

PERSONAL DETAILS:

Name & Designation	Dr Amales Misra Retd. Scientist, Zoological Survey of India & Secretary, Paribesh Unnayan Parishad
Residential Address	8/1 B, Raipur Road (East), Jadavpur, Kolkata-700032, West Bengal, INDIA Phone: 91-033-2413 6640
E-Mail Address	amargram.pupa@gmail.com amargram_pupa@rediffmail.com
Father's Name	Late Byomkes Misra
Date of Birth	21.08.1948
Profession	Research & Extension on rural livelihood development
Organisation & Address	Paribesh Unnayan Parishad 8/1B, Raipur Road (E), Kolkata 700 032 Phone: 91-033-2413 6640; 9002497090 (M)
Area of Specialisation	Taxonomy & Ecology of Earthworms & Polychaetes; Organic Farming, Vermicomposting ; Environment Education; Rural Developmental Planning & Implementation .Climate Resilient Livelihood Activities
Teaching Experience	i) Institute of Mass Communication Film & Television Studies under Kalyani University (2007 - 2013) ii) Guest Lecturer (PG level) in the Department of Environmental Studies, Rabindra Bharati University, Kolkata (July,2016 to June,2017.

EDUCATIONAL QUALIFICATION :

- B.Sc. (Hons.) in Zoology (University of Calcutta).... (1967)
- M.Sc. in Zoology (University of Kalyani)... (1969)
- Ph.D. in Zoology (University of Calcutta)... (1992)
- **Diploma in Integrated Coastal Zone Management (ICZM) from the University of New Castle Upon Tyne (UK).... (1995)**

PROFESSIONAL EXPERIENCE :

- More than 30 years experience on the survey & taxonomic study of polychaetes at ZSI
- More than 10 years experience on the taxonomy of earthworms at ZSI
- More than 15 years experience on Vermiculture & Vermicomposting at ZSI & in NGO
- More than 15 years experience on Environmental Education
- More than 10 years experience on Rural Development work

RESEARCH/AWARENESS/Development PROJECTS /SCHEMES:

In addition to several departmental projects completed during 36 years service period at ZSI, the following project were supervised at NGO level.

Sl. No.	Title of project	Name of the Funding Agency	Responsibility	Period From To
1.	Survey, Characterisation & Management of urban Domestic Wastes with emphasis on Vermidecomposition	Department of Environment, Govt. of West Bengal	Chief Coordinator	1999 — 2001
2.	Leadership & Green Entrepreneurship Development training programme with special emphasis on vermicomposting & Mushroom Culture	Rotary Club of Calcutta Golf Green, Kolkata	Coordinator	2004 — 2006
3.	Evergreen Entrepreneurship development training programme with special emphasis on vermicomposting	Rotary Club of Calcutta Mid City	Coordinator	2005 — 2006
4.	Capacity Building in Solid Waste Management through Vermicomposting in Rural Areas as Alternative Employment and to promote Organic Farming	Ministry of Environment & Forests, New Delhi (NEAC)	Principal Investigator	2005—2006
5.	Education & Training for raising mass awareness towards the production and use of organic manures in agro-horticultural fields at Sagar Island, South 24 Parganas, W.B.	Ministry of Environment & Forests, New Delhi (NEAC)	Principal Investigator	2006—2007
6.	Improving the quality of life & livelihood of rural population through sustainable use of local resources	UNDP/GEF/SGP	Chief Coordinator	2007 – 2009
7.	Documentation of village level bio-resources of seven villages of Mooriganga No. 1 Gram Panchayet for proper conservation and sustainable use	WB Biodiversity Board	PI	2008 to 2010
8.	Promoting System of Rice Intensification (SRI) at Sagar Island	NABARD	Chief Coordinator	2009 – 2010
9.	‘Service provider’ on Organic Farming	Dept. of Agriculture	PI	2011-12

	under Service provider Scheme of NPOF	(Plant Protection and Quality Control) Govt. of West Bengal		
10.	Establishment of 'Biodiversity Conservation Park' in farmer's field through participatory conservation network programme at I, S. 24 Parganas, West Bengal	WB Biodiversity Board	PI	2012 to 2016
11.	Integrated Coastal Zone Management project on Livelihood improvement at DS-1 GP, Sagar island.	Inst. Of Environmental Studies & Wetland Management, Dept. of Environment. Govt. of W.B. (World Bank Supported project)	Coordinator (Sept.,12 to May,13)	Sept., 2012 to March, 2015
12.	"Socio-economic upliftment of SC community in identified villages of Sagar Island, South 24 Parganas, West Bengal through skill enhancement and livelihood intervention"	Dept. of Sci. & Technology, Govt. of India (Coordinated by VIB, Nimpith)	PI.	2013 – 2016
13.	Conservation of local agro Biodiversity for better livelihoods through use of local resources in response poor areas of Sunderbans	GEF/UNDP/SGP/CEE	Co-PI	2014 -17
14.	Sustainable improvement of Life & Livelihood of Tribal Communities in selected villages of Sagar Island, S. 24 Parganas, W.B.	BOSE INSTITUTE (ST-Specific Rural Biotechnology Programme) (DST Funded)	PI	Nov.,2015 March,2018
15.	Wipro Earthian Sustainability Education programme	CEE, Ahmedabad	Coordinator	July to Octobers,2018.

PUBLICATIONS :

A. **Research papers:** More than 50 publications on Polychaete Taxonomy

MISCELLANEOUS SKILL

EXPERIENCE IN SUSTAINABLE FARMING ACTIVITIES:

i) Experienc in Vermicomposting

- Providing teaching support to the students of Netaji Subhash Open University on **vermicomposting** as and when required.
- Organized and attended in various training programme on **Vermicomposting** as a trainer/resource persons (Vivekananda Institute of Biotechnoogy, Nimpith; Netaji Subhash Open University; Sundarban Development Board, and several NGOs.)

- Implemented a programme on ‘Capacity Building in Solid Waste Management through Vermicomposting in Rural Areas as Alternative Employment and to promote Organic Farming’ during 2005-06 at Sagar Island.
- Organised Green Entrepreneurship Development Training Programme for farmers on Vermicomposting at Sagar Island, South 24 Parganas (supported by **NABARD**)
- Organised Training Programme on Vermicomposting in salt-reclaimed areas of West Bengal, Sagar Island (supported by Sundarban Development Board)
- Published two books, several papers and written popular articles on vermicomposting (pl. see above for details)

Worm Bank: The objective of this concept is to popularize and propagate the on-farm production of Vermicompost by a **system of distribution of worms** through worm exchange programme. SHG members selected by their group have received 200 or multiples of 200 worms from the Vermi-Hatchery set up by us. We have taken care of training the locals in culturing the worms. The practitioners have returned (as per agreement) 50% extra worms in addition to the worms given to them within six months. These worms again were distributed among other members of the group with the same principle as per the decision taken by their group.

Achievements: After repeated meetings, training and field trial, it is achieved that farmers’ belief on the importance of the use of vermicompost along with other organic input is established in addition to their confidence of preparing the same for domestic purpose as well as commercial purpose.

ii) Experience in Organic paddy cultivation with diversified organic inputs (Process innovation)

iii) Traditional Paddy conservation with organic Input: at Present 100+ traditional varieties of paddy are being conserved through cultivation with organic input only under my supervision.

iv) Salt-tolerant paddy promotion activities at nearly 20 villages of Sagar & Patharpratima Block.

TRAININGS (participated) :

- Participated in the Second **UNDP/UNESCO** Introductory training Course on Mangrove Ecosystem, held at NIO, Goa, from 1st -25th of November, 1984.
- Computer Training conducted by CMC Ltd. During 12-23 March, 1990.
- Participated in the Summer School on Biodiversity: Inventory, Monitoring and Information Systems organized by Centre for Ecological Science, Indian Institute of Science, Bangalore from 4 to 14 April, 1995.
- **Eco-Village design training Programme held at Auroville, India from August,13 to September,7, 2007**
- Capacity Building of Master Trainers in **Education for Sustainable Development (ESD)**, organized by WWF India, WBSO with support from WWF – Sweden during 8 – 9 December,2011.

TRAININGS (organised) :

- Coordinated one Three months’ duration and another six-months’ duration training on “**Integrated Framing System**” with support from Jnan Chandra Ghosh Polytechnic, Kolkata in the year 2010-11 & 2011-12 (CDTP Scheme)

Several training programmes on Vermicomposting were also organized at various places of West Bengal (VIB, Nimpith, NSU, Kalyani, etc.)

EXPERIENCE IN INTEGRATED COASTAL ZONE MANAGEMENT (ICZM):

- Successfully completed the **Diploma Course in ICZM** course organized by University of New Castle upon Tyne, Indian Institute of Port Management & Zoological Survey of India during June-August 1995.
- Deputed as a member to accompany a 5 member design Mission to MARC, Digha lead by Professor Burbribge, University of New Castle during July 1996.
- Acted as a Resource Person to guide the trainees during 2 week long training programme for the State level officials on “**Integrated Coastal Zone Management (ICZM)** in the month of April 1996.
- Deputed to attend the meetings on Integrated Environmental Management Plan for the Coastal Zone near Ganga (Hoogly) river outfall organized by Central Pollution Control Board, West Bengal during the years 1996-1997.

SKILL IN TEACHING:

- Acted as a guest Lecturer (PG level) for one year in the Department of Marine Science, University of Calcutta, Kolkata.
- Provided teaching support (Environment) to the students of Institute of Mass Communication Film & Television Studies under Kalyani University (2007 - 2013)
- Provided teaching support to the students of Netaji Subhash Open University on **vermicomposting**
- Acting as a guest Lecturer (PG level) in the Department of Environmental Studies, Rabindra Bharati University, Kolkata (July,2016 to June,2017.

EXPERIENCE IN CO-INVESTIGATING A RESEARCH PROJECT:

- **Acted as a Co-Investigator** for the Research project entitled “ Impact of mass collection of Prawn seeds in Mangrove ecosystems of Sundarbans Biosphere Reserve” supported by Ministry of Environment & Forests, Government of India during 1995-1997.

SKILL IN ADJUDICATION:

- Acted as a Practical examiner and adjudicator in the Department of Marine Science, University of Calcutta, Kolkata.
- Acted several times as an Adjudicator in Science Fairs & Seminars organized by Birla Industrial & Technological Museum, Kolkata.
- Acting as a Judge in National Talent Search Exhibition organized by Kendriya Vidyalaya, Ballygunj, Kolkata.

EXPERIENCE IN EIA STUDIES:

- Carried out EIA studies in the river Hoogly after the Oil spill near Haldia during 1996-1997.

EXPERIENCE IN MANGROVE ECOSYSTEM MANAGEMENT

- Deputed to attend the Convention on Sundarban Mangrove & Biosphere Management organized by State Level Steering Committee on Mangroves, Government of West Bengal in Sunderban Biosphere Reserve during May and November of 1995.

SKILL IN MAINTENANCE OF MUSEUM AND GALLERIES:

- Acquired considerable experience in maintaining Public Galleries (Zoological) of the Indian Museum, Kolkata, while serving in the Museum & Taxidermy Section at Headquarters, Kolkata.
- Well versed in maintaining Zoological Collections.

SKILL IN ORGANIZING EXHIBITIONS:

- Organised several Exhibitions on Environmental Education & Awareness, including Wild life protection and conservation in association with different Schools, Clubs etc.

SKILL IN ENVIRONMENTAL EDUCATION & AWARENESS PROGRAMMES:

- Participated actively in National Environmental Awareness Campaign programmes supported by Ministry of Environment & Forests, Government of India since 1994 for public awareness and **brought out two books** with the experience gained.
- Also participated actively in National Environmental Education Programme in Schools, a project of Ministry of Environment & Forests, Government of India, catalysed by Centre for Environmental Education, Ahmedabad during 1992-93 & 1993-94 for the benefit of local school students. **One document on Elephant conservation in regional language is published.**
- Participated in the workshop for the preparation of Activity Guide of National Children's Science Congress during 19th to 22nd March, 1998.
- Continuously participated in National Environment Awareness Campaign (NEAC) programmes since 2000.

SKILL IN COMPUTER USAGE:

- Well versed in Computer Usage and attended a Basic Computer training programme organized by CMC, Kolkata.
- Attended a fortnight-long training programme in E-Governance at CMC, Kolkata.

FOREIGN VISIT:

- Visited University of New Castle Upon Tyne during the participation in the Indo-British Diploma course in Integrated Coastal Zone Management jointly organized by University of New Castle, Indian Institute of Port Management & Zoological Survey of India during 19th June to 8 September 1995.

ON BOARD EXPERIENCE:

- Participated in the Cruise No.15 organised by Centre for Marine Fisheries Research Institute, Cochin onboard Research Vessel FORV SAGAR SAMPADA from 6th May to 26th May 1996.

EXPERIENCE IN RURAL DEVELOPMENTAL ACTIVITIES (Application of PRA tools):

With support from Global Environment Facility (GEF) through United Nation Development Programme (UNDP) Small Grant Programme (SGP), facilitated by Centre for Environment Education (CEE), a project entitled. “**Improving the quality of life and livelihood of rural community through sustainable use of local resources**” was coordinated as in 16 villages of two Gram Panchayats of Sagar Island of South 24 Parganas district during 2007 to 2009 covering a total population of 10,370, household 2027 under 158 groups (out of total population of 45,556 and household 8908). As a result of continuous community mobilization, **following PRA techniques**, a large number of various community groups have been strengthened and also formed. Of all these groups SHGs are the major beneficiaries of the project. Next to SGH, Farmers Clubs, Poor Man’ Group and Eco Clubs play the important role in the project 2027 Beneficiaries are exposed during various PRA meets, exposure visits and trainings on sustainable local resource (biotic) utilization for the benefit of their social, political, economical upliftment keeping the environmental sustainability with top most priority.

Different Stakeholders of the community (farmers, members of the SHGs, village leaders, Panchayat members, teachers, students, local government officials, veterinary and medical practitioners, local traders, fishermen, etc.) were mobilized through more than 275 village-level PRA meetings (formal & informal, within the village & outside the village). It resulted in the gradual consensus building, formation of viable groups (farmers clubs & village level groups), revival of inactive groups, selection of young village coordinators, general awareness creation, better understanding of the local issues etc., and also for gathering baseline information, developing village work plan and also for establishing a belief on the **benefit sharing mechanism** within the group so that the SHG would become potentially viable MCG (mutually cooperative group). The objective was to develop community ownership by involving the members of the SHGs in decision making, sharing up cost and roles and responsibilities. Initially, SHGs were confused with the sharing system put forward, however, with time they realized and gradually joined the SGP activities.

Following skill/experience gained:

Village Development planning (by using PRA tools), Social mobilization technique, Resource mapping, Resource utilization, documentation, evaluation and finally report preparation.

Relevant paper (Climate Resilient Agriculture)

1. *Climate Resilient Agriculture in the Coastal Areas of the Sundarbans*, W.B. (with Sunita Das and Pritam Mitra), 2018. *Journal of the Centre for Creative Learning and Research* Vol. 5 (2015).pp. 7-18

Document Published:

- i) Misra, A. (2017). *Polychaetes*. State of Art Report on Sunderban Biodiversity. by **WWF-India & World Bank**.
- ii) **Champion of Resilience: People's [perception of Climate change at Sagar Island; document published by PUPA, 2013.**

Relevant Paper presented in Seminar: .

Mitra, S., **Misra, A.** 2011. Food Security, Sustainability and the Poor: A case Study of Integrated farming at Sagar Island (Sundarbans), India. Presented in the International Workshop on “ SUSTAINABLE AGRICULTURE: Traditional Indigenous Knowledge System and Food Security”, organised by CIMP, in collaboration with UNESCO. NABARD & NHB, 3-5 May, 2011.

Papers presented at the Regional Science & Technology Congress

1. Quick decomposition of household wastes by liquid manure (Jeevamruth) for improving the fertility of soil. Anima Das (BA) and **A. Misra (PUPA), 2012**
2. Observation on the emergence of parasitic wasp (Hymenoptera) from pupa of the plain tiger butterfly (*Danaus chrysippus*) at Sagar Island, South 24 Parganas. Saheba Khatun (XII) , P. Ray & **A. Misra (PUPA),2012**
3. A Study to find out the causes for decreasing number of Chang fish (*Channa gachua*) in Sagar island and efforts towards their conservation : A local initiative. Saheba Khatun (XII) , Dr.Sujit Pal and Dr. **Amalesh Misra (PUPA).2012**
4. Enhancement of productivity of paddy with diversified organic inputs and Crop Rotation at Sagar Island, South 24 Parganas, West Bengal, India. Saheba Khatun (XII), Dipti Pramanik (IX) & **A.Misra (PUPA), 2016**
5. Diversity & Diversified uses of Palm Tree at Sagar Island, South 24 Parganas. Anirban Chakraborty(Teacher) , Vivek Bairagi (VII), **Amales Misra (PUPA) & Sudipta Tripathi (Agri. Scientist),2016**
7. IMPORTANCE OF A PATCH OF MANGROVES IN THE NORTH-WESTERN PART OF SAGAR ISLAND, SOUTH 24 PARGANAS. Saheba Khatun, Putul Mandal (VIII) & **Amales Misra (PUPA) Debashree Dam (ZSI),2017**
8. Concept of Ayurveda in Sanskrit literature. Anirban Chakraborty , Assistant Teacher , Phulbari Sitala High School (H.S) & **Amales Misra (PUPA),2017. 24th WEST BENGAL STATE SCIENCE & TECHNOLOGY CONGRESS, 2018**
9. Possibility of using Rainwater for drinking purpose at Sagar Island & Kolkata, West Bengal. Rinku Das , **Amales Misra** , Shirhendu Das & Aunnwesa Bhowmick . 25th WEST BENGAL STATE SCIENCE & TECHNOLOGY CONGRESS, **2018.**
10. Study of Biodiversity: an essential tool of Education for Sustainable Development. By Narayan Das(Retd. Principal, Chandraketurgarh Sahidullah Smriti Mahavidyalaya), Rinku Das(Garden Reach Nut Behari Das Girls'High School), and **Amales Misra (PUPA).2018;** National Seminar cum Workshop on Research Methodology with special reference to Teachers' Education, 19-20 January,**2019.** St. Marys College, Bachelor Education & Higher Studies, Ranaghat

11. Climate induced Soil salinity: the major constraint of Agricultural productivity in Sundarbans, West Bengal. By Sudipta Bhattacharjee, District Co-ordinator (Executive) , Mission Nirmal Bangla, Water & Sanitation Cell, Nort 24parganas, 2Rinku Das, Teacher Dept. of Science, Nut Bihari Girls High School (H. S.)3Dr. **Amalesh Mishra**, Secretary- Paribesh Unnayan Parishad,2018. National Seminar cum Workshop on Research Methodology with special reference to Teachers' Education, 19-20 January,2019. St. Marys College, Bachelor Education & Higher Studies, Ranaghat

Popular Article:

- Mirsa, A.** 2003. Role of earthworms in improving soil fertility and Environmental protection (Bengali). Agri-resource Training & Development Committee, Rotary International District 3290, ed. Dr. R.C. Basu & Dr. A.K. Mandal, pp.51-54.
- Mirsa, A.** 2003. Matir urbarata Raksha o paribesh surakshay kenchor bhumika. *Saathi, Special Issue, Rotary Community Corps*, R.I.district 3290.
- Mirsa, A.** 2004. Earthworms — a Horticulturist's true companion, in the crusade to halt environmental degradation. *Proc. Seminar on Salvaging our Environment — the Horticulturist way*, 2004, Bidhannagar Horticultural Society, 18th January, 2004, pp. 1-6.

Mirsa, A. 2004. Earthworms – friends of the people. *SEBA Newsletter*, 1 (1): 5-8.

Mirsa, A. 2004. Kencho—Manusher Upakari Bandhu. *Sundarban Alekhya*,21(2): 8-10.

Mirsa, A. 2005. Jaiba Krishi. *Sundarban Alekhya*, 22(2): 13-14.

A. Books:

Written —

1. Basu K. & Misra, A. 2005. **Vermicomposting** — What, Why & How (bi-lingual), 8 pages, Published by Paribesh Unnayan Parishad.
2. Misra, A. & Das, B.C. 2006. **Kencho abong Jaiba Sar** (in Bengali),pp. 32, Published by Paribesh Unnayan Parishad.
3. Mitra, S. & Misra, A. 2006. Chikista-jata barjya O tar Byabasthapanana (in Bengali), pp. 20, Published by Paribesh Unnayan Parishad.

Coordinated :—

1. **Kenchor Katha** by Soma Basu & S. Chattopadhyay2001
2. Vidyalaye Paribesh Siksha — Sikshak Nirdeshika (Class VI & VII)..... 2004
3. Vidyalaye Paribesh Siksha— Chhatra Sahaika (Class VI & VII)..... 2004
4. Vidyalaye Paribesh Siksha— Sabuj Sikshak Prasikshan Sahaika 2004

Amalesh Mishra