maity (B1950002)	Dr.Neeraj Kumar Bhargave, Assistant Professor, RKMVERI, Belur Math	
26	Santanu Nayek (B1950003)	Dr.Sukhdev Bhatt, Assistant Professor, RKMVERI, Belur Math	
27	Sankha Subhra Gachchhit (B1950004)	Dr.Neeraj Kumar Bhargave, Assistant Professor, RKMVERI, Belur Math	
28	Shubhadip Pal (B1950015)	Swami Vedarthananda, RKMVERI, Belur Math	
29	Pankaj Raul (B18902)	Dr. Gopikrishnan Reghu, Assistant Professor, RKMVERI, Belur Math	
30	Sukhdev Shau (B18903)	Dr.Neeraj Kumar Bhargave, Assistant Professor, RKMVERI, Belur Math	
31	Arpan Bhattacharya (B17902)	Rakesh Das, Assistant Professor, RKMVERI, Belur Math	
32	Biplab Mallick (B17904)	Rakesh Das, Assistant Professor, RKMVERI, Belur Math	
33	Krishna Gopal Patra (B17918)	Dr.Rakesh Das, Assistant Professor, RKMVERI, Belur Math	
34	Saibal Acharya (B17919)	Dr.Nagaraja Bhat, Assistant Professor, RKMVERI, Belur Math	
35	Soumitra Acharya (B17920)	Dr.Neeraj Kumar Bhargave, Assistant Professor, RKMVERI, Belur Math	
36	Arupam Sanyal (B17921)	Dr. Shantanu Ayachit, RKMVERI, Belur Math	
37	Bishnu Pada Pal (B16902)	Dr.Neeraj Kumar Bhargave, Assistant Professor, RKMVERI, Belur Math	
38	Kartik Mete (B16903)	Dr.Nagaraja Bhat, Assistant Professor, RKMVERI, Belur Math	
39	Sanatan Das (B16905)	Dr. Venkataramana Bhat, Assistant Professor, RKMVERI, Belur Math	
40	Sujit Maiti (B16906)	Dr.Rakesh Das, Assistant Professor, RKMVERI, Belur Math	
41	Sukanta Manna (B16907)	Dr.Gopikrishnan Reghu, Assistant Professor, RKMVERI, Belur Math	
42	Tridib Roy Mondal (B16908)	Dr.Venkataramana Bhat, Assistant Professor, RKMVERI, Belur Math	
43	Amit Kumar Dey (B15902)	Dr.Venkataramana Bhat, Assistant Professor, RKMVERI, Belur Math	

Sl.	Name	Name of Supervisor
44	Nityananda Manna (B15904)	Dr.Rakesh Das, Assistant Professor, RKMVERI, Belur Math
45	Sujit Paramanik (B15908)	Dr. Venkataramana Bhat, Assistant Professor, RKMVERI, Belur Math

# DETAILS OF ACADEMIC PUBLICATIONS DURING THE YEAR

Sl	Name	Date	Title of the paper presented	Presented in
1	Swami Japasiddhana nda	13,14,15 Feb 2023	Pāṇinīya-Vyākaraṇasya Mokṣopayogitvam (Sanskrit) presented in	A Three-Day International Seminar on Pāṇinīyan Grammar and Its Applications Organized by Central Sanskrit University, Ganganath Jha Champus, Prayagraj, UP, Department of Vyakarana, Karnataka Sanskrit University, Bengaluru
2		27 to 29 January 2023		Mrityunjaya: International Conference on Death, Rebirth, and Reincarnation Sri Shankaracharya Vangmaya Seva Parishat, Ayodhya, Vedanta Bharati, Mysore, and Indian Council of Philosophical Research, New Delhi
		13 January 2023	10 Day Workshop on Indian Palaeography: Grantha Script (Inaugural Address in Sanskrit)	Rabindra Bharati University, Kolkata
		9 January 2023	Influence of Vedic Culture on Indian Society (Keynote Address in Sanskrit) Name of the event - Akhila Bharatiya Vaidik Samgoshthi	Sanskrit Sahitya Parishat, and Maharshi Sandipini Rashtriya Vedavidya Pratishthan, Ujjain Sanskrit Sahitya Parishat, Kolkata

Sl	Name	Date	Title of the paper presented	Presented in
		12 October 2022	Importance of Shastra Studies (Special Lecture in Sanskrit) Name of the event - Intenational Seminar on Interactions with Kannada and Classical Language Resources and Future Prospects for Engagement	Karnataka Sanskrit University, Bengaluru
		12 October 2022	A Call for Character Formation and Team Work in the Sanskirt Community (A lecture in Sanskrit) Name of the event - Visit to the Institue and interaction with the faculty members of the Institue	Poornaprajna Samshodhana Mandiram, Bengaluru
2	Rakesh Das	10 January 2023	Śrījīvanyāyatīrthakrtacipiț akacarvaṇaprahasanasya nāndīślōkasya vimarśaḥ (श्रीजीवन्यायतीर्थकृतचिपिटकचर्वणप्र हसनस्य नान्दीश्लोकस्य विमर्शः)	World Sanskrit Conference, 2023 (Australia)
		11 June 2022	keynote speaker for the annual Sanskrit Day Symposium (Invited Lecture)	University of Pennsylvenia, USA
		8 June 2022	Mentor-Mentee Program (Invited Lecture)	Katwa Mahavidyalaya, Katwa
		03 and 05 March 2022	Sānkhyakārikā (Invited Lecture)	Shree Somnath Sanskrit University
3	Gopikrishnan Reghu	14 Nov. to 15 Nov. 2022		Guidelines for E-content Development of Project Submission for Assistance from UGC under NME ICT & Guidelines for Content Writers under E- PG Pathshala & SWAYAM' Faculty Development Programme on MOOCs & E-Learning Technologies organized by the Faculty Development Centre of Central Sanskrit University, Ekalavya

SI	Name	Date	Title of the paper presented	Presented in
				Campus, Agartala,
		23 March 2023	Samāsāntapratyaya- vicāraḥ (समासान्तप्रत्ययविचारः)	Two-Day National Seminar On Taddhitapratyayārthavi marśaḥ (तद्धितप्रत्ययार्थविमर्शः), Organized By Central Sanskrit University,
		27 March 2023	vyākaraņaśāstradiśā bauddhārthasiddhivicāraḥ (व्याकरणशास्त्रदिशा बौद्धार्थसिद्धिविचारः)	Bhopal Campus, Bhopal A Two-Day International Seminar On śabdaśāstrīyasiddhāntān āmiśāstrāntaraissaha sambandha: (शब्दशास्त्रीयसिद्धान्तानांशास्त्रान्त रैस्सह सम्बन्ध:), Organized By Central Sanskrit University, Sri Ranaveer Campus, Jammu
4	Nagaraja Bhat	14th- 15th July 2022.	Paţţābhirāmaśāstri- praņītāyāḥ Arthālokavyākhyāyāḥ Samīkṣaṇam	International Seminar On "Post Independence Indian Philosophy" Organized by Central Sanskrit University Shri Raghunath kirti campus Devprayag, Uttarakhand
		30-31 May 2022.	Pañcāgnividyāvimarśaḥ	Two Day National Seminar On "Upaniṣatprameyavicāra ḥ" Organized by Dept. of Advaita Vedanta, Central Sanskrit University, Guruvayoor Campus, Kerala
5	Neeraj Kumar Bhargave	14-15 July, 2022	Paramalaghumañjūṣāyāḥ dārśanikadr̥ṣṭyā samīkṣaṇam iti śōdhaprabandhasya samālōcanam (परमलघुमञ्जूषायाः दार्शनिकदृष्ट्या समीक्षणम् इति शोधप्रबन्धस्य समालोचनम्)	I.C.P.R sponsored International Seminar on Post Independence Indian Philosophy, Raghunath Kirti Campus, Central Sanskrit University.
		12-21 September, 2022	vivakṣāvaśāt kārakāṇi bhavanti (विवक्षावशात् कारकाणि भवन्ति)	A Ten-Day National Skill Development Programme on vaiyākaraṇasiddhāntaka

SI	Name	Date	Title of the paper presented	Presented in
				umudī (kārakapraka- raṇam) [वैयाकरणसिद्धान्तकौमुदी (कारकप्रकरणम्)] organized by Department of Sanskrit, Vidyasagar University.
		22-23 March, 2023	vyākaraṇadarśanē pramēyavimarśaḥ (व्याकरणदर्शने प्रमेयविमर्शः)	ICPR Sponsored Two- Day National Seminar on Indian Philosophy in Post-Independence Era, organized by Department of Sanskrit and Philosophy, Srikrishna College.
		27-28 March, 2023	Purāṇēṣu vrkṣāṇām māhātmyam (पुराणेषु वृक्षाणां माहात्म्यम्)	Two-Day International Seminar on Environment Scientific Outlook of Indological Literature, organized by Sri Sitaram Vaidic Adarsha Sanskrit Mahavidyalaya, Kolkata.
6	Ayachit Shantanu Ambadasrao	21 March to 23 March 2022	Akṣarapuruṣōttamadarśan ē daharādhikaraṇam (अक्षरपुरुषोत्तमदर्शने दहराधिकरणम्)	The Three day national conference on "The Aksara Purushottama Darshana : Adialogue with other Darshanas" organised by Utkal Parishat, Tirupati in collaboration with Central Sanskrit University at Sri Sadashiv campus, Puri. 752001, Odisha.
		01 March to 02 March 2023	Vēdōm mēm pratipādita yōga kī avadhāraṇā (वेदों में प्रतिपादित योग की अवधारणा)	The Two day national seminar on " वैदिक विज्ञान के विविध आयाम्" organised by वैदिक विज्ञान केन्द्र काशी हिन्दु विश्वविद्यालय, वाराणसी, Tirupati
		17 March to 18 March 2023	Rāṣṭrīya śikṣā nītī cyā sandarbhāta bhāratīya pāramparika vēdānta śikṣaṇācē yōgadāna (राष्ट्रीय शिक्षा नीती च्या सन्दर्भात भारतीय पारंपरिक वेदान्त शिक्षणाचे योगदान)	The national Seminar on "Indian Knowledge System in the context of NEP-2020" jointly organised by Savitribai Phule Pune University and KKSU, Ramtek.

SI	Name	Date	Title of the paper presented	Presented in
		13 July to 27 July, 2022		Online interdisciplinary Two-Week Refresher Course on "Managing Online Classes and Co- creating MOOCS 16.0" and obtained Grade A+ organized by Teaching Learning Centre, Ramanujan College, University of Delhi, under the aegis of Ministry of Education, Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching.
		5 January to 6 February, 2023.	Online International Workshop in Nāgēśabhaţţakrtaḥ paribhāṣēnduśēkharaḥ (bhūtivyākhyōpētaḥ) [नागेशभट्टकृतः परिभाषेन्दुशेखरः (भूतिव्याख्योपेतः)] conducted by the Department of Sanskrit and Philosophy, Ramakrishna Mission Vivekananda Educational and Research Institute, Belur Math	
7	Sukhdev bhatt	22 and 23 March 2023	Taddhitē cāturārthikavimarśaḥ (तद्धिते चातुरार्थिकविमर्शः)	के.सं.वि.वि.भोपालपरिसरः
		27 and 28 March 2023	Nipātārthavimarśaḥ (निपातार्थविमर्शः)	के.सं.वि.वि.श्रीरणवीरपरिसरः कोटभवालः जम्मूकश्मीरः
		20 February – 21 march, 2023		Four-Week faculty induction/orientation programme for 'faculty in university/colleges/ institutes of higher education' and obtained Grade A+. Organized by Teaching Learning Centre, Ramanujan College, University of Delhi, under the aegis of Ministry of Education, Pandit Madan Mohan

Sl	Name	Date	Title of the paper presented	Presented in
				Malaviya National Mission on Teachers and Teaching.
		5 January to 6 February, 2023	Actively Participated in the Online International Workshop in Nāgēśabhaṭṭakr̥taḥ paribhāṣēnduśēkharaḥ (bhūtivyākhyōpētaḥ) [नागेशभट्टकृत: परिभाषेन्दुशेखर: (भूतिव्याख्योपेत:)] conducted by the Department of Sanskrit and Philosophy, Ramakrishna Mission Vivekananda Educational and Research Institute, Belur Math	

# Details Of Publications In Journals And Books

Sl.	Author	Title of Paper	Journal	ISSN/ISBN
1	Swami Japasiddhanan da	Sthānivat-sūtre Matabheda- nirūpaṇam (Paper in Sanskrit) January 2023	Vishva-Samskritam, Sanskrit Quarterly of Vishveshvaranand Vedic Research Institute, Hoshiarpur-146021, Punjab	ISSN: 0975- 4474
		Sthānivat-sūtre Analvidhipadaṃ – Prācāṃ Navīnānāṃ Ca Naye (Paper in Sanskrit) December 2022	Saṃskṛtacintanam, 2022 published by Ramakrishna Mission Sikshanamandira, Belur Math, Howrah, West Bengal	ISSN 2393-8641
2	Rakesh Das	Astisicō'prktē (अस्तिसिचोऽपृक्ते)	Prajñāloka	2320-5911
		अशीत्यनुवाकनिबद्धा आन्ध्रपाठानुसारिणी महानारायणोपनिषत् (Mahānārāyaṇopani sat according the Āndhra recension and divided into 80 anuvākas.) (text, word to word meaning, translation		ISBN- 978-93- 84425-32-6.

Sl.	Author	Title of Paper	Journal	ISSN/ISBN
		into Bengali)		
3	Gopikrishnan Reghu	Śrautayāgasvarūpap aricayaḥ (श्रौतयागस्वरूपपरिचयः)	Śōdharatnam, Kavikulaguru Kalidas Sanskrit University, Ramtek	ISBN- 978-93- 93938-65-8
		Sphoțasvarūpamīmā ṃsā	National Journal of Hindi & Sanskrit Research (Peer-reviewed online Research Journal)	ISSN-2454 9177
		Prakriyākramaḥ Pāṇinīyavyākaraṇañ ca	MANĪṢĀ (A Research Journal of Sanskrit)	ISSN- 2583- 2271
4	Nagaraja Bhat	Viniyogavidhisahakā riņaḥ sthānapramāṇasya svarūpavivekaḥ	National Journal of Hindi & Sanskrit Research"	ISSN 24549177
		Pratīkādhikaraņasya tātparyasamīkṣaṇa m	The Samskrit Refereed Quarterly E Journal of "Hitaya"	ISSN 25817787
		Chāndogyopaniṣada ḥ śvetaketupravāhaṇa saṃvādasya tātparyavimarśaḥ	Peer-Reviewed Annual International Research Journal of Niḥśreyasī	ISSN 25822608
5	Neeraj Kumar Bhargave	Nāgēśābhimatakara ṇa- tr̥tīyārthavimarśaḥ (नागेशाभिमतकरण- तृतीयार्थविमर्शः)	Pariśīlanam (uttarapradēśasamiskrtas amisthānam) परिशीलनम् (उत्तरप्रदेशसंस्कृत- संस्थानम्)	2231-6221
		Raghunāthabhaṭṭācā ryā- bhimatākhyātārthavi cāraḥ (रघुनाथभट्टाचार्या- भिमताख्यातार्थविचारः)	Pāṇinīyā (maharṢipāṇini- samiskrta ēvami vaidikaviśvavidyālayaḥ, ujjayinī, madhyapradēśaḥ) [पाणिनीया (महर्षिपाणिनि-संस्कृत एवं वैदिकविश्वविद्यालयः, उज्जयिनी, मध्यप्रदेशः)]	2321-7626
		Śrīgadādharabhațțā bhimata- kartrkaraṇatrtīyārt havimarśaḥ (श्रीगदाधरभट्टाभिमत-	Hariprabhā (hariyāṇā samiskrta-akādamī) [हरिप्रभा (हरियाणा संस्कृत- अकादमी)]	2278-0416

Sl.	Author	Title of Paper	Journal	ISSN/ISBN
6	Ayachit Shantanu Ambadasrao	कर्तृकरणतृतीयार्थविमर्शः) Jīvaparimāṇavicāra ḥ (जीवपरिमाणविचारः)	Journal of Indian Intellectual Traditions	ISSN 2249-7129

# DETAILS OF SPECIAL LECTURES / WORKSHOPS / SEMINARS / CONFERENCES / SYMPOSIUMS HOSTED / ORGANISED DURING THE YEAR

Sl.	Date	Workshop
1	5 July to 13 August 2022	Online International Workshop in Advaitasiddhiḥ of Madhusūdana-sarasvatī – by Dr. K.S.Maheswaran, Assistant Professor, The Madras Sanskrit College, Chennai (35 hours lectures/ weekly self-assessments forms, etc are the highlights) – no. of registered participants – 68
2	3 January to the middle of March 2023	Online Workshop in Brahmasūtra-bhāṣya-bhāmatī from the beginning to Jijñāsādhikaraṇam – by Dr.Ganesh Ishwar Bhat, Associate professor and Head, Department of Advaita Vedanta, Sringeri Campus, Central Sanskrit University (39 hours lectures / weekly self-assessments forms, etc are the highlights) – no. Of registered participants – 49
3	5 January to 6 February 2023	Online International Workshop in Paribhāṣenduśekharaḥ of Nāgeśabhaṭṭa with Bhūtivyākhyā – by Dr. Brajbhushan Ojha, Associate Professor, Department of Vyakarana, Faculty of Sanskrit Vidya Dharmavijnan, Banaras Hindu University, Varanasi (19 hours lectures/ weekly self-assessments forms, etc are the highlights) – no. of registered participants – 56

SL.	Date	Special Lectures	
1	17 Sept 2022	Special Lectures: Dimensions of Soft Skills in Higher Education – by Kumara Swamy M.S, Bengaluru	
2	27 Nov 2022	Special Lectures: Global Opportunities for Sanskrit Students – by Sri Nitish Rai Parwani, M.Sc, University of Oxford, UK	
3	19 Dec 2022	Special Lectures: Paripraśnaḥ – by Prof. K.E.Devanathan, former Vice-Chancellor of Sri Venkateswara Vedic University, Tirupati and Karnataka Samskrit University, Bengaluru	
4	9 March 2023	Special talk on Vedanta – by Mahamandaleshwar Acharya Swami Pranav Chaitanya Puri Maharaj of the Paramarth Sadhak Sangh	

Sl.	Date	Extension Lectures	
1	13 Sept, 15 Sept and 16 Sept 2022	Extension lectures: Research Methodology - by Dr. Bhaskarnath Bhattacharyya, Professor & Director (I/C), School of Vedic Studies, Rabindra Bharati University, Kolkata – 50 (6 hours lecture)	
2	11 to 22 Oct 2022	Extension lectures: Vivaraṇaprameyasaṃgrahaḥ - by Dr.Pushkar Deopujari, Assistant Professor in Vedanta, Calicut Adarsha Sanskrit Vidyapeetha, Balussery, Kozhikode, Kerala (10 hours lecture )	
3	14 Dec 2022 to 2 Feb 2023	Extension lectures: Research Methodology – by Prof. Arun Ranjan Mishra Professor, Visva-Bharati University, Santiniketan, Birbhum (8 hours lecture)	
4	20 Dec and 23 Dec 2022		
5	9 February to 23 March 2023	Extension lectures: Nyāya and Buddhist Epistemology – by Dr. Ruma Bandyopadhyay Secretary, Sanskrit Sahitya Parishad, Kolkata and Retired Associate Professor, Basanti Devi College, Kolkata, West Bengal (10 hours lecture)	

# DETAILS OF PROJECTS UNDERTAKEN DURING THE YEAR

Investigator (staff)	Name of the project & other details	Funding Agency
Dr. Paromita Roy, Abhedananda Chair	The Relevance and Applicability of Kautilya's Arthashastra for solving current social problems	Under the Indian Knowledge System Samvardhini Project 2022-2023, scheme of the Ministry of Education, Government of India

# ANY OTHER ACTIVITY DURING THE YEAR WORTH MENTIONING

#### Certificate course

A Certificate course (October 2022 – April 2023) named 'Basic Course in Sanskrit and Philosophy' was designed for Sri Nitish Rai Parwani, M.Sc in Criminal Law and Criminology, University of Oxford, UK. Mr.Nitish has come all way from UK, to learn Sanskrit, and study scriptures at RKMVERI, before he could qualify for the research programme in Philosophy, at the Oxford. He is now staying in the Belur main campus of the

deemed University RKMVERI, studing scriptures, and he aspires to become a monk after the completion of his research by joining our most holy Order.

Details of the course are given below:

Sl.	Course Code	Course Name and Details	Credits	Contact hours	Course Facilitator
1	1 SK-101 Kaṭhopaniṣat 3 śāmkarabhāṣyasametā		3	3	Swami Japasiddhanan da
2	SK-511	Gītopaniṣatpāṭhaḥ-1 (gītā 1-2, īśa-kenopaniṣadau) (118+18+35=171)	2	2	Subhadeep Das
3	3 PH-714 Upaniṣads (word-by-word meaning, simple explanation of selected mantras from major Upaniṣads)		4	4	Swami Sarvottamanan da, Shantanu Ayachit
4	SK-166	Laghuvāsudevamananam	2	2	Gourav Sharma
5	5 PH-717 Gītā with Śrīdharaţīkā		3	3	Swami Atmapriyanan da
6	PH-741 Yogasūtra (with special reference to Swamiji's Rājayoga)		4	4	Swami Kaleshananda
7			4	4	Rajkumar Mandal, Subhadeep Das, Provat Kumar Mondal, Sankha-Subhra Gachchhit
8	SK-732	Saṃskṛtabhāṣāpraveśaḥ-2 (Introduction to Sanskrit Language – 2) (Introduction to the style of nyāya and basics of sāhityaśāstra. Basics of Nyāya and Sāhitya)	4	4	Prolay Nandi
9	BN-767	Bengali-1	2	2	Milan Malik
10	BN-768	Bengali-2	2	2	Milan Malik
		Total -	30	480 hrs Approx	

# NAME OF THE FACULTY CENTRE:

# INTEGRATED RURAL DEVELOPMENT AND MANAGEMENT

# LIST OF TEACHING FACULTY MEMBERS

S. No.	Name	Designation	
1.	Dr. Tapash Dasgupta	Dean, IRDM Faculty Centre	
2.	Dr. P.G. Dhar Chakraborty	Chair Professor, Environment and Disaster Management	
3.	Dr. Kajal Sengupta	Professor, Agronomy	
4.	Dr. Subrata Banerjee	Professor, Medical Biotechnology	
5.	Dr. Rukhsana Chowdhury	Professor, Medical Biotechnology	
6.	Dr. Abhijit Chakraborty	Professor, Medical Biotechnology	
7.	Dr. Rupak Goswami	Associate Professor, Agriculture and Rural Development	
8.	Dr. Gautam Chatterjee	Assistant Professor, Agricultural Biotechnology	
9.	Dr. Sanchayeeta Misra	Assistant Professor, Agriculture and Rural Development	
10.	Dr. Ashutosh Sawarkar	Assistant Professor, Genetics and Plant Breeding	
11.	Dr. Kishor Kumar	Assistant Professor, Agricultural Biotechnology	
12.	Dr. Bhubaneswar Pradhan	Assistant Professor, Agriculture Biotechnology	
13.	Dr. Pushkar Malakar	Ramanujan Fellow, Medical Biotechnology	
14.	Dr. Anirban Roy	Assistant Professor, Genetics and Plant Breeding	
15.	Dr. Dipak Manna	Ramlingaswami Fellow, Medical Biotechnology	

16.	Br. Manasdeep	Assistant Professor, Medical Biotechnology	
17.	Mr. Suman Datta	Assistant Professor, Genetics and Plant Breeding	
18.	Dr. Sukumal Sarkar	Assistant Professor, Agronomy	
19.	Dr. Sourav Garai	Assistant Professor, Agronomy	
20.	Dr. Sudipta Tripathi	Assistant Professor, Environment and Disaster Management	
21.	Arnab Basu	Assistant Professor and DBT Ramalingaswam fellow	
22.	Kunal Sikder	Assistant Professor	

# NEW PROGRAMMES / COURSES STARTED IN THE YEAR

- i) M.Sc. in Medical Laborotary Science & Technology
- ii) M.Sc. in Critical Care Science & Technology

# DETAILS OF STUDENTS ADMISSION DURING THE YEAR

S. No.	Programme	No. of Students
1	M.Sc in Agriculture Biotechnology	17
2	M.Sc. in Agriculture and Rural Development	29
3	M.Sc. in Environment and Disaster Management	14
4	M.Sc. (Ag.) in Genetics and Plant Breeding	9
5	M. Sc. (Ag.) in Agronomy	14
6	PG Diploma in Post Harvest and Food Technology	19

7	M.Sc. in Medical Biotechnology	14
8	M.Sc. in Medical Laborotary Science & Technology	6
9	M.Sc. in Critical Care Science & Technology	6
10	Ph.D. in Medical Biotechnology	5
11	Ph.D. in Agriculture Biotechnology	2
12	Ph.D. in Genetics and Plant Breeding	6
	Total	138

# STUDENTS PASSED OUT DETAILS OF THE YEAR

S. No.	Programme	No. of Students	
1	M.Sc. in Agricultural Biotechnology	13	
2	M.Sc. in Agriculture and Rural Development	24	
3	M.Sc. In Environmental Science and Disaster Management	10	
4	M.Sc. ( Ag.) in Genetics and Plant Breeding	11	
5	PG diploma in Post-harvest Technology	20	
6	M.Sc. in Medical Biotechnology	13	
7	PhD in Environmental Science and Disaster Management	01	
8	PhD in Medical Biotechnology	01	
	Total 93		

# STUDENTS PLACEMENT AND PROGRESSION DETAILS OF THE YEAR

### DETAILS OF STUDENTS PURSUING HIGHER EDUCATION:

Name	Institution
Anowor Hossain	RKMVERI-Narendrapur Campus
Payabrata Roy	RKMVERI-Narendrapur Campus
Satyaki Nandan Maity	RKMVERI-Narendrapur Campus
Sayantan Das	RKMVERI-Narendrapur Campus
Sudip Nandi	RKMVERI-Narendrapur Campus
Debojoyti Roy	RKMVERI-Narendrapur Campus
Aiswarya Bhattacharjee	RKMVERI-Narendrapur Campus
Titiryu Chakraborty	RKMVERI-Narendrapur Campus
Subhojit Ghosh	IIT-Gandhinagar
Dipanjoy Roy	NIPER-Kolkata
Samhita Chakraborty	NIPER-Guwahati
Srishti Sinha Ray	University of Petroleum and Energy Studies
Rantim Bhattacharjee	University of Goa
Prakriti Sundar Samanta	IISC Bengaluru

### **DETAILS OF STUDENTS PLACED:**

Sl. No.	Name of the Students	Program Name	Organization Name	Designation
01	Anwesha Pradhan	-	,	Young Professional
02	Kundan Mahato			
03	Sayani Adhikary			
04	Vikas Sarkar			
05	Sayantani Hazra	MSc in Agriculture and Rural Development	-	Previously Young Professional currently Secretariat Assistant
06	Kuntal Chattaraj	Diploma in Post Harvest and Food	and Livestock	
07	Debdas Mondal	00.	Producers Union Ltd., Govt. of West Bengal	Laccistant (Duality)
08	Abhik Kanti Paul	Post-Graduate Diploma in Post Harvest and Food Technology,	Elmac House, NH-6,	Production Supervisor
09	Nayan Kumar Dey	Academic Period – 2021-22	Munshidanga (Bankra), Howrah, West Bengal -	
10	Subrata Mandol		711403	

Sl. No.	Name of the Students	Program Name	Organization Name	Designation
11	Suman Chatterjee			
12	Anirban Dutta Roy	Post-Graduate Diploma in Post Harvest and Food	Thackers Dairy, Products Private limited, Andul	Production Supervisor
13	Deblina Nath	Technology, Academic Period – 2021-22	Road, Howrah-	
14	Santanu Mondal		711302, West Bengal	
15	Saptadeepa Paul			
16	Tiyasha Nandy			
17	Debjani Ghosh	Post-Graduate Diploma in Post Harvest and Food Technology, Academic Period – 2021-22	Country Beans Private Limited, Howrah, West Bengal	Production Supervisor
18	Partha Sarathi Pal		Shashanka Agrtitech, Ranchi, Jharkhand	Production Supervisor
19	Rupsa Sarkar		Tribal Agro. Limited, Salt lake, West Bengal	Production Supervisor
20	Sayanti Bhattarcharjee		Britannia Industries Private Limited, West Bengal	
21	Tanmay Manna		Rama Sugar, Howrah, West	

Sl. No.	Name of the Students	Program Name	Organization Name	Designation	
			Bengal		
22	Mainak Chakraborty	MSc in Agriculture and Rural Development	CINI Tata Trust, Odisha	Field coordinator	
23	Ganesh Mondal	Development			
24	Ganesh Mondal				
25	Rinika Halder	MSc in Agriculture and Rural Development	at CINI Tata Trust but currently	Earlier Field coordinator, currently Development Apprenticeship	
26	Sayan Chakraborty	MSc in Agriculture and Rural Development	Previously posted at Jharkhand State Livelihood promotion Society currently working CINI Tata Trust	Previously Production Manager currently Agriculture Anchor	
27	Samrat Das	MSc in Agriculture and Rural	Rajarhat PRASARI	Agriculture Expert	
28	Anamika Dutta	Development		Development Learner	
29	Suman Gair			Development Learner	
30	Subhojit Banerjee	MSc in Agriculture and Rural Development	at Rajarhat PRASARI currently	Earlier posted at Development Learner; currently State Lead (TISS-Jharkhand Team)	
31	Jibonjit Mahato	MSc in Agriculture and Rural	Sarva Seva Samity Sansthan (4'S), H.Q	CEO, FPO	
32	Aditi Mondal	Development	- Jharkhand		
33	Arnab Sarkar				
34	Adrika De				

Sl. No.	Name of the Students	Program Name	Organization Name	Designation	
35	Sankha Subhra Karfa		Sarva Seva Samity Sansthan, H.Q – Jharkhand currently working at GOAT Trust	CEO, FPO	
36	Basabdutta Pradhan	MSc in Agriculture and Rural Development	College Duniya	Content Writer	
37	Prakash Manna		Sarva Seva Samity Sansthan, H.Q - Jharkhand	CEO, FPO	
38	Pratyush Pratihar	MSc (Ag.) Genetics & Plant Breeding,	PRADAN	Agronomist	
39	Rakesh Mondal		Malkani Farmers Producer Company Ltd.	Chief Executive Officer, FPO	
41	Alakesh Pal	MSc in Agricultural	TISS-Gurukul Hub, Uluberia	Assistant Prfessor	
42	Rajdeep Sarkar	Biotechnology,			
43	Arka Kumar	MSc in Environment and	TISS-Mumbai	Field Officer	
44	Diksha Kar	Disaster Management,	Rajarhat PRASARI	Development Learner	
45	Asmita Basu		IISWBM, Kolkata	Project Staff	
46	Dipsikha Seth	MSc in Medical Biotechnology	Biotech Pharm	Scientific writer and data analytics	
47	Khursid Alam		Biotech pharm, New Delhi		

# DETAILS RELATING TO PH. D. SCHOLARS DURING THE YEAR

S. No.	Name of current Ph. D. scholars	Name of Supervisor
1	Mr. Shyam Chandra Ghosh, GPB	Prof. Tapash Dasgupta
2	Mr. Nilahit Payra ,GPB	Prof. Tapash Dasgupa
3	Ms. Samita Saha, GPB	Dr. Ashutosh Sawarkar
4	Mr. Shuvam Datta,GPB	Dr. Ashutosh Sawarkar
5	Ms. Adrija Banerjee, AgBT	Dr. Kishor Kumar
6	Mr. Shibasis Mukherjee, AgBT	Dr. Gautam Chatterjee
7	Mr. Argha Chakraborty, AgBT	Dr. Gautam Chatterjee
8	Ms. Sangita Patra, ARD	Dr. Rupak Goswami
9	Mr. Kalyan Roy, ARD	Dr. Rupak Goswami
10	Mr. Kousik Mallick, ARD	Dr. Sanchayeeta Misra
11	Mr. Kunal Singh, ARD	Dr. Rupak Goswami
12	Ms. Poulami Sen, ARD	Dr. Sanchayeeta Misra
13	Ms. Ria Bhattacharya, ARD	Dr. Sanchayeeta Misra
14	Mr. Akash Kumar Haldar	Dr. Kunal Sikdar
15	Mr. Soumyajyoti Ghoshal	Dr. Arkadeb Dutta
16	Ms. Sujata Saha	Dr. Arnab Basu
17	Ms. Debdatta Talukdar	Dr. Kunal Sikdar
18	Anowor Hossain	Prof. T. Dasgupta
19	Payabrata Roy	Prof. T. Dasgupta
20	Satyaki Nandan Maity	Prof. T. Dasgupta
21	Sayantan Das	Dr. Ashutosh Sawarkar

22	Sudip Nandi	Prof. T. Dasgupta
23	Debojoyti Roy	Prof. T. Dasgupta
24	Debosrita Roy Chowdhuri	Dr. Arnab Basu
25	Debopriya Chowdhuri	Dr. Puskar Malakar
26	Didhiti Singh	Dr. Puskar Malakar
27	Shreyasee Hazra	Dr. Dipak Manna
28	Suman Kalyan Dinda	Dr. Dipak Manna

# DETAILS OF ACADEMIC PUBLICATIONS DURING THE YEAR

Details of staff attended and presented paper in conferences, seminars, etc.

S. No.	Name	Date	Title of the paper presented
1	Dr. Rupak Goswami	April 25- May 02, 2022	"Advanced Analytical Approaches to Appraise Vulnerability and Adaptation Strategies to Climate Change in Agricultural Sector" ICAR-NDRI, Karnal during
2	Dr. Pushkar Malakar	June 2022	'New therapeutic hepatic target for treatment of diabetes and hepatocellu- lar carcinoma.' at JIVAN seminar room
3	Dr. Goutam Chatterjee	28-30 December	" Status of AINOP trials at RKMVERI" All India workshop on organic farming (ICAR) held at RKMVERI
4	Dr P G Dhar Chakrabarti	21 February 2023	Keynote Address at the National Con- ference on Disaster Research and Knowledge Management organized by the Central University Chennai
5	Dr Kishore Kumar and Dr. Anirban Roy	8 - 9 February 2023	Participated in 2-days brainstorming session cum workshop entitled 'Sensiti- zation on Recent Advances in Plant Genome Editing and Regulatory Guide- lines' organized by ICAR- Central Re- search Institute for Jute and Allied Fi- bres, Kolkata.
6	Dr Bhubaneswar Pradhan	09.09.2022	Colloquium on Plant-Microbe interac- tion and MicroRNAs held at RKMVERI

7	Dr. Rupak Goswami	21.10.2022	Colloquium on Agricultural Systems Re- search at IRDM: Accomplishments and Future Plans held at RKMVERI
8	Dr. Anirban Roy	04.11.2022	Colloquim on Bridging the Gap of Pro- duction and Demand: Breeding strate- gies in Legume crops held at RKMVERI
9	Dr. Kishor Kumar	18.11.2022	Colloquim on Harnessing the natural and induced genetic variations for crop improvement held at RKMVERI
10	Dr. Sukamal Sarkar	23.12.2022	Colloquim n Crop Modelling and Climate Change : A way forward held at RK- MVERI
11	Dr. Pushkar Malakar	13.01.2023	Colloquim on Polyploidy involves the activation of mTORC1 and induces toler- ance to glucose starvation held at RK- MVERI
12	Prof. P G Dhar Chakrabarti	13.03.2023	Measuring Disaster Risks and Resiliance in India held at RKMVERI
13	Mr. Akash Kumar Haldar, PhD scholar of Dr. Kunal Sikder	ACBICON, New Delhi 23-26 November, 2022	Understanding immunogenetics of auto- immune Graves' disease (GD) in patients of West Bengal, cross-sectional case- control
14	Mr. Akash Kumar Haldar, PhD scholar of Dr. Kunal Sikder	ESICON, Jaipur 22-24 December 2022	Apal and BsmI polymorphisms of Vitamin D receptor and activation of ER stress pathways in circulating PBMCs underlie pathogenesis of Graves' disease (GD), a cross-sectional case-control study
15	Mr. Akash Kumar Haldar, PhD scholar of Dr. Kunal Sikder	SBC symposium Kolkata, April 2022	Understanding the immunogenetics of auto-immune thyroid disorders (AITDs) among the patients of West Bengal, cross-sectional case-control study.
16	Ms Debdatta Talukdar, PhD scholar of Dr. Kunal Sikder	ACBICON, New Delhi 23-26 November, 2022	Exploring Dilated Cardiomyopathy (DCM) of Unknown Origin for Inflammatory Biomarkers and Cellular Stress Pathway.
17	Ms Debdatta Talukdar, PhD scholar of Dr. Kunal Sikder	SBC symposium Kolkata, April 2022	Inflammation-related biomarkers are associated with severity and progression of Idiopathic Dilated Cardiomyopathy (IDCM): A brief report on patients of West Bengal.

# Details of publications in journals and books

Authors	Title	Journal	Publi- cation year	ISSN
<b>Pradhan B</b> ,Chand S,Chand S,Rout PR,Naik SK	Emerging groundwater contaminants: A comprehensive review on their health hazards and remediation technologies	Groundwater for Sustainable Development	2023	2352- 801X
Sanyal R, <b>Pradhan</b> <b>B</b> ,Jawed DM,Tribhuvan KU,Dahuja A,Kumar M,Kumar N,Mishra GP,Ram C,Mahatma MK,Singh BK,Mangrauthia SK,Singh AK,Sharma TR,Pattanayak A,Bishi SK	Spatio-temporal expression pattern of Raffinose Synthase genes determine the levels of Raffinose Family Oligosaccharides in peanut (Arachis hypogaea L.) seed	Scientific Reports	2023	2045- 2322
Ghosh A,Nanda MK,Sarkar D, <b>Sarkar</b> <b>S</b> ,Brahmachari K,Mainuddin M	Assessing the cropping intensity dynamics of the Gosaba CD block of Indian Sundarbans using satellite- based remote sensing	Environment Development and sustainability	2023	1573- 2975
Moulick D,Bhutia KL, <b>Sarkar S</b> ,Roy A,Mishra UN,Pramanick B,Maitra S,Shankar T,Hazra S,Skalicky M,Brestic M,Barek V,Hossain A	The intertwining of Zn- finger motifs and abiotic stress tolerance in plants: Current status and future prospects	Frontiers in Plant Science	2023	1664- 462X
<b>Sarkar S</b> ,Ray K, <b>Garai</b> <b>S</b> ,Banerjee H,Haldar K,Nayak J	Modelling nitrogen management in hybrid rice for coastal ecosystem of West Bengal, India	PeerJ	2023	2167- 8359

# I. Publications in research Journal

Authors	Title	Journal	Publi- cation year	ISSN
Ray K,Mondal S,Kabir MJ, <b>Sarkar S</b> ,Roy K,Brahmachari K,Ghosh A,Nanda MK,Misra S,G <b>horui S,</b> Goswami R,Mainuddin M	Assessment of Economic Sustainability of Cropping Systems in the Salt– Affected Coastal Zone of West Bengal, India	Sustainability	2023	2071- 1050
Bera M, Nag PK	Bioclimatic Design of Low- Cost Rural Dwellings	Frontiers in Built Environment	2022	2297- 3362
<b>Goswami R</b> ,Ray K,Ghosh S,Dutta S,Mandal S,Nayak J,Chakraborty S,Banerjee H	Multiple pathways of legume-based systems towards environmental, social, and economic sustainability in smallholder systems	Advances in Legumes for Sustainable Intensificatio n	2022	
Bandyopadhyay S, <b>Dasgupta</b> <b>T,</b> Bhattacharjee M,Payra N,Saha S	Genetic diversity assessment of rice using SSR markers	Journal of Crop and Weed	2022	0974- 6315
Bandyopadhyay S, <b>Dasgupta T,</b> Saha S,Payra N	Screening for Bacterial Leaf Blight Resistant Genes in Some Rice Genotypes Using SSR Markers	Current Journal of Applied Science and Technology	2022	2457- 1024
Mandal K,Ghosh A, <b>Dasgupta</b> <b>T,</b> Kundagrami S	Genetic Variability and Trait Association in Indian Mustard [Brassica juncea (L.) Czern and Coss]	Agricultural Science Digest	2022	0976- 0547
Ghosh A,Dana SS,Sharma A,Sahu PK,Basu D, <b>Goswami R</b>	Perception of fishers about livelihood developmental interventions bvarious GOs and NGOs in Indian Sundarbans: A comparative study	Indian Journal of Fisheries	2022	0970- 6011
Chand S, <b>Pradhan</b> <b>B</b> ,Chand S,Naik SK	Solid waste and landfill leachate	Contaminants of Emerging Concerns and Reigning	2022	

Authors	Authors Title		Publi- cation year	ISSN
		Removal Technologies		
Tribhuvan KU,Singh DK, <b>Pradhan B</b> ,Bishi SK,Pandey A,Kumar S,Bhati J,Mishra DC,Das A,Sharma TR,Pattanayak A,Singh BK	Sequencing and de novo transcriptome assembly for discovering regulators of gene expression in Jack (Artocarpus heterophyllus)	Genomics	2022	1089- 8646
Kaur P,Neelam K,Sarao PS,Babbar A, <b>Kumar</b> <b>K</b> ,Vikal Y,Khanna R,Kaur R,Mangat GS,Singh K	Molecular mapping and transfer of a novel brown planthopper resistance gene bph42 from Oryza rufipogon (Griff.) To cultivated rice (Oryza sativa L.)	Molecular Biology Reports	2022	1573- 4978
Kumar K,Mandal SN, <b>Pradhan B</b> ,Kaur P,Kaur K,Neelam K	From Evolution to Revolution: Accelerating Crop Domestication through Genome Editing	Plant & cell physiology	2022	1471- 9053
Akhtar R,Iqbal A,Jana M, <b>Dasgupta T</b>	Agro-morphological Characterization and Genetic Diversity in a Mini Core Collection of Aromatic Rice (Oryza sativa L.)	Current Journal of Applied Science and Technology	2022	2457- 1024
Mandal K , Subba V., <b>Dasgupta T.,</b> Kundagrami S.	Combining Ability and Heterosis for Seed Yield and Yield Components in Indian Mustard [Brassica juncea (L.) Czern and Coss]	Agricultural Reviews	2022	0976- 0741
Akhtar R,Iqbal A, <b>Dasgupta T</b>	Genetic diversity analysis of aromatic rice (Oryza sativa L.) germplasm based on agro-morphological characterization	Oryza-An International Journal on Rice	2022	0474- 7615
Aggarwal SK,Malik P,Neelam K, <b>Kumar</b> <b>K</b> ,Kaur R,Lore JS,Singh K	Genome-wide association mapping for identification of sheath blight resistance	Euphytica	2022	1573- 5060

Authors	Title		Publi- cation year	ISSN
	loci from wild rice Oryza rufipogon			
Neelam K, <b>Kumar K</b> ,Kaur A,Kishore A,Kaur P,Babbar A,Kaur G,Kamboj I,Lore JS,Vikal Y,Mangat GS,Kaur R,Khanna R,Singh K	High-resolution mapping of the quantitative trait locus (QTLs) conferring resistance to false smut disease in rice	Journal of Applied Genetics	2022	2190- 3883
Ghosh SC,Manika N,Gupta S,Singh M, <b>Dasgupta T,</b> Khanuja SP	Future Prospective: Traditional Rice (Oryza Sativa L.) of Eastern India	International Journal of Advanced Research	2022	2320- 5407
<b>Kumar K</b> ,Mandal SN,Neelam K,de los Reyes BG	MicroRNA-mediated host defense mechanisms against pathogens and herbivores in rice: balancing gains from genetic resistance with trade-offs to productivity potential	BMC Plant Biology	2022	1471- 2229
Mukherjee S,Sain S,Ali MN, <b>Goswami</b> <b>R</b> ,Chakraborty A, <b>Ray</b> <b>K</b> ,Bhattacharjee R, <b>Pradhan B</b> ,Ravisankar N, <b>Chatterjee G</b>	Microbiological properties of Beejamrit, an ancient Indian traditional knowledge, uncover a dynamic plant beneficial microbial network	World Journal of Microbiology and Biotechnology	2022	1573- 0972
<b>Pradhan B</b> ,Panda D,Bishi SK,Chakraborty K,Muthusamy SK,Lenka SK	Progress and prospects of C4 trait engineering in plants	Plant Biology	2022	1438- 8677
Biswas B,Chakraborty D,Timsina J,Bhowmick UR,Dhara PK,Ghosh (Lkn) DK,Sarkar A,Mondal M,Adhikary S,Kanthal S,Patra K, <b>Sarkar S</b> ,Parsad R,Ray BR	Agroforestry offers multiple ecosystem services in degraded lateritic soils	Journal of Cleaner Production	2022	0959- 6526

Authors	Title	Journal	Publi- cation year	ISSN
Gope A,Chakraborty G,Ghosh SM,Sau S,Mondal K,Biswas A, <b>Sarkar S</b> ,Sarkar PK,Roy D	Toxicity and Sublethal Effects of Fluxametamide on the Key Biological Parameters and Life History Traits of Diamondback Moth Plutella xylostella (L.)	Agronomy	2022	2073- 4395
Mahalanobish D,Dutta S,Roy D,Biswas A, <b>Sarkar</b> <b>S</b> ,Mondal D,Gaber A,Hossain A,Sarkar PK	Field-evolved resistance and mechanisms in Bemisia tabaci Asia I to a novel pyropene insecticide, afidopyropen, in India	Crop Protection	2022	0261- 2194
Banerjee H <b>,Sarkar</b> <b>S</b> ,Dutta SK, <b>Garai S,</b> Ray K,Zingore S,Goswami R,Majumdar K	Nitrogen management trade-offs in hybrid rice for agronomy, carbon, and energy efficiency	Nutrient Cycling in Agroecosyste ms	2022	1385- 1314
Ghosh SC, <b>Dasgupta T</b>	Rice ( Oryza sativa L .) Varietal Diversity , Uttar Dinajpur ,	International Journal Of Innovative Research In Technology	2022	2349- 6002
Ghosh, S. C. and Dasgupta, T	Rice cultivation and need of cold tolerance breeding in East and North East India.	Agriallis	2022	
Ghosh, S. C., <b>Sawarkar, A</b> . and <b>Dasgupta, T</b> .	A Review on Future Prospective of Cold Tolerance Rice (Oryza sativa L.) Breeding in East and North Eastern India	Int. J. Adv. Res. Biol. Sci.	2022	2348- 8069
Ghosh SC and <b>Dasgupta</b> <b>T</b>	Medicinal health benefits of Traditional Rice	SATSA Mukhopatra – Annual Tech- nical Issue 27	2023	0971- 975X
Nath, A., Nath, D., Barua, A., Majumder, K., <b>Dasgupta, T.,</b> &	Phenotypic and marker assisted screening of rice genotypes inoculated with	Journal of Plant Pathology,	2022	11254 653

Authors	Title	Journal	Publi- cation year	ISSN
Kundagrami, S	three widely available pathogenic strains of Xanthomonas oryzae pv. oryzae	Berlin, Springer		
Ghosh, S. C and <b>Dasgupta, T</b> .	Genetic Diversity Analysis with Morphological Traits on Rice ( <i>Oryza sativa</i> L.) for Cold Tolerance Breeding	International Journal of Current Microbiology and applied science.	2022	2319- 7692
Roy D,Biswas A, <b>Sarkar</b> <b>S</b> ,Chakraborty G,Gaber A,Kobeasy MI,Hossain A	Evaluation and characterization of indigenous rice ( Oryza sativa L.) landraces resistant to brown planthopper Nilaparvata lugens (St å l.) biotype 4	PeerJ	2022	2167- 8359
Somnath Ghosal and Subrata Banerjee	Investigating the potential molecular players and therapeutic drug molecules in carfilzomib resistant multiple myeloma by comprehensive bioinformatics analysis	Leukemia & Lymphoma		ISSN 1042- 8194
Somnath Ghosal and Subrata Banerjee	In silico bioinformatics analysis for identification of differentially expressed genes and therapeutic drug molecules in Glucocorticoid-resistant Multiple myeloma	Medical Oncology		ISSN: 13570 560
Rajendra P Giri, Mrinmay K Mukhopadhyay, Milan K Sanyal, Dipayan Bose, <b>Abhijit Chakrabarti</b> , Peiyu Quan, Wei Bu, Binhua Lin	Structural Flexibility of Proteins Dramatically Alters Membrane Stability—A Novel Aspect of Lipid-Protein Interaction	The Journal of Physical Chemistry Letters		ISSN: 1948- 7185

Authors	Title	Journal	Publi- cation year	ISSN
Jasmine Saunders, <b>Kunal</b> <b>Sikder</b> , Elizabeth Phillips, Anurag Ishwar, David Mothy, Kenneth B Margulies, Jason C Choi	Med25 Limits Master Regulators That Govern Adipogenesis	International Journal of Molecular Sciences		ISSN: 1422- 0067
Rinini Dastidar and <b>Kunal Sikder</b>	Diagnostic reliability of serum active B12 (holo- transcobalamin) in true evaluation of vitamin B12 deficiency: Relevance in current perspective	BMC Research notes		ISSN:1 75605 00
Rinini Dastidar, <b>Kunal</b> <b>Sikder</b> and Barnali Das	A Comparative Study on the Efficacy Between Cystatin C and Creatinine- Based Equations for Early Detection of Renal Damage in Patients of Eastern India	Indian Journal of Clinical Biochemistry		ISSN: 0974- 0422
Barman S, <b>Chakraborty</b> <b>A</b> , Saha S, Sikder K, Roy S M, Modi B, Bahadur S, Khan A H, Manna D, Bag P, Sarkar A K, Bhattacharya R, <b>Basu A</b> , and Maity A R	Efficient Synergistic Antibacterial Activity of α- MSH Using Chitosan-Based Versatile Nanoconjugates,	ACS Omega		ISSN:2 470- 1343
Roy S M, Garg V, Sivaraman S P, Barman S, Ghosh C, Bag P, Mohanasundaram P, Maji P S, <b>Basu A</b> , Dirisala A, Ghosh S K, Maity A R	Overcoming the barriers of nuclear- targeted drug delivery using nanomedicine-based strategies for enhanced anticancer therapy,	Journal of drug delivery science and Technology		ISSN:1 773- 2247
Modi B, Bahadur S, Bhowmik P, Chakraborti S, Dirisala A, Khan A H, Ghosh A, Mondal S, Maity A R, <b>Basu A</b>	Curcumin and Colistin are Synergistic in Inhibiting the Growth and Biofilm Formation of Pseudomonas aeruginosa Isolated from Environmental Sample,	Infectious Diseases Diagnosis & Treatment,		ISSN:2 577- 1515
Rekha Kumari, Yasha	Emerging frontiers of	Microbiologic		ISSN:

Authors	Title	Journal	Publi- cation year	ISSN
Yadav, Richa Misra, Utpal Das, Upasana Das Adhikari, <b>Pushkar</b> <b>Malakar</b> , Gyanendra P Dubey	antibiotics use and their impacts on the human gut microbiome	al Research		0944- 5013
Mercilena Benjamin, <b>Pushkar Malakar</b> , Rohit Anthony Sinha, Mohd Wasim Nasser, Surinder K Batra, Jawed Akhtar Siddiqui, Bandana Chakravarti	Molecular signaling network and therapeutic developments in breast cancer brain metastasis	Advances in Cancer Biology - Metastasis		ISSN 2667- 3940.

# II. Book Chapters

- **Misra, S., & Goswami, R.** (2022). Social Network Analysis to Understand adaptive mechanisms followed by the farming community. Analytical Approaches for Vulnerability and Adaptation to Climate Change in Agriculture, In Maiti et al. (Eds). Analytical approaches for vulnerability and Adaptation to Climate Change in Agriculture (pp.128-145), Dairy Extension Division, National Dairy Research Institute, Karnal
- Venugopalan, V.K. and **Sengupta, K**. (2023) Business Opportunities in Integrated Farming System. In: Entrepreneurship in Integrated Farming System (Kunar, A. et al. Eds) Daya Publishing House, New Delhi. pp. 17-30
- Sengupta, K., Chatterjee, P. and Kumar, A. (2023) Integrated Farming System: An Emerging Approach for Sustainable Development for the Farmers. In: Entrepreneurship in Integrated Farming System (Kunar, A. et al. Eds.) Daya Publishing House, New Delhi. pp. 251-284.
- Misra, S., & Goswami, R. (2022). Social Network Analysis to Understand adaptive mechanisms followed by the farming community. Analytical Approaches for Vulnerability and Adaptation to Climate Change in Agriculture, In Maiti et al. (Eds). Analytical approaches for vulnerability and Adaptation to Climate Change in Agriculture (pp.128-145), Dairy Extension Division, National Dairy Research Institute, Karnal.
- Sen, P., **Misra, S**., Das, S., Paul, P., Saha, S., **Goswami, R**. (2022). Women's Empowerment in Agriculture: A Brief Note for the Beginners. Roy, S. et al. (2022).

Building Self-Reliant India Through Techno-Rich Extension System in Agriculture and Allied Sectors. Om Pub., New Delhi

# DETAILS OF SPECIAL LECTURES / WORKSHOPS / SEMINARS / CONFERENCES / SYMPOSIUMS HOSTED / ORGANISED

- Annual Group Meeting of All India Network Program on Organic farming: The 17<sup>th</sup> AINPOF meeting of ICAR was held at RKMVERI, Narendrapur Campus for the first time. The scientists of 20 different centres belonging to different states participated in the group meeting and presented their findings from December 28 to December 30, 2022, at RKMVERI, Narendrapur campus. Distinguished dignitaries, including Revered Swami Atmapriyananda, the Pro-Chancellor of RKMVERI, Prof. B. Singha Mahapatra, Vice Chancellor of Bidhan Chandra Krishi Viswavidyalaya, Dr. N. Ravishankar, National PI of the AINPOF-ICAR. Dr. A. S. Panwar, Director of the ICAR-Indian Institute of Farming Systems Research, and many other ICAR scientists were present in the inauguration ceremony. All the faculty members, students and scholars of RKMVERI, Narendrapur campus actively participated in the meeting.
- Colloquium lecture by Dr. Partha Chakrabarti, CSIR-Indian Institute of Chemical Biology, Kolkata. Topic: Molecular basis of obesity and diabetes on 07-04-2022.
- Colloquium lecture by Dr. Ajitesh Roy of RKM Seva Pratishthan. Topic: Reversal of pathological features of Graves' orbitopathy by activation of FOXO on 21-04-2022
- Special lecture by Dr. Poulomi Biswas of IIT Kharagpur. Topic: Vanishing the problem of medical diagnosis with the magic wand of engineering on 26-05-2022
- Special lecture by Prof. Anupam Chatterjee of North Eastern Hill University. Topic: The systemic adverse effects of Areca-nut: Evaluation of Carcinogenic Risks and Its Early Detection on 01-06-2022
- Colloquium lecture by Dr. Soumyananda Chakraborti of National Institute of Malaria Research, New Delhi. Protein cages and its application in Biotechnology and therapeutic on 09-06-2022
- Special lecture by Dr. Dipak Manna, DBT Ramalingaswami fellow.. Topic: Identification of anti-amoebic compounds and a novel transcription factor that regulates Entamoeba stage conversion on 30-06-2922
- Special lecture by Dr. Pushkar Malakar, Ramanujan Fellow. Topic: New therapeutic hepatic target for treatment of diabetes and hepatic cellular carcinoma on 16-07-2022
- Colloquium talk by Prof. Debashis Mukhopadhyay of Saha Institute of Nuclear Physics, Kolkata. Topic: The 'fuzzy' links in the brain: understanding how lncRNA functionally regulate neurodegeneration on 16-09-2022
- Colloquium talk By Prof. Sanjoy Ghosh of University of Calcutta. Topic: Journey of Microbiology: Evolution to its modern age applications on 24-09-2022

- Colloquium talk by Dr. Abhik Saha of Presidency University, Kolkata. Topic: Antiviral therapies that antagonize associated cancer development on 03-11-2022
- Prof. Rupak Bhadra of CSIR-Indian Institute of Chemical Biology, Kolkata. Topic:Extracellular bacterial pathogen *Vibrio cholera* environmental signals and virulence regulation on 17-12-2022

## DETAILS OF PROJECTS UNDERTAKEN DURING THE YEAR

- 1. All India Network Project on Organic Farming. (Ref. No. F. No. 1-42/NPOF/201). Indian Council of Agricultural Research (ICAR), Govt. of India. Long-term Project. (**Dr. Gautam Chatterjee**, PI)
- 2. Ioinizing radiation induced mutagenesis and rapid identification of mutant genes for the improvement of traditional aromatic rice. UGC-DAE CSR, Govt Of India. 2022-2025 ( **Dr. Kishor Kumar**, PI).
- 3. All India co-ordinated Maize Improvement Project (ICAR) Long term project (**Prof. Tapash Dasgupta**,PI and **Co: PI : Dr. Rambabu Raman and Dr. A Sawarkar**)
- 4. Developing Multi-stress tolerant breeding materials in rice and mustard through advanced breeding method" has been sanctioned by Department of Agriculture, Government of West Bengal [Rs 85.00 lakh; the first installment of Rs. 45 lakh and Rs 21 lakh for the second year have been released] (**Prof.Tapash Dasgupta, PI**).
- 5. Establishment of "Tissue culture laboratory and banana saplings commercialization" initially National Horticultural Mission, Government of India, sponsored the project and presently under commercialization phase. (Rs. 94.00 lakh, PI: **Prof.-Tapash Dasgupta**).
- 6. A project entitled "Assessing the Contribution of Capacity Building Programs of the KVKs to Increase Livestock Production and Farmers' Income in Eastern India" was funded by ICAR (**Dr. Rupak Goswami,PI and Dr. Sanchayeeta Misra, Co PI**)
- A project entitled was funded 'Using Women Farmers' Social Networks To Improve the delivery of agricultural information through information communication technology in selected rural areas of West Bengal sponsored by Indian Council of Social Science Research. (Period: 2022-2024; Share: INR.700000) [ S. Misra, S (PI) and R. Goswami, (Co-PI) ]
- 'Modelling the Livelihood Impact of Technology Transfer Projects in Natural Resources Management using Fuzzy Logic Cognitive Mapping' was funded by Indian Council of Social Science Research. [Period: 2022-2024; Share: INR.700000] Dr. R.-Goswami, (PI) and Dr. Sanchayeeta Misra (Co-PI)

- 9. Research Consultancy Project on Assessing the Natural Farming in Selected Areas of Jharkhand State. Supported by Welthungerhilfe. [Period: 2022; Share: INR.300000] Dr. R. **Goswami, Pl.**
- 10. "Mitigating risk and scaling-out profitable cropping system intensification practices in the salt-affected coastal zones of the Ganges Delta" Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia. Started June 2022: INR 17,46,250 (Approx) (PI: Dr. Rupak Goswami and Co-PI: Dr. Sukumal Sarkar)
- 11. "SciTech4Climate Indo-Pacific Climate-Smart Agriculture Initiative: Project B: Ganges coastal zone climate-smart agricultural production" Department of Foreign Affairs and Trade (DFAT) - CSIRO, Australia. Started June 2022-: AUSD.42000; INR 23,10,000] (PI : Dr. Rupak Goswami and Co-PI : Dr. S. Misra, Dr. S. Sarkar and Dr. K. Dey).
- Characterization of mechanistic function of the encystation-specific transcription factor ERM-BP in Entamoeba, and identifying drugs against Entamoeba cyst. DBT-Ramanujan fellowship. 5 years duration (2020-present). Total cost-113 Lakhs (PI: Dr. Dipak Manna)
- 13. Role of Long Non-Coding RNAs in physiological and pathological conditions, DST-Ramanujan fellowship. 5 years (2022-present). Total cost 116 lakhs. (**PI : Dr. Pushkar Malakar**)

## ANY OTHER ACTIVITY DURING THE YEAR WORTH MENTIONING

- **Dr. Gautam Chatterjee** Organized an awareness programme on organic farming in collaboration with Sashya Shyamala Krishi Vikas Kendra, RKMVERI via video conferencing mode (virtual), **12 August, 2022**.
- Dr. Bhubaneswar Pradhan and Dr. Sanchayeeta Misra Participated in Face to Face Master Trainers Training Programme on Capacity Building of Faculty as Master Trainers for Community Based Participatory Research (CBPR) responsibility under Unaat Bharat Abhiyan (UBA 2.0) at Central University of Odisha, Koraput from 7-9 June, 2022.
- **Prof. Tapash Dasgupta** attended as a member of the Board of study at School of Agriculture, JIS university held on 16 November,2022
- **Prof. Tapash Dasgupta a**ttended a meeting as a member of Board of study at Medinipore city college on 21<sup>st</sup> November,2022.
- Prof. Kajal Sengupta and Dr. Sukamal Sarkar delivered an invited talk on 'Winter Season Pulse Cultivation' in the Krishidarsahn Live Programme of Dooradarshan Kolkata on 20<sup>th</sup>December 2022

- **Dr. Sukamal Sarkar** delivered an invited lecture at B. R. Ambedkar Institute of Panchayats and Rural Development, Govt. of West Bengal on **13<sup>th</sup>January 2023** to community trainers and progressive farmers of Purba Bardhaman and Hooghly.
- Prof. Kajal Sengupta and Dr. Sourav Garai delivered an invited talk on Jute Cultivation in the Krishidarsahn Live Programme of Dooradarshan Kolkata on 15<sup>th</sup> March 2023.
- **Prof. Kajal Sengupta** delivered an invited lecture at B. R. Ambedkar Institute of Panchayats and Rural Development, Govt. of West Bengal on **17th November 2022** to community trainers and progressive farmers of Jhargram, Paschim Medinipur and Purulia
- **Student exchange** : Eight (8) students among sixteen (16) in the 3<sup>rd</sup> semester are doing 4<sup>th</sup> semester project dissertation in various National level well-renowned research labs in Kolkata. Four (4) of these eight (8) students are working in NICED, Kolkata on clinical Microbiology, one (1) is working in Indian Association for the Cultivation of Science (IACS) on Bacterial Nanopore technology, two (2) are in Indian Institute of Science Education and Research (IISER) Kolkata working on clinical Immunology and one (1) in Saha Institute of Nuclear Physics (SINP) on Biomedical Engineering.

### Faculty Exchange:

- Prof. Rinini Dastidar of Ramakrishna Mission Seva Pratishthan (RKMSP) hospital took 12 classes on clinical Biochemistry for MSc Medical Biotechnology 3<sup>rd</sup> semester
- Dr. Poulami Mukherjee of Ramakrishna Mission Seva Pratishthan (RKMSP) hospital took 6 classes on clinical Microbiology for MSc Medical Biotechnology 3<sup>rd</sup> semester
- Dr. Prabudhha Mukherjee of Ramakrishna Mission Seva Pratishthan (RKMSP) hospital took 2 classes on clinical Microbiology for MSc Medical Biotechnology 3<sup>rd</sup> semester
- Dr. Ajitesh Roy of Ramakrishna Mission Seva Pratishthan (RKMSP) hospital took 6 classes on clinical Biochemistry for MSc Medical Biotechnology 3<sup>rd</sup> semester
- Prof. (Dr.) Soumitra Kumar of Ramakrishna Mission Seva Pratishthan (RKMSP) hospital took a special class on Cardiology for MSc Medical Biotechnology 3<sup>rd</sup> semester
- Dr. Soumen Manna of SINP taught metabolomics section of MSc Medical Biotechnology 3<sup>rd</sup> semester
- Prof. Debasis Bhattacharyya of Indian Institute of Chemical Sciences (IICB) taught Biochemistry for the 1<sup>st</sup> semester Medical Biotechnology students, 36 hours theoretical and 45 hours of practical classes

# ANY OTHER INFORMATION

- A MoU has been signed between IRDM, RKMVERI and Tea Research Institute, Tocklai, Assam for research collaboration and students' M.Sc. dissertation and Ph.D. program
- Research collaboration has commenced between Indian Institute of Agricultural Biotechnology (ICAR) Ranchi and IRDM, RKMVERI. A Mou has been signed by the two institutes in this respect.
- **Dr. Dharmendra Pradhan**, the **Hon'ble Union Education Minister, Govt. of India** visited IRDM faculty centre, Narendrapur on 8<sup>th</sup> August, 2022.
- RKMVERI has been recognized and awarded as the 'Best Centre of the All India Network Programme on Organic Farming (AINP-OF)' by the ICAR-Indian Institute of Farming Systems Research (ICAR-IIFSR) in the All India Net work program of Organic Farming (AINOF-ICAR) held at RKMVERI during
- The CSIRO Projects and the visit of CSIRO-delegates: The Narendrapur Campus of RKMVERI has been implementing two research projects supported by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) since June 2022. An international team comprising scientists from Australia, Bangladesh and Fiji visited Narendrapur campus from 24-25 February 2023.
- Research Advisory meetings, Half yearly JRF/SRF scholar presentations and dates

1. Half yearly PhD progress report presentations cum PhD registration presentations of Mr. Akash Kr. Haldar and Mrs. Debdatta Talukdar held on 16 December 2022. Both of the scholars have registered to the PhD program after successfully defending their projects in front of the expert committee.

2. Half yearly PhD progress report presentations of Ms. Asmita Chakraborty and Ms. Sujata Saha held on 30 January 2023.

### New Projects

1. Role of Cytoplasmic and Nuclear long noncoding RNAs (Bioinformatics Analysis)

2. Region of MALAT1 long Noncoding RNA responsible for executing its functional property (Bioinformatics Analysis)

3. Implications of Glutamine in the regulation of cell size.

4. Identification of medicinal plants and their active compounds as drugs that can regulate the expression of altered splicing factors or INSR splicing in obesity and diabetes.

5. Demonstrating MetAP2 pathway in protozoan parasite *Entamoeba histolytica* and in deadly free-living amoebae as a potential drug target

6. Development of rapid, low-cost diagnostic kit for the detection of *Entamoeba* 

#### Initiatives to promote research / employability in the MSc curriculum

- 1. PhD scholars and PG students are exposed to fortnightly colloquia in various subjects of Medical Biotechnology. Research scientists and eminent professors are invited to make presentations in which the PhD scholars and PG students actively participate.
- 2. PG students have their most of the 4<sup>th</sup> semester curriculum as research work. Students regularly participate in journal club and present their research work during this period.
- 3. Also they have hands on practical papers on Microbiology, Immunology, Biochemistry, Molecular Biology, Cell and tissue culture throughout their curriculum, which make them interested and enable them towards research.

# NAME OF THE FACULTY CENTRE: AGRICULTURE RURAL AND TRIBAL DEVELOPMENT, RANCHI CAMPUS

# LIST OF TEACHING FACULTY MEMBERS

S. No.	Name	Designation	
1	Dr. Ardith Sankar	Assistant Professor	
2	Dr. Arunava Sengupta	Assistant Professor	
3	Dr. Avijit Kumar Dutta	Associate Professor	
4	Dr. Deep Narayan Mukherjee	Assistant Professor	
5	Dr. Dipankar Chatterjee	Associate Professor	
6	Dr. Pankaj Mishra	Assistant Professor	
7	Dr. Pooja Yadav	Assistant Professor	
8	Dr. Raghava Thakur	Professor	
9	Dr. Saikat Biswas	Assistant Professor	
10	Dr. Siddhartha Mukherjee	Assistant Professor	
11	Dr. Soumik Dey	Assistant Professor	
12	Dr. Sudarsan Biswas	Assistant Professor	
13	Dr. Vishal Walmik Dhote	Assistant Professor	
14	Sri Amitava Dutta	Assistant Professor	

# **NEW PROGRAMMES / COURSES STARTED**

New Programme - Post Graduate Diploma in Rural Development and Practice

## DETAILS OF STUDENTS ADMISSION DURING THE YEAR

S. No.	Programme	No. of Students
1	Integrated M.Sc. In Agriculture, Rural and Tribal De- velopment	42
2	MSc in Agriculture Rural and Tribal Development	16
3	MA/MSc in Rural Development and Management	25
4	B.Sc (Hons) Agriculture	50
5	B.Voc. in Sustainable Agriculture	40
6	Post Graduate Diploma in Rural Development Practices	6
7	Diploma in Organic Farming	7
8	PhD	3
	Total	189

## STUDENTS PASSED OUT DETAILS OF THE YEAR

S. No.	Programme	No. of Students
1	Integrated MSc (Agriculture Rural and Tribal Devel- opment)	18
2	MA/MSc (Rural Development and Management)	20
3	MSc (Agriculture Rural and Tribal Development)	12

4	Diploma in Organic Farming	6
5	Integrated MSc in Agriculture Rural and Tribal Development (Lateral Exit after BSc.)	21
	Total	77

## STUDENTS PLACEMENT AND PROGRESSION DETAILS OF THE YEAR

## DETAILS OF STUDENTS PURSUING HIGHER EDUCATION:

S. No.	Name	Programme graduated from	Name of the Institution Joined	Name of the Programme admitted to
1	Sudarshana Poddar	B. Sc. (ARTD)	Tata Institute of Social Sci- ence, Tuljapur (MS)	M. A. (Rural Development)
2	Chhandos Pramanik	B. Sc. (ARTD)	Kirloskar Institute of Advanced Management Studies, Mumbai	Master of Business Administration (MBA),
3	Saibal Roy	B. Sc. (ARTD)	NL Dalmia Institute of Management Studies and Research, Pune	Master of Business Administration (MBA)
4	Supreeti Ghosh	B. Sc. (ARTD)	Management Development Institute, Murshidabad	Post- Graduate Diploma in Management
5	Kumar Pritam Puri	B. Sc. (ARTD)	Azim Premji University, Banglore (KR)	Master in Development Studies
6	Ankita Konar	B. Sc. (ARTD)	Tata Institute of Social Science, Tuljapur (MS)	M. Sc. (Sustainable Livelihood and Natural Resource Governance)
7	Gourav Bhakat	B. Sc. (ARTD)	Tata Institute of Social Science, Tuljapur (MS)	M. Sc. (Sustainable Livelihood and Natural Resource Governance)
8	Suvo Samanta	B. Sc. (ARTD)	Tata Institute of Social Science, Tuljapur (MS)	M. Sc. (Sustainable Livelihood and Natural Resource Governance)
9	Bindesh Bediya	B. Sc. (ARTD)	RKMVERI, Ranchi	M. Sc. (Agriculture, Rural and Tribal Development)
10	Bipan Pal	B. Sc.	RKMVERI, Ranchi	M. Sc. (Agriculture, Rural

S. No.	Name	Programme graduated from	Name of the Institution Joined	Name of the Programme admitted to
		(ARTD)		and Tribal Development)
11	Goutam Basak	B. Sc. (ARTD)	RKMVERI, Ranchi	M. Sc. (Agriculture, Rural and Tribal Development)
12	Kumari Khushbu Singh	B. Sc. (ARTD)	RKMVERI, Ranchi	M. Sc. (Agriculture, Rural and Tribal Development)
13	Ratan Priya	B. Sc. (ARTD)	RKMVERI, Ranchi	M. Sc. (Agriculture, Rural and Tribal Development)
14	Rohit Oraon	B. Sc. (ARTD)	RKMVERI, Ranchi	M. Sc. (Agriculture, Rural and Tribal Development)
15	Semali Munjni Oraon	B. Sc. (ARTD)	RKMVERI, Ranchi	M. Sc. (Agriculture, Rural and Tribal Development)
16	Shibam Dey	B. Sc. (ARTD)	RKMVERI, Ranchi	M. Sc. (Agriculture, Rural and Tribal Development)
17	Subhojit Das	B. Sc. (ARTD)	RKMVERI, Ranchi	M. Sc. (Agriculture, Rural and Tribal Development)
18	Sucheta Goswami	B. Sc. (ARTD)	RKMVERI, Ranchi	M. Sc. (Agriculture, Rural and Tribal Development)
19	Supriya Minz	B. Sc. (ARTD)	RKMVERI, Ranchi	M. Sc. (Agriculture, Rural and Tribal Development)
20	Sutapa Ruidas	B. Sc. (ARTD)	RKMVERI, Ranchi	M. Sc. (Agriculture, Rural and Tribal Development)
21	Swarup Kumar Ghosh	B. Sc. (ARTD)	RKMVERI, Ranchi	M. Sc. (Agriculture, Rural and Tribal Development)
22	Tiasha Roy	B. Sc. (ARTD)	RKMVERI, Ranchi	M. Sc. (Agriculture, Rural and Tribal Development)

## DETAILS OF STUDENTS PLACED:

S. No.	Name	Programme graduated from	Name of the Company/ Institution Joined	Year of Joining
1	Kumudini Oraon	Int. M. Sc. (ARTD)	Jharkhand State Livelihood Promotion Society (JSLPS), Ranchi, Ms. Dipti	2022

S. No.	Name	Programme graduated from	Name of the Company/ Institution Joined	Year of Joining
			Diana Kullu (Manager, HR)	
2	Shivam Shekhar Pati	Int. M. Sc. (ARTD)	Jharkhand State Livelihood Promotion Society (JSLPS), Ranchi, Ms. Dipti Diana Kullu (Manager, HR)	2022
3	Shweta Kumari	Int. M. Sc. (ARTD)	Jharkhand State Livelihood Promotion Society (JSLPS), Ranchi, Ms. Dipti Diana Kullu (Manager, HR)	2022
4	Sarthi Kumari	Int. M. Sc. (ARTD)	Jharkhand State Livelihood Promotion Society (JSLPS), Ranchi, Ms. Dipti Diana Kullu (Manager, HR)	2022
5	Gourav Kumar	M. Sc. (ARTD)	Jharkhand State Livelihood Promotion Society (JSLPS), Ranchi, Ms. Dipti Diana Kullu (Manager, HR)	2022
6	Rahul Kundu	M. Sc. (RDM)	Jharkhand State Livelihood Promotion Society (JSLPS), Ranchi, Ms. Dipti Diana Kullu (Manager, HR)	2022
7	Rita Kumari	M. A. (RDM)	Jharkhand State Livelihood Promotion Society (JSLPS), Ranchi, Ms. Dipti Diana Kullu (Manager, HR)	2022
8	Bibhushit Angelo Tirkey	M. A. (RDM)	Jharkhand State Livelihood Promotion Society (JSLPS), Ranchi, Ms. Dipti Diana Kullu (Manager, HR)	2022
9	Akansha Kumari	Int. M. Sc. (ARTD)	Karuna Sechen, Jamshedpur (JH),Mr. Shamsul Akhtar, Country Director (India)	2022
10	Anindita Kundu	Int. M. Sc. (ARTD)	Karuna Sechen, Jamshedpur (JH),Mr.2Shamsul Akhtar, Country Director(India)	
11	Ranit Dey	Int. M. Sc. (ARTD)	Karuna Sechen, Jamshedpur (JH),Mr. Shamsul Akhtar, Country Director (India)	2022
12	Souvik Gayen	Int. M. Sc. (ARTD)	Karuna Sechen, Jamshedpur (JH),Mr. Shamsul Akhtar, Country Director (India)	2022
13	Sanju Kumari	Int. M. Sc.	Karuna Sechen, Jamshedpur (JH),Mr.	2022

S. No.	Name	Programme graduated from	Name of the Company/ Institution Joined	Year of Joining
		(ARTD)	Shamsul Akhtar, Country Director (India)	
14			Karuna Sechen, Jamshedpur (JH),Mr. Shamsul Akhtar, Country Director (India)	2022
15	Swarnima Karn	M. A. (RDM)	Karuna Sechen, Jamshedpur (JH),Mr. Shamsul Akhtar, Country Director (India)	2022
16	Sumit Mishra	Int. M. Sc. (ARTD)	Better World Foundation, Ranchi (JH), Mr. Manoj Prabhakar, Director	2022
17	Ranjana Dey	M. Sc. (ARTD)	Better World Foundation, Ranchi (JH), Mr. Manoj Prabhakar, Director	2022
18	Rupam Biswas	M. Sc. (ARTD)	Better World Foundation, Ranchi (JH), Mr. Manoj Prabhakar, Director	2022
19	Swati Kiran	M. Sc. (ARTD)	MART Global Management Solutions LLP, Ranchi, Mr. Jitendra Rai	2022
20	Dinesh Oraon	M. Sc. (RDM)	MART Global Management Solutions LLP, Ranchi, Mr. Jitendra Rai	2022
21	Khushbu Kumari	M. A. (RDM)	MART Global Management Solutions LLP, Ranchi, Mr. Jitendra Rai	2022
22	Mrityunjay Kumar	M. A. (RDM)	MART Global Management Solutions LLP, Ranchi, Mr. Jitendra Rai	2022
23	Tithi adak	M. A. (RDM)	MART Global Management Solutions LLP, Ranchi, Mr. Jitendra Rai	2022
24	Satyanand Bedia	Int. M. Sc. (ARTD)	Vikas Bharti, Ranchi, Manager, HR & Admin	2022
25	Pradyut Chaki	M. Sc. (RDM)	BAIF Institute for Sustainable Livelihoods and Development, Pune (MH), Mr.V.B. Dyasa, Regional Director	2022
26	Nihar Kumar Mahto	M. Sc. (ARTD)	Society for westtland Development, New Delhi, Mr. Pramod Tyagi, Executaive Director	2022
27	Rajesh Kumar	M. A. (RDM)	TribalAg Limited, Kolkata, Mr.	2022

S. No.	Name	Programme graduated from	Name of the Company/ Institution Joined	Year of Joining
	Mahato		Khelaram Murmu, Director	

## DETAILS RELATING TO PH. D. SCHOLARS DURING THE YEAR

S. No.	Name of current Ph. D. scholars	Name of Supervisor
1	Arindam Banerjee	Dr. Deep Narayan Mukherjee
2	Anuj Kumar Mahto	Dr. Arunava Sengupta
3	Dhiraj Ghosh	Dr. Dipankar Chatterjee
4	Reddi Gowtham	Dr. Avijit Kumar Dutta
5	Rupesh Kumar Monu	Dr. Dipankar Chatterjee
6	Sourav Pathak	Dr. Vishal Walmik Dhote
7	Koustab Majumdar (awarded)	Dr. Dipankar Chatterjee
8	Manoj Raul (awarded)	Dr. Dipankar Chatterjeess
9	Suresh Kumar Mahto (awarded)	Dr. Avijit Kumar Dutta
10	Suchartita Ghosal	Dr. Deep Narayan Mukherjee
11	Nishant	Dr. Avijit Kumar Dutta
12	Lalchhandama	Dr. Arunava Sengupta

## DETAILS OF ACADEMIC PUBLICATIONS DURING THE YEAR

## Details of publications in journals and books

S. No.	Author	Title of Paper	Journal	ISSN/ISBN
1	Avijit Kr.	Performance of Organically	Journal of Bio Inno-	2277-8330 (Elec-

S. No.	Author	Title of Paper	Journal	ISSN/ISBN
	Dutta	Grown French Bean during Post-Kharif Season in South Chhota Nagpur Plateau of Eastern India.	vation	tronic)
2	Avijit Kr. Dutta	Elucidation of Nature of Gene Action and Estimation of Combining Ability Effects for Fruit Yield Improvement and Yield Attributing Traits in Brinjal Landraces	Journal of Food Quality	0146-9428 (Print) 1745-4557 (Online)
3	Pooja Yadav	Functional associates in rooting and survival of foliated apical bud cuttings of Gudmar (Gymnema sylvestre R.Br.)	Indian Journal Trop Biodiv,	0971- 4642
4	Dipankar Chatterjee	Perception of subjective well- being of Lodha Tribe: A Study in Jhargram District of West Bengal, India.	Contemporary Voice of Dalit	2456-0502
5	Dipankar Chatterjee	Ecoliteracy among the tribals of eastern India.	South Asia Research	1741-3141
6	Dipankar Chatterjee	Estimation of Vulnerabilities of HIV Transmission Among Rural Migrants in Jharkhand	ISSRF Newsletter	2395-2806
7	Arunava Sengupta	Causes and Concequences ofHigh School Drop-out in Ranchi District of Jharkhand	International Journal of Social Science and Economic Research	2455-8834

# DETAILS OF SPECIAL LECTURES / WORKSHOPS / SEMINARS / CONFERENCES / SYMPOSIUMS HOSTED / ORGANISED DURING THE YEAR

S. No.	Date	Details of Lectures / workshops / seminars / conferences / symposiums
1	18-May-22	One Day Workshop on Concept, Constraints and Prospects of Natural Farming in India

S. No.	Date	Details of Lectures / workshops / seminars / conferences / symposiums	
2	20-May-22	Celebration of World Bee Day	
3	28-May-22	Special lecture on Swacha Bharat Abhiyan	
4	31-May-22	Garib Kalyan Sammelan	
5	02-Jun-22	Special lecture on Entrepreneurship Development	
6	04-Jun-22	Celebration of World Environment Day	
7	08-Jun-22	Special Lecture on Stress Management	
8	21-Jun-22	Celebration of International Day of Yoga	
9	06-Jul-22	One Day Workshop on 'Swami Vivekananda, Sustainable Development Goals and Model Village Development – Experiences and Experiments'	
10	22-Jul-22	Special lecture on the occasion of Azadi Ka Amrit Mahotsav and 125th Anniversary of Ramakrishna Mission	
11	15-Aug-22	Celebration of Independence Day	
12	05-Sep-22	Special lecture on the occasion of Teacher's Day	
13	04-Nov-22	Vigilance Awareness Week	
14	12-Nov-22	Special Lecture on Managing Self through Moral Education	
15	15-Nov-22	Celebration of Janjatiya Gaurav Divas	
16	16-Nov-22	Special Lecture on Human Rights in Agriculture and Rural Development	
17	18-Nov-22	Special Lecture on Managing Disaster in Higher Education through Human Values	
18	25-Nov-22	Career Counselling Session	
19	26-Nov-22	Celebration of Constitution Day	
20	05-Dec-22	World Soil Day	
21	10-Dec-22	Celebration of International Human Rights Day	
22	10-Dec-22	Celebration of Bharatiya Bhasha Divas	
23	12-Jan-23	Celebration of National Youth Day	
24	16-Jan-23	A Special Lecture On 'Swamiji's Message to Rebuild new And Vibrant India'	
25	06-Feb-23	Celebration of Birthday of Sarada Maa	

S. No.	Date	Details of Lectures / workshops / seminars / conferences / symposiums
26	01-Mar-23	International Women's Day

## DETAILS OF PROJECTS UNDERTAKEN DURING THE YEAR

S. No.	Investigator (staff)	Name of the project & other details	Funding Agency
1	Dr. Avijit Kr. Dutta	Science, Technology and Innovation Hub for Creating Sustainable Liveli- hood Opportunities of Scheduled Tribes in Angara Block, Ranchi Dis- trict, Jharkhand.	Department of Science and Technology (DST), Govern- ment of India
2	Dr. Arunava Sengupta	An Analytical Study of Tribal Students Dropouts and Transition rate in rural as well as urban schools	Dr. Ramdayal Munda Tribal Welfare Research Institute, Govt. of Jharkhand
3	Dr. Dipankar Chatterjee	Ethnographic Studies of Castes of Jharkhand (Pardhi, Lodha/Lodhi)	Dr. Ramdayal Munda Tribal Welfare Research Institute, Govt. of Jharkhand

# ANY OTHER ACTIVITY DURING THE YEAR WORTH MENTIONING

### Internship of B.Voc. (Sustainable Agriculture) Students

Thirty-eight students from the B.Voc. 2021 batch have completed a one-month internship in various organizations across India. They were sent to different organizations for a one-month internship began July 2022.

#### Learning through Organizational Attachment (LOA)

The students of the 8<sup>th</sup> semester of ARTD and 2<sup>nd</sup> semester of RDM and DARD were sent to the different organizations and have completed their Learning through Organisational Attachment (LOA) curriculum successfully.

# Rural Agricultural Work Experience (RAWE) and Agro-Industrial Attachment (AIA) of Ag-2019 Batch

The Rural Agricultural Work Experience (RAWE) including Agro-industrial Attachment (AIA) is automated in Seventh Semester of B.SC. (Hons.) Agriculture programme in which students have to stay in different villages for two months, in KVK and other ICAR institutes for two weeks and in different agro-industries for two months.

## ANY OTHER MISCELLANEOUS INFORMATION

#### Annual Sports 2022-23

The Annual sports for the faculty center of Agriculture, Rural and Tribal Development, Morabadi, Ranchi-834008 was held in the last week of December, 2022 involving students, faculties, research scholars and other staffs. More than 200 candidates (including boys and girls) participated across 5 individual events like Badminton single (Boys and Girls), Table Tennis, Carrom, Athletics, Musical Chair and 7 team events like Table Tennis Doubles, Badminton Doubles (Boys and Girls), Football, Volleyball, Cricket, Tug of War and Carrom.

#### Extension Activities of the ARTD Faculty

The faculty centre conducts both intensive and extensive fieldwork for the students to acquire knowledge about the real-life situation through participatory interactions with the villagers. Students study villages extensively, identify resources available, problems etc.

**a) Village & Institutional visits:** In each semester students must do educational visits to different villages and Govt. & Non-Govt. organizations/Institutions for detailed study under different course. Students have visited the following villages during the reporting period – Nawagarh, Ara Keram, Kuchu Pahan Tola, Chipibanddihi, Dublabera, Karkare, Tirlakocha, Obar etc.

Institutional visits conducted during the reporting period includes Primary Health Centre (PHC), Bero; ASHA, Birsa Agricultural University, Kokar Indistrial Area, Central Tasar Training and Research Institute (CTTRI), Nagri; IINRG, Namkom.

**b)** Village Level Youth Convention: During the reporting period, Students of RTD Division (ARTD – 9<sup>th</sup> and RDM – 3<sup>rd</sup> semester), research scholars and staff actively participated in a village level youth convention organised by Ramakrishna Mission Ashrama on 27 and 30 December 2022. The convention was held in two adopted villages (Datma and Losera) in Ranch district. Students helped with registration, cultural events, and delivering speeches about Swami Vivekananda. During the day-long events, a group of students was tasked with identifying the village's major problems. The findings were shared with the villagers during the afternoon session's group discussion to determine possible solutions. The programme was a huge success, and it provided students with an excellent learning opportunity. The programme also inspired and empowered rural youth by demonstrating future opportunities.

**c) Plantation Activities:** NSS unit of the Ranchi campus organized a plantation activity at the Devimandap and Brambe Awas area of Chiroundi village, Ranchi on 13 June, 2022. Total of twenty-six students of B.Sc, Agriculture 2021 batch participated in this programme. They dug pits for the plantation of *Neem, Karanj* and *mango* saplings after the onset of the monsoon.

**d)** Kisan Mela: In collaboration with Divyayan Krishi Vigyan Kendra, the ARTD faculty center organised regional and central Kisan Melas, in which students and staff from the Division of RTD actively participated.

# NAME OF THE FACULTY CENTRE: AGRICULTURE, RURAL AND TRIBAL DEVELOPMENT, COIMBATORE CAMPUS

## LIST OF TEACHING FACULTY MEMBERS

S. No.	Name	Designation
1	Dr. N. Jaivel,	Assistant Professor (Agricultural Microbiology)
2	Dr. K. Vinoth Kumar	Assistant Professor (Environmental Science)
3	Dr. C. Partheeban	Assistant Professor (Crop Physiology)
4	Mr. S. Kasinathan	Assistant Professor (Agricultural Microbiology)
5	Mr. B. Muthuraja	Assistant Professor (Agricultural Economics)
6	Dr. S. Suresh	Assistant Professor (Agricultural Entomology)
7	Dr. S. Sureshkumar	Assistant Professor (Biotechnology)
8	Dr. G. Yoganathan	Assistant Professor (Soil Science)
D9r.	Dr. K. Mohanasundram	Assistant Professor (Plant Breeding & Genetics)
10	Mr. S. Chandraprakash	Assistant Professor (Plant Pathology)
11	Dr. M. Selvam	Assistant Professor (English)
12	Mr. A. Suresh	Assistant Professor (Agricultural Extension)
13	Dr.R. Karthika	Assistant Professor (Animal Husbandry)
14	Dr.K.P.Ragupathi	Assistant Professor (Seed Science and Technology)

# **NEW PROGRAMMES / COURSES STARTED**

- 1. B.Sc / M.Sc Integrated Rural and Tribal Development (IRTD)
- 2. M.Sc/ M.A Rural Development and Management (RDM)

## DETAILS OF STUDENTS ADMISSION DURING THE YEAR

S. No.	Programme	No. of Students
1	M.Sc/ M.A Rural Development and Management (RDM)	04
	Total	04

# STUDENTS PASSED OUT DETAILS OF THE YEAR

S. No.	Programme	No. of Students
1	B.Sc (Hons) Agriculture	49
	Total	49

## STUDENTS PLACEMENT AND PROGRESSION DETAILS OF THE YEAR

### DETAILS OF STUDENTS PURSUING HIGHER EDUCATION:

S. No	Name	Programme graduated from	Name of the Institution Joined	Name of the Programme admitted to
1	Amarnath .S	FAR-	Annamalai University,	M.Sc Plant Pathology

S.	Name	Programme	Name of the Institution	Name of the Programme
No		graduated	Joined	admitted to
		from		
		RKMVERI	Chidambaram	
2	Dhilipan .K.S	FAR-	Annamalai University,	M.Sc Agronomy
		RKMVERI	Chidambaram	
3	Manoj .K	FAR-	Annamalai University,	M.Sc Soil Science
		RKMVERI	Chidambaram	
4	Praviinkumar	FAR-	Annamalai University,	M.Sc Plant breeding
	.R	RKMVERI	Chidambaram	
5	Prithiviraj .K	FAR-	Annamalai University,	M.Sc Plant breeding
		RKMVERI	Chidambaram	
6	Srisabari .S	FAR-	Annamalai University,	M.Sc Agrl. Extension
		RKMVERI	Chidambaram	
7	Pradesh, G.J	FAR-	Firebird college,	MBA
		RKMVERI	Coimbatore	

## DETAILS OF STUDENTS PLACED:

S. No	Name	Programme graduated from	Name of the Company/ Institution Joined	Year of Joining
1	Anbumani .R	FAR- RKMVERI	New Gen Crop Solutions Pvt Ltd, Cbe	2022
2	Ahil .P.S	FAR- RKMVERI	Syngenta, Coimbatore	2022
3	Akesh .R	FAR- RKMVERI	Sri Rasi Agro, Hosur	2022
4	Kavin .R.B	FAR- RKMVERI	Research Fellow, TNAU, Coimbatore	2022
5	Sibi .S	FAR-	Smart kitchen, Salem	2022

S. No	Name	Programme graduated from	Name of the Company/ Institution Joined	Year of Joining
		RKMVERI		
6	Sanjeev .S	FAR- RKMVERI	Federal bank, Gujarat	2022

## DETAILS OF ACADEMIC PUBLICATIONS DURING THE YEAR

# Paper presented in conferences, seminars, etc.

S. No.	Name	Date	Title of the paper presented	
	Dr. K. Vinoth Kumar,	June	Toxicity potential of metal oxide	
1	Assistant Professor	1 <sup>st</sup> -3 <sup>rd</sup> ,	nanoparticles (Zno) on soil biological	
	(Environmental Sciences)	2022	properties – International conference	
	Dr. N. Jaivel,	June	Actinobacterial formulation for the	
2	Assistant Professor	1 <sup>st</sup> -3 <sup>rd</sup> ,	management of <i>Xanthomonas boryzae pv.</i>	
	(Agricultural Microbiology)	2022	Oryzae in rice- International conference	
	Dr. K. Vinoth Kumar,	February	An environmental friendly approach of	
3	Assistant Professor	$17^{\text{th}}$ - $18^{\text{th}}$ ,	Parthenium weed control – wealth from	
	(Environmental Sciences)	2023	waste – International conference	
	Dr. N. Jaivel,	February	Streptomyces based bioformulation for	
4	Assistant Professor	$17^{ ext{th}}$ - $18^{ ext{th}}$ ,	the management of bacterial leaf blight	
	(Agricultural Microbiology)	2023	disease in rice - International conference	

## Details of publications in journals and books

S. No.	Author	Title of Paper	Journal	ISSN/ISBN
1	Vinoth Kumar, K.	Agricultural	LAPBERT	(978-620-5-
		opportunities to mitigate	Academic	51927-1)
		greenhouse gas	publication,	
		emission.	Germany, p.1-53	

			(2022)	
2	Vinoth Kumar, K., B. Anish Raj, A.Sriraghul, K. Sadanish, N. Raghul Raj, K.S. Prajith and M. Tamilselvan.	Study the efficiency of vermicompost on growth and yield attributes of tomato ( <i>lycopersican</i> <i>esculentum</i> ),	Bhartiya Krishi Anusandhan Patrika., 37(3): 285-288 (2022)	(0303- 3821)
3	Vinoth Kumar, K., B. Anish Raj, A.Sriraghul, K. Sadanish, N. Raghul Raj, K.S. Prajith and M. Tamilselvan.	Comparing the effect of organic and inorganic fertilizers on soil health.	Bhartiya Krishi Anusandhan Patrika., 38(1): 80-83 ( 2023)	(0303- 3821)
4	Vinoth Kumar, K and C. Udayasoorian.	Biotoxicity of metal oxide nanoparticles (Zno) on soil biological properties.	Ecology and Environment. 41 (1A)262-265 (2023)	(0970- 0420)

## ANY OTHER ACTIVITY DURING THE YEAR WORTH MENTIONING

- Dr. K. Vinoth Kumar, Assistant Professor (Environmental Sciences) received the Best Scientist (2022) in the 9<sup>th</sup> Annual Convocation of Indian Academic Researchers Association (IARA), Tiruchirappalli held on 1<sup>st</sup> May, 2022.
- 2. Mr. Muthuraja, Assistant Professor (Agricultural Economics) attended the ICAR short term course (10 days) on Agribusiness, Market Intelligence and Block chain at TNAU, Coimbatore
- 3. Dr. K. Vinoth Kumar and Dr. N. Jaivel received the **Young Teaching Faculty Award-2023** in the 'International Conference on Agricultural Sciences, Technologies, Innovations and Entrepreneurship (AGRI TECHNOVA - 2023)' during February, 2023.
- 4. Dr. K. Vinoth Kumar received the **Best Poster award (first prize)** for the paper 'An environmental friendly approach of Parthenium weed control wealth from waste' in the 'International Conference on Agricultural Sciences, Technologies,

Innovations and Entrepreneurship (AGRI TECHNOVA - 2023)' during February, 2023.

## ANY OTHER MISCELLANEOUS INFORMATION:

- In view of New Education Policy 2020, Seven Multi-Disciplinary Short-Term Courses in Agriculture viz., 1. Rural Biotechnology, 2. Food processing and post harvest management, 3. Dairy Management, 4. Plant Health Management, 5. Soil Health Management, 6. Poultry Production and 7. Seed production technologies were introduced to non-agriculture based departments of Vidyalaya.
- Agricultural sciences classes were introduced to the school students.

# NAME OF THE FACULTY CENTRE: <u>FACULTY OF DISABILITY MANAGEMENT AND SPECIAL</u> <u>EDUCATION</u>, COIMBATORE CAMPUS

## LIST OF TEACHING FACULTY MEMBERS

S. No.	Name of the Faculty	Designation
1	Dr. N. Muthaiah	Dean
2	Dr. S. Parween	Assistant Professor
3	Dr. J.B. Dheesha	Assistant Professor
4	Dr. K. Dhanalakshmi	Assistant Professor
5	Mrs. S.N. Hamsapriya	Assistant Professor
6	Mrs. M. Senthilvani	Assistant Professor
7	Dr. A. Sudha	Assistant Professor
8	Dr. Saumya Chandra	Assistant Professor
9	Dr. S. Logesh Kumar	Assistant Professor
10	Mrs. V. Indirani	Assistant Professor
11	Dr. S. Sukumari	Assistant Professor
12	Dr. M. Sumathi	Assistant Professor
13	Dr. Nandita Chakrabarty	Assistant Professor
14	Dr. Jignya Shah	Assistant Professor

## DETAILS OF STUDENTS ADMISSION DURING THE YEAR

S. No.	Programme	No. of Students
1	B.Ed. Special Education (Visual Impairment)	5
2	B.Ed. Special Education ( Hearing Impairment )	2
3	B.Ed. Special Education ( Intellectual Disability )	19

6	M.Ed. Special Education (Visual Impairment) M.Ed. Special Education ( Hearing Impairment )	NIL
7	M.Ed. Special Education (Intellectual Disability)	NIL
8	Ph.D Special Education ( Visual Imparment )	1
	Total	39

## STUDENTS PASSED OUT DETAILS OF THE YEAR

S. No.	Programme	No. of Students		
1	B.Ed. Special Education (Visual Impairment ) 2			
2	B.Ed. Special Education ( Hearing Impairment )	4		
3	B.Ed. Special Education (Intellectual Disability)	11		
4	Integrated B.Ed.M.Ed. Special Education (Intellectual Disability) 8			
5	M.Ed. Special Education (Visual Impairment)	5		
6	M.Ed. Special Education ( Hearing Impairment )	3		
7	M.Ed. Special Education (Intellectual Disability)	1		
8	M.Phil Special Education. (Intellectual Disability)	1		
9	Ph.D Special Education	3		
	Total	38		

## DETAILS OF STUDENTS PLACED:

S.	Name	Programme	Name of the institution joined	Year of
No.		graduated from		Joining
1	Nandhini K	B.Ed. Spl. Ed (ID)	Rainbow Bridge, Coimbatore	2022
2	Aarthiya	B.Ed. Spl. Ed (HI)	Rainbow Bridge, Coimbatore	2022
3	Lakshmi	B.Ed. Spl. Ed (ID)	Ashirwad Special School, Coimbatore	2022

S.	Name	Programme	Name of the institution joined	Year of
No.		graduated from		Joining
4	Reshma R	B.Ed. Spl. Ed (ID)	St. John's Matriculation Higher Secondary School, Coimbatore	2022
5	Nandhini M	B.Ed. Spl. Ed (ID)	St. John's Matriculation Higher Secondary School, Coimbatore	2022
6	Hema Malini R	B.Ed. Spl. Ed (ID)	St. John's Matriculation Higher Secondary School, Coimbatore	2022
7	Pavithra. K	B.Ed. Spl. Ed (ID)	St. John's Matriculation Higher Secondary School, Coimbatore	2022
8	Keerthana H	B.Ed. Spl. Ed (VI)	G.S.R. Matric Higher Secondary School, Coimbatore	2022
9	Dhara RM	B.Ed. Spl. Ed (ID)	G.S.R. Matric Higher Secondary School, Coimbatore	2022
10	Madhubala	B.Ed. Spl. Ed (HI)	Indian Red Cross Society, Coimbatore	2022
11	Lalhriatpuia R	M.Ed. Spl. Ed (VI)	Special Blind School, Durtlang Venglai, Zuangtui Road, Aizawl, Mizoram	2022
12	Madhusmita Nayak	M.Ed. Spl. Ed (VI)	CHC Integratd Physiotherapy Unit, Majhapara, IPU Sundargarh, Odisha	2022
13	Sushanti Sahoo	M.Ed. Spl. Ed (VI)	Shree Gurukul Hr.Sec. School, Keonjhar, Odisha	2022
14	Neha Baretha	M.Ed. Spl. Ed (HI)	St. Joseph Integrated Public School20Satna, Madhya Pradesh	
15	Senthamil. M	M.Ed. Spl. Ed (ID)	Sri Vamana Foundation, Peelamedu, Coimbatore	2022
16	Deviprasad Barik	M.Ed. Spl. Ed (HI	(HI School of Rehabilitation and Social Sciences, Seva Foundation, Keonjhar, Odisha	
17	Sujitha K	INT B.ED M.ED.ID	Straightpath International School, Panakkad, Malapuram, Kerala	2022
18	Chitra K	INT B.ED M.ED.ID	Royal Care Hospital, Gandipuram,20Coimbatore	
19	Janani Barani	INT B.ED M.ED.ID	Sankalp - The Learning Centre & Special Needs School,	2022

S. No.	Name	Programme graduated from	Name of the institution joined	Year of Joining
		<b>0</b>	Poonamallee, Chennai	,
20	Praveen Kumar	INT B.ED M.ED.ID	Army Public School, Bolarum, Secunderabad, Telangana	2022
21	Rajiv Yadav	INT B.ED M.ED.ID	INT B.ED M.ED.IDMini Miracles Child DevelopmentCentre, Hyderabad, Telangana	
22	Rijisha M A	B.Ed. Spl. Ed (ID) Block Resource Centre, Palakkad, Kerala		2022
23	Sowmiya M	B.Ed. Spl. Ed (HI)	B.Ed. Spl. Ed (HI) Manchester International School, Near Vellaikinaru, Coimbatore	
24	Swathi S Nair	B.Ed. Spl. Ed (HI) Attakkara Special School, Agali Post, Palakkad, Kerala		2022
25	Arthe K	B.Ed. Spl. Ed (ID)	l. Spl. Ed (ID) Ideal English School, Ras Al Khaimah, UAE.	
26	Akshitha S	B.Ed. Spl. Ed (VI)	SSVM Institutions Sree Sarassawthi Vidhyaah Mandheer, Alangombu post, Mettupalayam,	2022
27	Shilpa Jharia	M.Ed. Spl. Ed (HI)	Geetha University, NH-71, Naultha, Panipat, Haryana,	2022

## DETAILS OF STUDENTS PURSUING HIGHER EDUCATION:

S. No.	Name of student enrolling into higher education	Programme graduated from	Name of the institution joined	Name of programme admitted to
1	Lalrin Hlui	M.Ed. Spl.Ed (Visual Impairment)	RKMVERI-FDMSE	Ph.D. Spl. Ed.
2	Shilpa Jharia	M.Ed. Spl.Ed (Hearing Impairment)	Geeta University, Panipat, Haryana	Ph.D. Spl. Ed.

## DETAILS RELATING TO PH.D. SCHOLARS DURING THE YEAR

S. No.	Name of the existing Ph. D. scholars	Registration No.	Year	Name of Supervisor
1	Baiju Thomas	H19IMPD001	IV	Dr. S. Logesh Kumar
2	Kiruthuga K.	H20PHDS003	III	Dr. Sudha A.
3	Roopavathy S.	H20PHDS005	III	Dr. Saumya Chandra
4	Uma Maheswari N.	H20PHDS006	III	Dr. Saumya Chandra

S. No.	Name of newly admitted Ph. D. scholar	Registration No.	Year	Name of Supervisor
1	Lalrin Hlui	H22PHDS001	Ι	Dr. S. Parween

# DETAILS OF ACADEMIC PUBLICATIONS DURING THE YEAR

Details of staff attended and paper presented in conferences, seminars, etc.

S.N o.	Name	Date	Title of the paper presented
1	Dr.K.Dhanala kshmi	22 <sup>nd</sup> July 2022	Resource person for the CRE Webinar on 'Parents as equal partners in the intervention process" at Vivekananda Mission Ashram, Chaitanyapur, West Ben- gal and handled a session on "Role of teachers and par- ents in the intervention process'.
2	Dr.S.Parween	22 <sup>nd</sup> July 2022	Resource Person in the Two-Day CRE Webinar titled "Adaptation of Teaching Learning Materials for Persons with Visual Impairment" and delivered an online lecture on 'Learning Media Assessment, Adaptation Principles

			and Use of 2D & 3D Manipulatives' on organised by Na- tional Institute for the Empowerment of Persons with Visual Disabilities (NIEPVD), Regional Centre, Chennai.
3	Dr. Sudha A.	12 <sup>th</sup> August 2022	Resource Person and delivered a lecture on "An over- view of the Implementation of Inclusive Education in In- dia and abroad" in a CRE Webinar organized by Na- tional Institute for Locomotor Disabilities, Kolkata
4	Dr.S.Parween	17 <sup>th</sup> August 2022	Resource Person and handled an online session on 'Tools and Techniques of Data Collection' in Prabhat Ku- mar College, Contai, West Bengal
5	Dr.Saumya Chandra	7 <sup>th</sup> September 2022	Resource person in a three-day Online National CRE Webinar titled Social Security and Legal Aspects in Dis- ability Rehabilitation, organized by VMATC, a Unit of Vivekananda Mission Ashram West Bengal and handled a session on 'Social Provisions for Persons with Disabili- ties in view of the RPWD Act, 2016'.
6	Mrs. V. Indirani	5 <sup>th</sup> November 2022	Resource person in a Five Day Audio- Visual Workshop and delivered a lecture on 'Orientation and Hands on training in Teaching Learning Materials (TLM) for Per- sons with Disabilities' at the Department of Special Edu- cation, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
7	Dr.S.Parween	10 <sup>th</sup> November 2022	Resource person and delivered a guest lecture on "As- sessment of Children with Visual Impairment and Multi- ple Disabilities and Individualized Family Service Plan - Components of Family Support Services" at the Depart- ment of Special Education, Avinashilingam Institute for Home Science and Higher Education for Women, Coim- batore.
8	Dr.J.B.Dheesh a,	11 <sup>th</sup> November 2022	Resource person and delivered an online lecture on 'In- troduction to ECC and Strategies to cultivate compen- satory/ Functional Academic Skills & Communication modes for Children with Visual Impairment' in a Two Day National Level CRE Webinar on "Expanded Core Curriculum (ECC) for Children with Visual Impairment"

			organized by Regional Centre, national Institute for the Empowerment of Persons with Visual Impairment, Chennai
9	Dr.S.Parween	12 <sup>th</sup> November 2022	Resource person and delivered an online lecture on 'Need, Importance, Activities, Ideas and Resources for developing Self -Determination and Social Interaction Skills for Children with Visual Impairment' in a Two Day National Level CRE Webinar on "Expanded Core Curriculum (ECC) for Children with Visual Impairment" organized by Regional Centre, national Institute for the Empowerment of Persons with Visual Impairment, Chennai
10	Dr. Nandita Chakrabarty	24 <sup>th</sup> November 2022	Presented a paper on 'Efficacy of Home Based Remedial Teaching Programme for Children with Intellectual Dis- abilities in Inclusive Schools' at the National Conference on Inclusive Education organised by National Institute for the Empowerment of Intellectual Disabilities, Secun- derabad.
11	Dr. Saumya Chandra		Presented a paper on Quality Considerations for Re- forms in Higher Education - A Dialogue with Totto-Chan at International Conference on Innovation and Reforms in Higher Education organised by Alagappa University, Karaikudi.
12	Dr. Nandita Chakrabarty	28 <sup>th</sup> December 2022	Resource person during the five day on-line CRE programme on 'Strategies for Inclusive Education' organized by Composite Regional Centre (CRC), Srinagar, Jammu and Kashmir (UT) and delivered an online session on "Application of Technology to Promote Inclusive Education"
13	Dr.Sudha.A	9 <sup>th</sup> February 2023	Resource person in a three day CRE programme organized by Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore and delivered a lecture titled "Parent Professional Partnership in Inclusive Education".
14	Dr.Sudha.A	10th February 2023	Preseanted a paper on Universal Design of Learning in Implementation of Curriculum Transaction to create an effective inclusive classroom at the International Conference on "Transformative solutions for Inclusive Development – Fueling an Accessible and Equitable

			World for Persons with Disability" organised by Department of Special Education and Rehabilitation Science, Alagappa University , Karaikkudi.
15	Dr. S. Parween	14 <sup>th</sup> February 2023	Resource Person in a CRE Programme on "Assistive Technology for Persons with Disabilities" and handled a session on "Assistive Technology and Accessibility Requirements for Persons with Disabilities" at Department of Special Education, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
16	Dr. K. Dhana- lakshmi	9 <sup>th</sup> March 2023	Presented a paper through online entitled "Role of technology in providing, equitable and inclusive education to students with visual impairment" in two day National Seminar organized by the Internal Quality Assurance Cell, Buddha College of Teacher Education, Kerala
17	Dr. Jignya Shah	11 <sup>th</sup> March 2023	Delivered a guest lecture on 'Different career options in the field of Education'at St. Aloysius College, Jabalpur
18	Dr. Saumya Chandra	17 <sup>th</sup> March 2023	Resource Person in a seminar on Students Mental Health organized by the Child Rights Resource Centre of Department of Social Work - SRKV College of Arts and Science on and handled a session on Enhancing Mental Health among Persons with Intellectual Disability
19	Mrs. V . Indirani	23 <sup>rd</sup> March 2023	Resource person in the international conference for 'Approaches to Curriculum Development' on the topic 'Curriculum: Addressing Differential Needs of Children' organized by S.B.T. College of Special Education, Madurai
20	Dr. Saumya Chandra	23 <sup>rd</sup> & 24 <sup>th</sup> March 2023	Resource Person in a National level Offline CRE program titled "Developing Social Readiness for Transition" organized by Pope Paul Mercy Home, Peringandoor, Kerala

# Details of publications in journals and books

S.No.	Author	Title of Paper/ Chapter	Journal/ Book	ISSN/ISBN
1	Dr. Saumya Chandra, Asst. Prof. (Co-author)	Evaluation of Therapeutic Interventions provided to Children with Autism Spectrum Disorder in Yemen	IFAD Journal of Humanities and Social Sciences	Vol. 1, No. 2, ISSN No. 1835-3950X
2	Dr. Saumya Chandra, Asst. Prof. (Co-author)	-	COVID-19, Education & Inclusive Setting	ISBN -978- 93- 5526- 170-0
3	Dr.Nandita Chakrabarty & Dr. Sudha A Asst. Prof.	Development of Sensory Assessment Battery for Children with Autism Spectrum Disorder	Interdisciplinary Cycle	Volume 14, Issue 06, June 2022. ISSN No: 0022- 1945
4	Dr. Nandita Chakrabarty, Asst. Professor	Is Stem Cell Therapy "A Ray of Hope" To The Parents of Children with Autism Spectrum Disorder? – An Insight	Juni Khyat	Vol. 12, Issue 06 No.02, June 2022 ISSN: 2278- 4632
5	Dr.J.B. Dheesha & Dr. S. Parween		Management and Special Education (JODYS)	
6	Ms. Amani Qasim Ahmad Al-Gashany & Dr. Saumya Chandra	free Diet and	International Journal of Current Medical and Pharmaceutical Research	ISSN: 2395- 6429

S.No.	Author	Title of Paper/ Chapter	Journal/ Book	ISSN/ISBN
		Disorders		
7	Dr. J. B. Dheesha		Educational Technology in Volume 4, Issue 2, July	
8	Dr. J. B. Dheesha	Students with Visual Impairment	Disabilities and Impairment - an Interdisciplinary Research Journal, Volume 36, No.2, 2022	356X
9	Ms. Uma Maheswari (PhD Scholar) & Dr. Saumya Chandra Asst. Professor	to COVID-19		
10	Dr. K. Dhanalakshmi Asst. Professor	5		Volume 36 ISSN: 0970 356X
11	Dr. Sudha .A Asst. Professor & Mr. Gangadhara Rao Jami, (PhD Scholar)	And Support Services for	Opportunities of Education and Rehabilitation of Persons with various disabilities in post covid-19 era	
12	Mr. N. Karthigaiselvam, Spl. Educator & Dr. S. Logesh Kumar, Asst. Professor	-	Management and Special Education - JODYS	

S.No.	Author	Title of Paper/ Chapter	Journal/ Book	ISSN/ISBN
		Disability		
13	Dr. Saumya Chandra, Asst. Professor and Dr. Prabha Hariharan, Guest Lecturer	Reforms in Higher	Quality consideration for reforms in Higher Education - A Dialogue with Totto-Chan (published and printed by Alagappa University College of Education, Karaikudi Tamil Nadu)	195522637
14		Problem Based Learning Method	Education and Society: Peer Reviewed Multi- disciplinary Referred Journal with IF=6.718 Vol. 47, Issue 01, No. 02, January - March : 2023. (UGC-CARE Approved)	6864
15	Dr. Saumya Chandra, Asst. Professor & Ms. P. Aruna, Spl. Educator	Children with Intellectual and Developmental	Education of Socio- Economic Disadvantaged Groups, Published by Routledge, Taylor & Francis Group, New York	978-1-032-
16	Dr. S. Parween, Asst. Professor	Strategies to Overcome Behavioural Issues of Students with Visual Impairment in Inclusive Classrooms	Indian Journal of Psychology	ISSN-0019- 5553 (UGC Care list Journal)

# DETAILS OF SPECIAL LECTURES / WORKSHOPS / SEMINARS / CONFERENCES / SYMPOSIUMS HOSTED / ORGANISED DURING THE YEAR

S. No	Date	Title of the workshops / seminars / conferences / training programmes
1.	16 <sup>th</sup> April 2022	Organised a Guest Lecture by Ms. Subha Chandrashekhar, Founder Director-Anugraham Institute on Community Integration in collaboration with University of Minnesota), Chennai on the topic 'Let's make a better world for our Children with Disabilities–Inclusive School and Inclusive Society'
2.	22 <sup>nd</sup> April 2022	Awareness program on "Life after Covid" for Parents of Individuals with Intellectual and Developmental Disabilities.
3.	16 <sup>th</sup> to 20 <sup>th</sup> Au- gust 2022	A five - day Refresher Programme on "Research Methodology in the field of Special Education and Disability Rehabilitation" organized by Department of Intellectual Disability
4.	17 <sup>th</sup> September 2022	Organised a Guest Lecture by Dr. Shilpa K. S. Consultant and Special Educator (The Unit of Hope), Saint John's Medical Col- lege and Hospital, Bengaluru Karnataka on the topic 'Vitality of Special Education for Infants & Toddlers'
5.	19 <sup>th</sup> – 21 <sup>st</sup> Octo- ber, 2022	A three-day RCI approved CRE training programme on 'Learning Disability and its Differential Diagnosis' was orga- nized by Department of Intellectual Disability
6.	26 <sup>th</sup> November 2022	Organised a Guest Lecture by Dr. Shubhangi Vaidya, Associate Professor, School of Inter-Disciplinary and Trans-Disciplinary Studies, IGNOU, New Delhi on the topic 'Advocacy and Human Rights of Persons with Intellectual and Developmental Dis- abilities'
7.	29 <sup>th</sup> November 2022	A One-day orientation programme for Parents of Children with Intellectual Disability about 'Future Prospects'
8.	9 <sup>th</sup> December 2022	Organised a Guest Lecture by Mr.Suresh Arunachalam, Computer Engineer and Software Developer, Cognizant, Coimbatore on the topic 'Brain-Gym Activities'
9.	30 <sup>th</sup> January to 01 <sup>st</sup> February 2023	A Three-day training programme on Orientation and Mobility
10.	4 <sup>th</sup> February 2023	Organised a Guest Lecture by Dr.Tilly Van Veggel, Senior Ex- pert and Policy Maker in Special Education, Drunen, Nether- lands, on the topic 'Every Child has a Voice'

S. No	Date	Title of the workshops / seminars / conferences / training programmes		
11.	07 <sup>th</sup> February 2023	Swavriddhi - A Self Development Programme for Children with Intellectual Disability		
12.	9 <sup>th</sup> and 10 <sup>th</sup> Feb- ruary 2023	A Two-day Training Programme on Enabling Mobile Apps for Persons with Visual Impairment		
13.	23 <sup>rd</sup> to 25 <sup>th</sup> Feb- ruary 2023	A Three Day Training Program on 'Life Skills Development for Students with Intellectual Disability		
14.	02 <sup>nd</sup> – 04 <sup>th</sup> March 2023	Three-day Continuous Rehabilitation Education Programme - "Application of Technology in Education and Training"		
15.	3 <sup>rd</sup> March, 2023	One-day Training Programme - Care and Usage of Amplification Devices in Developing Communication skills for Children with Hearing Impairment		
16.	9 <sup>th</sup> March 2023	A one-day community participatory program (CPP) for parents of children with intellectual disability		
17.	16 <sup>th</sup> March 2023	A One – Day Orientation Programme on Creating Accessible and Inclusive Classrooms for Children with Special Needs for B.Ed. General Teacher Trainees		
18.	18 <sup>th</sup> March 2023	Organised a Guest Lecture by Dr. Janani Tamilvanan, Founder Director - Nutri-Genetics, Coimbatore on the topic 'Nutrition and Diet Choices for sound Physical Health and Mental Wellbeing'		
19.	25 <sup>th</sup> March 2023	A Sensitization programme on Physical and mental well- being for parents of children with cerebral palsy		
20.	30 <sup>th</sup> March 2023	A One - Day Awareness Programme on 'Higher Education Opportunities and Job Avenues for Students with Hearing Impairment'		

# DETAILS OF PROJECTS UNDERTAKEN DURING THE YEAR

S.No	Investigator	Name of the Project & other details	Funding Agency
1	Dr.S.Parween, Asst.Professor	Effectiveness of Adapted Physical Activities on the Executive Functioning of Students with Visual Impairment. Sanctioned Amount: Rs. Ten Lakhs	Science Research

# ANY OTHER ACTIVITY DURING THE YEAR WORTH MENTIONING

#### 17<sup>th</sup> Convocation

The 17<sup>th</sup> Convocation of the four Faculties of the Ramakrishna Mission Vivekananda Educational and Research Institute, Coimbatore Campus was held in a blended mode at GKD Auditorium, Ramakrishna Mission Vidyalaya on 12<sup>th</sup> October 2022.

Swami Garishthananda, Administrative Head of RKMVERI, Coimbatore Campus and Secretary, Ramakrishna Mission Vidyalaya, Coimbatore delivered the welcome address. Swami Sarvottamananda, Vice Chancellor, RKMVERI, Belur Math delivered the introductory address. Swami Kirtipradananda, Registrar, RKMVERI, presented the profile of the University through online. Dr. Bhushan Patwardhan, Chairman, Executive Committee, National Assessment and Accreditation Council (NAAC) Bengaluru and Former Vice-Chairman, University Grants Commission (UGC), New Delhi delivered the convocational address. Next to that, Revered Swami Suviranandaji Maharaj, Chancellor, RKMVERI and General Secretary, Ramakrishna Math and Ramakrishna Mission, Belur Math, Kolkata delivered the Chancellor's address through online. In total 215 students (38 students from FDMSE, 109 from GAPEY, 51 from FAR and 17 from DCS) received their degrees.

# NAME OF THE FACULTY CENTRE: <u>FACULTY OF GENERAL & ADAPTED PHYSICAL</u> <u>EDUCATION AND YOGA (GAPEY)</u>, COIMBATORE CAMPUS

# LIST OF TEACHING FACULTY MEMBERS

S. No.	Name	Designation
1	Dr. R. Giridharan	Associate Professor & Head
2	Dr. A. Sathiya Moorthy	Assistant Professor Cum Sports Physio- therapist
3	Dr. Dibakar Debnath	Assistant Professor
4	Dr. D. Yuvaraj	Assistant Professor
5	Dr. M. Ramajayam	Assistant Professor
6	Dr. S. Sakthivel	Assistant Professor
7	Sri S. Rajavarman	Assistant Professor
8	Dr. N. Karthikeyan	Assistant Professor
9	Dr. S. Sathish kumar	Assistant Professor
10	Dr. J. Viswanathan	Assistant Professor
11	Dr. Vijmendra Kumar Grover	Assistant Professor

# **NEW PROGRAMMES / COURSES STARTED**

#### **NEW PROGRAMMES / COURSES STARTED**

#### Introduction of New Multi-disciplinary Courses:

**Exercises and Fitness Management** 

Physical Activity Strategies for Inclusive Classroom

Basic course on Isokinetic Assessment

# DETAILS OF STUDENTS ADMISSION DURING THE YEAR

S. No	Programme	Admitted	
1	Bachelor of Science in Physical Education Health Education and Sports (BSc PHS)	54	
2	Bachelor of Physical Education (BPEd)	50	
3	Master of Physical Education (MPEd)	17	
4	Doctor of Philosophy in Physical Education (Ph.D.)	04	
	TOTAL		

# STUDENTS PASSED OUT DETAILS OF THE YEAR

S. No	Programme	Number of students	Pass Percentage
1	Bachelor of Science in Physical Education Health Education and Sports (BSc PHS)	49	100%
2	Bachelor of Physical Education (BPEd)	38	100%
3	Master of Physical Education (MPEd)	20	100%
4	Doctor of Philosophy in Physical Education (Ph.D.)	02	100%

# STUDENTS PLACEMENT AND PROGRESSION DETAILS OF THE YEAR

# DETAILS OF STUDENTS PURSUING HIGHER EDUCATION (2021-22):

S. No	Name of the Student	Program graduated from	Name of institution joined	Name of pro- gramme admitted to
1	Aniruthnithin.V	BSc PHS	RKMVERI - GAPEY	BPEd
2	Arunachalam.S	BSc PHS	RKMVERI - GAPEY	BPEd
3	Kishor Kumar.G	BSc PHS	RKMVERI - GAPEY	BPEd
4	Manojkumar.R	BSc PHS	RKMVERI - GAPEY	BPEd
5	Mohanraj.P	BSc PHS	RKMVERI - GAPEY	BPEd
6	Naveen Kumar.D	BSc PHS	RKMVERI - GAPEY	BPEd
7	Prakasan.K	BSc PHS	RKMVERI - GAPEY	BPEd
8	Shajin.K	BSc PHS	RKMVERI - GAPEY	BPEd
9	Chandru.G.G	BSc PHS	RKMVERI - School of Rehabil- itation and Sports Science	M.Sc. in Sports Sci- ence
10	Hari Vishnu.A	BSc PHS	RKMVERI - School of Rehabil- itation and Sports Science	M.Sc. in Sports Sci- ence
11	Sudesh Kumar.K	BSc PHS	RKMVERI - School of Rehabil- itation and Sports Science	M.Sc. in Sports Sci- ence
12	Dharun Kumar.S	BSc PHS	Maruthi College of Physical Education	BPEd
13	Kirubanandhan.M	BSc PHS	Maruthi College of Physical Education	BPEd
14	Mayilvelmurugan.V	BSc PHS	Maruthi College of Physical Education	BPEd
15	Praveen.K	BSc PHS	Maruthi College of Physical Education	BPEd
16	Prabhakaran.S	BSc PHS	Vinayaka Missions College of Physical Education	BPEd
17	Sudhakar.M	BSc PHS	Vinayaka Missions College of Physical Education	BPEd

S. No	Name of the Student	Program graduated from	Name of institution joined	Name of pro- gramme admitted to
18	Iyappan.S	BSc PHS	GS College of Physical Educa- tion BPEd	
19	Naveen Kumar.S	BSc PHS	GS College of Physical Educa- tion	BPEd
20	Pandiyarajan.P	BSc PHS	GS College of Physical Educa- tion	BPEd
21	Vignesh.M	BSc PHS	GS College of Physical Educa- tion	BPEd
22	Ashwanth.M	BSc PHS	Bharathidasan University	BPEd
23	Jeevanantham.G	BSc PHS	Sree Saraswathi Thyagaraja College	MSW
24	Kavin Kumar.G	BSc PHS	Bharath Niketan Engineering College	MBA
25	Saran.S	BSc PHS	Bharathiar University	BPEd
26	Seeman.R	BSc PHS	Saveetha School of Physical Education	BPEd
27	Srirangan.P	BSc PHS	Selvam College of Physical Education	BPEd
28	Siva.M	BSc PHS	Sri Renugambal College of Physical Education	BPEd
29	Manikandan.M	BPEd	RKMVERI - GAPEY	MPEd
30	Manikandan.N	BPEd	RKMVERI - GAPEY	MPEd
31	Rahul.I.S	BPEd	RKMVERI - GAPEY	MPEd
32	Ramesh Aravind.J	BPEd	RKMVERI - GAPEY	MPEd
33	Shanmuga Priyan.S	BPEd	RKMVERI - GAPEY	MPEd
34	Sriram.T.K	BPEd	RKMVERI - GAPEY	MPEd
35	Madhavan.D.C	BPEd	RKMVERI - GAPEY	MPEd
36	Deepak Rahul.A	BPEd	Cheran College of Physical Education	MPEd

S. No	Name of the Student	Program graduated from	Name of institution joined	Name of pro- gramme admitted to
37	Aravindh.M	MPEd	RKMVERI - GAPEY	Ph.D
38	Sabarish.C	MPEd	RKMVERI - GAPEY	Ph.D

#### DETAILS OF STUDENTS PLACED:

S. No	Name	Programme graduated from	Name of the Company/ Institution Joined	Year of Joining
1	Harish K	MPEd II	MMS CBSE, Hosur	2023
2	Sounthararajan S	BSc PHS III	MMS CBSE, Hosur	2023
3	Sathish M	BPED II	AVB Mat.Hr.Sec School	2023
4	Senthil Kumar R	BPED II	AVB Mat.Hr.Sec School	2023
5	Kalamamani C M	BPED II	AVB Mat.Hr.Sec School	2023
6	Srikaran M	BPED II	AVB Mat.Hr.Sec School	2023
7	Pravin Kumar P	BPED II	Shri Ganga Hr.Sec.School	2023
8	Pasumbon P	BPED II	SOBO SPORTS	2023
9	Veerapandi M	BPED II	SOBO SPORTS	2023
10	Mohankumar D	BPED II	SOBO SPORTS	2023
11	Sanjai K	BPED II	SOBO SPORTS	2023
12	Manoj T	BPED II	SOBO SPORTS	2023
13	Divakar B	BPED II	SOBO SPORTS	2023
14	Sriharan M	BPED II	SOBO SPORTS	2023
15	Senthil Kumar R	BPED II	SOBO SPORTS	2023
16	Byju Infant	BPED II	SOBO SPORTS	2023

S. No	Name	Programme graduated from	Name of the Company/ Institution Joined	Year of Joining
17	Ashok M	BPED II		2023
17			SOBO SPORTS	2023
18	Ganesh B K	BPED II	SOBO SPORTS	2023
19	Praksah R	BPED II	SOBO SPORTS	2023
20	Gunaseelan R	BPED II	SOBO SPORTS	2023
21	Selvarag G	BPED II	SOBO SPORTS	2023
22	Sakthivel T	MPED II	SOBO SPORTS	2023
23	Maheshwaran	MPED II	SOBO SPORTS	2023
24	Ganesan	MPED II	SOBO SPORTS	2023
25	Kishore P	MPED II	SOBO SPORTS	2023
26	Mukesh S	MPED II	SOBO SPORTS	2023
27	Harish K	MPED II	SOBO SPORTS	2023
28	Aravind R	BPED II	PHASE SPORTS	2023
29	Mahalakshmanan D	BPED II	PHASE SPORTS	2023
30	Selvaraj G	BPED II	PHASE SPORTS	2023
31	Ashok Kumar A	MPED II	PHASE SPORTS	2023
32	Mukesh S	MPED II	PHASE SPORTS	2023
33	Mahalakshmanan D	BPED II	SPORTY BEANS	2023
34	Selvaraj G	BPED II	SPORTY BEANS	2023
35	Dhivakar B	BPED II	SPORTY BEANS	2023
36	Aravind R	BPED II	SPORTY BEANS	2023
37	Kishore P	MPED II	SPORTY BEANS	2023

S. No	Name	Programme graduated from	Name of the Company/ Institution Joined	Year of Joining
38	Sudharsan R	MPED II	SPORTY BEANS	2023
39	Sakthi Vel.T	MPED II	Vet Institute of Arts & Science	2023
40	Kishore P	MPED II	Sri Shakthi International School	2023

# DETAILS RELATING TO PH. D. SCHOLARS DURING THE YEAR

S. No.	Name of Current Ph. D. scholars	Name of Supervisor
1	Aravindh.M	
2	Maruthamuthu.K	
3	Prakash.G	Yet to Allot
4	Sabarish.C	

# DETAILS OF ACADEMIC PUBLICATIONS DURING THE YEAR

Details of staff who attended and presented paper in conferences, seminars, etc.

S. No.	Name	Date	Title of the paper presented		
1	Dr. R. Giridharan	24 <sup>th</sup> January, 2023	Attended the University Sports Conference		
2	Dr. Dibakar Debnath	15 <sup>th</sup> March, 2023	Two Day International Conference on Modern Trends in Sports Performance		
3	Dr. Dibakar Debnath	24 <sup>th</sup> & 25 <sup>th</sup> March, 2023	National Seminar on Latest Advancements in Physical Education &		

S. No.	Name	Date	Title of the paper presented
			Sports Sciences and Their Implications
4	Dr. D. Yuvaraj	15 <sup>th</sup> March, 2023	Two Day International Conference on Modern Trends in Sports Performance
5	Dr. D. Yuvaraj	24 <sup>th</sup> & 25 <sup>th</sup> March, 2023	National Seminar on Latest Advancements in Physical Education & Sports Sciences and Their Implications
6	Dr. M. Ramajayam	21 <sup>st</sup> and 22 <sup>nd</sup> April, 2022	"Assessment of Sports Injuries between Kabaddi and Kho-Kho Players" in the International Conference on "Sports Injury Prevention and Management"
7	Dr. M. Ramajayam	24 <sup>th</sup> & 25 <sup>th</sup> March, 2023	National Seminar on Latest Advancements in Physical Education & Sports Sciences and Their Implications
8	Dr. S. Sakthivel	27 <sup>th</sup> Sep. to 1 <sup>st</sup> Oct. 2022	Attended the "International Workshop on SCOPUS, Peer Reviewed Journal and UGC CARE List free publication process"
9	Dr. S. Sakthivel	15 <sup>th</sup> March, 2023	Two Day International Conference on Modern Trends in Sports Performance
10	Dr. S. Sakthivel	19 <sup>th</sup> March, 2023	2 <sup>nd</sup> International Conference on Food Safety, Nutrients and Microbiology and Fitness
11	Dr. S. Sakthivel	24 <sup>th</sup> & 25 <sup>th</sup> March, 2023	National Seminar on Latest Advancements in Physical Education & Sports Sciences and Their Implications
12	Dr. N. Karthikeyan	18 <sup>th</sup> & 19 <sup>th</sup> March 2023	2 <sup>nd</sup> International Conference on Food Safety, Nutrients and Microbiology and Fitness (ICFNMF-2023)
13	Dr. J. Viswanathan	15 <sup>th</sup> March, 2023	Two Day International Conference on Modern Trends in Sports Performance
14	Dr. J. Viswanathan	24 <sup>th</sup> & 25 <sup>th</sup> March, 2023	National Seminar on Latest Advancements in Physical Education & Sports Sciences and Their Implications
15	Dr. Vijmendra Kumar Grover	24 <sup>th</sup> & 25 <sup>th</sup> March, 2023	National Seminar on Latest Advancements in Physical Education & Sports Sciences and Their Implications

# Details of publications in journals and books

S. No	Author	Title of Paper	Journal	ISSN/ISBN
1	Dr. S. Sakthivel	Analysis of Selected Motor Fitness Variables of Children with Hearing Impairment and Intellectual Disability	Madhya Bharti	ISSN: 0974- 0066
2	Dr. M. Ramajayam	Impact of High Altitude Aerobic Training on Physiological Variables of Post Pubescent Men Footballers	Madhya Bharti	ISSN: 0974- 0066
3	Dr. D. Yuvaraj	Comparative Analysis of Hand Grip Strength and Arm Length of Para Sitting Volleyball and Para Sitting Cricket Players	Journal of Education, Rabindra Bharti University	ISSN: 0972- 7175
4	Dr. Dibakar Debnath	Analysis of Body Composition Index and Selected Anthropometric Measurements of Students with Hearing Impairment and Intellectual Disability	Journal of Education, Rabindra Bharti University	ISSN: 0972- 7175
5	Dr. Dibakar Debnath	Effects of Specific Bowling Skills Training on Grip Strength and Bowling Accuracy for College Level Men Cricket Players	Journal of Education, Rabindra Bharti University	ISSN: 0972- 7175
6	Dr. Dibakar Debnath	Effect of Adapted Physical Activities on Leg Explosive Power of Children with Intellectual Disability	Kala Sarovar Quarterly Journal	ISSN: 0975- 4520
7	Dr. M. Ramajayam	Assessment of Sports Injuries between Kabaddi and Kho-Kho Players	Proceedings of the International Conference on Sports Injury Prevention & Management	ISSN 0975- 6299
8	Dr. M. Ramajayam	Impact of Varied Modalities with Skill Training on Weave and Slip Skills of Novice Boxers	Journal of Education, Rabindra	ISSN: 0972- 7175

S. No	Author	Title of Paper	Journal	ISSN/ISBN
			Bharati University	
9	Dr. Dibakar Debnath	Effects of Adapted Yogic Practice on Balance and Vital Capacity among students with Hearing Impairment	Journal of Emerging Technologies and Innovative Research	ISSN: 2349- 5162
10	Dr. Dibakar Debnath	Effects of Indigenous Activities on Agility and Flexibility of Children with Intellectual Disability	Journal of Emerging Technologies and Innovative Research	ISSN: 2349- 5162
11	Dr. R. Giridharan	Relationship of Balance and Bilateral Coordination Between Age-Matched Male and Female Individuals with Intellectual Disability	Madhya Bharti	ISSN: 0974- 0066
12	Dr. R. Giridharan	Health Related Physical Fitness And Associated Factors Among Individuals With and Without Intellectual Disability	Madhya Bharti	ISSN: 0974- 0066
13	Dr. R. Giridharan	Relationship of Balance and Bilateral Coordination Between Age-Matched Male and Female Individuals with Hearing Impairment	Journal of Education	ISSN: 0972- 7175
14	Dr. D. Yuvaraj	Effects of Badaga Dance on Selected Physical Health of Students with Intellectual Disability	Journal of Education	ISSN: 0972- 7175
15	Dr. D. Yuvaraj	Effects of Specific Football Drills on Selected Physical Fitness and Skill Performance Variables of Students with Intellectual Disability	Madhya Bharti	ISSN: 0974- 0066
16	Dr. D. Yuvaraj	Influence of Inclusive Games On Special Olympic Football Skills Of Student With Intellectual Disability	Madhya Bharti	ISSN: 0974- 0066

S. No	Author	Title of Paper	Journal	ISSN/ISBN
17	Dr. S. Sakthivel	Relationship between Body Composition and Health Related Physical Fitness Factors among Children with Intellectual Disability	Madhya Bharti	ISSN: 0974- 0066
18	Dr. S. Sakthivel	Analysis of Bowling Accuracy and Target Hitting with Varied Run Up Techniques among College and Club Level Pace Bowlers In Thrissur District	Journal of Education	ISSN: 0972- 7175
19	Dr. R. Giridharan	A Systematic Review on How Individual Factors Affect Physical Activity Participation among School Children	Journal of Fundamental & Competitive Research (Shodhasamhit a)	ISSN: 2277- 7067
20	Dr. J. Viswanathan	Contribution of anthropometric and biomechanical variables supporting the performance of medium pace bowlers in cricket	International Journal of Research and Analytical Reviews	ISSN: E-ISSN: 2348-1269, P- ISSN: 2349-5138
21	Dr. J. Viswanathan	Analysis of anthropometric and biomechanical factors influencing the performance of first division cricket bowlers	Proceedings of the Research Methodology in Multidisciplina ry subjects	ISBN - 978- 93-94901- 44-5

S. No	Author	Title of Book	Name of the Publication	ISBN
1	Dr. M. Ramajayam	Research Process in Physical education and Sports Sciences	Nipun Prakashan Publication	978-93- 92169-42-7
2	Dr. Dibakar Debnath & Dr. D. Yuvaraj	Teaching Methodology in Physical Education and Sports Science	Mahi Publication	978-93- 94238-93-0

# DETAILS OF SPECIAL LECTURES / WORKSHOPS / SEMINARS / CONFERENCES / SYMPOSIUMS HOSTED / ORGANISED DURING THE YEAR

S. No.	Date	Details of Lectures / workshops / seminars / conferences / symposiums HOSTED / ORGANISED
1	27 <sup>th</sup> & 28 <sup>th</sup> February, 2023	National Conference on "Sports Science: A Multi- Disciplinary Approach to Enhance Sports Performance"
2	19 <sup>th</sup> & 20 <sup>th</sup> April, 2022	State level Workshop cum Officiating Examination on Kabaddi for General & Athletes with Hearing Impairment was conducted
3	26 <sup>th</sup> to 30 <sup>th</sup> April, 2022	One Week Short Term Training Programme cum National Level Workshop on "Comprehensive Fitness Training for Excelling in General and Paralympic Sports"
4	14 <sup>th</sup> November, 2022	Workshop on "16 Registers and Records of Physical Education"
5	26 <sup>th</sup> & 27 <sup>th</sup> November	Two Day workshop on "Yogasana & Parayogasana Sports District Judges Training"
6	26 <sup>th</sup> August, 2022	Guest Lecture on Research Process & Methodology
7	17 <sup>th</sup> September, 2022	Guest Lecture on "Track & Field Events – Organization & Practical Implication" for the BSc PHS students
8	17 <sup>th</sup> September, 2022	Guest Lecture on Say NO to Drugs – Drug Abuse on Students
9	15 <sup>th</sup> November, 2022	Guest Lecture on Drug Abuse – SAY Yes to Life : No To Drugs
10	28 <sup>th</sup> November, 2022	A One Day Workshop on Mallakhamb

# DETAILS OF PROJECTS UNDERTAKEN DURING THE YEAR

S. No.	Investigator (staff)	Name of the project & other details	Funding Agency
1	Dr. R. Giridharan	Design and Development of Adapted Boccia Game and Gadgets and a study of their Effect on Auditory Depth Perception and Auditory Reaction Time among persons with Visual Impairment	DST - SEED TIDE

# ANY OTHER ACTIVITY DURING THE YEAR WORTH MENTIONING

#### WORKSHOP

- State level Workshop cum Officiating Examination on Kabaddi for General & Athletes with Hearing Impairment was conducted on 19<sup>th</sup> and 20<sup>th</sup> April, 2022. A total of 412 delegates participated in the workshop on 19<sup>th</sup> April, in which 213 attended the officiating examination conducted on 20<sup>th</sup> April, 2022. Dr. R. Ananthakrishnan, Senior Kabaddi Coach, SAI-STC, Sri P. Gopalan, Convenor, Tamilnadu Amateur Kabaddi Association, Sri N. Dhandapani, Secretary, Coimbatore District Kabaddi Association were the resource persons. Swami Virahanandaji Maharaj, RKMVERI GAPEY, presided the function, Dr. R. Giridharan, Associate Professor & Head welcomed the gathering. Dr. S. Sakthivel, Assistant Professor, Coordinated the programme.
- Faculty organized One Week Short Term Training Programme cum National Level Workshop on "Comprehensive Fitness Training for Excelling in General and Paralympic Sports" from 26<sup>th</sup> to 30<sup>th</sup> April, 2022.
- Workshop on "16 Registers and Records of Physical Education" was organized by the Students Literary Association on 14<sup>th</sup> November, 2022 at the Multipurpose Hall. Dr. N. Vijayakumar, Physical Director, Govt. Arts College (Autonomous), Coimbatore was the Resource Person. A total of 107 students (BPED I, II & MPED I, II) were the beneficiaries.
- RKMVERI, Faculty of GAPEY jointly with Tamil Nadu Youth Yogasana Sports Association organized a Two Day workshop on "Yogasana & Parayogasana Sports District Judges Training" on 26<sup>th</sup> & 27<sup>th</sup> November, 2022 at GKD Auditorium. 130 delegates and 224 students participated in the programme. Dr. C. V. Jayanthy, Secretary, Tamil Nadu

Youth Yogasana Sports Association along with the four-member team were the resource persons. Swami Virahanandaji Maharaj graced the valedictory unction and distributed the certificates to the delegates.

#### **GUEST LECTURE**

Students Literary Association organized an Guest Lecture as mentioned below

S.No	Name of the Guest Lecture	Date	Resource Person
1	Research Process & Methodology	26 <sup>th</sup> August, 2022	Dr. D. Maniazhagu, Associate Profes- sor, Department of Physical Education and Health, Alagappa University
2	"Track & Field Events – Or- ganization & Practical Im- plication" for the BSc PHS students	17 <sup>th</sup> Septem- ber, 2022	Sri M. Manoj Kumar, Alumni (2015 Batch)
3	Say NO to Drugs – Drug Abuse on Students	17 <sup>th</sup> Septem- ber, 2022	Tamil Nadu Police <b>"Enforcement Bu- reau"</b>
4	Drug Abuse – SAY Yes to Life : No To Drugs	15 <sup>th</sup> Novem- ber, 2022	Sri R. Jeyaprakash & Sri B. Vignesh, Sub Inspectors, Periyanaicken- palayam Police Station
5	A One Day Workshop on Mallakhamb	28 <sup>th</sup> Novem- ber, 2022	Mr. G. Athithan, Joint Secretary, Aerial Sports Association of India & Secre- tary, Aerial Sports Association of Tamil Nadu

#### PROGRAMMES AND COMPETITIONS ORGANIZED

#### International Day of Yoga

International Day of Yoga was celebrated on 21<sup>st</sup> June 2022. Dr. R. Giridharan, Associate Professor & Head delivered the welcome address, Swami Garishthanandaji Maharaj, Administrative Head presided over the function. A total of 688 students from various Vidyalaya Institutions performed the yoga protocol in the function.

#### State Level Inter-Collegiate Yogasana Competition

State Level Inter-Collegiate Yogasana Competition was conducted on 7<sup>th</sup> August, 2022. A total of 248 students participated in the events like Athletic Yoga, Rhythmic Yoga and Rope Yoga. Swami Nirmaleshanandaji Maharaj, Secretary, SRMV, College of arts and Science distributed the certificates & medals to the winners.

#### Deeksharambh – Student Induction Programme 2022

 Deeksharambh – Student Induction Programme 2022 commenced for the fresher's BSc PHS I, BPED I and MPED I from 8<sup>th</sup> August, 2022. Parents meeting was conducted on the same day, Swami Suryatmanandaji Maharaj, warden, Swami Akhandananda Hostel delivered the Benedictory Address.

#### Partition Horrors Remembrance Day

As per the Circular issued by the University Grants Commission, "Partition Horrors Remembrance Day" was observed on 14<sup>th</sup> August, 2022. Dr. G. S. Sameeran, District Collector, Coimbatore inaugurated the exhibition in the presence of Swami Garishthanandaji Maharaj, Administrative Head, RKMVERI Coimbatore Campus. Around 800 people including Staff and Student of GAPEY, Persons with Disabilities and Public witnessed the exhibits.

#### Swami Vivekananda's Chicago Address Oratorical Competition

 In celebration of 129<sup>th</sup> Anniversary of Swami Vivekananda's Chicago Address, an oratorical competition in English and Tamil categories was conducted on 30<sup>th</sup> August, 2022. A total of 18 students participated in both the categories. Swami Virahanandaji Maharaj, RKMVERI-GAPEY distributed the mementoes to the prize winners.

# <u>One-day Orientation Programme on Officiating and Coaching in "Cricket for Visually Impaired"</u>

• Sri Mahendran, President, VI Cricket Association of Tamil Nadu and Sri K. Dinesh, Joint secretary oriented the rules, regulations, methods of play, coaching strategies and officiating techniques to the PG students on 13<sup>th</sup> August, 2022.

#### Leadership Training Camp

- Annual Leadership Training Camp for BSc PHS II Year & BPED I Year was organized from 26<sup>th</sup> to 29<sup>th</sup> September, 2022 at GAPEY premises. The following events were conducted:
  - Tent Installation, Map Reading, Tackling the Treat in Forest
  - Knots & Lashes, Lifting & Carrying Techniques, First Aid
  - Progressive Party Games, Mock Sports, Camp Recreation Games
  - Camp Craft, Kit Arrangement, Collection of Articles
  - Treasure Hunt, Camp Songs
  - Trekking, Village Community Programme
  - Camp Fire Programme

The students were divided into four groups and were guided by the house in-charge staff to develop their skills and leadership qualities.

Swami Buddhidanandaji Maharaj, Dy. Controller of Examinations, RKMVERI - Coimbatore Campus, Swami Virahanandaji Maharaj, RKMVERI, Swami Brahmanyanandaji Maharaj, SRMV, Central Office graced the occasion by witnessing the camp events in the valedictory function and distributed the prizes to the campers.

#### <u>Unnat Bharat Abhiyan</u>

• Dr. A. Sathiya Moorthy, Dr. S. Sakthivel, Dr. N. Karthikeyan and 25 students were involved in mapping, and collection of data at Kuppaepalayam Village on 19<sup>th</sup> & 21<sup>st</sup> November, 2022. A total of 162 houses were surveyed and documented.

#### National Constitution Day

National Constitution Day was observed on 26<sup>th</sup> November 2022. A total of 356 students participated and took the pledge.

#### 3rd State Yogasana Sports Championship 2022

 RKMVERI – Faculty of GAPEY in collaboration with Tamil Nadu Youth Yogasana Sports Association organized "3<sup>rd</sup> State Yogasana Sports Championship 2022" on 11<sup>th</sup> December, 2022.

#### National Youth Day

GAPEY celebrated the "National Youth Day" on 12<sup>th</sup> January, 2023. Student Literary Association organized a special lecture in the topic "Youth & Nation Building" delivered by Swami Narayananandaji Maharaj, Secretary, SRKV, Institute of Agriculture and Rural Development and also the staff members participated in the programmes organized by Ramakrishna Mission Vidyalaya at Vivekananda Park.

#### State Level Inter-Physical Education Kabaddi & Volleyball Tournament

• State Level Inter-Physical Education Kabaddi & Volleyball Tournament was conducted on 16<sup>th</sup> & 17<sup>th</sup> February, 2023. Swami Virahanandaji Maharaj, RKMVERI-GAPEY was the Chief Guest, who distributed the trophies, cash prize and certificates to the winners. The results are as follows:

PLACE	KABADDI	VOLLEYBALL
I	RKMVERI – Faculty of GAPEY, Coimbatore	ST. Johns College of Physical Educa- tion, Tirunelveli
II	Cheran College of Physical Educa- tion, Karur	SRMV, Maruthi College of Physical Ed- ucation, Coimbatore

III	Selvam College of Physical Educa- tion, Namakkal	The American College, Madurai
IV	SRMV, College of Arts and Science, Coimbatore	RKMVERI – Faculty of GAPEY Coimbatore

#### **NEW INITIATIVES**

#### Fit Vidyalaya Programme

Adopting the idea of Fit India Movement initiated by the Government of India, our faculty as implemented the Fit Vidyalaya Programme to the Swami Shivananda Hr. Sec. School children of Grades 6 & 7 from July 2022 to February 2023 on all working Thursdays. A total of 360 students were benefited by this programme.

#### PROGRAMMES FOR PERSON WITH DISABILITIES

#### **Unified Sports Competition**

 "Unified Sports Competition – District Level Tournament in 5-a-side Football and Bocce" was conducted on 6<sup>th</sup> April, 2022. A total of 53 special athletes from six special schools in Coimbatore District participated.

#### Inter-State South India Level

 RKMVERI – GAPEY in collaboration with Rotary Club of Coimbatore Midtown organized Inter-State South India Level Para Sitting Volleyball for Men and Para Throwball for Women Tournaments at Vidyalaya Indoor Stadium on 11<sup>th</sup> September, 2022.

#### <u>Coimbatore District Level Sports Competition for persons with disabilities</u>

Coimbatore District Level Sports Competition for persons with disabilities was conducted on 22<sup>nd</sup> April, 2022. Sri R. P. Ravichandran, District Sports Officer was the Special Guest, Sri G. Vasantha Kumar, District Differently Abled Welfare Officer (DDAWO) and Ms. Sharmila, President, Coimbatore Paralympic Committee were the Invited Guest. Swami Virahanandaji Maharaj, Dr. R. Giridharan Associate Professor & Head were present. A total of 231 persons with disabilities participated in the events. Four categories (Men/Women) – Intellectual Disability, Visually Impaired, Hearing Impaired and Orthopedically Handicapped was conducted. The winners were honored with medals and certificates.

## State Level Tournaments in Adapted sports

- In Commemoration of 125th year of Ramakrishna Mission and 75<sup>th</sup> Anniversary of Independence Day "RKMV Trophy – State Level Tournaments in Adapted sports" was organized on 14<sup>th</sup> & 15<sup>th</sup> August, 2022 in five categories namely
  - Para Sitting Volleyball
  - Cricket for Visually Impaired
  - Kabaddi for Hearing Impaired
  - Volleyball for Visually Impaired
  - Football for Intellectually Challenged

Dr. G. S. Sameeran, District Collector, Coimbatore was the Chief Guest and inaugurated the Tournaments. A total of 364 Persons with Disabilities participated from 37 districts. In the Valedictory Function Rtn. K. Palaniappan, Former President, Rotary Club of Coimbatore Metropolis was the Chief Guest, Swami Tadbhasanandaji Maharaj, Correspondent, SRMV, Polytechnic College presided over the function, Rtn. CA M. Bhaskar, Secretary, Rotary Club of Coimbatore Metropolis, Rtn. R. Tharun, Rotary Club of Coimbatore Metropolis were the Special Invitees who distributed the Trophies, Certificates, Medals and Cash Prize to the Winners.

## Indian National Wheelchair Basketball Camp

• RKMVERI – Faculty of GAPEY in Association with Wheelchair Basketball Federation of India conducted the training camp to select the Indian National Wheelchair Basketball Team from 4<sup>th</sup> October to 3<sup>rd</sup> November, 2022. The Valedictory function of the camp was conducted on 4<sup>th</sup> November, 2022 at Indoor Stadium. Swami Buddhidanandaji Maharaj, Dy. Controller of Examination, RKMVERI, was the Guest who delivered the Benedictory Address and presented the mementos to the players and the coaches. Dr. R. Giridharan, Head of the Department, Sri Sharath Nagkne, Head Coach, Sri Thayumanava, Asst. Coach were the dignitaries on the dais. Dr. J. Viswanathan, Assistant Professor coordinated the training camp.

## International Day for Persons with Disabilities (IDPD-2022)

International Day for Persons with Disabilities (IDPD-2022) was observed on 3<sup>rd</sup> December, 2022. In this connection RKMVERI – Faculty of GAPEY in collaboration with Tamil Nadu Paralympic Sports Association & Coimbatore District Paralympic Sports Association organized Regional Para Athletic Meet – 2022 at Vivekananda Inclusive Sports Complex. A total of 94 athletes participated in 100m, 200m, Shot put, Discus & Javelin events. Swami Buddhidanandaji Maharaj, Dy. Controller of Examination, RK-MVERI – Coimbatore Campus was the Chief Guest in the inaugural function and flagged of the Track & Field events. The winners were awarded with medals & certificates.

## State Level Yogasana Competition for Person with Disabilities

State Level Yogasana Competition for Person with Disabilities (Boys & Girls) was organized on 11<sup>th</sup> February, 2023 at Multipurpose Hall. A total of 140 athletes with Intellec-

tual Disability, Visual Impairment & Hearing Impairment participated in the event. In the Valedictory Function, Swami Virahanandaji Maharaj, distributed the certificates and medals to the winners.

#### State Level T20 Cricket Tournament" for Persons with Hearing Impairment

RKMVERI – Faculty of GAPEY in collaboration with Coimbatore District Deaf Association organized "State Level T20 Cricket Tournament" for Persons with Hearing Impairment on 12<sup>th</sup> February, 2023. A total of 6 districts – Coimbatore, Chennai North, Chennai South, Dindugul, Thiruvallur & Tiruppur participated in the tournament. Swami Buddhidanandaji Maharaj, Dty. Controller of Examinations, RKMVERI, Coimbatore Campus was the Chief Guest who distributed the prizes, trophies & medals to the winners.

#### <u>Chief Ministers Trophy - District Level Athletic & Sports Meet for Person with Disabilities</u>

RKMVERI – GAPEY & State Development Authority of Tamil Nadu, Coimbatore conducted the Chief Ministers Trophy - District Level Athletic & Sports Meet for Person with Disabilities on 21<sup>st</sup> February, 2023. A total of 345 Athletes from Intellectual Disability, Hearing Impairment, Visual Impairment & Orthopedic Impairment participated. Ms. Sowmya Anand, IAS, Coimbatore District Assistant Collector, Training, Mr. Vasantha Rama Kumar. G, DDAWO, Mr. Ragu Kumar, DSO & Dr. R. Giridharan, Associate Professor & Head were the Guests.

#### Young Athlete Training Programme for Community Capacity Building

Young Athlete Training Programme for Community Capacity Building was organized at Jeyam Special School & Autism Center, Coimbatore on 22<sup>nd</sup> February, 2023. 29 Special Children, 34 Parents, 6 Special Educators, 4 Therapists and 3 Caretakers participated. Series of MATP games and activities were conducted. Dr. A. Sathiya Moorthy & Sri S. Rajavarman, Coordinated the programme.

## <u>Unified Play Day & Sports Competition – 2023</u>

 A total of 470 Students (370 ID Children & 100 Normal Children) participated in the programme. Swami Garishthanandaji Maharaj, Secretary, Ramakrishna Mission Vidyalaya & Administrative Head, RKMVERI, Coimbatore Campus was the Chief Guest. Monks, Heads of Vidyalaya Institutions, Special Invitees, Parents, Special Educators, Physiotherapist, witnessed the programme.

#### Young Athlete Training & Community Capacity Building Programme

 Young Athlete Training & Community Capacity Building Programme was organized for the RKMVERI – FDMSE Special Children and Parents on 11<sup>th</sup> & 18<sup>th</sup> March, 2023. Thirty-Eight Special Children, 15 Parents & 3 Special Educators participated. Series of Motor Activity Training Games and Activities were conducted. Sri S. Rajavarman, Coordinated the programme along with 30 teacher trainee volunteers.

## <u>Special Teachers Convention Programme and Special Olympics – Young Athlete Training &</u> <u>Capacity Building Programme</u>

Faculty organized "Special Teachers Convention Programme and Special Olympics – Young Athlete Training & Capacity Building Programme" on 27<sup>th</sup> March, 2023. Twelve playing stations for CwDs was arranged with the help of 40 teacher trainees, in which 165 CwDs and 45 Parents participated and exhibited their talents. Seventy-three special education teachers along with the parents and caregivers attended the convention programme and got exposed & handling the CwDs through various Motor Activity Training and Adapted Activities. The CwDs were appreciated with certificates & medals, while Teachers & Parents with certificates.

# Adapted Sports Coaching Camp:

Camp	Date	Beneficiaries
Intensive Cricket Coaching Camp for Players with Visual Impaired	22.02.2023 to 02.03.2023	15
Intensive Kabaddi Sports Coaching Camp for Per- sons with Hearing Impairment	20.02.2023 to 03.03.2023	25
Intensive Para Sitting Volleyball Coaching Camp	10.02.2023 to 24.02.2023	15
Intensive Wheelchair Basketball Coaching Camp	18 <sup>th</sup> & 19 <sup>th</sup> Feb- ruary, 2023	08
Intensive Football Coaching Camp for players with Intellectual Disability	06.02.2023 to 17.03.2023	15

Our faculty organized various adapted sports coaching camp are given below.\_

## UNESCO CHAIR

Ramakrishna Mission Vivekananda Educational and Research Institute, India (ID 1004) concerning the UNESCO Chair in Inclusive Adapted Physical Education and Yoga, established on December 15, 2012. Renewal of the third term of the UNESCO Chair in Inclusive Adapted Physical Education and Yoga at RKMVERI was approved by UNITWIN/UNESCO, Paris, France, on December 26, 2022, and is valid up to 2025. Professor Giridharan Rangaraj, as new chairholder, and Professor Arkadeb Dutta, as co-chairholder of this UNESCO chair.

## Vivekananda Inclusive Sports Academy for Differently-abled

Ramakrishna Mission Vivekananda Educational and Research Institute (RKMVERI)—Faculty of General and Adapted Physical Education and Yoga (GAPEY)—recognized the need for creating an accessible sporting environment for persons with disabilities so as to enable them to excel in sports with a view to boosting the participation of persons with disabilities in sports activities both at the national level and at the international level. RK-MVERI has established a training centre for disability sports, entitled "Vivekananda Inclusive Sports Academy for Differently-abled (VISAD)" at the Coimbatore Campus, with world-class facilities and equipment for both indoor and outdoor games, which was inaugurated on June 23, 2022. The aim of the academy is to provide training facilities at par for athletes to compete and win in Paralympics, Deaflympics, Special Olympics, and other international events with an average of 150 people with disabilities in a day. The teachertrainees and research scholars of GAPEY are working closely with the special athletes to develop a fully accessible centre with the ability to train and host more than 14 official sports.

# A REPORT OF EXTENSION ACTIVITIES OF THE UNIVERSITY

The University conducts the following extension activities:

- (i) CERTIFICATE COURSES IN INDIAN SPIRITUAL HERITAGE
- (ii) VIVEKDISHA AN ICT BASED NETWORK
- (iii) KRISHI VIGYAN KENDRA A PROJECT OF ICAR
- (iv) LOKA SIKSHA PARISHAD AN INTEGRATED RURAL DEVELOPMENT PROJECT

# (i) CERTIFICATE COURSES IN INDIAN SPIRITUAL HERITAGE

S.No	Name	Duration	Medium of Instruction	No. of Students
1	Bhagavad Gita (Traditional and Modern Interpretations)	Two years	Bengali	63
2	Bhakti Yoga of Swami Vivekananda	One year	Bengali	17
3	Deva Vani and Bhakti Prasanga of Swami Vivekananda (Selections)	Two years	Bengali	20
4	Fundamentals of Indian Spiritual Heritage	Two years	Bengali	63
5	Gospel of Sri Ramakrishna (Sri Sri Ramakrishna Kathamrita)	Two years	English	10
6	Jnana-Yoga of Swami Vivekananda	One year	Bengali	76
7	Kathopanishad (Swamiji House)	Two years	Bengali	1
8	Kenopanishad	One year	Bengali	47
9	Life and Message of Sri Ma Sarada Devi	Two years	Bengali	46
10	Life and Teachings of Swami Vivekananda	One year	Bengali	43
11	Mahabharata	Two years	Bengali	14
12	Mahanarayana Upanishad	Two years	Bengali	168

13	Patanjali Yoga Sutra and Raja Yoga of Swami Vivekananda (Sadhana Pada)	One year	Bengali	113
14	Spiritual Heritage of India	Two years	English	21
15	Sri Ramakrishna kathamrita and Stotras	Two years	Bengali	47
16	Sri Sri Ramakrishna Lila Prasanga	Two years	Bengali	63
17	Sri Sri Ramakrishna Lila Prasanga and Sri Sri Chandi	Two years	Bengali	82
18	Srimad Bhagavatam/Ramayana/Purana	Two years	Bengali	74
19	Stotramala, Sahasra-namavali and Sri Sri Chandi	One year	Bengali	61
20	Karmayoga of Swami Vivekananda (Swamiji House)	Two years	Bengali	2
21	Taittiriya Upanishad	Two years	Bengali	5
22	'Tin Ramayan ki Jhanki' (Valmiki, Tulsidas, Adhyatma)	Two years	Hindi	4
23	Viveka-Chudamani (selections)	One year	Bengali	62
24	Indian Classical Music:Dhrupad Sangeet (Level-1)	One year	Bengali/ English/ Hindi	16
25	Pakhawaj (percussion instrument)(Level-1)	One year	Bengali/ Hindi	13
26	Certificate Course in Yoga (Theory and Practical)	6 Months	Bengali /Hindi	12
	Total			1143

# (ii) VIVEKDISHA – AN ICT BASED NETWORK

Vivekdisha, an information and communication technology (ICT)-based network, is a unique service and outreach activity of the Ramakrishna Mission Vivekananda Educational and Research Institute. It provides a range of services through a single platform, including free online classes conducted via Zoom, specifically designed for school students in grades 9 to 12. During the academic year 2022-23, Vivekdisha conducted multimedia-based interactive online classes five days a week, with a total of 29,749 student attendances. Additionally, the recorded classes are available on our website through YouTube links.

Vivekdisha operates regular programs in approximately 25 centers, which cover both urban and rural areas. These programs are closely monitored from the University's expert center located at its main campus in Belur Math, Howrah, West Bengal.

The subjects offered by Vivekdisha encompass Physics, Chemistry, Mathematics, Biology, Communicative English, and Indian Constitution. The teaching materials primarily consist of multimedia presentations that incorporate texts, pictures, animations, real visual clips, and video recordings from laboratories. This teaching approach aims to enhance the effectiveness, enjoyment, and productivity of the teaching-learning process. The medium of instruction is available in both Bangla and English.

S No.	Class	Subjects Taught	
1	9 and 10	Physical Science, Life Science, Mathematics, English	
2	11 and 12	Physics, Chemistry, Mathematics, Life Science, English	
3	9, 10, 11, 12	Constitution of India	

#### 2. Subjects Taught:

The total number of classes held across all subjects is 218. The program has been implemented in 25 schools, with a total student attendance of 29,749 across all subjects.

Furthermore, during the 2022-2023 academic year, we have published a Bengali compilation of 100 selected Subhashitani, which are illuminating moral sayings in the form of Sanskrit verses.

Sl. No.	Name	Designation	Subject taught
	Dr. Gautam Chaterjee	Assistant Professor Agricultural Biotechnology	Biology for class XI

#### 3. List of the Teaching Faculty Members:

Sl. No.	Name	Designation	Subject taught
		Department IRDM Faculty Centre Ramakrishna Mission Vivekananda Educational and Research Institute, Narendrapur Campus	
2	Dr. Kunal Sikdar	Assistant Professor Department of Biomedical Science and Technology and Department of Sports Science & Yoga, Ramakrishna Mission Vivekananda Educational and Research Institute, Belur Math	Biology for class XII
3	Dr. Janardan Ghosh	Teaching and Research Associate Ramakrishna Mission Vivekananda Educational and Research Institute, Belur Math	General English (Communication, Grammar & Literature) for class IX & X
4	Dr. Arnab Das	Assistant Professor Department of Sports Science & Yoga Ramakrishna Mission Vivekananda Educational and Research Institute, Belur Math	Life Science for class IX & X
5	Sri Rabindranath Dhara	Retired Professor, Ramakrishna Mission Vidyamandira, Belur Math	Chemistry for class XI & XII
6	Sri Akshay Panda	Lab. Cum Teaching Assistant, Ramakrishna Mission Vivekananda Educational and Research Institute, Belur Math	Physical Science for class IX
7	Sri Tathagata Roy	Lab. Cum Teaching Assistant, Ramakrishna Mission Vivekananda Educational and Research Institute, Belur Math	Physical Science for class X Physics for class XI Physics and Mathematics for class XII
8	Sri Sanu Bera	Ph. D. Scholar, Ramakrishna Mission Vivekananda Educational and Research Institute, Belur Math	Mathematics for class X
9	Sri Snehasish Mukherjee	Ph. D. Scholar, Ramakrishna Mission Vivekananda Educational and Research Institute, Belur Math	Mathematics for class IX & XI
10	Sri Subhankar	State aided College Teacher,	Indian Constitution for class

Sl. No.	Name	Designation	Subject taught
	Maity	Ramakrishna Mission Vidyamandira, Belur Math	XII
11	Sri Uttam Kumar Das	State aided College Teacher, Ramakrishna Mission Vidyamandira, Belur Math	Indian Constitution for class IX & XI
12	Sri Sourav Chakraborty	Guest Faculty of Political Science Department, Ramakrishna Mission Residential College, Narendrapur	Indian Constitution for class X

# 4. Schools covered by Vivekdisha:

Sl. No.	Name of the schools	<u>Category</u> Secondary / Higher Secondary	Address
1	Nimpith Ramakrishna Vidyabhavan	Higher Secondary	PO - Nimpith Ashram, Dist South 24 Parganas, Sundarban, Pin – 743338
2	Konnagar Rajendra Smriti Vidyalaya	Higher Secondary	PO – Konnagar, Dist Hooghly, West Bengal
3	Dwarbasini Girls High School HS	Higher Secondary	Vill Dwarbasini, Pandua, Dist Hooghly, Pin – 712149, West Bengal
4	Sinthi Ramakrishna Sangha Vidyamandir (For Girls)	Higher Secondary	40, Gour Sundar Sett Lane, Kolkata – 700050
5	Bergram Palli Sevaniketan High School (H.S.)	Higher Secondary	Vill. & PO – Bergram, Via – Sriniketan, Dist Birbhum, Pin – 731236, West Bengal
6	Chakdwipa High School	Higher Secondary	PO – Chakdwipa, Dist Puba Medinipur, Pin – 721645, West Bengal
7	Taki Ramakrishna Mission High School	Secondary	PO – Taki, Dist. North 24 Parganas, Pin – 743429, West Bengal
8	Shibpur SSPS Vidyalaya	Higher	78/8, College Road, PO – Botanical

		Secondary	Garden, Howrah – 711103, West Bengal
9	Begampur High School	Higher Secondary	PO – Begampur, Dist Hooghly, Pin – 712306, West Bengal
10	Borai Balika Vidya Mandir	Secondary	PO – Borai, PS – Singur, Sub Division – Chandannagar, Dist Hooghly, Pin – 712306, West Bengal
11	Karanjatala Subhasini Vidyapith	Secondary	PO – Uchildaha, Block – Minakhan, PS – Haroa, Dist North 24 Parganas, Pin – 743425, West Bengal
12	Tentulia High School	Higher Secondary	PO – Tentulia, PS – Swarupnagar, Dist North 24 Parganas, Pin – 743703, West Bengal
13	Bolpur High School	Higher Secondary	Sriniketan Road, Darjipara, Bolpur, Pin – 731204, West Bengal
14	Baluhati Balika Vidyalaya	Secondary	Domjur, Howrah, Pin – 711405, West Bengal
15	Masat Aptap Mitra High School	Higher Secondary	PO – Masat, Dist Hooghly, Pin – 712701, West Bengal
16	Betai High School	Higher Secondary	PO – Betai, Dist Nadia, Pin – 741163, West Bengal
17	Nasigram High School	Higher Secondary	PO – Nasigram, Dist Bardhaman, Pin – 713166, West Bengal
18	Serampore Girls' High School	Higher Secondary	8, Jitendranath Lahiri Road, Battala, Serampor, Pin – 712201, West Bengal
19	Bansberia Municipal HIgh School	Higher Secondary	PO – Shibpur, Tribeni, Dist Hooghly, Pin – 712503, West Bengal
20	Kamalpore High School (H.S)	Higher Secondary	PO – Khamargachi, Dist Hooghly, Pin – 712147, West Bengal
21	Garalgacha Balika Vidyalaya	Higher Secondary	PO – Garalgacha, PS – Chanditala, Chanditala Block – II, Dist Hooghly, Pin – 712708, West Bengal
22	Palashipara MGS Vidyapith	Secondary	PO – Palashipara, Dist Nadia, Pin –

			741155, West Bengal
23	Sunitibala Sadar Girls High School	Higher Secondary	Jalpaiguri, Pin – 735102, West Bengal
24	Nawabganj Balika Vidyalaya	Higher Secondary	PO – Ichapur, Nawabganj, Dist North 24 Parganas, Pin 743144, West Bengal
25	Ramakrishna Mission Ashrama, Ramharipur	Secondary	Vill & PO – Ramharipur, Dist Bankura, Pin – 722203, West Bengal

# 5. Acknowledgment of Grant for Vivekdisha during 2022-23:

We extend our heartfelt gratitude to Tata Steel Downstream Products Limited for their generous financial assistance. Their support has been instrumental in developing the necessary infrastructure at Nivedita Bhavan, RKMVERI, located within Ramakrishna Mission Swami Vivekananda's Ancestral House and Cultural Centre in Kolkata. This infrastructure has greatly facilitated the successful implementation of our online tele-education program.

## (iii) KRISHI VIGYAN KENDRA (KVK) – A PROJECT OF ICAR

KVK is a project of the Indian Council of Agricultural Research (ICAR) which is the apex body for coordinating, guiding, and managing research and education in agriculture in the entire country. It aims to work for the benefit of the farmers, to make available the discoveries made by the scientists in their laboratories to the farmers in their lands. To implement the mandates (i.e. technology assessment and demonstration for its application and capacity development), the following activities are envisaged by the KVK:

A) On-farm testing/trials (OFT): Assessing the suitability and effectiveness of agricultural technologies in different farming systems, considering the specificities of each location.

B) Frontline demonstration (FLD): Showcasing the production potential of various technologies on farmers' fields, establishing their viability and practicality.

C) Capacity development: Equipping farmers and extension personnel with updated knowledge and skills in modern agricultural technologies through training programs.

D) Knowledge and Resource Centre: Serving as a hub of agricultural technologies to support the efforts of the public, private, and voluntary sectors in enhancing the agricultural economy of the district.

E) Farm advisories: Providing valuable guidance and information to farmers through Information and Communication Technologies (ICTs) and other media platforms, covering a wide range of subjects relevant to their interests.

In addition, KVK is also involved in producing quality technological products like seeds of cereals, pulses, oilseeds and fodder crops, planting materials, livestock and fishery materials, vermi-compost, Tricho-compost, different liquid manures etc., and also covering different ongoing schemes and programmes within the mandates of the KVK.

Currently, our University operates following two KVKs that have been granted by the ICAR.

(i) 'Sasya Shyamala' KVK, situated at Arapanch (operating under the Ramakrishna Mission Ashrama, Narendrapur Centre, 24-Parganas District).

(ii) 'Dhaanyaganga' KVK, operating under the Ramakrishna Mission Ashrama, Sargachhi, Murshidabad District.

### **REPORT OF SASYA SHYAMALA KRISHI VIGYAN KENDRA (KVK)**

#### INTRODUCTION

Sasya Shyamala Krishi Vigyan Kendra, operating under the aegis of the Ramakrishna Mission Vivekananda Educational and Research Institute (RKMVERI), established in the year 2013. It plays an active role in disseminating technologies to farmers, farm women, and rural youths. Its primary focus is on the development of the agricultural sector in the South 24 Parganas district of West Bengal. This KVK has jurisdiction over a total of 14 blocks, namely Sonarpur, Baruipur, Canning I, Canning II, Basanti, Gosaba, Budge Budge I, Budge Budge II, Bispnuur I, Bishnupur II, Falta, Thakurpur Maheshtala, Bhangore I and Bhangore II. These blocks are part of the overall 29 blocks within the district. The KVK's operational area falls under distinct agro-climatic zones, namely, Costal Saline and Alluvial Zone. The KVK adheres to the ICAR (Indian Council of Agricultural Research) norms regarding staffing and the current staff strength is 16 nos.

In the year 2022-23, a total of 5351 individuals benefited from a total of 160 training programs organized by this KVK.

#### MANDATED ACTIVITIES OF THIS KVK

- 1. On-Farm Trials
- 2. Frontline Demonstrations
- 3. Trainings

#### ON-FARM TRIALS (OFTs)

Please provide a report and include data on the following aspects:

Total Number of Trials: 12

Total Number of beneficiaries: 79

Sl. No.	Title	Recommendation
1	Effect of foliar application of zinc and boron on productivity and profitability of hybrid rabi maize	Application of B and Zn along with recommended dose of NPK significantly outperformed single application of either B or Zn in terms of yield attributes and economics.
2	Effect of potassium and zinc application on fibre yield and profitability of jute	Application of 40 kg $K_2O$ /ha along with 6 kg Zn/ha, the fibre yield was observed to be highest.

3	Effect of lime pelleting in acidic soil to increase the nutrient availability and yield of green gram	Lime + biofertilizer and lime pelleting showed higher grain yield (7.50 & 7.30 q/ha), number of branches per plant, number of seeds per plant thus lime pelleting might be the best option for green gram cultivation in acidic soil.
4	Response of Bio-priming in Tomato seedlings	Priming the seedlings with Beejamrita @ 1 lit mother solution diluted with 10 lit water for 1 hr gave better yield (56.24/ha); priming the seedlings with <i>T. viride</i> @ 6 g for 1 hr. recorded yield to the tune of 54.45 t/ha.
5	in influencing the yield attributes of alon banana Panc	The use of basal and foliar fertilizer combination g with organic based fortified combination as like hagavya are highly recommended for the num production of banana.
6	Varietal assessment with high yielding varieties of Greengram during summer season	Shikha variety showed significantly higher grain yield per ha (10.67 q/ha)
7	Varietal assessment through high yielding varieties of Sesame during summer season	CUMS-17 variety showed significantly higher grain yield per ha (9.70 q/ha), number of capsules per plant (82.20) and 100 sees weight (3.19).
8	Impact of Biopesticides on Insect pests of Aman Paddy	biopesticides of different origins like <i>Verticillium lecanii, Beauveria bassiana</i> or Spraying of NPV, Neem oil in combination successfully manage the infestation of different insect pests like leaf folder, stem borer and hopper
9	Management of mushroom pest through sanitation	Straw treatment with lime @ 5 g/lt along with 5 g Alum, Hot water treatment, Floor drenching with Bleaching powder 1 kg/ 100 sq ft monthly, Room sanitation with Mancozeb @ 2.5 g/lt and Quinalphos @ 2ml/lt monthly) can reduce the infestation of different pests associated with mushroom.
10	Effect of dried azolla supplementation on body weight in white pekin ducks	It is recommended to supplement dried azolla powder @ 7% in the diet for White Pekin ducks during the rearing period.
11	Evaluation of native probiotic culture in body growth performances in dual purpose backyard poultry breeds (RIR/Vanaraja/ Kaveri)	Trial is ongoing and the result is awaited
12	Locally available ingredients based feed formulation for the successful	Fishes with feed, Feed prepared with anti- oxidant 0.5-1.0%, protein sources 30-35%,

### FRONTLINE DEMONSTRATIONS (FLDs)

Please provide a report and include data on the following aspects:

Total Number of Demonstrations: 41

Total Number of beneficiaries: 371

#### Details:

Sl. No.	Discipline	Сгор	Variety/Technology	Area (ha)/ No. of demonstration	Total no. of beneficiaries
1	Crop production	Paddy (CR Dhan 412, 411, 414, 314)	Cultivation of different high yielding, Salt tolerant and bio-fortified variety	2	4
		Maize (var. P 3388)	LCC technology in maize	2	9
		Maize (var. P 3388)	Maize-greengram/ cowpea intercropping	2	7
		Baby corn (var. G 5417)	Cultivation practices of baby corn#	1	4
		Sweet corn (var. Sugar 75)	Cultivation practices of sweet corn	1	4
2	Plant	Sun-flower	Dibakar	1	7
	breeding and seed science	Lathyrus	Bidhan Khesari-1, Rice-fallow intensificatn.	6	28
		Greengram	IPM-205-7	1	6
		Lentil	IPL-220	1	7
3	Soil health management	Rice	Green manuring technology	1	5
		Brocolli	Arka Microbial Consortium (AMC) technology	1	5

4	Plant	Rice	False smut disease	5	
	protection		management		8
		Maize	FAW m gmt through bio-concoction	0.25	7
		Tomato	Management of Damping off disease	1	7
		Mustard	Aphid management	1	7
		Greengram	Plant health management through ZBNF	1.25	7
		Disease managemen t	Homestead trichoderma preparation	8	8
5	Horticulture	Brocolli	Variety: Besty	0.026	7
			Improved package of practices		
		Capsicum	Variety: Indra (Green)	0.013	
			Improved practices		5
		Carrot	Variety: Nantes Improved practices	0.013	7
		Beet	Variety: Dark Red Improved practices	0.026	10
		French Bean	Variety: Falguni Improved practices	0.798	5
		Coriander	Variety: Caribe Improved practices	0.013	6
		Bitter gourd	Variety: Meghna	0.013	6
			Improved practices		
		Elephant	Variety: Bidhan Kusum	0.798	6
		Foot Yam	Improved practices		
		Turmeric	Variety: Suranjana Improved practices	0.039	6
		Tomato	Variety: Himsikhar	0.026	8

			Improved practices		
		Cauli-flower	Variety: PAN-3025 Improved practices	0.039	6
		Purple Cauli-flower	Variety: Valentina Improved practices	0.039	6
		Cabbage	Variety: Royal Ball Improved practices	0.039	6
		Knol-khol	Variety: Sakura Improved practices	0.026	8
5	Livestock	Dairy Management	Cultivation of fodder crops	7	7
			(Barseem and Oat)		
		Poultry Management	Scientific rearing of <i>Kaveri</i>	7	7
		Poultry Management	Scientific rearing of turkey birds	29	29
		Duckery	Rearing of <i>Khaki</i> <i>Campbell</i> Ducks	10	10
6	Fisheries	Fish	Magurfish Breeding & culture	7	7
		Aquaculture	Culture of Indian Major Carp	7	7
		Fish Nutrition	Low cost ornamental fish feed for better colouration and growth	7	7
		Crustacean	Culture techniques for Crab farmers of Sunderbans	7	7
7	Other	Oyster mushroom	Enterprise development	45	45
		Verm- icompost	Vermicomposting Technology	23	23
	Total			29.40 ha + 157 nos	371

### Cluster Front Line Demonstrations (CFLDs)

Please provide a report and include data on the following aspects:

Total Number of Demonstrations: 10

Total Number of beneficiaries: 358

Variety	Area (ha)	Number of beneficieries
Virat and Shikha	30	214
PM 28, PM 31	10	44
	40	358
-	Virat and Shikha	Virat and Shikha30PM 28, PM 3110

#### TRAINING

Give your report and data mentioning the following aspects:

Total Number of Trainings: 160 nos.

Total Number of beneficiaries: 5351 nos.

#### A) Farmers & Farm Women Training (On and Off campus)

	N 6	No. of	of Participants									Grand Total		
Thematic Area	No. of Courses	Other			SC			ST						
		М	F	Т	М	F	Т	M	F	T	М	F	Т	
Crop Production				1			1					1		
Weed Management	1	14	3	17	17	1	18	0	0	0	31	4	35	
Micro irrigation/irrigatio n	2	12	5	17	26	5	31	0	0	0	38	10	48	
Nursery management	2	14	4	18	15	10	25	0	0	0	29	14	43	
Integrated Crop Management	7	51	10	61	121	42	163	10	2	12	182	54	236	
Integrated nutrient Management	3	24	6	30	38	15	53	0	0	0	62	21	83	
Total	15	115	28	143	217	73	290	10	2	12	342	103	445	
Horticulture		1		1	1		1		I		1	1	<u> </u>	
a) Vegetable Crops														
Production of low	2	50	12	62	11	3	14	0	0	0	61	15	76	

		No. of Participants										Grand Total		
Thematic Area	No. of Courses	Other			SC			ST						
		М	F	Т	M	F	Т	M	F	T	M	F	Т	
volume and high value crops														
Off season vegetables	2	48	5	53	7	0	7	0	0	0	55	5	60	
Cultivation of winter vegetables	1	20	4	24	3	1	4	0	0	0	24	4	28	
Cultivation of summer vegetables	1	35	6	41	1	2	3	0	0	0	36	8	44	
Multi-tier Horticulture	2	22	18	40	0	18	18	0	4	4	22	40	62	
Others														
Total (a)	8	175	45	220	22	24	46	0	4	4	198	72	270	
Cultivation of Fruit	1	30	0	30	4	0	4	0	0	0	34	0	34	
Dragon fruit cultivation	1	20	0	20	3	0	3	1	0	1	24	0	24	
Value Addition of Horticultural crops	1	24	6	30	2	8	10	0	0	0	26	14	40	
Others														
Total (b)	3	74	6	80	9	8	17	1	0	1	84	14	98	
c) Ornamental Plants														
Nursery Management	1	23	3	26	4	2	6	2	0	2	29	5	34	
Cultivation of seasonal flowers	2	53	4	57	4	0	4	0	0	0	57	4	61	
Total (c)	3	76	7	83	8	2	10	2	0	2	86	9	95	
d) Plantation crops														
Scientific cultivation of Betel vine	1	20	0	20	10	0	10	0	0	0	30	0	30	
Others														
Total (d)	1	20	0	20	10	0	10	0	0	0	30	0	30	
e) Tuber crops		1		1			1		1	-	1			
Production and Management technology of turmeric and Elephant Foot Yam	2	45	2	47	18	2	20	0	0	0	63	4	67	
Others														

		No. of	No. of Participants										Grand Total		
Thematic Area	No. of Courses	Other	•		SC			ST							
		М	F	Т	М	F	Т	M	F	T	м	F	T		
Total (e)	2	45	2	47	18	2	20	0	0	0	63	4	67		
Soil Health and Fertility Management				1	1					1			1		
Soil fertility management	1	5	4	9	7	3	10	0	1	1	12	8	20		
Production and use of organic inputs	1	9	3	12	14	8	22	7	1	8	30	12	42		
Management of Problematic soils	1	2	5	7	16	5	21	3	2	5	21	12	33		
Nutrient Use Efficiency	1	8	7	15	6	8	14	1	0	1	15	15	30		
Soil & water testing	3	18	5	23	32	9	41	7	4	11	57	18	75		
Technologies for production of Azolla	3	5	12	17	21	31	52	2	6	8	28	49	77		
Soil fertility management	1	5	4	9	7	3	10	0	1	1	12	8	20		
Total	11	52	40	92	103	67	170	20	15	35	175	122	297		
Livestock Production and Management			1		1	<u> </u>		1	1				1		
Dairy Management	1	0	0	0	0	45	45	0	0	0	0	45	45		
Poultry Management	6	0	4	4	37	159	196	0	0	0	37	163	200		
Others	2	11	10	21	7	50	57	0	0	0	18	60	78		
Total	9	11	14	25	44	254	298	0	0	0	55	268	323		
Plant Protection															
Integrated Pest Management	10	112	24	136	139	41	180	52	47	99	303	112	415		
Integrated Disease Management	1	0	0	0	0	0	0	22	8	30	22	8	30		
Bio0control of pests and diseases	2	28	0	28	15	6	21	0	0	0	43	6	49		
Production of bio control agents and bio pesticides	4	34	15	49	81	13	94	0	0	0	114	28	142		
Others	1	22	0	60	32	5	37	0	0	0	55	5	60		
Total	18	196	39	273	267	65	332	74	55	129	537	159	696		

		No. of	Partic	Grand Total									
Thematic Area	No. of Courses	Other	•		SC			ST					
		М	F	T	М	F	Т	М	F	Т	М	F	Т
Fisheries		1											
Integrated fish farming	2	10	13	23	7	14	21	12	4	16	29	31	60
Carp breeding and hatchery management	1	20	8	28	4	2	6	0	1	1	24	11	35
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0	0	0	0
Composite fish culture	1	1	1	2	26	4	30	0	0	0	27	5	32
Hatchery management and culture of freshwater prawn	4	59	13	72	26	14	40	13	2	15	98	29	127
Breeding and culture of ornamental fishes	1	14	5	19	3	5	8	0	1	1	17	11	28
Portable plastic carp hatchery	2	15	14	29	17	3	20	3	0	3	35	17	52
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp farming	2	4	9	13	39	14	53	5	1	6	48	24	72
Edible oyster farming	0	0	0	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0	0	0	0
Training on fish diseases and its prevention with Good Management Practices	2	19	24	43	10	12	22	0	0	0	29	36	65
Scientific fish culture practices in Bheries/ coastal saline areas	1	23	7	30	0	0	0	3	7	10	26	14	40
Training on Air breathing fish culture with special reference to magur, singhi and koi	2	30	20	50	13	12	25	9	6	15	52	38	90
Nursery Pond management with	1	24	6	30	0	0	0	0	0	0	24	6	30

		No. of Participants							Grand Total				
Thematic Area	No. of Courses	Other			SC			ST				Tour	
		М	F	Т	М	F	Т	М	F	Т	м	F	Т
special reference					11					1			
to nutrition and													
disease													
management													
Total	19	219	120	339	145	80	225	45	22	67	409	222	631
Production of													
Input at site													
Seed Production	4	32	13	45	34	40	74	5	3	8	71	56	127
Total	4	32	13	45	34	40	74	5	3	8	71	56	127
TOTAL	111	1211	353	1640	1144	680	1824	231	156	387	2587	1188	3775

# B) RURAL YOUTH Training (On and Off Campus)

		No.	of Part		Grand Total									
Thematic Area	No. of Courses	Othe	er		SC	SC			ST					
		М	F	T	М	F	T	M	F	T	М	F	Т	
Nursery Management of Coconut	1	30	0	30	5	0	5	1	0	1	36	0	36	
Cultivation of dragon Fruit orchard	1	25	0	25	4	0	4	1	0	1	30	0	30	
Value addition of horticultural crops	1	1	4	5	4	26	30	0	0	0	30	5	35	
Nutritional gardening	1	0	20	20	0	6	6	0	0	0	0	26	26	
Seed production	4	32	13	45	34	40	74	5	3	8	71	56	127	
Vermicomposting technology	5	21	24	45	61	31	92	9	4	1 3	91	59	150	
Mushroom Production	2	13	10	23	18	33	51	3	1	4	34	44	78	
Value addition	2	0	1	1	2	47	49	0	0	0	2	48	50	
Production of quality animal products	1	8	9	17	9	6	15	0	0	0	17	15	32	
Dairying	2	12	9	21	21	18	39	0	0	0	33	27	60	
Sheep and goat rearing	2	1	2	3	35	19	54	0	0	0	36	21	57	
Poultry production	5	11	20	31	26	59	85	0	0	0	37	79	116	
Ornamental fisheries	3	33	42	75	0	2	2	1	9	1 0	34	53	87	

		No. o	of Part	icipan	ts						Grand Total			
Thematic Area	No. of Courses	Othe	er		SC			ST						
		М	F	Т	М	F	T	М	F	T	М	F	Т	
Composite fish culture	3	9	9	18	42	30	32	3	2	5	26	29	95	
Freshwater prawn culture	4	54	12	66	36	31	67	2	0	2	92	43	135	
Shrimp farming	2	27	5	32	45	11	56	0	0	0	72	16	88	
Fry and fingerling rearing	1	0	30	30	0	2	2	0	0	0	0	32	32	
Air breathing fish breeding with special reference to magur, singhi and koi	1	20	8	28	3	2	5	1	1	2	24	11	35	
Mud crab fattening for the rural youths of SundarbanAila affected areas	2	21	11	32	10	12	22	7	9	1 6	38	32	70	
Scientific fish culture practices in Bheries/ coastal saline areas of South 24 Pgns district	1	27	3	30	20	5	25	0	0	0	47	8	55	
Others	1	4	0	4	20	3	23	2	0	2	26	3	29	
Total	45	349	232	581	395	383	738	35	29	64	776	607	1423	

# C) Extension Personnel Training (On and Off Campus)

	No. of	No. of Participants									Grand Total		
Thematic Area	Course	Othe	er		SC			ST				.u 100	
	S	М	F	Т	М	F	Т	М	F	T	М	F	Т
Productivity enhancement in rose cultivation	1	35	4	39	4	0	4	0	0	0	39	4	43
Production and use of organic inputs	1	52	1	49	6	0	6	0	0	0	58	1	59
Seed Production	1	12	6	18	8	7	15	0	0	0	20	13	33
Importance of Soil testing	1	2	3	5	9	3	12	1	0	1	12	6	18
Total	4	101	14	111	2 7	10	37	1	0	1	129	24	153

## D) Vocational training programmes for Rural Youth

				No. o	of Particij	pants	Se	lf employe trainin		Number	
Crop / Enterprise	Identified Thrust Area	Training title*	Duratio n (days)	Mal e	Femal e	Tota 1	Typ e of unit s	Numbe r of units	Number of persons employe d	of per- sons emplo- yed	
Horti- culture	Post harvest manage- ment	Value Addition of Horticultural crops	03	5	30	35	Self	25	25	10	
Seed Production	Seed Production	Seed production techniques of paddy	04	16	7	23	Self	17	17	6	
Seed Production	Seed Production	Seed production technique of vegetables	03	6	0	6	Self	4	4	2	
Seed Production	Seed Production	Seed production techniques of oilseed crops	03	5	2	7	Self	5	5	2	
Seed Production	Seed Production	Village Seed production programmes	03	5	4	9	Self	3	3	3	
Seed Production	Seed Production	Quality Seed Production techniques for increasing income	03	12	6	18	Self	16	16	2	
Dairy	Dairy Manage- ment	Dairy farm Management for Small Holders	3	15	15	30	Self	24	24	6	
Poultry	Poultry Farming	Commercial Poultry Farming	3	8	22	30	Self	21	21	9	
Dairy	Dairy Manage- ment	Integrated Farming System in Dairy Management	3	18	12	30	Self	11	25	5	
Poultry	Poultry Farming	Scientific Management in Backyard Poultry	3	0	30	30	Self	18	23	7	

		Farming								
Goatery	Goat farming	Scientific Goat Farming	3	16	14	30	Self	22	26	4
Goatery	Goat farming	Improved Goat Rearing Technologies	4	20	7	27	Self	16	22	5
Veterinary	Livestock Farming	Commercial Livestock Farming	7	17	15	32	Self	23	29	3
Poultry	Poultry Farming	Commercial Poultry Farming (STRY)	6	7	8	15	Self	11	15	0
Poultry	Poultry Farming	Training on poultry farming with special reference to broiler, layer, Turkey and quail farming	3	8	12	20	Self	9	17	3
Fisheries	IMC breeding	Carp breeding and hatchery mgmt	3	24	11	35	Self	22	28	7
Fisheries	Air breathing fish breeding	Training on Air breathing fish breeding with special reference to magur, singhi and koi	3	24	11	35	Self	20	29	6
Fisheries	Shrimp culture	Training on shrimp culture in coastal saline areas of South 24 Pgns	3	72	16	88	Self	45	79	9
Mushroom Cultivation	Entrepreneur- ship develop ment	Mushroom Cultivation	04	18	27	45	Self	39	39	6

### **E)** Sponsored Training Programmes:

			Duratn	Client PF/	No. of	No. of participants	Sponsoring
Sl.No	Title	Thematic area	(days)	RY/	courses		Agency
1	Nursery management of coconut	Horticulture	1	EF RY	1	36	Coconut Development Board, Kolkata
2	Farmers safety awareness	Pl. Protection	1	PF	1	60	Parijat Ind. Ltd.
3	Workshop on Natural Farming	Pl. Protection	01	EF	1	59	ICAR-ATARI, Kolkata
4	Prospect of increasing area and productivity of pulse crops in Our District	Enhancement of production & productivity of pulses	01	PF	1	50	<b>ATMA,</b> Soutn 24 Parganas, Govt. of West Bengal
5	Dairy farm Management for Small Holders	Livestock production and management	3	RY	1	30	ICAR-ATARI, Kolkata
6	Commercial Poultry Farming	Livestock production and management	3	RY	1	30	ICAR-ATARI, Kolkata
7	Integrated Farming System in Dairy Management	Livestock production and management	3	RY	1	30	ICAR-ATARI, Kolkata
8	Scientific Management in Backyard Poultry Farming	Livestock production and management	3	RY	1	30	ICAR-ATARI, Kolkata
9	Scientific Goat Farming	Livestock production and management	3	RY	1	30	ICAR-ATARI, Kolkata
10	Small Scale Meat Processing & Value Addition	Value Addition in Livestock	2	RY	2	50	ICAR -NRC on Meat, Hyderabad
11	Commercial Poultry Farming (STRY)	Livestock production and management	6	RY	1	15	SAMETI (West Bengal)
12	Integrated Fish farming	Fisheries & Aquaculture	3	RY	2	100	NFDB

13	Air-breathing fish breeding	Aquaculture & Breeding	3	RY	2	100	NFDB
14	Low cost fish feed management	Aquaculture & Breeding	3	RY	2	100	NFDB
15	Crab Farming and fattening	Shell fish Aquaculture	3	RY	1	100	NFDB
16	Ornamental fish farming	Fisheries & Aquaculture	3	RY	2	100	NFDB

# **EXTENSION ACTIVITIES :**

Nature of Extension Activity	No. of	Total					
	activities	Male	Female	Total			
Field Day	4	212	41	253			
Kisan Mela (Jal Shakti Abhiyan)	1	104	30	134			
Kisan Mela (Kisan Bhagidari)	1	171	75	246			
Kisan Mela (Fisheries)	4	300	200	500			
Exhibition (At Kisan Mela)	1	171	75	246			
Exhibition	1	81	41	122			
(National Exhibition at Central park, Saltlake sector II on 24.08.22)							
Exhibition	5	300	200	500			
(Fisheries)	-						
Film Show	13	274	134	408			
Method Demonstrations	9	130	19	149			
Farmers Seminar (Block level seminar of coconut farmers)	1	102	5	107			
Workshop	1	28	14	42			
Group meetings	5	80	70	150			
Lectures delivered as resource persons	46	975	394	1369			
Advisory Services	3	10	50	60			
Scientific visit to farmers field	115	313	49	362			
Farmers visit to KVK	102	163 7	791	2428			
Diagnostic visits	9	107	111	218			
Exposure visits	30	667	213	880			

Total	354	6118	2683	8801
Any Other (Celebration of Independence Day)	1	40	10	50
(Wetland Day)				
Celebration of important days	1	50	30	80
(Biodiversity day and Nematode Day)				
Celebration of important days	2	68	23	91
Celebration of important days (Global Fertilizer Day, World Soil Day)	3	107	4	111
Celebration of important days (World Pulse Day)	1	78	34	112
Mahila Mandals Conveners meetings	1	21	15	36
Self Help Group Conveners meetings	1	20	15	35
Animal Health Camp	2	21	11	32
Soil health Camp	2	57	25	82
Ex-trainees Sammelan	1	15	15	30

# **OTHER ACTIVITIES:**

# PRODUCTION AND SUPPLY OF TECHNOLOGICAL PRODUCTS

# Village seed Production

Сгор	Variety	Quantity of seed (q)	Value (Rs)	No. of farmers in village seed production
Paddy	Sabita, Swarna Sub-1, CR Dhan-310, Sambha Sub-1	1.80	9000	19
Lathyrus	Bidhan Khesari-1, Mahateora, Ratan	2.00	22000	25
Lentil	IPL-220, L-4717	1.60	19200	10
Mustard	PM-30, PM-31	0.26	3640	5
Sesame	CUMS-17	0.40	5600	18
Greengram	Shikha, Virat	50.48	167680	118
	Total	66.54	727120	195

### KVK farm

								Number of farmers								
_	Variety	Quantity of seed	Value		to	who	m se	ed pı	rovide	ed						
Crop	Variety	(q)	(Rs)	S	С	S	Т	Ot	her	Тс	otal					
				М	F	М	F	М	F		F					
	Sabita Foundation	16.00	48000.00	12	10	5	6	5	8	22	24					
	Sabita Certified	80.00	240000.00	54	2	12	2	4	8	70	12					
	Swarna Sub-1 (F)	7.00	21000.00	12	0	16	12	2	5	30	17					
	Swarna Sub-1 (C)	1.50	4500.00	0	2	12	5	3	4	15	11					
	CR-1009 Sub 1	2.20	6600.00	5	0	0	0	0	0	5	0					
	Shatabdi	1.20	3600.00	10	0	0	0	0	0	10	0					
Rice	Samba Sub 1	2.20	6600.00	13	5	4	5	2	2	19	12					
Nice	CR-506	2.60	7800.00	15	10	2	3	4	7	21	20					
	CR- 302	1.00	3000.00	2	5	5	6	8	4	15	15					
	CR-507	3.00	9000.00	5	6	4	7	8	9	17	22					
	CR-202	1.20	3600.00	6	4	8	7	2	1	16	12					
	Kalabhat	1.50	4500.00	10	2	1	1	0	0	11	3					
	IET-27051	4.00	12000.00	11	2	2	0	0	0	13	2					
	Santoshi	5.00	15000.00	5	5	5	0	0	0	10	5					
	IPL-220	0.85	8500.00	2	2	0	0	1	0	3	2					
Lentil	L-4717	0.45	4500.00	5	3	0	0	2	2	7	5					
	IPL-526	0.30	3000.00	4	4	4	0	0	0	8	4					
Khesari	Ratan	0.25	2500.00	6	5	2	1	2	2	10	8					
Micsuri	Mohatera	0.30	3000.00	2	4	0	0	0	0	2	4					
	YSH-0401	0.095	950.00	6	6	2	1	0	0	8	7					
Mustard	PM-30	0.50	5000.00	2	2	1	0	0	0	3	2					
mustalu	PM-31	0.30	3000.0	6	6	2	1	0	0	8	7					
	Pitambori	0.095	950.00	1	0	0	0	0	0	1	0					
Greengram	Virat	4.92	63960.00	67	25	0	5	8	12	75	42					
Turmeric	Suranjana, Local, Suguna, Subarna	2.0	2000.00	1	0	0	0	0	0	1	0					

Ele. Foot Yam	Bidhan Kusum	4.50	45000.00	2	0	0	0	0	0	2	0
Sesamum	Suprava	1.11	1100.00	5	0	0	0	0	0	5	0
Gra	and Total	144.07	528660	269	110	87	62	51	64	407	236

### Production of Bio-Products

Name of product	Quantity	Value (Rs.)			No. of	Farme	ers bei	nefitte	d	
	kg/lit		S	C	S	Т	Ot	her	Тс	otal
			М	F	М	F	М	F	М	F
Bio-fertilizers										
Bio-pesticide	Jeevamrit: 600 l	18000	8						8	
	Beejamrit: 200 l	6000	8						8	
	Neemastra: 200 l	6000	8						8	
	Agniastra: 200 l	6000	8						8	
	Dasaparni: 50 l	1500	8						8	
	Sasyagavya: 150 l	3000								
Bio-fungicide (Trichoderma)	260 kg	39,000								
Vermicompost	9365.6 kg	140484.99	2	10					2	10
Vermiwash	350 l	1138.00								
Others, please specify.										
Total	9625.6 kg / 1750 l		42	10	0	0	0	0	42	10

### Production of livestock materials

Particulars of		Number	Value (Rs.)		ľ	lo. of	Farm	ers be	nefitte	d	
Fai ticulai S Oi	breed			SC		ST		Other		Total	
Live stock				М	F	M	F	М	F	М	F
Calves	Crossbred	3	75000							3	
Goat	Black Bengal	97	266750.00	15	12	12	10	5	8	32	30
Broilers	Cobb 400	50000	500000	0	0	0	0	30		30	0
Duals (broiler and layer)	RIR	2000	140000	45	54	56	42	35	32	136	128
	Kaveri	3410	187550.00	78	54	59	68	25	29	162	151

Grand Total		342,690	1,307,032	119	226	70	62	168	115	850	633
Others (Pl. specify)	Zebrafish, Chilids, gold fish , angel, sivoram, live bearers	1,00,000	5,00,000	0	0	0	0	0	0	25	50
Spawn	Magur, Singhi, Padba	78,300	93,960	0	0	0	0	0	0	5	0
Fish fingerlings	Catla	14,000	1,30,200	0	0	0	0	0	0	20	0
Mixed carp	Rohu, Catla, Mrigal	1,76,000	5,63,200	0	0	0	0	0	0	175	70
Exotic carp	Silver carp, Amur Carp	83,000	83,000	0	0	0	0	0	0	15	0
Indian carp	Rohu,	1,90,600	1,90,600	0	0	0	0	0	0	15	0
Hatching egg		787	5509.00	30	32	25	10	0	0	55	42
Ducks	Khaki Campbell	2050	1,23,000	89	56	45	52	78	54	212	162
Turkey	White Beltsvilliae	1000	90000		30			0	0	0	30

# Literature developed/published

Item	Title	Author's name	Number	Circulation
	Integrated nutrient management improves productivity, profitability and quality of rainfed pigeonpea ( <i>Cajanus cajan</i> L. Mill sp.) in an alfisol of Eastern India.	Phonglosa, A., Dalei, B.B., <b>Ray, K.</b> and Pattanayak, S.K.		<i>Journal of Plant Nutrition</i> <b>46</b> (2): 285-299 (2022)
Research paper	Nitrogen management trade-offs in hybrid rice for agronomy, carbon, and energy efficiency.	Banerjee, H., Sarkar, S., Dutta, S.K., Garai, S., <b>Ray, K.</b> , Zingore, S., Goswami, R. and Majumdar, K.	26	<i>Nutrient Cycling in Agroecosystem</i> <b>123</b> : 5-18 (2022)
	Microbiological properties of <i>Beejamrit,</i> an ancient Indian traditional knowledge, uncover a dynamic plant beneficial microbial network.	Mukherjee, S., Sain, S., Ali, M.N., Goswami, R., Chakraborty, A., <b>Ray, K.</b> , Bhattacharjee, R., Pradhan, B., Ravisankar, N. and Chatterjee, G.		<i>World Journal of Microbiology and Biotechnology</i> 38: 111 (2022)
	Relationship between	Monidipta Saha,		Vidyabharati International

Item	Title	Author's name	Number	Circulation
	disturbance Indicating soil microbial parameters and	Moumit Roy Goswami		Interdisciplinary Research
	Pendimethalin degradation in a clay Loam soil	and Sudipta Tripathi		Journal(June-August 2022) pp.82-92
	Assessment of heavy metals uptake in Irrigated fruits and vegetables grown in Coastal belt of West Bengal	<b>Prasenjit Kundu</b> , Nayan Kishor Adhikary, Priyanka Mondal, <b>Monidipta</b> <b>Saha</b> , Sarbaswarup Ghosh		<i>Scientist</i> vol.1(3):4890- 4899 (2022)
	Interaction of Soil Microbes and Insecticides in Rice- Brinjal Crop Sequence	Abhijit Ghosal and Prasenjit Kundu	-	Pesticide Research Journal Vol. 33(2): 58-64 doi: 10.5958/2249- 524X.2021.00039.X
	Case Study of a Farmer Producer Organization: Bhangar Vegetable Producer Company Limited	Prasenji Kundu, Sarba Swarup Ghosh and Narayan Chandra Sahu		Journal of Agricultural Extension Management Vol. XXIII No. (1) 259-276
	Morpho-chemical characterization of broccoli ( <i>Brassica</i> <i>oleracea</i> var. <i>italica</i> )	<b>Prasenjit Kundu,</b> <b>Anupam Mukherje</b> e, Nayan Kishor Adhikary, <b>Abhijit</b> <b>Ghosal</b> and Narayan Chandra Sahu		Annals of Plant and Soil Research 24(1): 110-115
	Molecular characterization of whitefly (Bemesia tabaci Genn.) and development of management module against chilli leaf curl complex	<b>Abhijit Ghosal</b> , Kalyani Das and <b>Prasenjit Kundu</b>		Journal of Crop and Weed, 17(3): 109-117 ISSN- O : 2349 9400 ; P : 0974 6315
	Integration of soil and foliar nutrition in influencing the yield attributes of banana	Prasenjit Kundu		Indian Biologist. Vol. 1&2: 53-56
	Principal component	Sawarkar A., Pradhan	1	International Journal of

Item	Title	Author's name	Number	Circulation
	analysis, euclidean clustering of tossa jute (corchorus olitorius l.) Genotypes for the drought stress tolerance.	A., Yumnam S., <b>Raman R.B</b> ., GhoshS.C. and Mukherjee S.		Agriculture Sciences. Volume 14, Issue 12, pp 12126-12133
	Emergence and growth of weedy rice species in response to soil burial depth, moisture and period of sowing	<b>A. Mukherjee</b> and B. Duary	_	Journal of Crop and Weed, 18(1): 238-243 (2022)
	Density and Frequency of Weedy rice species under Red and Lateritic belt of West Bengal, India	Anupam Mukherjee		Indian Biologist, 52 (1&2): 41-45
	Impact of crop management on soil inhabiting arthropods abundance	Ghosal A, Adhikary NK, And Mal B	_	Scientist, 1(3):519-531.
	Knowledge and Perception on Rice Pests in South 24 Parganas District of West Bengal	Ghosal A. and Sahu NC		Journal of Krishi Vigyan, 11(1):245-250.
	Chemical Management of Spilosoma obliqua Walker in Greengram.	<b>Ghosal A.,</b> Sehgal, M; Adhikary, NK and <b>Sahu NC</b>	_	Legume Research - An International Journal. (10.18805/LR-5001)
	Assessment of application of panchagavya, sasyagavya, beejamrit, jeevamrit and dasaparniin crop and pest management of blackgram.	Ghosal A.		Indian Biologist, 52(1&2): 35-40.
	Impact of Crop Specific Technologies and Organic Growth Stimulant on Mustard, Blackgram and Greengram in Sundarban area of West	Ghosal A. and Sahu NC		Journal of the Indian Society of Coastal Agricultural Research (Accepted)

Item	Title	Author's name	Number	Circulation
	Bengal.			
	Studies on Seasonal Abundance and Insecticidal Management of Whitefly (Bemisia tabaci Gennadius) in Brinjal.	<b>Ghosal A.,</b> Mukherjee A and Adhikary, NK	-	Pakistan J. Zool (Accepted)
	Growth Performance and Meat Quality of White Pekin Ducks Reared in Backyard Farming System	<b>Ghosh S</b> , Saha M, Md Habib and <b>Sahu NC.</b> (2022)		<i>Asian Journal of Dairy and</i> <i>Food Research,41</i> (4), 495- 499. DOI: <u>10.18805/ajdfr.DR-</u> <u>1883</u>
	Body Weight Prediction using Recursive Partitioning and		-	
	Regression Trees (RPART) Model in Indian Black Bengal Goat			Indian Journal of Animal
	Breed: A Machine Learning Approach.	Haldar A, Pal P, <b>Ghosh S</b> , Pan S		<i>Science</i> ; DOI: <u>10.18805/IJAR.B-4894</u>
	Body Weight Prediction using Recursive Partitioning and Regression Trees (RPART) Model in Indian Black Bengal Goat Breed: A Machine Learning Approach	(2022)		
	Climate resilient technologies for augmenting livestock production and enhancing farmer's income under smallholder farming system	Haldar A, Kumar D, Behera M, <b>Ghosh S</b> , Joshi SK, Das U, Kumar A and Roy SK (2022)		<i>Indian J Anim Health</i> , 61(2- Spl): 41-54 doi:10.36062/ijah.2022.spl. 02022
	A study on ground reality of freshwater fish farming in biofloc tank in West Bengal, India	Swagat Ghosh		<i>J. Inland Fish. Soc</i> .India53 (3&4): 132-142 (2022)
	Impact of stocking	Swagat Ghosh		International Journal of

Item	Title	Author's name	Number	Circulation
	density on growth and production performance of walking catfish, clarias batrachus catfish			<i>Current Research,</i> 13(03):132-142 DOI:10.24941/ijcr.xxxx.09.2 022
	Present Status of Pond- Based Integrated Farming on Selected Blocks of South 24 Parganas, India	Swagat Ghosh		<i>International Journal of Science and Research</i> (IJSR) ISSN: 2319-7064
	Evaluation of stocking of two small indigenous fish, pabda (Ompok pabda) and gulsha tangra (Mystus cavasius) with Indian major carps in composite fish culture system	Swagat Ghosh		<i>J. Exp. Zool.</i> India Vol. 26, No. 1, pp. 967-97 DOI:10.51470/ jez.2023.26.1.967
	Case Study of a Farmer Producer Organization: Bhangar Vegetable Producer Company Limited	Prasenjit Kundu, Sarba Swarup Ghosh and Narayan Chandra Sahu		Journal of Agricultural Extension Management Vol. XXIII No. (1) 259-276
Seminar/ conferenc e/ symposia papers	Assessing the Production and Evaluating the Marketing Channels of Garden Pea in Different Markets underneath assorted Blocks of Hooghly Region, West Bengal	<b>Prasenjit Kundu</b> and Sangita Singha	3	Sasya Shyamala KVK
	Varietal assessment of lentil on yield and yield attributing characters Rabi season in gangetic alluvial soil of West Bengal	Ram Babu Raman and Narayan Chandra Sahu (2022)		9th Annual Convention and A Webinar on <i>"Managing Agro-chemicals for Crop and Environmental Health"</i> February 25 & 26, 2022 SFE PP-202
Books	Krishi Bish o Sasya	Ghosal, A., Ray, K.,	3	Published by: SAMETI-WB,

Item	Title	Author's name	Number	Circulation
	Surakkha	Ghosh, M., Ghosh, M., Mudi, N., Garain, P.K., Mandal, S. and Das, S. (Alphabetically sequenced)		R K Mission Ashrama, Narendrapur Printed at: Giri Print Service, Kolkata 700009
	Biggyan Sammoto Upaye Chagol O Vera Palon (Scientific rearing of Goat and Sheep) (ISBN: 978 81 957919 27)	Sarbaswarup Ghosh		Mehanati Prakashani, Hooghly, West Bengal
	Ornamenting self- reliance	Dr. P P Pal, Dr. S Das, <b>Dr. S Ghosh</b>		Achievements of KVKs' Odisha and West Bengal
Bulletins	Biggyan Sammoto Vabe Sukor Pratipaloner Madhyame Krishoker Aye Briddhi (Scientific Pig Farming for Increasing Farmers' Income)	<b>Sarbaswarup Ghosh</b> , Avijit Haldar, NC Sahu	1	Sasya Shyamala KVK
News letter	A Real Time Based Economic Nitrogen Fertilization Technology - The needful approach by agriculture to mitigate climate change	Monidipta Saha		AgriGate E Magazine
	Known and Unknown Facts of Lakshadweep Islands: The Atoll Euphoria of India	Swagat Ghosh		SPLASH AND SHOAL Biannual Volume II Issue II
	The Shifting of Natural Farming to Chemical Farming in Indian Agriculture.	Ghosal A.		Just Agriculture (e-ISSN: 2582-8223), Vol I (9).
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	White Pekin Duck Farming through SHGs	Sarbaswarup Ghosh		<i>Samaj Shiksha</i> . June 2022, Lokashiksha Parishad, Ramakrishna Mission Ashrama, Narendrapur

Item	Title	Author's name	Number	Circulation
	A Modified Technique for Breeding and Seed Production of Pabda in India	Swagat Ghosh		World Aquaculture
	Multiple pathways of legume-based systems towards environmental, social, and economic sustainability in smallholder systems	Goswami, Rupak, <i>Krishnendu Ray,</i> <i>Sarbaswarup Ghosh,</i> Sudarshan Dutta, Subhasis Mandal, Jagamohan Nayak, Somsubhra Chakraborty, and Hirak Banerjee (2022)		In Advances in Legumes for Sustainable Intensification, pp. 657-678. Academic Press https://doi.org/10.1016/ B978-0-323-85797- 0.00017-3
Book Chapter	Researching From a Distance: Mapping COVID-19 and Cyclonic Storm Affected Agri- Food Systems by Integrating Qualitative Research and Fuzzy Cognitive Mapping.	Roy, K., Goswami, R., Dutta, S., <b>Ray, K.</b> , Sarkar, S., Brahmachari, K., Nanda, M.K., Mainuddin, M., Banerjee, H., Timsina, J. and Majumdar, K.	5	In: <i>SAGE Research Methods:</i> <i>Doing Research Online</i> . <b>SAGE Publications</b> , Ltd., London, pp. 1-16 (2022)
	Influence of Abiotic Factors on Whitefly Population Abundance in Cotton. In Ibrokhim Y. Abdurakhmonov (Ed.),	Ghosal A.		Cotton [ISBN 978-1-80355-709-0.].
	Management Guide of Sucking Insect Pest. In El-Shafie, HAF (Ed.),	Ghosal A.		Hemiptera - Recent Updates
	Socioeconomic Study of Prospective of Probiotics, Prebiotics, and Synbiotics for Sustainable Development of Aquaculture in Indian Sundarbans	Swagat Ghosh		Prebiotics, Probiotics and Nutraceuticals <u>10.1007/978-981-16-8990-</u> <u>1 13</u> Spingerlink pp 253–273
Extension Pamphlets / literature	Baby corn er chas poddhoti	Ray, K.	11	Sasya Shyamala KVK
, <u></u>	Gram Prodhan der jonyo prakritik krishi sombondhiyo	Ray, K.		MANAGE, Hyderabad

Item	Title	Author's name	Number	Circulation
	prathomik dharona			
	Aye Barate White Pekin Hans Chaas (Income generation through white pekin	Sarbaswarup Ghosh	-	Sasya Shyamala KVK
	duck farming) Byabsa Vittik Chagol Paloner Madhyme Rojgar Briddhi (Enhancement of	Sarbaswarup Ghosh		Sasya Shyamala KVK
	income through commercial goat farming)			
	Basic Plant Protection	Ghosal A.	_	Sasya Shyamala KVK
	Safe Handling of Pesticides	Ghosal A.	_	Sasya Shyamala KVK
	Biological Control Agents	Ghosal A.	_	Sasya Shyamala KVK
	Trichoderma: One Step Solution to check soil pathogen	Ghosal A.	_	Sasya Shyamala KVK
	Natural farming for sustainable agriculture	Ghosal A.	-	Sasya Shyamala KVK
	Labhjanak bhabe mach chaser jonya pukurer matir porichorja "লাভজনকভাবে মাছ-চাষের জন্য পুকুরের মাটির পরিচর্যা"	Swagat Ghosh & Monidipta Saha	-	Sasya Shyamala KVK
	Black soldier fly	Swagat Ghosh	_	Sasya Shyamala KVK
Technical reports	Six Skill development programmes under NFDB project	Swagat Ghosh	1	
Electronic Publication (CD/DVD etc.)	Demonstration of diagnostic tests of sub- clinical mastitis in dairy cows in field condition	Sarbaswarup Ghosh	3	YouTube Channel of Sasya Shyamala KVK (https://youtu.be/n79YZkl XyT8)
	Brinjal Shoot and Fruit borer Management (YouTube video)	Ghosal A.		SSKVK, RKMVERI

Item	Title	Author's name	Number	Circulation
	Biopesticide preparation (YouTube video)	Ghosal A.		SSKVK, RKMVERI
TOTAL	Research Papers: 26; Ser Newsletter:2; Popular Ar Technical reports : 1; Ele	ticle:4; Book Chapter:		

Details of HRD	programmes	undergone	bv KVK	personnel:
			-,	P

Sl. No.	Name of programme	Name of course	Name of KVK personnel and designation	Date	Organized by
1	Training programme to the Master Trainers	Introduction to Natural Farming – Principles and Practices	Dr. K. Ray, SMS (Agronomy)	05 to 09.04.202 2	MANAGE, Hyderabad
2	National Conference	Promotion of Kisan Drone	Dr. K. Ray, SMS (Agronomy)	02.05.202 2	Department of Agriculture & Farmers Welfare, Ministry of Agriculture and Farmers Welfare, Govt. of India
3	State level Workshop	Preparation of "Study Material for 12 week certificate course on pest management"	Dr. K. Ray, SMS (Agronomy)	05 to 07.05.202 2	SAMETI-WB, R K Mission Ashrama, Narendrapur
4	XVII Annual Group Meeting of All India Network Programme on Organic Farming		Dr. K. Ray, SMS (Agronomy)	28 to 30.12.202 2	AINPOF, ICAR-IIFSR and RKMVERI
5	Training programme to the Master Trainers	Introduction to Natural Farming – Principles and Practices	Dr. K. Ray, SMS (Agronomy)	05 to 09.04.202 2	MANAGE, Hyderabad
6	National Conference	Promotion of Kisan Drone	Dr. K. Ray, SMS (Agronomy)	02.05.202 2	Dept of Agriculture & Farmers Welfare, Min of Agriculture and Farmers Welfare, Govt. of India

Sl. No.	Name of programme	Name of course	Name of KVK personnel and designation	Date	Organized by
7	State level Workshop	Preparation of "Study Material for 12 week certificate course on pest management"	Dr. K. Ray, SMS (Agronomy)	05 to 07.05.202 2	SAMETI-WB, R K Mission Ashrama, Narendrapur
8	District Level Seminar on coconut production technologies and value addition & World coconut day celebration	District level Workshop	Dr. Prasenjit Kundu (Subject Matter Specialist, Horticulture)	02.09.202 2	Coconut Development Board, Kolkata
9	Regional Level Seminar on scientific Coconut cultivation and value Addition	Workshop-cum- Training Programme	Dr. Prasenjit Kundu (Subject Matter Specialist, Horticulture)	20.10.202 2	Coconut Development Board, Kolkata
10	Recent development in agriculture for sustainable farming	Training Programme	Dr. Prasenjit Kundu (Subject Matter Specialist, Horticulture)	17- 18.11.202 2	Director of Extension Education, Bidhan Chandra Krishi Viswavidyalaya
11	Workshop Meeting at ATARI - online meeting	Action Plan on Natural Farming	Dr. Prasenjit Kundu (Subject Matter Specialist, Horticulture)	09.10.202 2	ICAR-ATARI
12	Capacity Building and Action Plan Workshop on Natural Farming for West Bengal KVKs	Workshop	Dr. Prasenjit Kundu (Subject Matter Specialist, Horticulture)	29.11.202 2	SSKVK
13	Capacity Building	Marketing of organic products	Dr. Sarbaswarup Ghosh (Subject Matter	13- 15.09.202 2	SAMETI, WB

Sl. No.	Name of programme	Name of course	Name of KVK personnel and designation	Date	Organized by
			Specialist, Animal Husbandry)		
14	Awareness Program for Soil Testing Labs under Soil Health Card scheme envisioning the Slogan 'Swasth Dharaa. Khet Haraa.' -Healthy Earth, Green Farm	Awareness Program	Dr. Monidipta Saha	09.09.202 2	ICAR-ATARI
15	Workshop Meeting at ATARI - online meeting	Action Plan on Natural Farming	Dr. Monidipta Saha	09.10.22	ICAR-ATARI
16	Capacity Building and Action Plan Workshop on Natural Farming for West Bengal KVKs	Workshop	Dr. Monidipta Saha	29.11.22	SSKVK
17	Online Training Program for Master Traineron "Introduction to Natural Farming - Principles and Practices"	Training on "Introduction to Natural Farming - Principles and Practices"	Dr. Monidipta Saha	05-09.04. 2022	MANAGE, Hyderabad
18	Training programme to the Master Trainers	Introduction to Natural Farming – Principles and Practices	Dr. A. Ghosal, SMS (Pl. Protection)	05- 09.04.202 2	MANAGE, Hyderabad
19	State level Workshop	Preparation of "Study Material for 12 week certificate course on pest management"	Dr. A. Ghosal, SMS (Pl. Protection)	05- 07.05.202 2	SAMETI-WB, R K Mission Ashrama, Narendrapur
20	Training	Introduction to molecular entomology, Organized by	A. Ghosal	22- 28.08.202 2	ABF, Hyderabad, PJTSU

Sl. No.	Name of programme	Name of course	Name of KVK personnel and designation	Date	Organized by
21	Training	Faculty Induction Programme	A. Ghosal	01- 30.09.202 2	Univ. of Hyd.
22	Workshop	National workshop of Natural Farming	A. Ghosal	04.12.202 2	ICAR
23	Training	Training on Natural Farming	A. Ghosal	12- 13.012.20 22	Gurukul, Haryana
24	Annual Meeting	Annual meeting of TSP centres under IPM	A. Ghosal	22.05.202 2	ICAR-NCIPM
25	Conference on World Aquaculture 2022 at Singapore	Conference	Dr. Swagat Ghosh	28-03.12. 2022	World Aquaculture Society, USA
26	RASHI -2022	Conference	Dr. Swagat Ghosh	12-16.12. 2022	Limbuchera fisheries college Tripura, CAU, Imphal
27	Recent Development in Agriculture for sustainable Farming	HRD Programme	Dr. Anupam Mukherjee Farm Manager	17- 18.11.202 2	DEE, BCKV

# Details of entrepreneurship development

Name of the enterprise	Name & complete address of the	Annual income
'Sundarban Adarsha Goat Farm' (Goat Breeding Farm)	entrepreneur Mr. Pranab Mondal Village+ P.O: Puinjali, Block: Gosaba, Dist.: South 24 Parganas	1,92,000
Sardar Fish Enterprise	Debasish Sardar, Gram Panchayat: harihorpur, P.O kundarali, Village: Dham Nagar, District- 24 Parganas (S), Block: Baruipur, Pin- 743610	4,00,000
The Agro Ventures Pvt. Ltd.	Mr. Sougata Mukherjee	98,000

# **NEW ACTIVITIES LAUNCHED in 2022-23:**

Sl.No.	Name of the programme	Purpose of the programme	Sponsored by	Amount (Rs. lakhs)	Infrastructure created
1.	Sub Mission on Agricultural Mechanization for Implementation of Its Component No 1 under Drone Technology Demonstration during 2022-23	To promote drones, its benefits in reducing labour involvement, drudgery, safer application of fertilizers and pesticides in crop fields within a very short time	ICAR	17.5 lakh	Two numbers of Drones (with 10 litre tank) were purchased
2	DST-SEED funded Project, New Delhi, Govt. of India	To prepare low cost good quality fish feed for production of indigenous fish species and ensure the alternative livelihood for local fisher flocks of Kheyadah wetland.	DST-SEED, New Delhi, Govt. of India	Rs. 131 lakhs	Floating and Sinking Fish Feed Making Unit
3	Small Scale Meat Processing and Value Addition Unit	To train rural youths and SHG members of SC community on meat processing and value addition	ICAR-NRC on Meat, Hyderabad	Rs. 1.5 L	Meat Processing and Value Addition Unit with product preservation facilities
4	Short Term Research Project	Identification of mushroom diversity, Mushroom Pest management and Promotion of Scientific	ATMA, S-24 Pgs	Rs. 5 L	Mushroom demonstration unit, compost unit, Spawn production equipments

		Mushroom Cultivation Technologies for Livelihood Security			
5	DAESI (2 Batches)	Diploma course for the input dealers	Self-financed	Rs. 16 L	NA
6.	Out scaling of Natural Farming through KVKs	Promotion of natural farming technologies	ICAR	10.69 L (Contd.)	NA

## **REPORT OF DHAANYAGANGA KRISHI VIGYAN KENDRA (KVK)**

#### INTRODUCTION

Dhaanyaganga Krishi Vigyan Kendra, operating under the aegis of the Ramakrishna Mission Vivekananda Educational and Research Institute (RKMVERI), established in the year 2018. It plays an active role in disseminating technologies to farmers, farm women, and rural youths. Its primary focus is on the development of the agricultural sector in the Murshidabad district of West Bengal. This KVK has jurisdiction over a total of 13 blocks, namely Berhampore, Beldanga-I, Beldanga-II, Hariharpara, Nowda, Jalangi, Domkal, Kandi, Bharatpur-I, Bharatpur-II, Burwan, Khargram, Nabagram. These blocks are part of the overall 26 blocks within the district. The KVK's operational area falls under one distinct agro-climatic zones, namely, Gangetic Alluvial Zone. The KVK adheres to the ICAR (Indian Council of Agricultural Research) norms regarding staffing and the current staff strength is 16.

In the year 2022-23, a total of 10752 individuals benefited from a total of 311 training programs organized by this KVK.

#### MANDATED ACTIVITIES OF THIS KVK

1. Work as single window knowledge hub system for all steak holders related to Agri and Allied subject.

2. Conducting on farm testing and on farm research

3. Conducting front line demonstration of identified potential technologies and collecting feed back

4. Training for practicing farmers, farm women, rural youth and women and extension functionaries

5. Production of clean and quality seed and planting material

6. Production of quality livestock strains, fish spawn & fingerling, bio agents and organic input etc.

7. Soil testing and advisory services based on test result.

#### ON-FARM TRIALS (OFTs)

Total Number of Trials: 12

Total Number of beneficiaries: 387

What **technology** disseminated and what is the **recommendation** of the KVK

Sl. No.	Technology	Recommendation
OFT 1: Assessment of different technologies of	TechnologyOption-1:SeedtreatmentwithRhizobimleguminoserum+50%RDF(25:50:25)through vermicompost +50%RDFthrough inorganicfertilizer	<b>Technology Option-</b> 2: Soil application of microbial consortia ( <i>Rhizobimlegumino</i> serum + PSB + F.
Integrated Nutrient Management in Chickpea.	<b>Technology Option-2:</b> Soil application of microbial consortia ( <i>Rhizobimleguminoserum</i> + PSB + <i>F. aurantia</i> ) + 25 % RDF through Vermicompost + 50 % RDF through inorganic fertilizer	<i>aurantia</i> ) + 25 % RDF through Vermicompost + 50 % RDF through
	<b>Technology Option-3:</b> Soil application of microbial consortia ( <i>Rhizobimleguminoserum</i> + PSB) + 50 % RDF through Vermicompost + Liquid N P K @ 3g lit <sup>-1</sup> twice	inorganic fertilizer
OFT 2: Evaluation of performance of	<b>Recommended Practice -1</b> : Seed producing Agency Distributes or sells the seeds directly to the <b>Dealers</b> who later on distributes or sells to the Farmers	In every locality the adjacent FPC or Cooperative should take initiative for
different marketing channels of quality seed distribution or	<b>Recommended Practice -2</b> : Seed producing Agence Distributes or sells the seeds directly to the <b>C</b> <b>Operatives</b> who later on distributes or sells to the Farmers	seed procurement channel towards the farmer. Farmers should take
selling by Seed producing agency	<b>Recommended Practice -3</b> : Seed producing Agency Distributes or sells the seeds directly to the <b>FPCs</b> who later on distributes or sells to the Farmers	membership of nearby FPC and should avail the opportunity of getting quality seed at right time and with reasonable price.
OFT 3: Evaluation of	<b>Procurement Channel -1</b> : Procurement of paddy directly from farmers in MSP at Kisan Mandis	In every locality the adjacent FPC or
performance of different sales channels used by farmers to sell	<b>Procurement Channel -2:</b> Procurement of paddy directly from farmers in MSP at On Site Procurement Centre of FPCs	- Cooperative should take initiative for agricultural produce procurement from
agricultural produce	<b>Procurement Channel -3:</b> Procurement of paddy directly from farmers in MSP at On Site Procurement Centre of FPCs	thefarmersandsubsequentdisbursementforbetter remunerationto farmers.FarmersshouldtakemembershipofnearbyFPCor

	Technology Option 1. Descurrent ded des states of D.O. V.O.	cooperative to avail this benefit at its fullest potential.
OFT 4: Assessment of different	<b>Technology Option-1</b> : Recommended dose of P <sub>2</sub> O <sub>5</sub> : K <sub>2</sub> O (40:40) through DAP & MOP + (50% of RDN though urea + 2 sprays of Nano-N) + 1 spray of Nano-Zn	<b>Technology Option-</b> <b>3:</b> Recommended dose of $K_2O$ (40) + (50% of RDN
technologies of nutrient Management in <i>kharif</i> paddy	<b>Technology Option-2:</b> Recommended dose of $P_2O_5$ : K <sub>2</sub> O (40:40) through DAP & MOP + (75% of RDN through urea + 1spray of Nano-N) + 1 spray of Nano- Zn	(50%  of  RDN) though urea + 2 sprays of Nano-N at 25 & 45 DAT) + $(50\% \text{ of } RD \text{ of } P_2O_5)$
	<b>Technology Option-3:</b> Recommended dose of K <sub>2</sub> O (40) + (50% of RDN though urea + 2 sprays of Nano-N at 25 & 45 DAT) + (50% of RD of P <sub>2</sub> O <sub>5</sub> as basal + 2 foliar spray of Nano DAP at 25 & 45 DAT) + 1 spray of Nano- Zn	as basal + 2 foliar spray of Nano DAP at 25 & 45 DAT) + 1 spray of Nano-Zn produced best result based on monitoring indicators.
OFT 5: Assessment of different technologies of	<b>Technology Option-1:</b> Seed treatment with <i>Rhizobimleguminoserum</i> + 50 % RDF (25:50:25) through vermicompost + 50 % RDF through inorganic fertilizer	-
Integrated Nutrient Management in Chickpea.	<b>Technology Option-2:</b> Soil application of microbial consortia ( <i>Rhizobimleguminoserum</i> + PSB + <i>F. aurantia</i> ) + 25 % RDF through Vermicompost + 50 % RDF through inorganic fertilizer	
	<b>Technology Option-3:</b> Soil application of microbial consortia ( <i>Rhizobimleguminoserum</i> + PSB) + 50 % RDF through Vermicompost + Liquid N P K @ 3g lit <sup>-1</sup> twice	
OFT 6: Standardization of integrated disease management schedule for	<b>Technology Option-1:</b> Seed trt. with Mancozeb 75% WP @ 2.5 g/litre followed by alternate spraying of Metalaxyl 8% + Mancozeb 64% @ 2.5 g/ litre of water and Fenamidone 10% + Mancozeb 50% WG @ 2.5 g/ litre of water at root zone after initial symptom development.	1. Seed trt. with Mancozeb 75% WP @ 2.5 g/litre followed by alternate spraying of
rhizome rot of <i>ekangi(Kaempfer iagalanga</i> L.)	<i>fer</i> <b>Technology Option-2:</b> Seed trt. with Metalaxyl 35% WS @ 0.5 g/ litre followed by spraying of Metalaxyl 8% - Mancozeb 64% WP @ 2.5 g/ litre of water at root zone after initial symptom development.	Metalaxyl 8% + Mancozeb 64% @ 2.5 g/ litre of water and Fenamidone
	TechnologyOption-2:Seedtrt.withTrichodermaviridae@4-5g/kgofseed+soilapplicationof(neemcake@250kg/ha+Trichodermaharzenium@1.5kg/ha)	10% + Mancozeb 50% WG @ 2.5 g/ litre of water at root zone after

		initial symptom development
		2. Seed trt. with <i>Trichodermavir</i> <i>idae</i> @ 4-5 g/ kg of seed + soil application of (neem cake @ 250 kg/ ha + <i>Trichodermaha</i> <i>rzenium</i> @ 1.5 kg/ ha)
OFT 7: Assessing the performance	<b>Technology Option-1</b> : Planting onion during4 <sup>th</sup> week of August following BBF method	Planting onion during 4 <sup>th</sup> week of
of BBF method and standardizing	<b>Technology Option-2</b> : Planting onion during 2 <sup>nd</sup> week of September following BBF method	September following BBF method and
the planting dates of kharif onion in BBF method for the New Alluvial Zone specially in Murshidabad	<b>Technology Option-3</b> : Planting onion during 4 <sup>th</sup> week of September following BBF method	Planting onion during 2 <sup>nd</sup> week of September following BBF method are statistically at par and both can be recommended epending upon the cropping pattern of the farmer.
OFT 8: Tank-mix effectiveness of <i>Moringa</i> leaf extract with Flupyradifurone	<b>Technology Option-1</b> : Flupyradifurone 17.09 w/w SL at 75% (185 g a.i. ha <sup>-1</sup> or 935 ml ha <sup>-1</sup> ) of recommended rate + <i>Moringa</i> Leaf Extract (aqueous) 10%	From the results of the OFT, application of afidopyropen at 1.5 ml per liter water by mixing
and Afidopyropen against <i>Bemisiatabaci</i> in solanaceous vegetable crops	<b>Technology Option-2</b> : T-2: Afidopyropen 50% DC at 75% (37.5 g a.i. ha <sup>-1</sup> or 750 ml ha <sup>-1</sup> ) of recommended rate + <i>Moringa</i> Leaf Extract (aqueous) 10%	with 10% aqueous extract of <i>Moringa</i> leaf could be a sustainable management option of <i>Bemisiatabaci</i> .
OFT 9: Evaluation of novel chemicals and bio- pesticides for the management of root-knot nematode, <i>Meloidogyne</i>	<b>Technology Option-1</b> : Fluopyram 400 SC (34.48% w/w) at 500 g a.i. ha <sup>-1</sup> (1.25 L with 1000 L water ha <sup>-1</sup> )	From the results of the OFT, application of fluopyram 10 days before the transplanting of pointed gourd could be a sustainable management option of root knot

<i>incognita</i> in pointed gourd	Technology Option-2:         Fluensulfon 480 EC (g L <sup>-1</sup> ) at 2.34 L a.i. ha <sup>-1</sup> (4 L with 1000 L water ha <sup>-1</sup> )         Technology Option-3:	nematode. However, some other field efficacy parameters need to be tested in the following year.
	TO-3: <i>Paecilomyceslilacinus</i> 1.0% WP ( $2 \times 10^6$ CFU g <sup>-1</sup> ) at 10 kg ha <sup>-1</sup>	
OFT 10: Assessing the effect of different concentrate feed prepared from locally available materials on performance of	<b>Technology Option-1</b> : Use of concentrate feed prepared with using (Maize - 20% + Ground nut cake - 10 %+ sesame cake - 25% + Wheat bran/De-oiled rice bran- 32 + Gram - 10% + Mineral mixture- 2% + Salt – 1% fortified with vitamins A, B2 and D3 and antibiotic feed supplements)	Continuing
goat	Technology Option-2:Use of concentrate feed prepared with using (Maize - 40% + Ground nut cake - 30 % + Wheat bran/De-oiled rice bran- 22 % + Molasses - 5% + Mineral mixture- 2% + Salt - 1% fortified with vitamins A, B2 and D3 and antibiotic feed supplements)Technology Option-3:Use of concentrate feed available	
OFT 11: Evaluation of performance of different poultry breeds in Murshidabad district under backyard farming.	in marketing channel Technology Option-1 breed with Grampriya	Continuing
	Technology Option-2: Replacement of localbreed with Swarnath	
	Technology Option-3: Replacement of localbreed with Srinidhi	
OFT 12: Assessment of efficacy of different	<b>Technology Option-1</b> : Application of urea (25 kgha <sup>-1</sup> ) and SSP (50 kgha <sup>-1</sup> ) + fermented material (fermentation of MOC + GOC +	

manures& supplements on plankton production in aquaculture ponds	DORB + vitamin-minerals with yeast under anaerobic condn for 48-72 hrs) @50kgha <sup>-1</sup> once in a month after 20 times diln with pond water.	
	<b>Technology Option-2</b> : Application of urea (25 kgha <sup>-1</sup> ) and (SSP 50 kgha <sup>-1</sup> ) + fermented material (fermentation of DORB using probiotics, dolomite and raw salt under aerobic condn for 48 hours) @ 13.4 kg ha <sup>-1</sup> after 20 times dilution with pond water once in a week.	Application of urea (25 kgha <sup>-1</sup> )and SSP (50 kgha <sup>-1</sup> ) + fermented material (fermentation of MOC + GOC + DORB + vitamin-minerals with yeast under anaerobic condition for 48-72 hrs.) @50kgha <sup>-1</sup> once in a month after 20 times diln with pond water.

# FRONTLINE DEMONSTRATIONS (FLDs)

Total Number of Demonstrations: 46

Total Number of beneficiaries: 2549

#### **Frontline Demonstrations on Cereals:**

S 1.	Crop	Thematic area	Technology Demonstrated with detailed treatments	Area (ha)		N	<b>o. o</b> i	f farm	ners/	/dem	ionst	ratio	n
N o.				Propo -sed	Act ual	Othe	ers	S	C	S	Т	То	tal
0.				-seu	uai	М	F	М	F	М	F	М	F
1	Kharif Rice (2022 )	Weed	Application of herbicide (Triafemone 20 EC+ Ethoxy- Sulphuron 10% WG) @ 45gm/ac in transplanted paddy 15 DAT	10	10	21	0	18	0	5	0	45	0
2.	Kharif Rice (2022 )	Crop	System of Assured Rice Production in kharif paddy	10	10	15	0	25	0	5	0	45	0
3.	Wheat (2022 )	0.0	Var. DBW 187+ Zero tillage + Soil application of B @ 2 kgha-1 + 2 spray of B @ 0.25% twice (30 & 45 DAS)	10	10	18	0	24	0	3	0	45	0
4.	Boro paddy (2022	Resource conservati	Water productivity enhancement by application of Pusa Hydrogel. In transplanted	05	05	16	0	19	0	0	0	35	0

S l.	Сгор	Thematic area	Technology Demonstrated with detailed treatments	Area (ha)		N	0.0	f farm	ners,	/dem	ions	tratio	n
N				Propo	Act ual	Othe	ers	S	С	S	Т	То	tal
0.				-sed	uai	М	F	м	F	М	F	М	F
	)	on	boro paddy										
5.	Millet (2022)	Crop Diversific ation	Finger Millet (Variety: Indrabati)+ Soil application of B @ 2 kgha-1 + 2 spray of B @ 0.25% twice (30 & 45 DAS)	00	01	02	0	05	0	0	0	07	0
6.	Maize (Sum mer 2022)	ent of Fall Armywor	Installation of pheromone trap @ 5 per acre at 30 DAS; spraying of NSKE @ 5 ml liter-1 water at 35-40 DAS; spraying of novaluron5.25% + emamectin benzoate 0.9% SC @ 40 g a.i. ha-1 at 45 DAS; spraying of Bt var kurstaki 17600 IU mg-1 @ 2.5 ml liter-1 water at 60 DAS; spraying of spinetoram 11.7 SC @ 35 g a.i. ha-1 at 70 DAS and spraying of chlorantraniliprole 9.5% + lambda cyhalothrin 4.6% ZC @ 85 g a.i. ha-1 at 85 DAS	03	03	10	0	10	0	0	0	20	0
7.	Maize (Rabi, 2022)	Same	Same	00	07	12	0	17	0	7	0	36	0
8.	Wheat (2021 )	Integrated Crop Managem ent	Var. HD2967+ Zero tillage + Soil application of B @ 2 kgha-1 + 2 spray of B @ 0.25% twice (30 & 45 DAS)	10	10	19	0	26	0	0	0	45	0
Tot	al (2022	2)		48	56	113	0	144	0	21	0	278	0

# Frontline demonstrations on oilseed crops

Sl.	Crop	Thematic area	Technology Demonstrated with detailed treatments	Area (ha	l)	No	No. of		ers,	/den	ions	tratio	'n
No.		aica	ucaunents	Propo- sed	Actu al	Oth	ers	SC	2	S	Г	Tot	al
				scu	ai	М	F	М	F	М	F	М	F
1.	Musta rd (2022 )	Crop	Var. PM-28 + Soil application of S @ 20 kgha <sup>-1</sup> & B @ 1.5 kg ha <sup>-1</sup> + B spray @ $0.025\%$ twice at 30 and 45 DAS + Soil application of <i>T. viridae</i> @ 3.0 kg kgha <sup>-1</sup>	5	10	20	0	31	3	5	2	56	5
2.	Musta rd (2022 )	Crop	Var. NRCHB-101 + Soil application of S @ 20 kgha <sup>-1</sup> & B @ 1.5 kg ha <sup>-1</sup> + B <u>spray @ 0.025%</u> twice at 30 and 45 DAS + Soil application of <i>T. viridae</i> @ 3.0 kg kgha <sup>-1</sup>	5	15	23	0	35	0	24	0	84	0

Sl.	Crop	Thematic area	Technology Demonstrated with detailed treatments	Area (ha	a)	N	o. of	farm	ers	/den	ions	stratio	n
No.		aica	u caunents	Propo- sed	Actu al	Oth	ers	S	2	S	Т	Tot	al
				sea	aı	м	F	М	F	м	F	М	F
3.	Sesa me (2022 )	Crop	Var. Sabitri + Soil application of S @ 20 kgha <sup>-1</sup> & B @ 10.5 kgha <sup>-1</sup> + B <u>spray @</u> <u>0.025%</u> twice + Soil application of <i>T.</i> <i>viridae</i> @ 3.0 kg kgha <sup>-1</sup>	0	5	8	0	10	0	4	0	22	0
4.	Groun d-nut (2022 )	Crop	Variety-Dharani + Seed treatment- Trichodarma viridae- $4g/kg$ +Soil application of S @ 20 kgha <sup>-1</sup> & B @ 10.5 kgha <sup>-1</sup> + B <u>spray @ 0.025%</u> twice + Soil application of <i>T. viridae</i> @ 3.0 kg kgha <sup>-1</sup>	10	10	18	0	21	0	6	0	45	0
5.	Musta rd (2021 )	Crop	Var. NRCHB-101 + Soil application of S @ 20 kgha <sup>-1</sup> & B @ 1.5 kgha <sup>-1</sup> + B spray @ $0.025\%$ twice at 30 and 45 DAS + Soil application of <i>T. viridae</i> @ 3.0 kg kgha <sup>-1</sup>	10	10	19	0	10	0	21	0	50	0
6.	Musta rd (2021 )	Crop	Var. PM-28 + Soil application of S @ 20 kgha <sup>-1</sup> & B @ 1.5 kg ha <sup>-1</sup> + B spray @ $0.025\%$ twice at 30 and 45 DAS + Soil application of <i>T. viridae</i> @ 3.0 kg kgha <sup>-1</sup>	10	10	20	0	8	0	22	0	50	0
Tot	al	1		40	60	108	0	115	3	82	2	307	5

# Frontline Demonstrations on Pulse Crops :

Сгор	Themati c area	Technology Demonstrated with detailed treatments	Area (ha)						farmers/					
			Propo -sed	Actu al	Othe	ers	SC	2	S	ST		tal		
			-seu	ai	М	F	М	F	М	F	М	F		
Lentil (Rabi, 2022)	Integrat ed crop Mgt.	Var. P. ageti + Soil application of <i>T. viridie</i> @ 30 kg $ha^{-1}$ + Spraying of 5% NPK and 0.025% B at 35-45 DAS + 0.025% B & 0.05 % Mo during grain setting	1	10	18	4	25	3	7	3	50	10		
Lentil (Rabi, 2022)	Integrat ed Disease Mgt.	Seed treatment with Carboxin + Thiram @ $2.5g/kg$ seed followed by foliar application of T.viridae + P.fluorescens @ 5 + 5 ml/liter water at the initiation of disease and application of thiophanate methyl + chlorothalonil @ 1 g + 2 g per liter water at 15-20 days after depending upon the condition of field		4	14	0	16	0	0	0	30	0		
Chickp ea (Rabi, 2022)	Integrat ed crop Mgt.	Var. RVG-203 + Soil application of <i>T. viridie</i> @ 30 kg ha <sup>-1</sup> + Spraying of 5% NPK and 0.025% B at 35-45 DAS + 0.025% B & 0.05 % Mo during grain setting		10	18	0	24	0	18	0	60	60		
Lentil (Rabi, 2021)	Integrat ed crop Mgt.	Var. P. ageti + Soil application of <i>T. viridie</i> @ 30 kg ha <sup>-1</sup> + Spraying of 5% NPK and 0.025% B at 35-45 DAS + 0.025% B & 0.05 % Mo during grain setting		10	20	0	20	0	5	0	45	0		
Lentil (Rabi,	Integrat ed	Seed treatment with Carboxin + Thiram @ 2.5g/ kg seed followed by foliar application of T.viridae +	03	03	30	0	10	0	4	0	44	0		

Crop	Themati c area	Technology Demonstrated with detailed treatments	Area (ha)	-			No. demo		arme ratio			
			Propo	-	Oth	ers	SC	]	S	Г	То	tal
			-sed	al	M F		М	F	М	F	М	F
2021)	Disease Mgt.	P.fluorescens @ $5 + 5$ ml/ liter water at the initiation of disease and application of thiophanate methyl + chlorothalonil @ $1$ g + $2$ g per liter water at 15-20 days after depending upon the condition of field										
Chickp ea (Rabi, 2021)		Var. RVG-203 + Soil application of <i>T. viridie</i> @ 30 kg ha <sup>-1</sup> + Spraying of 5% NPK and 0.025% B at 35-45 DAS + 0.025% B & 0.05 % Mo during grain setting		10	22	0	28	0	0	0	50	50
		Total	46	47	122	4	123	3	34	3	279	10

# Frontline Demonstrations on Fibre Crops :

Sl.	Crop	Thematic		Area (h	a)	No. of farmers/							
No		area	treatments					demo	onstr	atior	ı		
•				Propo-	Actu	Others SC ST Tota						tal	
				sed	al	M F M F				М	F	М	F
1.	Jute (2022 )	Integrate d crop Mgt.	Variety : Co-58 + Propaquizafop10%EC @ 1.5 ml/ltr water at 2-4 leaf stage	0	15	36	05	47	05	0	0	83	10
2.	Jute (2022 )	Scientific jute retting & quality improve ment	Use of NINFET Sathi Powder @ 18.75 kg ha <sup>-1</sup> + CRIJAF Sona powder @ 11.25 kg ha <sup>-1</sup> for shortening jute retting time followed by dipping of jute fibre in Vijol polyquat solution @ 1 gm/ltr		20	50	10	70	10	20	0	140	20
Tota	al	I		20	35	86	15	117	15	20	0	223	30

# Frontline Demonstrations on Vegetable Crops :

Sl. No	Сгор	Thematic area	Technology Demonstrated with detailed treatments	Area (h	a)		far	mer		o. of emo	-	atio	n
•				Propo- sed	Actu al	Ot r		2	SC	S	Т	То	tal
						М	F	М	F	М	F	М	F
1.	Elephant Foot Yam	Scientific intercroppin g	Intercropping of amaranthus/ cowpea with EFY	0.5 (10)	0.52	4	0	4	0	2	0	10	0
2.	Cabbage (Summer King)	Off-season vegetable/ protective cultivation	Off season & early cabbage under grow cover	0.13 (12)	0.13 (12)	6	0	6	0	0	0	12	0

Sl. No	Сгор	Thematic area	Technology Demonstrated with detailed treatments	Area (h	a)		far	mer		No. of s/demonstratio				
•				Propo- sed	Actu al	Ot r:		S	SC	S	T	То	tal	
						М	F	М	F	м	F	М	F	
3.	Cauliflow er (Don)	Off-season vegetable/ protective cultivation	Off season & early cabbage under grow cover	0.13 (12)	0.13 (12)	6	0	6	0	0	0	12	0	
4.	Brocolli	Promotion	Partial replacement of conventional cauliflower and cabbage by Broccoli (Green magic).	0.20 (12)	0.26	4	0	8	0	0	0	12	0	
5.	Pigmente d cauliflow er	Promotion of exotic vegetables	Partial replacement of conventional cauliflower and cabbage by Pigmented cauliflower (Carotena)	0.20 (12)	0.20	0	5	0	5	0	2	0	12	
6.	Red cabbage	Promotion of exotic vegetables	Partial replacement of conventional cauliflower and cabbage by Red cabbage (Valentena)	0.20 (12)	0.20	4	0	6	0	2	0	12	0	

# Frontline Demonstrations on Fruit Crops:

Sl. No	Сгор	Thematic area	Technology Demonstrated with detailed treatments	Area (ha)	-			No. ( emo				/	
				Prop o-sed	Actu al	Othe	ers	S	C	S	Г	То	tal
				0-seu	aı	М	F	М	F	М	F	М	F
1.	Mango	Integrated pest management	Installation of Methyl eugenol trap at the time of post-buttoning stage	0 4	0 6	2 0	0	25	0	10	0	55	0

# Frontline Demonstrations on Spice Crops:

Sl	Crop	Thematic	Technology Demonstrated with detailed	Area	-			No.	of fa	arn	ners,	/	
.   N		area	treatments	(ha)			d	emo	onst	rat	ion		
0.				Prop o-sed		Oth	ers	S	С	5	ST	То	tal
				0-seu	ai	М	F	М	F	М	F	М	F
1.	Turme ric	Cultural manageme nt	Improved variety (Saguna) + Potray + Use of Polythene mulch	0.33 (10)	0.65	5	4	10	4	0	0	15	8
2.	Kharif Onion (AFD Red)	Integrated Crop Manageme nt	Transplanting of seedling treated with carbendazim though root dipping +Application of N:P:K @ 75:100:75 + Microbial consortia enriched (Aztobacter + PSB + Fraturia enriched vermicompost @ 2q ha <sup>-1</sup> ) + sulphar application @ 30 kg/ha.	(15)	2.0	7	0	8	0	0	0	15	0
3.	Garlic	Integrated	Microbial consortia enriched (Aztobacter + PSB +	2.0	2.0	7	0	9	0	0	0	16	0

Sl	Сгор	Thematic area	Technology Demonstrated with detailed treatments	Area (ha)	-			No. emo			iers, ion	/	
N o.				Prop		Oth	ers	S	С	5	ST	То	tal
				o-sed	al	м	F	М	F	М	F	М	F
		Nutrient Manageme nt	<i>Fraturia</i> ) enriched Vermicompost @ 2 t ha -1 + sulphar @ 30 kg/ha.	(15)									
4.	Chilli	Integrated Disease	Scientific management of nursery bed through covering with 45 nylon mesh; cartap hydrochloride 4G @ 2 kg bigha <sup>-1</sup> during final land preparation and sowing of maize around the main field as border crop at 15 days prior to transplanting of chilli seedlings; spraying of castor oil @ 3 ml liter <sup>-1</sup> water at 20 DAT; spraying of chlorfenapyr 10 SC @ 75 g a.i. ha <sup>-1</sup> at 35 DAT; spraying of afidopyropen 50 DC + moringa root extract 10% w/v as tank mix @ 200 g a.i. ha <sup>-1</sup> + 5 ml liter <sup>-1</sup> water at 55 DAT and spraying of spirotetramat 11.01% + imidacloprid 11.01% SC @ 55 g a.i. ha <sup>-1</sup> at 70-75 DAT		03	9	0	12	0	0	0	21	0
То	tal			7.33	7.65	28	4	39	4	0	0	67	8

# Frontline Demonstrations on Fodder Crops :

Sl. No	Crop	Thematic area	Technology Demonstrated with detailed treatments	Area (ha)				No. dem	of fa		'		
•				Prop o-sed	Actu al	Oth	ers	S	С	S	Т	Тс	otal
				o scu		М	F	М	F	М	F	М	F
1.	Fodder	Integrated crop manageme nt	Intercropping of cowpea (F4/F5) during prekharif and berseem (JB-1/2) during rabi season with hybrid napier.		8.0	54	12	12	10	22	10	88	32

# Frontline Demonstrations on Livestock:

Crop	Themati c area	Name of the technology demonstrated	No. of Farm er	Area (Ha)		uction (Ha)	% of chan ge in Prod		Econor emons (Rs	tratio		*]	ch	omics o eck s.)	of
					Demons -tration	Check	'n	Gro ss Cos t	Gros s Retu rn	Net Ret urn	** BC R	Gro ss Cos t	Gro ss Ret urn	Net Retu rn	** IC BR
Dairy															
Cow	Animal Reprodu ctive Mgt.	Increase reproduction potentiality (Birth rate of calf, Grading Up of Deshi/Non- Descriptive Cattle, Gynecological diseases) by usingArtificial Insemination straw of indigenous cattle (Sahiwal)	100 Oth- 50 SC-50 ST- 00	100 Unit (2 cattle /unit)	Concept ion Rate- 48.20 % Avg. Birth Wt. of calf- 17.97 Kg	Concept ion Rate- 36.62 % Avg. Birth Wt. of calf- 17.13 Kg	8.88	420 0	770 0	350 0	1. 83	27 50	460 0	185 0	1.6 7
	Animal Diseases Mgt.	Increase Production &Profitability by reducing disease prevalence, cost of treatment, through vaccination against FMD, HS and BQ diseases in cattle	SC-	250 unit (3 cattle /Unit )	Avg. Milk Prodn - 8.25 Disease Occurre nce- 0.9%	Avg. MilkPro dn- 5.10 Disease Occurre nce- 5.4%	61.7 6 (-) 4.5%	463 5	715 2	251 7	1. 54	40 50	458 0	530	1.1 3
	Animal nutrition manage ment	Urea + Molasses feeding during scarcity of fodder	150 Oth- 80 SC-60 ST- 10	150 Unit (3 Cattle /Unit )	240 lit/ Cattle / Month	190 lit/ Cattle / Month	26.3 1	530 0	1010 0	480 0	1.9	460 0	805 0	3450	1.7 5
	Animal nutrition manage ment	Feeding of concentrate feed & mineral mixture on cattle	100 Oth- 50 SC-50 ST- 00	100 (4 cattle /unit)	Avg. Milk Product ion/co w/mont h-260 lit	Avg. Milk Product ion/co w/mon th- 190 lit	36.8 4	550 0	110 50	555 0	2. 00	42 50	785 0	360 0	1.8 5

Cro p	Them atic area	Name of the technology demonstrated	No. of Far mer	Area (ha)	Productio	on (Q/Ha)	% of chan ge in Prod		Econor emons (Rs	tratio		*	che	omics o eck .s.)	of
					Demons- tration	Check	n	Gr oss Cos t	Gro ss Ret urn	Net Ret urn	** BC R	Gr oss Co st	Gro ss Ret urn	Net Retu rn	** IC B R
Shee p and goat	Anim al Nutri tion Mgt.	Feeding of Concentrate feed & Mineral Mixture on Black Bengal Goat in free range farming	50	50 Unit, (5 goat / unit)	doe (kg)- 10.165 Final weight of doe (kg)- 14.135 Birth	Initial weight of doe (kg)- 10.150 Final weight of doe (kg)- 12.180 Birth weight of kids (kg)- 0.930 Weaning weight (kg)- 4.68 Milk yield per day (ml/doe)- 118 Kid Mortality (%)-23	-	14 80 / Go at/ Yr	425 0/ Goat / Yr	277 0/ Goa t/ yr	2. 87	13 20 / Go at/ Yr	325 0/ Goa t/Yr	193 0/- Goat /Yr	2. 46
Duc kery		Khaki Campbell breed promotion for dual purpose (Egg & Meat Production)	30	30U nit (10 duck / farm er)	190 eggs/ bird/yr	120 eggs/bird/y r	58.3 3	57 00 /- (du ck + fee d val ue 1.5 yea r)	115 20/-	582 0/	2. 02	47 00 /- (d uc k+ fee d val ue 1.5 ye ar)	768 0/-	2980 /-	1. 63
Duc kery	Prom o- tion of impr oved breed	Increase meat production potentiality of duck by Promotion of improved breed (White-Pekin)	30	30 unit (20 duck / farm er)	2.7 Kg/duck/2. 5 Month	N/A		28 0/ duc k/ 2.5 Mo nth	430 / duc k/ 2.5 Mon th	150 /-	1. 54	N/ A	N/A	N/A	N/ A

Cro p	Them atic area	Name of the technology demonstrated	No. of Far mer	Area (ha)	Productio	on (Q/Ha)	% of chan ge in Prod n		Econor emons (Rs	tratio		*	che	omics o eck .s.)	f
					Demons- tration	Check	. 11	Gr oss Cos t	Gro ss Ret urn	Net Ret urn	** BC R	Gr oss Co st	Gro ss Ret urn	Net Retu rn	** IC B R
Shee p and goat	Anim al Nutri tion Mgt.	Feeding of Concentrate feed & Mineral Mixture on Black Bengal Goat in free range farming	50	50 Unit, (5 goat / unit)	Initial weight of doe (kg)- 10.165 Final weight of doe (kg)- 14.135 Birth weight of kids (kg)- 1.325 Weaning weight (kg)- 5.850 Milk yield per day(ml/do e)-222 Kid Mortality (%)-14	Initial weight of doe (kg)- 10.150 Final weight of doe (kg)- 12.180 Birth weight of kids (kg)- 0.930 Weaning weight (kg)- 4.68 Milk yield per day (ml/doe)- 118 Kid Mortality (%)-23	-	14 80 / Go at/ Yr	425 0/ Goat / Yr	277 0/ Goa t/ yr	2. 87	13 20 / Go at/ Yr	325 0/ Goa t/Yr	193 0/- Goat /Yr	2. 46
Poul try	otion of impro ved	Promotion of RIR (Rhode Island Red) poultry breed promotion for dual purpose (Egg & Meat Production)	30	20 Unit (10 chick / farm er)				829 .00	223 4.00	140 5.00	2. 69	45 9.5 0	120 0.50	741	2.6
Othe rs			<u> </u>		<u> </u>	<u> </u>									
Tota l			640	740											

# Frontline Demonstrations on Fisheries:

Catego ry	Thematic area	Name of the technology demonstrated	P	ropos	ed			Actual								
Ty	aita		a	No. of Unit	of	Area (ha)	No. of Unit	Oth		N S		of Fa	arm T		tal	Gra nd
								м	F	м	F	М	F	M	F	Tot
		Application of soil and water probiotics in composite fish culture @ 250gha <sup>-1</sup> once in month.	10	30	30	12	30	5	0	20	0	5	0	30	0	<b>al</b> 30
Carp group fishes	Freshwat er Aqua- culture	Nursery pond management for production of carp group fishes in seasonal ponds. Spawn was supplied @ 5 lakhs nos./bigha		30	30	05	30	8	0	20	0	2	0	30	0	30
Carp group fishes	Fingerling productio n	Production of fingerling in Pen culture system	4	30	30	4.5	30	10	0	20	0	0	0	30	0	30
-	0 0	Production of stunted growth fingerling in perennial ponds during winter season		15	15	4.2	15	3	0	10	0	2	0	15	0	15
	Species diversific ation	Introduction of Air Breathing fishes in composite fish culture system	1	10	10	0.80	10	5	0	5	0	0	0	10	0	10
Mussel s																
Ornam ental fishes	Bio- control of mosquito larvae	Mass production of Guppy in polythene tank	0	0	0		4	0	0	0	4	0	0	0	0	4
Others (pl.spe cify)																
Total		1	23	115	115	26.5	119	31	0	75	4	9	0	9	0	119

# Frontline Demonstrations on Other Enterprises:

Crop/ Enterprise	Technology Demonstrated with detailed treatments	Area (ha)		No	o. of f	farm	ers/	den	ion	stra	tion	Gra- nd
		Propo-sed	Act- ual	Oth	ers	S	C	S	Г	Т	otal	Total
				М	F	М	F	M	F	М	F	
(j) Frontline Demonstrations on Other Enterprise:												

Crop/ Enterprise	Technology Demonstrated with detailed treatments	Area (ha]		No	o. of f	arm	ers/o	den	ion	stra	tion	Gra- nd
	with uctaned a cauncing	Propo-sed		Oth	ers	S	С	S	Т	T	otal	Total
			ual	м	F	М	F	М	F	М	F	-
Vermicompost	Vermicompost production in polypropylene chamber	40	40	8	8	8	8	4	4	20	20	40
Compost	Compost production in polypropylene chamber	20	20	4	4	6	6	0	0	10	10	20
Liquid manure	Preparation of liquid organic using vermin-wash as base material	30	30	5	8	5	8	0	4	10	20	30
Oyster Mushroom ( <i>Pleurotusflorida</i> )	Production using paddy & wheat straw as substrate	20 (20 cyl/unit)	25	0	10	0	15	0	0	0	25	25
Oyster Mushroom ( <i>Pleurotussajorcaju</i> )	Production using paddy & wheat straw as substrate	20 (20 cyl/unit)	25	0	10	0	15	0	0	0	25	25
Milky Mushroom ( <i>Calocybeindica</i> )	Production using paddy & wheat straw as substrate	20 (20 cyl/unit)	20	5	5	5	5	0	0	10	10	20
Oyster Mushroom ( <i>Pleurotusflorida</i> )	Use of light trap and spraying of formalin to control phorid fly	20	20	10	0	10	0	0	0	20	0	20
Apiculture	Production of honey using Apis mellifera	20	30	5	5	10	10	0	0	15	15	30
Total (Other Enterprise	)	190	210	37	50	44	67	4	8	85	125	210

# Frontline Demonstrations on Farm implements and Machinery:

Name of the imple ment	Crop	Name of the technolo gy demonst	No. of Far mer	Ar ea (h a)	Field obser (output/ hour Demonstr	'man	% change in major parameter	Labor reducti on (man	Cost reduction (Rs./ha or Rs./Unit)
		rated			ation	k		days)	
Mini maize thresh er	Rice	Maize threshin g using mini thresher	40	1 0	200 kg	Man ual : 25 kg Hire d thres her – 600 kg	The mini thresher can be utilized and run by women during leisure time resulting drudgery reduction and cost reduction		Manual : 22500/ha Mini thresher : 3000/ha Hired thresher:7500/ha

# Cluster Front Line Demonstrations (CFLDs)

Сгор	Variety	Area (ha)	Number of beneficiaries
Pulses			
Arhar Kharif	Local	10	35
Green gram (Kharif)	Virat	20	60
Black gram (Kharif)	Local	30	95
Oilseeds			
Ground nut Rabi	Dharani	10	30
Mustard Rabi	PM-28	10	40

# TRAINING

# A) Farmers & Farm Women Training (On and Off campus)

Thematic	No. of			]	No. of Pa	rticipar	its				Grand 7	Fotal	
Area	Courses		Other			SC			ST				
		М	F	Т	М	F	Т	М	F	Т	М	F	Т
Crop Productio n	61	1016	305	1321	448	60	508	28	32	60	1492	397	1889
Horticultu re	32	511	365	876	192	45	237	9	39	48	712	449	1161
Soil Health and Fertility Mgt.	15	248	74	322	99	14	113	0	0	0	347	88	435
Livestock Prdn. and Manageme nt	25	395	109	504	180	25	205	0	0	0	575	134	709
Home Science/ Women empwmnt.	9	61	97	158	51	29	80	14	4	18	126	130	256
Plant Protection	17	271	65	336	115	16	131	0	5	5	386	86	472
Fisheries	13	174	63	237	100	13	113	8	10	18	282	86	368
Capacity Building	16	280	127	407	117	16	136	0	0	0	397	143	540
Total	188	2956	1205	4161	1302	218	1523	59	90	149	4317	1513	5830

# B) RURAL YOUTH Training (On and Off Campus)

Thematic Area	No. of				No. of P	articipa	nts				Grand	Total	
	Courses		Other			SC			ST				
	-	М	F	Т	М	F	T	М	F	Т	м	F	Т
Protected Cultivation	2	10	42	52	6	2	8	0	0	0	16	44	60
Mushroom Production	3	51	27	78	33	12	45	0	0	0	84	39	123
Beekeeping	3	59	6	65	8	2	10	0	0	0	67	8	75
Value addition	7	300	0	300	50	0	50	0	0	0	350	0	350
Dairying	2	67	0	67	13	0	13	0	0	0	80	0	80
Sheep and goat rearing	1	18	1	19	14	3	17	0	0	0	32	4	36
Poultry Production	1	5	13	18	7	3	10	2	0	2	14	16	30
Ornamental fishery	2	24	10	34	11	2	13	3	0	0	38	12	50C
Composite fish culture	3	45	12	57	24	9	33	0	0	0	69	21	90
Freshwater prawn culture	3	42	6	48	27	15	42	0	0	0	69	21	90
Other Skill Training	2	42	38	80	2	12	14	0	0	0	44	50	94
Total	29	663	155	818	195	60	255	5	0	2	863	215	1078

# C) Extension Personnel Training (On and Off Campus)

Thematic Area	No.			No. of l	Partici	pan	ts				Grand To	otal	
	of Cou		Other			SC			ST				
	rses	М	F	Т	М	F	Т	М	F	Т	М	F	Т
Productivity enhancement in field crops	15	524	160	684	5	0	0	0	0	0	529	160	689
Integrated Pest Management	30	1080	90	1170	30	0	0	0	0	0	1110	90	1200
Integrated Nutrient management	25	898	77	975	25	0	25	0	0	0	923	77	1000
Protected cultivation technology	20	720	60	780	20	0	60	0	0	0	740	60	800
Gender mainstreaming through SHGs	1	8	42	50	0	0	0	0	0	0	8	42	50
Low cost and nutrient efficient diet designing	1	25	0	25	0	0	0	0	0	0	25	0	25
Group Dynamics and farmers organization	2	62	2	64	16	0	16	0	0	0	78	2	80
Total	94	3317	431	3748	96	0	101	0	0	0	3413	431	3844

Crop /	Identified Thrust	Training title*	Duration	No.	of Particip	ants
Enterprise	Area		(days)	Male	Female	Total
Cattle	Cattle management & breed improvement	Paschim Banga Go-Sampad Bikash Sanstha, Govt. Of WB	23/06/22 To 22/07/22 (30 Days)	0	40	40
Cattle		Paschim Banga Go-Sampad Bikash Sanstha, Govt. Of WB	10/08/22 To 08/09/22 (30 Days)	0	31	31
Cattle		Paschim Banga Go-Sampad Bikash Sanstha, Govt. Of WB	07/11/22 To 06/12/22 (30 Days)	0	31	31
Cattle		Paschimbanga Go- Sampadbikashsanstha, Govt. Of WB	21/12/22 To 20/01/23 (30 Days)	0	32	32
All crops and enterprise related to agricultur e	Integrated crop management	DAESI	One year diploma	38	2	40
All crops and enterprise related to agricultur e	Integrated crop management	DAESI	One year diploma	37	3	40

# D) Vocational training programmes for Rural Youth

# E) Sponsored Training Programmes:

Venue	Date	Category of				1	No. 0	f Part	icipa	nt					Sponsoring Agency	Sponso- red
		Particip ant		Othe	er		SC			ST			Total			Amount (Rs.)
			М	F	Т	м	F	Т	М	F	Т	М	F	Т		
On Campus	07.03. 22 To 09.03. 22	PF & FW	40	0	40	0	0	0	0	0	0	40	0	40	IFFCO	20000

Venue	Date	Category of					No. C	)f Part	icipa	nt					Sponsoring Agency	Sponso- red
		Particip ant		Othe	er		SC			ST			Total			Amount (Rs.)
			М	F	Т	м	F	Т	м	F	Т	м	F	Т		
	17.03. 22	PF & FW	0	30	30	0	0	0	0	0	0	0	30	30	IFFCO	13500
	15.03. 22 To 16.03. 22	PF & FW	25	0	25	0	0	0	0	0	0	25	0	25	ATMA, Berhampor e	20000
	17.09. 2022	PF & FW	20	25	45	4 0	15	55	0	0	0	60	40	100	IFFCO	7000
	07.07. 2022	Farmers And Farm Women	57	18	75	1 1	4	15	0	0	0	68	22	80	AICRP- Nematodes & Bayer Crop Sci.	45000
Nowdapan ur, Berhampor e Block	25.02. 2022	PF & FW	0	40	40	0	0	0	0	0	0	0	40	40	АТМА	50000
Bali, Nowda Block	04/04 /22 & 07/04 /22	PF & FW	4	0	4	0	0	0	0	0	0	4	0	4	NABARD	12000
Bali, Nowda Block	04-05- 2022	PF & FW	4	0	4	0	0	0	0	0	0	4	0	4	NABARD	12000
Daspara	27.07. 2022	PF & FW	0	0	0	2 0	30	50	0	0	0	20	30	50	NINFET, Kolkata	12000
Sattarpur	27.07. 2022	PF & FW	50	0	50	0	0	0	0	0	0	50	0	50	NINFET, Kolkata	12000
Sundipur	28.07. 2022	PF & FW	50	0	50	0	0	0	0	0	0	50	0	50	NINFET, Kolkata	12000
Nowdapan ur	28.07. 2022	PF & FW	50	0	50	0	0	0	0	0	0	50	0	50	NINFET, Kolkata	12000
Tungi	29.07. 2022	PF & FW	50	0	50	0	0	0	0	0	0	50	0	50	NINFET, Kolkata	12000
Sonnasidan ga	29.07. 2022	PF & FW	50	0	50	0	0	0	0	0	0	50	0	50	NINFET, Kolkata	12000
Gajnipur	30.07. 2022	PF & FW	50	0	50	0	0	0	0	0	0	50	0	50	NINFET, Kolkata	12000

Venue	Date	Category of						No. C	)f Part	icipa	nt					Sponsoring Agency	Sponso- red
		Particip ant		Othe	er			SC			ST			Total			Amount (Rs.)
			М	F	Т	1	м	F	Т	м	F	Т	м	F	Т		
Imamnagar	30.07. 2022	PF & FW	50	0	50		0	0	0	0	0	0	50	0	50	NINFET, Kolkata	12000
On Campus	11.01. 22 to 13.01. 22	RY & W	30	0	30	10		0	10	0	0	0	40	0	40	ICAR-ATARI (Kolkata)	40000
	19.01. 22 to 21.01. 22	RY & W	37	0	37	3		0	3	0	0	0	40	0	40	ICAR-ATARI (Kolkata)	40000
	24.1.2 2 to 25.01. 22	RY & W	12	5	17	6		0	6	2	0	2	20	5	25	ATMA- Berhampor e	10,000
	24.1.2 2 to 25.01. 22	RY & W	12	5	17	5		2	7	1	0	3	18	7	25	ATMA- Berhampor e	10,000
	01.02. 22 to 03.02. 22	RY & W	15	1	16	7		6	13	0	0	0	22	7	29	ICAR-ATARI (Kolkata)	40000
	21.03. 22 to 23.03. 22	RY & W	20	8	28	10		3	13	0	0	0	30	11	41	ATMA, Suti- 1 Block	20,000
	22.03. 22 to 24.03. 22	RY & W	17	12	29	12		4	16	0	0	0	29	16	45	ATMA, Khargram	20,000
	07.04. 22 to 13.04. 2022	RY & W	16	4	20	3		2	5	0	0	0	19	6	25	National Bee Board	1,81,200
	14.04. 22 to 20.04. 2022	RY & W	20	2	22	3		0	3	0	0	0	23	2	25	National Bee Board	1,81,200
	21.04. 22 to 27.04.	RY & W	23	0	23	2		0	2	0	0	0	25	0	25	National Bee Board	1,81,200

Venue	Date	Category of					]	No. C	)f Part	icipa	nt					Sponsoring Agency	Sponso- red
		Particip ant		Oth	er			SC			ST			Total			Amount (Rs.)
			м	F	Т		м	F	Т	м	F	Т	м	F	Т		
	2022																
	25.05. 22 to 26.05. 225	RY & W	15	4	19	8		3	11	0	0	0	23	7	30	NINFET, Kolkata	38500
	15.03. 22 To16.0 3.22	RY & W	13	1	14	9		3	12	0	0	0	22	4	26	ATMA, Beldanga-II	20,000
	2.03.2 022 To 3.03.2 022	RY & W	14	4	18	11	-	6	17	0	0	0	25	10	35	ATMA, Bharatpur- 1	20,000
	26.03. 22 To 28.03. 22	RY & W	42	0	42	2		0	2	0	0	0	44	0	44	ATMA, Jalangi	20,000
	05.06. 22	RY & W	41	0	41	6		0	6	0	0	0	47	0	47	NINFET, Kolkata	43,000
	05- 14.08. 22	RY & W	0	0	0	30	)	30	60	0	0	0	30	30	60	NINFET, Kolkata	61,000
	23/06 /22 To 22/07 /22 (30 Days)	EF	0	20	20	0	2	20	20	0	0	0	0	40	40	Paschim Banga Go- Sampad Bikash Sanstha, Govt. Of WB	8.99.000
	10/08 /22 To 08/09 /22 (30 Days)	EF	0	8	8	0	2	23	23	0	0	0	0	31	31	Paschim Banga Go- Sampad Bikash Sanstha, Govt. Of WB	8.99.000
	07/11 /22 To 06/12 /22 (30 Days)	EF	0	8	8	0	2	23	23	0	0	0	0	31	31	Paschim Banga Go- Sampad Bikash Sanstha, Govt. Of WB	8.99.000
	21/12	Pranimit	0	9	9	0	2	23	23	0	0	0	0	32	32	Paschimban	8.99.000

Venue	Date	Category of					No. C	)f Part	icipa	nt					Sponsoring Agency	Sponso- red
		Particip ant		Othe	er		SC			ST			Total			Amount (Rs.)
			м	F	Т	N	1 F	Т	м	F	Т	м	F	Т		
	/22 To 20/01 /23 (30 Days)	ra Of Diff. Dists.													ga Go- Sampadbika shsanstha, Govt. Of WB	
	One year diplom a	EF	25	1	22	13	1	14	0	0	0	38	2	40	Self- Financed	8,00,000
	One year diplom a	EF	26	1	27	11	2	13	0	0	0	37	3	40	Self- Financed	8,00,000
On Campus	RAWE	Student	18	22	40	12	12	24	8	2	10	38	36	74	Self- Financed	6,00,000
Total			896	228	1120	234	212	446	11	2	15	1141	442	1573		6997600

# **EXTENSION ACTIVITIES:**

Nature of Extension Activity	No. of activities		Far	mers		Exte	nsion Off	icials		Total	
	acuviues	М	F	Т	SC/ST	Male	Female	Total	Male	Female	Total
					(% of total)						
Field Day	8	98	166	264	54	13	0	13	111	166	276
KisanMela	0	0	0	0	0	0	0	0	0	0	0
KisanGhosthi	1	30	0	30	48	4	0	4	34	0	34
Exhibition	0	0	0	0	0	0	0	0	0	0	0
Film Show	2	38	17	55	35	2	0	2	40	17	57
Method Demonstrations	8	124	168	292	47	9	0	9	133	168	301
Farmers Seminar	1	8	10	18	0	2	2	4	10	12	22
Workshop	1	140	60	200	60	8	1	9	148	61	209
Group meetings											
Lectures delivered as resource persons	75	2677	770	3447	52	96	30	126	2773	800	3573

Total	207	10821	4739	15560		403	58	456	11219	4801	16020
Input distribution											
Any Other (Specify)	10	340	126	466	51	6	4	10	346	130	476
Swatchta Hi Sewa											
Sankalp Se Siddhi											
Celebration of important days (specify)	23	720	401	1121	48	133	9	142	851	412	1263
MahilaMandals Conveners meetings	1	0	23	23	35	1	0	1	1	23	24
Self Help Group Conveners meetings	1	0	12	12	43	1	0	1	1	12	13
Farm Science Club Conveners meet											
Soil test campaigns	7	270	0	270	29	9	0	9	279	0	279
Agri mobile clinic											
Animal Health Camp	3	676	492	1168	54	9	0	9	685	492	1177
Soil health Camp											
Ex-trainees Sammelan	3	0	94	94	37	3	0	3	3	94	97
Exposure visits	20	471	270	741	32	51	0	51	522	270	792
Diagnostic visits	5	58	7	65	0	5	0	0	63	7	70
(Thematic area wise grouped)											
Farmers visit to KVK	10	3332	1244	4576	53	24	0	24	3355	1244	4600
Scientific visit to farmers field	16	129	36	165	42	15	12	27	142	50	192
Advisory Services (Thematic area wise)	12	1710	843	2553	63	12	0	12	1721	843	2565

# **OTHER ACTIVITIES:**

Nature of Extension Activity	No. of activities
Newspaper coverage	13
Radio talks	11
TV talks	17
Popular articles	01
Extension Literature	15

# NEW ACTIVITIES LAUNCHED in 2022-23:

- 1) Natural Farming funded by ICAR-ATARI
- 2) Tissue Culture Lab Funded By WBDSTBT

# LOKASIKSHA PARISHAD - An Integrated Development Project

Ramakrishna Mission Lokasiksha Parishad is the development wing of this University located at Ramakrishna Mission Ashrama, Narendrapur West Bengal. It is engaged in the up-liftment and enlightenment of rural disadvantaged backward communities since decades together through various development programmes.

Ramakrishna Mission Lokasiksha Parishad, engaged with the prime objective of rural development by rendering service through a network of dedicated non-government Community Based Organisations (CBOs), to the distressed, deprived, neglected and downtrodden of the rural community, irrespective of caste, creed or religion. The programme of Parishad is spread over 12 districts in West Bengal covering South 24-Parganas, North 24-Parganas, Purba Medinipur, Paschim Medinipur, Howrah, Hooghly, Jhargram, Murshidabad, Purba Burdwan, Bankura, Purulia and Kolkata.

The programme activities are being organized through 25 affiliated cluster organizations (constituted with the affiliated village level organisations and registered under West Bengal Societies Registration Act 1961). There are 3 Project Offices at Ajodhya and Santuri in Purulia district and Motgoda in Bankura district through which various rural development activities are also being implemented. There are 283 numbers of rural youth organisations (including 25 associated organisation) functioning at grass root level of which 04 youth organizations are working with the Lokasiksha Parishad directly without associating with cluster organizations. The rural youth organisations function at grass root level under the guidance of the clusters organisations function at middle level for bridging and coordinating with the Parishad in preparing the policy, guidelines, administration of the activities etc.

The Lokasiksha Parishad has a team of professionals and financial managers to monitor and evaluate the rural development activities launched in villages and multiple training programmes organised in campus or outside campus. The clusters at the organisational level are headed by a senior staff of the Ashrama designated as Desk- In-Charge who monitors the activities of the concerned cluster and village organisations and ensures that they function in a disciplined manner and implement programmes effectively maintaining financial transparency.

The programmes undertaken by the Parishad broadly relate to three strategic fields, viz. Human resource development, optimum utilization of local resources for rural development and environment conservation. Highlights of the major programme areas are given in the following order.

#### **EDUCATION :**

During the year under review, the educational activities organized by the Parishad were as under:

## a) State Open School (Rabindra Mukta Vidyalaya):

Ramakrishna Mission Lokasiksha Parishad conducted many projects for the drop out students to continue their education. Programme started in 1997 as a Madhyamik study center and later on Higher Secondary course in 2000 approved by the West Bengal Council of Rabindra Open Schooling and.

During the reporting period 130 (MP-78 and HS-52) boys and 174 (MP-79 and HS-95) girls enjoyed the benefit from the Rabindra Mukta Vidyalaya.

#### b) Library Services :

A Library-cum-Reading room was maintained by the Lokasiksha Parishad in its own premises. The library had a total collection of 26,372 books and 3 periodicals. The library catered to the needs of students of academic courses, trainees of vocational courses, teaching faculty and other staffs.

#### c) Publication :

The Parishad had a Publication Unit that brings our different types of Publications, as under:

Monthly Journals (in Bengali)	-	1
English Publications	-	23
Bengali publications	-	108
Bengali Publication (New Title)	-	1 (during this year)
Bengali Publications (Reprinting)	-	7 (during this year)
English Publications (Reprinting)	-	1 (during this year)
Audio Publication	-	11

#### d) Samajsiksha :

Samajsiksha was a literary Bengali magazine brought out by Ramakrishna Mission Lokasiksha Parishad of Ramakrishna Mission Ashrama, Narendrapur uninterruptedly since 1956. This magazine was dedicated to raising rural people's consciousness about its positive changes being affected by the people themselves to help to educate the public about their need of the day. It contained articles on contemporary issues, specially the economic uplift in the agricultural field, by eminent writers on subjects that directly concerned the society and its people and helped to promote moral, ethical and spiritual benefit of the masses.

## e) Preaching:

The Parishad organizes so many Workshop, Seminar, Anudhyan Sibir, Camps, Preaching classes etc. inside the campus and outside the campus through its different cluster organizations, gram unnayan kendras village based youth clubs for value education.

# f) Vivekananda Study Circle :

Vivekananda study circle is one of the vital activities of Ramakrishna Mission Lokasiksha Parishad. The purpose of the programme is to mobilize the rural youth for their orientation in spirit and philosophy of Sri Ramakrishna, Maa Sarada and Swami Vivekananada so that in course of time the participants internalize the ideology of these great personalities for rendering selfless services to the deserving communities.

# g) Sustained Graded Value Education Programme :

Sustained graded value education programme (SGVEP) was conducted involving affiliated village organisation. With initial preparation of the group like i) Chanting of selective shlokas from "Srimadbhagabat Gita" and "Upanishad", ii) Meditation, iii) Devotional chorus songs, iv) reading from the biography of different great Personalities, v) First-Aid, vi) Yoga, vi) Social Work, etc. They concentrated their programme on study of books like "Yuga-Prabartak Vivekananda", "Sri Ramakrishna Jibani", "Sri Sri Maa Sarada". Each centre conducted class once in a week.

## WOMAN AND CHILD DEVELOPMENT :

The women and child development activities conducted by the Parishad in the reporting year are elicited in the following order:

## a) Chalaman Bahini :

Chalaman Bahini or Mobile Squad was a flagship drive for Child Development undertaken by the Lokasiksha Parishad is. It aimed at developing personality and leadership of children through introduction of Bratachari games, yoga and cultural competition, chorus and folk dance and other physical exercise etc. For the purpose, the activities organized during reporting year were children camp, kho-kho, kabadi, leadership training, value education, re-citation and essay writing, master trainer training and youth leadership training, annual competition, sports and children rally at cluster level.

The number of the children who participated in different activities was 5,325 and 17,740 community people including 2,830 volunteers also participated in the programme during the year 2022-23.

#### b) Child Development Programme:

Being the development wing of the Ramakrishna Mission Ashrama, Narendrapur, West Bengal, the Ramakrishna Mission Lokasiksha Parishad engages itself in the upliftment and enlightenment of rural disadvantaged backward communities since decades together through various development programmes. It mainly focuses on child development activities for the deprived children belonging to poor families of remote villages. Parents, especially mother's participation is ensured in such development activities through awareness generation.

The various programmes and the activities undertaken are discussed below.

#### i Vivekananda Child Development Programme

Vivekananda Child Development Programme is one such programme of Lokasiksha Parishad that focuses on providing early childhood care and education to the unprivileged and unreached children of rural Bengal in the age group of three (above) years to five (above) years. The objective of the programme is to ensure balanced growth of the children by developing their school going habit, right mindset towards learning, character building and social well-being during the formative stage.

#### Promotion of Early Childhood Education:

- 97 ECE centers were run in 8 districts of West Bengal covering 3662 children (Boys 1954, Girls 1708, SC 620, ST 75, BC 666) including 1 new VCDP (ECE centre) started in the Bankura district during the year.
- 70 monthly orientation meetings were held in 12 clusters for Organizers and Assistant organizers on methodology of teaching of different subjects, academic progress of children, syllabus, support for slow learners, awareness about general health and hygiene habits, preparation of question papers, evaluation of children. Total participants – 1296, Female – 1148, Male – 148, SC – 212, ST – 7, BC – 46.
- 545 numbers of mother's / parent's meetings were held in 12 clusters on methodology of teaching, syllabus, academic progress of children, role of mothers in monitoring the child's studies at home, awareness about health and hygiene habits, evaluation of children and parent's participation. Total participants – 13292, Female – 11868, Male – 1424, SC – 1538, ST – 217, BC – 1168.

#### Promotion of Health and Nutrition:

• Growth monitoring conducted on 3662 children.

#### Other Activities:

Puja dresses given to 4479 nos. children, Boys – 2365, Girls – 2114, SC – 567, ST – 59, BC – 1034.

#### ii) Sponsor Relation Programme – Vivekananda Child Development Fund :

Vivekananda Child Development Fund, a Sponsor Relation Programme is an initiative of Ramakrishna Mission Lokasiksha Parishad to mobilize the resources from benevolent donors in supporting the children belonging to the backward, downtrodden families of rural Bengal for their educational upliftment and health care support. The primary objective is to provide comprehensive education and guidance to ensure the child is able to learn in a child-friendly environment, explore his talents and achieve growth.

#### The Sponsorship support is given in three phases:

$1^{st}$ Phase :	Pre-primary to Madhyamik
$2^{nd}$ Phase :	XI and XII standard
3 <sup>rd</sup> Phase :	Degree / Technical education

#### **Brief View of VCDF**

- Total no. of sponsors : 1178
- Total no. of sponsors in 2022-23 : 60
- Total no. of sponsored children in 2022-23 : 845
- No. of Boys: 421 and No. of Girls : 424
- Total no. of newly sponsored children in 2022-23 : 89

#### Education Status of VCDF Children:

Educational support through sponsorship programme at:

- Pre-primary level Total no. of children 31, Boys 11, Girls 20, SC- 2, BC-1.
- Junior basic (Primary level) Total no. of children 158, Boys 75, Girls 83, SC- 39, ST – 2, BC – 6.
- Coaching (Class I to X) Total no. of children 632, Boys 326, Girls 306, SC- 142, ST – 18, BC – 53 including 3 new coaching centres (class V – VIII) started under Sagar Mangal during the year.
- Educational assistance to Higher Secondary level Total no. of children 19, Boys 8, Girls 11.
- Educational assistance to Degree level Total no. of children 5, Boys 1, Girls 4.

#### Promotion of Education:

• 28 nos. monthly orientation meetings of Organizers or Asst. Organizers were held in 6 clusters on VCDF programme, methodology of teaching of different subjects, syllabus, academic progress of children, awareness on general

health of children, parent's participation etc. Total number of participants – 269, Male – 72, Female – 197, SC – 26, BC – 17.

• 58 nos. Mother's / parent's meetings were held in 6 clusters on methodology of teaching subjects, syllabus, academic progress of children, VCDF programme in new areas, annual evaluation and parent's participation. Total participants – 1284, Female – 1005, Male – 279, SC – 150, ST – 38, BC – 56.

#### Other activities:

- Books of 4301 Units were distributed to a total of 790 nos. children, Male 326, Female 306, Boys 75, Girls 83, SC 181, ST 20, BC 59.
- Copies of 14805 Units were distributed to a total of 790 nos. children, Male 326, Female 306, Boys 75, Girls 83, SC 181, ST 20, BC 59.
- Puja dresses were distributed to 794 nos. sponsored children, Boys 176, Girls 177, Male 221, Female 220, SC 169, ST –17, BC 43.

#### iii CSR Initiatives :

## Child Development Programme funded by Lexmark International India Pvt. Ltd.

Financial support was extended by Lexmark International (India) Pvt. Ltd., Kolkata for running 12 numbers of Early Childhood Education Centers to provide educational support to 364 children under Vivekananda Child Development Programme located at Mayer Sansar Guccha Samiti (8 centers) in North 24 Parganas and Sonarpur area (4 centers) in South 24 Parganas of West Bengal for the year 2022-23.

## Child Development Programme funded by Axens India Pvt. Ltd.

Financial support was extended by Axens India Pvt. Ltd., New Delhi for running 14 numbers of Early Childhood Education Centers located in Paschim Medinipur and Murshidabad district of West Bengal to provide educational support to 664 children under Vivekananda Child Development Programme for the year 2022-23.

#### c Ma Sarada Women Development Programme :

Sri Maa Sarada Devi, the Divine Consort of Bhagaban Sri Ramakrishna impelled Swami Vivekananda to establish a monastic organization for all round services to the humanity. Her life was a rare blend of self-effacing humility and divinity. To commemorate the 150<sup>th</sup> Birth Anniversary of The Holy Mother in the year 2003, Ramakrishna Mission Lokasiksha Parishad initiated a programme in view of Mother's cherished desire for the upliftment of poor and downtrodden women. In the name of Holy Mother, a corpus of fund titled *"Maa Sarada Women Development Fund"* was launched to help the poor and impoverished women in education, skill development and empowerment.

The main objective of the programme is to empower women particularly backward, underprivileged and distressed women. The programme undertakes different activities aiming to empower women.

## d) Integrated Child Development Services (ICDS) :

Burtala ICDS Project of Kolkata district is run by Ramakrishna Mission Ashrama, Narendrapur since 1986. There are six different services related to nutrition, health, pre-school education provided to the children (0-6 years), mothers (up to 45 years) and Adolescent Girl's under SABLA programme (11-18 years) from the AWCs provided this Project. During the reporting year the project ran 125 Anganwadi Centres. spreading over 17 Wards under 3 Assembly Constituency in North Kolkata. There were 107 Anganwadi Workers and 113 Anganwadi Helpers in position in the F.Y.2022-23. A CDPO, three Supervisors, two ANMs, one Lower Division Clerk and one Storekeeper monitored the Project activities throughout the year.

During 2022-23, Burtala ICDS Project had provided Pre-Basic education on average to 2,225 beneficiaries (3 years to 6 years). Immunization programme was an important part of our day to day work. Two ANMs of Burtala ICDS Project were deployed at 2 Anganwadi Centres to carry out regular immunization programme as vaccinators. Total 24 vaccination programme had been organised during the year 2022-23 and 3,356 beneficiaries had been vaccinated in the routine immunization programme. On an average 4,385 (children, pregnant and lactating mother) beneficiaries took the benefit of supplementary nutrition programme provided by the Project.

#### ANIMAL HUSBANDRY DEVELOPMENT :

#### Dairy and Poultry Development :

The existing dairy unit played an important role in pertaining quality training. Beside this dairy unit involved in the improvement of the local cattle breed through cross-breeding and providing green fodder seeds/cuttings to the farmer throughout the year.

This unit included several cross breeds of well-maintained Pedigree. The cross breeds included Holstein-Frisian (HF) x Gir; HF x Sahiwal (S), Jersey x Gir and Jersey x Sahiwal. Average milk production during the 2022-23 financial year was approx. 500 Kg/day and total staffs involved in the dairy was 24 (twenty-four). There were 132 livestock animals in the farm among them 54 were milch cows.

Beside this, the Bio-gas Plant of 1000 Kg/day capacity and Vermi-compost was an attached unit and an integrated part of the farm. Both the units were used as demonstration and training component of the learning trainees. Vermi-compost production was 16 tons during 2022-23 financial year. A training programme named as 'MAITRI' training was conducted by dairy unit during this year, which was sponsored by Paschim Banga Go-Sampad Bikash Sanstha, Government of West Bengal. The training programme covered 32 women trainees from different districts of West Bengal. The average percentage of fat was 4.5% and average 8.75% SNF (Solid Not Fat), became a subject of learning to the dairy management students and entrepreneurs.

The University students from West Bengal University of Animal and Fishery Science (WBUAFS) as well as internees and also IRDM faculty Centre used to come to the unit on regular basis to learn the dairy technologies and management.

#### TRAINING, ENTREPRENEURSHIP AND RESOURCE MOBILIZATION :

#### a) Vocational Training Programme :

Lokasiksha Parishad sought to create an ambiance of vigorous economic activities through promoting relevant vocational training programme, a process of small entrepreneurial development and self-employment on the youth belonging to the backward families mostly living in the category of Below Poverty Line (BPL). The programme was started successfully in the year of 1979 with five trades viz. carpentry, electric wiremanship, lathe operation, radio tape recorder and television repairing and plumbing and sanitation where 100 trainees imparted training.

The journey of the esteemed training institute Lokasiksha Parishad took a new turn at the beginning of the 21<sup>st</sup> century. Presently the Parishad imparts regular training on Beautician (Basic and Advance), Physiotherapy – Equipment Operator cum Assistant, Solar (Basic), Motor Mechanism (4 Wheeler), 2/3 wheeler Repairing and Servicing, Computer Basic, Desktop publishing (DTP), Computer Hardware & Networking, Telephone & Mobile Repairing, Commercial Art and Craft, Spoken English, Fruit Processing, Electric Wiremanship and Motor Winding, Basic Electronics and Radio, TV Repairing, Photography (Digital and Analog), Yogasana and 13 other allied irregular courses. In 2022-23 financial year, the Parishad conducted 96 batches of vocational training (in-campus and out-campus both) covering 825 males and 1,174 females totaling to 1,999 trainees out of which 769 were belonged to SC, 40 were ST and 253 were belonged to OBC, those who came from different districts of West Bengal. On completion the trainees became either self-employed or working in different befitting agencies and also became capable to improve their life and livelihood.

## b) Training-cum-Production (TCP) :

Industrial Cell at Ramakrishna Mission Lokasiksha Parishad was initiated in the year 1979 with the financial support of Cottage and Small Scale Industries Department, Government of West Bengal with a purpose to extend employment opportunities for the unemployed and school drop-out youth by imparting hands-on-training on different trades. The Parishad introduced few training-cum-production units to make the trainees familiar with the practical job. The Parishad runs carpentry, apiary, fruite processing, dhup making, candle making, papar making, etc. Rural youths received intensive training from training cum production units like Carpentry, Apiary, Fruited Processing, Candle Making, Tailoring, Dhup Making, etc. including the entrepreneurship inputs.

## c) Farmers' Training Programme :

Ramakrishna Mission Lokasiksha Parishad (RKMLSP), Narendrapur initiated farmers training programme titled – 'Capacity Development and Income generation through Sustainable Jal-Krishi, Livestock Development and Agricultural activities in Sagar Block, South 24 Parganas – Part-II' in collaboration with the Department of Sundarban Affairs, Sundarban Development Board, Government of West Bengal.

The objective of the project was to impart scientifically proven improved training and provide related support to marginalised farmers and enhance their scope of income in the agriculture and agri-allied field.

Out of the targeted 23 trainings in Sagar Block, during the project period (October 2022 to March 2023), RKMLSP and Sagar Mangal had jointly completed all 23 trainings for marginal farmers. Strategically, twenty farmers (Male and female), predominantly marginal farmers, were selected for each training. Total number of participants in each training was 20 heads only, which came to 460 heads in total of 23 trainings.

Similarly, in Hingalgange Block, North 24 Parganas, six training programs were conducted under the said project. The training programmes include:

- Five days training on Vermi Compost pit construction (2 trainings were conducted) and 20 Vermi compost pit were constructed at site
- Five days training on Goat farming (2 trainings were conducted)
- Three days training on Horticulture and kitchen garden (2 trainings were conducted)
- Awareness generation program on Save Soil and Plantation drive (2 programs with the active participation of approximately 100 villagers in each program)

In the month of Februrary 2023, RKMLSP and its affiliated cluster organization – Mayer Sansar, Dulduli, Hingalgange, North 24 Parganas jointly conducted six training and two awareness generation programme with support of the village level clubs associated with Mayer Sansar. Seven selected clubs implemented the scheduled training and awareness generation programme at site.

Total participants in each training was 20 heads only, which came to 120 heads in total of above mentioned 6 trainings. All trainees in the respective training programme received training-inputs (like, seeds, chicks, Sprayer etc.).

# d) Promotion of EDP Model for the Unemployed Young Adults:

Ramakrishna Mission Lokasiksha Parishad (RKMLSP), Narendrapur conducted the following training under EDP programme in collaboration with MSME&T, Government of West Bengal, specifically, for the unemployed youths who were keen to explore the available opportunities in this sector and raise as self-employed Individual, businessman, and/ or entrepreneur.

- Three days training-cum-orientation on soft skill development with special emphasis on business communication and network creation
- Three days Training of Trainers (ToT) on student counseling, project proposal development and the process of getting technical and financial assistance
- Three days training on developing Entrepreneurial skill- how to start and run a business; Quality Management to run production unit, Servicing unit, Sales and Marketing unit

Total 14 trainings were imparted to the young trainees those who were designated as teachers of Vocational Training unit of the RKMLSP, Narendrapur and the students of various trades conducted by the said unit. 285 participants of which 30 teachers and 255 students of Vocational Training unit participated in the training programme.

## e) CSR Programme :

# Vedenta Foundation :

Vocational training was organized with the support of Vedanta Foundation, Mumbai in three cluster organisations namely i) Sagarmangal, Kamalpur, Sagar, ii) Sundarban Kalpataru, Kakdwip and Gosaba Rupayan, Gosaba in South 24 Parganas district. Basic tailoring (course duration 72 hours in 3 months) and course on computer concept (CCC) (course duration 126 hours in 6 months) were included in the training programme.

The programme was started in August 2018 with tailoring and computer training in Sagarmangal. Gradually the programme was started in Sundarban Kalpataru and Gosaba Rupayan.

During the reporting period the 1 batch of Computer Training programme and 4 batches of Tailoring Training programme were organized which covered 20 participants of which 16 male and 4 female participants under Computer Training and 84 participants (female) under Tailoring Training. Most of the participants of both the vocational training programme were from backward sections of the society (SC-30, ST-2 and other backward-25).

# f) Empanelled Training Institution :

The Empanelled Training Institution (ETI-Ramakrishna Mission Ashrama, Narendrapur) erstwhile Training Orientation and Research Centre (TORC), Narendrapur had been conducting orientation training programmes for NSS Programme Officers since 1986 and playing a vital role in imparting training of NSS Programme Officers for the states of Jharkhand, Bihar and West Bengal, who were undoubtedly the backbone of NSS.

But, from the year 2019-20 as per the decision of the Ministry of Youth Affairs & Sports, Government of India the functions of ETI, Ramakrishna Mission Ashrama, Narendrapur had been restricted to the state of West Bengal only.

Functions of the ETI-Ramakrishna Mission Ashrama, Narendrapur are as follows:

- Organizing Orientation Courses for NSS Programme Officers.
- Attending Advisory Committee Meeting of various Universities, Colleges and H. S. Councils and offering suggestions for innovative NSS programmes.
- Providing assistance to Universities, Colleges and H. S. Councils in planning and conducting regular and special camping programmes.
- Developing and providing consultancy services to Universities and Colleges/ Schools in different areas of programme planning, training of NSS volunteers, supervision, evaluation etc.
- Maintaining linkages with the State NSS Officers of different states, Programme Coordinators of different Universities and Higher Secondary Councils, NSS Regional Centres and NSS Programme Advisors Cell at New Delhi.

During the financial year 2022-23 this unit of the Ramakrishna Mission Ashrama, Narendrapur conducted seven Orientation Courses for NSS Programme Officers involving 169 Male and 50 Female totalling to 219 participants.

## JAN SHIKSHAN SANSTHAN:

Imparting vocational skills in non-formal mode to non-literate, neo-literates, persons with rudimentary level of education up to 8th and school drop-outs up to 12th standard in the age group of 15-45 years has become a mandate of Jan Shikshan Sansthan (JSS) of Ministry of Skill Development and Entrepreneurship, Government of India. In addition to imparting vocational education, JSS used to conduct various activities like observation of notable days, birthdays of famous personalities and various other activities like Swacchhta Pakhwada, National Yoga Day, National Skill Day, Ex-trainees' Meet, Constitution Day, Janajatiya Gaurav Diwas, Netaji's Birth Day a Parakram Diwas, Republic Day, International Women's Day, etc. Considering the need and importance of promoting better opportunity for wage employment and self-employment to the unemployed youths, JSS conducted some training and other activities, took initiative for collecting data on success stories, maintaining database portal of JSS, planning and organizing meeting at various levels like

meeting of the Board of Management (BoM), Meeting of the Executive Committee (EC) Members, Meeting of the Collaborating Agencies, identifying new resource persons having vocational education in domain skills and arranging placement linkage camp for potential resource organizations deserving to extend opportunities of wage employment to extrainees in the district of South 24 Parganas and slum areas of Kolkata Metropolitan areas. All about these activities, trainings, special initiatives taken up during year 2022-23 could be described in brief herewith as follows:

As per approved plan of action, JSS Narendrapur was able to achieve the target for the year 2022-23 of conducting 90 batches of training with a number of 1800 trainees. Some special features were observed from the coverage of trainees which could be seen as follows:

- Out of total trainees 72% were female
- Coverage of trainees from SC was 45%, OBC was 7% and physically challenged persons was 1% in compare to General coverage of 46%.
- It was found that 83% of the trainees were from BPL category.
- In the context of age group wise distribution, it was found that 43% was from 19-25 years' age group and 30% was from 26-35 years' age group.
- There was 1% non-literate, while 70% was from rudimentary with 8<sup>th</sup> standard of education.
- In the locality context, it was found that 88% of the trainees from rural areas.

The analysis on the success stories so far collected pointed out that there was tendency of self-employment (88% of the trainees) to a larger extent.

During the year 2022-23 different activities were conducted as per guidance and instructions issued by the Additional Director, DJSS, MSDE, Government of India from time to time and some initiatives taken up as per local importance or traditions.

As per instruction received from the Directorate of JSS of Ministry of Skill Development and Entrepreneurship, Government of India over mail dated 9<sup>th</sup> February 2023, JSS Narendrapur decided to conduct four batches of training namely Self Employed Tailors (two batches) and Assistant Beauty and Wellness Consultant (two batches) under Skill Hub Initiatives of PMKVY4.0 as per fund support from NSDC, Government of India.

## HEALTH, WATER, SANITATION & ENVIRONMENT :

## a. Water, Sanitation and Hygiene Project :

i. Improving WASH Standards in Schools under Nirmal Vidyalaya Initiative in Purulia partnering with the UNICEF and SSM, Purulia:

A MoU was signed between RKMLSP and UNICEF for implementation of "2<sup>nd</sup> Phase Improving WASH Standards in Schools under Nirmal Vidyalaya Initiative in Purulia" and initiated on and from March 2022. This was a short term project with the time line from March – December 2022. The WASH project in Purulia aimed to strengthen the Capacity of Teachers, Child Cabinets/ Kanyashree Clubs and Circle level functionaries of Education Department of Purulia to enable schools to improve their WASH and Child Friendly indicators, including menstrual hygiene management (MHM), assessments of WASH indicators in schools, capacity building, supportive supervision, establishing model schools enhancing the standard of Nirmal Vidyalaya Abhiyan and Swachh Vidyalaya Abhiyan and leveraging funds from Government Departments, Community and CSR to improve school WASH infrastructure in the government schools of Purulia.

The foremost emphasis was given in creating Model Schools where these strategies can be replicated and successfully emulated in rest of the schools in Purulia. The project also aimed in creating awareness on building WASH and child friendly infrastructure, operation and maintenance (O&M) system of WASH and Child Friendly and waste management practices required to achieve indicators of different awards categorized for the schools.

Under mentioned Activities conducted during this period:

- Orientation of Teachers of schools on Nirmal Vidyalaya Abhiyan has been conducted with school teachers and circle level officials of Education Department including Head Master/Mistress of High/HS schools, Head Teachers of Primary schools, Sikhya Bandhu etc.
- Handholding support provided to 850 schools to improve the standard for participation in the Nirmal Vidyalaya, Shishu Mitra and Jamini Roy Puraskar of Education Department of West Bengal.
- Installed 14 nos. Hand Washing Stations in the selected schools for which equipment were supplied by the UNICEF.
- 20 schools have installed/upgraded Child friendly facilities in schools with the financial support from the project.
- MHM Day was observed on 28<sup>th</sup> May 2022 in 18 of Schools and 6 Blocks of the district in collaboration with SSM Purulia and Purulia Zilla Parishad and Block Administration. 745 students and 393 Kanyashree club members, ASHA workers and SHG members participated in the programs.
- One-day orientation on Menstrual Hygiene Management (MHM) conducted in 87 schools involving 3045 Kanyashree club members and students.
- 48 Pad Banks and 109 Soap Banks established in 157 schools by the project.
- 100 Hygiene Corners established in 100 schools and orientation for Child Cabinet members on use of hygiene materials for dissemination of hygiene education conducted.
- Global Hand Washing Day observed in selected schools with 27354 students, parents and teachers. A special 100 days' hand washing campaign started from that day in 639 schools.
- Block level interface meetings were conducted in 20 blocks of the Purulia district with 1233 participants including Head Teacher/Head Master or Head Mistress/Teacher in Charge, Gram Panchayat Pradhan, BDO and the

Joint BDO of blocks, Savapati of Block Panchayat Samity, Panchayat Secretary, Education and Environment in charge, SIs and the SEOs.

- Green and Clean Campaign have been conducted in 20 selected schools involving all students, teachers, parents and panchayat members. 4 numbers fruit plant siblings given to each schools and child cabinet were oriented on caring of the trees.
- Orientation on School Safety and Security Plan (SSSP) of teachers and students has been organized involving 1116 Students, Teachers, Civic Volunteers, PRI Member, Parents and Community Members and 10 schools developed School Safety and Security Plan and rolled out.
- 8 schools have set up rain water harvesting structures and 66 have installed dry and wet wastes management units in the school mobilizing funds from different sources. Child Cabinet members and Kanyashree Club girls are trained on O&M of these units.
- Wall writings with five different WASH messages done in selected 20 schools as a part of Green and Clean campaign in schools and neighbouring villages.
- 20 schools have been covered with 5 different messages of wall writings in each school. The paintings provided continuous reinforcement to the minds of children on the appropriate WASH practices.

The project sensitized schools to mobilize funds from different sources. As a result of the sensitization and handholding support of the project, 148 schools have leveraged a sum of Rs.35,99,600.00 from different sources for ensuring WASH and Child Friendly indicators in the school. The major contributors are teachers, Exteachers, GPs, Community and CSR funds.

Achievements of the project at a glance:

- Impact : Improved WASH facilities for 2,94,108 children in 2084 schools in Purulia.
- o Outcomes : 98% schools have WASH and Child friendly facilities in place.
- o Output :
  - 96% schools have hand washing facilities and practice
  - 90% schools are testing drinking water before usage
  - 9% of the schools have facilities for purified drinking water
  - 84% schools have proper sanitation infrastructure
  - 90% schools are having operational maintenance system
  - 81% schools have running water in the toilets
  - 100% schools have separate toilets for girls and boys
  - 100% schools have conducted capacity building programmes
  - 100% schools have functional child cabinet
  - 3% schools have rainwater harvesting structures
  - 65% schools have kitchen gardens in their premises
  - 63% schools have provisions for grey water management

- 100% Schools conducted awareness programmes in the village including WASH
- All schools achieved higher Star rating from two stars to five stars

# ii. WASH activities in Purba Medinipur and Paschim Medinipur districts:

12 cluster organisations affiliated to Ramakrishna Mission Lokasiksha Parishad (RKMLSP), Narendrapur, have been working in Purba and Paschim Medinipur for the promotion of sanitation under the national flagship program "Swachh Bharat Mission- Gramin" (SBM-G) / Mission Nirmal Bangla (MNB). Technical, professional and managerial supports are provided from RKMLSP. Cluster organisations (CL) are installing household, Community and Institutional Toilets etc. in different blocks as per the requisition of Zilla Parishad/Blocks/GPs and also providing handholding supports in organizing different IEC and awareness generation activities in the villages involving GPs and associated clubs of the cluster organisations.

# During 2022-23 financial year following programs have been conducted :

- 5994 household toilets were constructed under Swachh Bharat Mission-Grameen (Phase 2) /Mission Nirmal Bangla covering 1126 villages in Purba and Paschim Medinipur districts.
- 134 household toilets had been installed covering 129 villages. All cost for the toilets have been paid by the beneficiaries, motivated by RKMLSP's associated village organisations and Cluster Organisations.
- 92 households of 92 villages upgraded their basic toilet models motivated by associated village organisations and technical support of Cluster Organisations.
- Six toilet-blocks had been constructed in educational institutions and Community places in Purba Medinipur district.
- Four cluster organisations of Purba Medinipur districts installed 25 Improved Smokeless Chullahs, 65 household organic waste management units and 11 no. Liquid waste management units.
- Twelve cluster organisations of Purba and Paschim Medinipur districts observed Global Hand Washing Day involving their associated village organisations.
- Two numbers of 3-day training programmes for Master Trainers of cluster organisations on SBM-G (Phase-2) had been conducted with 58 male and 20 female participants of Purba Medinipur district with the support of District Sanitation Cell.
- Forty-one numbers of one-day Orientation programmes on SBM-G (Phase-2) had been organised with 2387 participants including 2276 women conducted by 6 cluster organisations of Purba Medinipur district.
- 1629 different IEC and community mobilization programmes on safe water, sanitation, hygiene and clean environment had been conducted covering 4510 villages in Purba and Paschim Medinipur districts with 43902 women, 2966 men,

1343 children by 12 cluster organisations and their associated village organisations.

• "Nirmal Gram" initiatives had been initiated by seven cluster organisations in 95 villages of Purba Medinipur district. It had been planned that with 2023-24 fiscal year all these villages would be declared as "Nirmal Gram" by the Village Organisations and cluster organisations.

# iii. Water Quality Monitoring and Surveillance (WQMS):

## Activities at Narendrapur:

Two NABL recognized Drinking Water Testing Laboratories are directly run by the Ramakrishna Mission Lokasiksha Parishad of Ramakrishna Mission Ashrama, Narendrapur at Narendrapur and at Raidighi Nibodhata in collaboration with the Public Health Engineering Department (PHED), Govt. of West Bengal. These two Labs are working in four blocks (Kultali, Kulpi, Joynagar-I and Joynagar-II) of South 24 Parganas district. Water samples of Public drinking water and Educational institutions including Anganwadi Centers, Health Centers are tested regularly. Private water sources are also tested on payment basis. 39 Water Facilitators are collecting water samples and test report shared with the concerned Gram Panchayats and Blocks. All reports are uploaded in the PHED's MIS system.

Activities conducted during this year :

- RKMLSP's two labs tested 5912 water samples collected from 2614 villages of four blocks. Out of 5912 water samples, 1088 were collected from public drinking water source, 1653 from educational institutions, 58 from government health centres. 113 private samples had also been tested on cost sharing basis.
- Four training programs had been conducted for ASHA Workers on water testing by Field Test Kits (FTK) at Kultali, Kulpi, Joynagar-I and Joynagar-II block offices in the month of September 2022.
- Demonstration on water testing by FTK had been done in the exhibition at Sri Ramakrishna Mela, Narendrapur in the month of January 2023. water samples of 72 households were tested free of cost in the Exhibition.

## Activities in Purba and Paschim Medinipur districts:

Eleven (11 Nos.) NABL recognized Water Testing Laboratories (WTLs) are run by the RKMLSP's affiliated cluster organizations in Purba and Paschim Medinipur districts in collaboration with Public Health Engineering Department (PHED) and Panchayat and Rural Development Department (P&RDD), Government of West Bengal.

Drinking Water Quality Monitoring and Surveillance activities during this period:

- 25737 water samples of public drinking water sources collected from 5067 villages of Purba and Paschim Medinipur districts, had been tested by Water Testing Labs run by 11 cluster organisations affiliated to the RKMLSP with financial and technical support of PHED, Government of west Bengal. Reports had been shared with the concerned gram panchayats and uploaded in MIS system of the PHED, Government of West Bengal by these Labs.
- Other than the public water sources, these labs tested 3037 water samples of educational institutions and 58 samples of other institutions including health centres.
- These labs tested 427 water samples of private sources, for which the owner of water sources, contributed partial cost of testing.
- 41 bacteriological contaminated public water sources had been disinfected by these Labs.
- Eleven Water Testing Labs of Purba and Paschim Medinipur districts conducted 22 training programmes on "Water Testing by Field Test Kit" for ASHA Workers. 1147 ASHA workers had been trained through these training programmes.

#### iv. Drinking Water Improvement Programmes :

In collaboration with Taru Leading Edge, New Delhi, Ramakrishna Mission Lokasiksha Parishad (RKMLSP) had initiated a partnership for the project "West Bengal Drinking Water Sector Improvement Project" (WBDWSIP) from October, 2019. The project aims to provide safe, reliable, and continuous drinking water in line with government of India's guidelines and standards to about 1.65 million people in selected Arsenic, Fluoride, and Salinity affected areas of North 24 Parganas, (including one neighbouring block in South 24 Parganas), Purba Medinipur and Bankura districts of West Bengal. The Public Health and Engineering Department (PHED) of the Government of West Bengal is wholly responsible for the implementation of ADBfinanced West Bengal Drinking Water Sector Improvement Project (WBDWSIP) in the selected blocks of 4 districts.

The Project will ensure drinking water security through 24/7 piped water supply schemes in the areas covered, strengthen the institutional structures and build the capacities of stakeholders at all levels of service delivery for sustainable operation and maintenance and sustained public health improvement.

#### **Project Subcomponents and Community Development Programme :**

RKMLSP and Taru hold hand under WBDSIP to support for strengthening capacity of PRI bodies, mobilizing community through different awareness generation, coordination, facilitation of trainings and rural drinking water supply services delivery related activities at the grassroots level in Nandigram-I and Nandigram-II blocks under the ADB supported project of Purba Medinipur district.

# Scope of work:

- To support Implementation of community awareness and stakeholder consultation program
- To support Institutional strengthening and capacity building of the gram panchayats (GPs) to sustainably operate and manage the assets created under the proposed WBDWSIP and provide services to the consumers
- To support PHED in delivering outputs under the grant component of the WBD-WSIP financed by the Japan Fund for Poverty Reduction, as well as outputs under the Gender Equality and Social Inclusion (GESI) Action Plan for the Project.
- To support the GPs in preparing themselves for effective implementation of the Government Order on Asset Management and Service Delivery and operate and maintain the GP level water supply distribution system.

## Achievements during April – September 2022 :

RKMLSP conducted the following activities during the reporting period :

- All 17 gram panchayats of Nandigram-I and Nandigram-II blocks had been mobilized for adopting the resolution in the gram sabha for taking responsibilities for operation and maintenance of the water supply facilities at in their concerned GP areas after installation of the units by the PHED. All these documents were submitted to the Programme Management Unit of PHED and ADB.
- Mobilized all GPs to identify the place for installation of Smart Water Management Centre at GP premises and helped in selection of personnel for its operation.
- 39 Village level awareness development programmes had been conducted in Nandigram-I and Nandigram-II blocks with 2301 participants. It is important to note that 73% women participated in these programmes. Associated clubs of Lokajagaran Guchha Samity, one of the affiliated cluster organisations of RKMLSP, directly participated in organizing these programmes.
- 47 consultation meeting were conducted with GP and VWSC members at villages involving community to resolve the hindrances rose during pipe laying work in the villages. 780 men and 354 women of 47 villages participated in these consultation programmes.
- Two training programmes on CGA and CMMS Application were conducted at Lokajagaran Guchha Samiti, Shibrampur with 34 male and 102 female candidates of 17 GPs of Nandigram-I and Nandigram-II blocks.
- Forty-seven field level awareness programme on implementation of Gender Equality Sensitization Initiatives Action Plan with 600 men and 1475 women community members of 47 villages of Nandigram-I and Nandigram-II blocks.

The project contract with PHED as well as with Taru, New Delhi has ended on 30th September 2022.

# b) Joint Forest Management Unit :

Joint Forest Management wing of the Ramakrishna Mission Lokasiksha Parishad of the Ashrama undertook various programmes through national and international CSR funding during the reporting period. The details of these programs have been narrated below:

# a.i Plantation Program: Sponsored by M-Junction, 'Tata Centre' Kolkata.

The main objective of the program is to develop greeneries through plantation to improve environmental foot print besides generation of additional income of the farmers.

This program is being implementing at Binpur II block in Jhargram district. A cluster of ten acres of land owned by ten individuals had been selected for this purpose. As input support, Mango, Cashew, Sonajhuri and Teak saplings, fertilizers and pesticides were given to the selected persons. The duration of this project is for three years.

# a.ii Early Childhood Education Programme: Sponsored by individual downers and Lokasiksha Parishad

Early Child Education Centres (ECE) were started in the year 2005 at Motgoda, Raniband in Bankura district, Ajodhya Hill and Santuri in Purulia district and Gohalbera in Jhargram district of West Bengal for children up to 6 years of age.

The main objective of this program is to develop school going habit among the children at their early ages, to provide primary orientation of the basic literacy, their environment and to make themselves aware of the hygienic habits required for leading healthy life. This is supplemented by imbibing cultural values at their early childhood.

10 ECE centres were operated which were being managed by 20 local teachers. 263 children (136 boys and 127 girls) receive education and nutritional support through this programme. Most of the children belonged to SC/ST category. There were 4 centres in Ajodhya hill, Purulia; 2 centres in Santuri, Purulia; 3 centres in Bankura and 1 centre in Jhargram. The centres were operate for 3 hours on all week days except on Sunday.

## a.iii Green College: Sponsored by WHH, New Delhi

# Skill up! - Strengthening Skills Development, Creating Future Perspective

Ramakrishna Mission Lokasiksha Parishad is running the Skill-up Programme funded by Wealthungerhilfe, New Delhi covering 18 blocks of Purulia and 4 blocks of adjoining Bankura and 1 block of Jhargram district, which are within 50 km radius of the centres. The project duration is three years starting from January 2020. The mandates of this programme were to:

- train a total of 750 rural youths (50% women) from the poor tribal, marginal or backward community,
- promote 40 MSME through Fast Track Business Acceleration Programme,
- support 670 farmers through formation of Farmers' Producer Organisation,
- develop institution linkages with 2 Institutes, to make provision for job for 120 people with MSME and
- provide indirect benefit to around 2300 farmers' family members in the said districts.

To achieve the given mandates, residential and non-residential training courses of various durations were introduced on sal-leaf plate making, animal and bird rearing, mushroom cultivation, medicinal plant cultivation, tailoring, fruit processing and preservation to name a few. During the reporting period, 129 youths were trained, 127 men and 108 women took part in Farmer Field Schools (FFS). Towards reaching the final outcome on sustenance, effort is on for formation of Farmers Interest Groups (FIGs) and Farmers Producers Organisation (FPO) with resourceful trainees.

The other notable outcomes were:

- 33 Farmers Interest Groups comprising of 382 farmers were in the process of formation. Dept of Agriculture, Dept of Animal husbandry were helping us for the registration of the FIGs.
- 120 High Potential Rural Youths (HPRYs) out of 156 participants in 3 networking workshops, arranged in three districts were identified.
- ICICI Foundation provided start up support to 15 HPRY trainees for erecting animal sheds for keeping pigs.
- 6 trainees received poultry shed, chick lings and chick feed. 10 trainees received incubators for starting business of hatching service. KVK, Purulia agreed to provide day to day monitoring service.
- 11 women trainees trained in face mask making and tailoring, joined 'Karmatirtha'- a project of Government of West Bengal at Santuri Block of Purulia District for the supply of school uniforms at different schools besides getting engaged in stitching and selling readymade garments. With this, each could earn in the range of Rs.3000-5000 per month
- 62 animal keepers received input support of Rs. 70,000.00 from KVK, Purulia, besides receiving first aids from livestock department, Govt of West Bengal.
- 20 animal keepers received raw materials for urea molasses mineral block mixture as food for animal.
- 51 animal keeping trainees received medicine and vaccination at camps set upin their respective areas under the guidance of BLDO, Animal Resource department, West Bengal.

## Green Colleges India: The Sundarban Islands Programme

Welthungerhilfe, New Delhi sponsored yet another project "Green Colleges India: The Sundarban Islands Programme" at Gosaba Green College, South 24 Parganas, West Bengal run by Ramakrishna Mission Lokasiksha Parishad (RKMLSP) recognizing the commendable service provided by this institute. It had produced a good number of rural eco-preneures by imparting time bound, cost effective; market oriented and need based trainings on Natural Resource Management (NRM) based trades. The proposed duration of this project is 3 years starting from 1<sup>st</sup> November 2021. The mandates of this programme were to train 750 rural school dropouts in the age group of 15 to 25 years on certified green trades (solar repairing and maintenance, computer hardware repairing and maintenance, animal health works, agriculture and allied course) following the Skill up! Quality Standards.

During the reporting period, 13 batches of training on 5 trades were conducted with 352 youth (254 males and 98 females) out of whom 149 were belonged to scheduled caste and 82 were belonged to scheduled tribe.

The other activities during the period were:

- 198 youths participated in 10 different exposure visits to gain first-hand experience of the trades.
- Undertook a number of infrastructure upgradation works which includes:
  - Installation powerful jet pump for water lifting.
  - Painting of hostel building.
  - Procurement of sitting chairs for the training hall.
  - Revamping of water pipelines.
  - Setting up of green laboratory with various instruments and tools for hands on training on animal keeping, food processing, composite fish farming etc.
  - Hand holding support to trainees on animal rearing by giving 30 poultry birds to each.

#### a.ivEmpowerment of Downtrodden Women Programme:

This empowerment programme was aimed at poor and down trodden women of the forest fringe areas of Purulia, Bankura, Paschim Medinipur and Jhargram districts. Self Help Groups (SHG) were formed as part of group mobilization and were imparted vocational trainings in different Green Colleges. Post training, women were encouraged to apply for interest free loan as start up support.

During the reporting period, 45 women applied for loan which had been kept under active consideration.

## c) Solar Energy Programme :

Towards promotion and utilization of non-conventional energy like solar, the Parishad installed different solar system mainly in non-electrified areas. The Parishad promoted 7 home lighting systems, 8 solar LED lanterns, 13 solar fans, 45 solar LED small light, 8 SPV Module, 3 solar batteries, 10 charge controller unit (CCU), 7 solar torch, 43 solar caps, 1 solar power plant (1080 watt), etc. among beneficiaries during the reporting year.

#### **RELIEF AND REHABILITATION :**

Ramakrishna Mission Lokasiksha Parishad, the rural development wing of Ramakrishna Mission Ashrama, Narendrapur has been rendering disaster management services during natural calamities for decades together with the help of village organizations under different cluster organisations.

Mayer Sansar, one of 25 cluster organisations, has been conducting village development work in 8 gram panchayats of Hingalganj block, a backward remote riverine island in Sundarbans area of North 24 Parganas district. Mayer Sansar has two campuses – one in Dulduli and the other in Pathaghara. All of 8 gram panchayats of Hingalganj block are highly flood prone areas. In the last few decades, the common people living in the villages of this block had repeatedly faced with dire situations due to extreme natural calamities (super cyclones and floods). Their livelihoods had been severely affected. Heavy floods caused by the cyclones 'Amphan' (May 2020) and 'Yaas' (May 2021) destroyed livelihoods and homes of many people. Ramakrishna Mission has traditionally been committed to serving the common people affected by calamities. Ramakrishna Mission had keenly felt the problem of providing shelter to the flood victims during the devastating floods caused by cyclones 'Amphan' and 'Yaas' and had finally succeeded in solving that problem with relentless efforts.

With the financial support of Ramakrishna Mission, Belur Math, Howrah and under the direct supervision of Ramakrishna Mission Lokasiksha Parishad, the integrated rural development unit of the Ramakrishna Mission Ashram, Narendrapur established along with an emergency shelter cum multipurpose non-formal education institution ('Ma Sarada Multipurpose Relief Shelter cum Non-Formal Education Centre') at Pathghara campus of Mayer Sansar (beside Dulduli-Hemnagar road). The two-storied building of the was two storied, length – 87 feet and width – 43 feet with 7 toilets, two guest rooms on the ground floor and 6 toilets on the first floor. The purpose of constructing this building was to use it as a shelter for the disaster-affected common people during natural calamities and to conduct informal education and training programmes during normal times.

Meanwhile, the Ramakrishna Mission Lokasiksha Parishad and Mayer Sansar had jointly formulated a plan to implement the free coaching and training programme from the next financial year 2023-24.

