



**ASSOCIATION OF RETIRED INDIAN COUNCIL OF AGRICULTURAL RESEARCH
EMPLOYEES
(ARICARE)**

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ARICARE news

Vol. 9 No. 1, January, 2025

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President's Desk

Science for the People: Challenging Elitism

Modern science refers to collective body of knowledge and methodologies developed over centuries through systematic inquiry. Science, however, is not just a pursuit of knowledge; it is a powerful tool for social change. The swift advancements in technology have led to the innovations that were once unimaginable in science fiction. However, despite its achievements, modern science faces challenges like public mistrust and the spread of misinformation and lack of accessible communication between scientists and public. There is growing concern among general public that scientific research is done at the helm of the elite group with little application for the wider section of the society. Scientific knowledge is now subject to ever greater restrictions through intellectual property legislation, over patenting, licensing and overpricing. Scientific research and discourse is dominated by a small number of institutions and individuals serving the interests of powerful stakeholders such as corporations or Governments. Elitism is described as a tendency to draw a line between intellectual superiors and general public. This concentration can lead to biases, exclusion of marginalized groups and research agendas that primarily reflect priorities of those in power rather than broader social needs.

The vast majority of population in India lives in extreme poverty and struggles to access basic necessities such as food, education and healthcare. It is common for the people to rely on god, man and religion for answers. Promotion of scientific temper has been a herculean task in India given obstacles of a feudalistic social order and linked with obscurantist ideas, conservative social attitudes, superstitious beliefs. Limited public access to scientific information results in inadequate accountability mechanisms for scientific research and its application. Environmental issues represent one of the most long-standing issues for the most science and social groups. Even large-scale environment projects are carried out without any public participation. Public health continues to be a major concern with poor indicators not commensurate with India's standing in the world. Further, people's (indigenous, local) knowledge is a crucial ingredient of a democratic development process. People are repositories of intimate knowledge of intricate working of the natural ecosystem. The people themselves to cope up with inaccessibility, fragility and marginability of the resources have evolved indigenous practices based on local knowledge and, materials which are cost effective, simple and easy to operate; each attuned to the agroecological systems, it is employed. While we excel in science and technology globally, we also need to develop local solutions that fit our unique context.

Technology choices are social choices, and cannot be left to a technocratic elite. Scientific knowledge should not be concentrated in the hands of elites and it should be distributed fairly. As scientists, we have a responsibility to ensure that our work is relevant, accessible and beneficial to all. We must strive to make science more

inclusive, more participatory and more accountable to the people. Peoples science movements have emerged in many countries around the world including India. Peoples science is a broad-based term that encompasses various initiatives aimed at making science accessible to the general public. It emphasizes the importance of science in addressing social and environmental issues, and promotes critical thinking and scientific literacy. A people's science movement makes scientific concepts understandable and engaging to a wide audience through various medium like books, articles, blogs, videos, podcasts and public lectures. It organizes science fairs, exhibitions, workshops and other events to showcase scientific discoveries and innovation in a fun and interactive way. It can undertake participatory action research in collaboration with communities to address local problems using scientific methods and tools, empowering them to take control of their development. It also makes effort to develop scientific outlook and knowledge among people challenging the forces of supernaturalism, obscurantism and superstition. The movement emphasizes the need to bridge the gap between science and society, promote scientific literacy and address socioeconomic inequalities through science and technology intervention.

People's science seeks to challenge the dominant narrative of science as elitist and detached from the everyday realities of ordinary people advocating for the integration of traditional knowledge systems with modern science and technology promoting sustainable development practices. Let us work together to create a more just, equitable and sustainable world where science is not just a tool of the powerful, but a force for social change.

Secretary's Desk

It is a great pleasure to us that the ensuing issue of ARICARE news, Volume 9 (1), 2025 will be published in due time. This is a digital half yearly publication of the Association since January, 2017. The publication is the reflection of various activities (meetings/events), research and entrepreneurship information, important scientific news, individual professional achievements performed. The Editorial Board members have put their best efforts for the collection and editing the manuscripts for the publication of ARICARE news in time. It is appreciated that all Sub-Committee of ARICARE have performed very significant activities in this period with the cooperation of all members of the Association as well as the guidance and inspiration received from the President. During the period, one Governing Body meeting was held on 30.7.2024 at ICAR-CIFE, 32, G. N. Block, Sector- V, Salt Lake City, Kolkata -700091; one joint meeting of Governing Body and Community Service Sub-committee was held on 22.01.2025 at ICAR-IVRI, Eastern Regional Station, 37 Belgachia Road, Kolkata-700037. In addition, several meetings of Social and Cultural Sub-Committee, Community Service Sub-committee and Tour Sub-Committee, one meeting of Pension, administration and medical Sub-committee were held during the period.

Various important administrative issues, tour programmes at National and International level, community services, celebration of Bijaya Sammilani, Picnic, membership drive etc were discussed and most of them were executed. Most important events organised during the period are: (1) the Illish Utsab was organized on 17.08.2024 by ARICARE members and their families at ICAR-CIFRI, Barrackpore and 33 family members participated, (2) A National tour was undertaken at Dublagadi, Odisha from 22.08.2024 to 25.08.2024 with a group of 11 family members, (3) Members of Community Service Sub-committee of ARICARE organised a programme on 01.10.2024 for the distribution of Sanitary pads among the rural women and engagement of a Computer Teacher to have computer literacy to the students of class VI to XII at Amratala village, Basanti Block, South 24 Parganas district with the help of a local NGO "Sunderban Rural Health Awareness & Welfare Association (SRHAWA)", (4) the e-publication of the Sharada Issue of "ANWESHA" was published in 9th October, 2024, (5) the celebration of Bijaya Sammelani was organised on 18th November, 2024 in the Indumati Sabagriha, Jadavpur University Campus, Kolkata with more than 50 participants, (6) An "Awareness Programme and Goat Kid distribution for Rural Livelihood Development" was organised on 30.11.2024 at Sasya Shayamala Krishi Vigyan Kendra, Aranch, Sonarpur, 24-Pgs (South) jointly by Community Service Sub-Committee, ARICARE, Kolkata and Sasya Shayamala Krishi Vigyan Kendra, Ramkrishna Mission Vivekananda Educational & Research Institute (RKMVERI), Aranch, Sonarpur, 24-Pgs (South), (7) Annual picnic of ARICARE was arranged on 8th January, 2025 at 4 No. Bheri Fisherman's Cooperative Society Ltd, P.O. Nowbhangra, P.S. Bidhannagar, Kolkata - 700105 near Chingrighata. About 78 family members were present.

In Membership drive, a good number of retired ICAR employees have joined in the ARICARE and it is hoped that the Association will be enlightened with their new ideas and active role to pursue the challenging activities of ARICARE. We are thankful to the members of the Governing Body; the Chairman, Convener and members of all Sub-committee for organising the above events enthusiastically and also thankful to all members and their family for their whole hearted participation to make the events more enjoyable and memorial. I wish a Very Happy, Peaceful and Prosperous.

Editorial

Association of Retired ICAR Employees (ARICARE) had started its journey during 2014-15 with the initiatives undertaken by some enthusiastic retired ICAR Employees who had a urge of having an association to bring the retired ICAR employees under one umbrella and these employees are not only from Kolkata based ICAR Institutes but the association is made open to all retired employees across the country. Now it is a matter of great satisfaction that 'Seedling' germinated from seed sown by some of retired ICAR employees, is grown to a big tree with an ever increasing nos of 164 odd members who have an awesome aspiration to carry forward the message of togetherness in order to achieve the targeted goal of an Association. The power of an association means the people around us have an influence

and impact on our mindset ,actions,health,behavior ,attitudes, habits, character, personality and values which ,in turn ,influence our performance,success , well- being and happiness. Precisely , thought of a retired person about happiness might focus on finding fulfillment through spending quality time with loved ones, pursuing hobbies, he or she never had time for in earlier phase of life,travelling to a new places, engaging in meaningful volunteer work, staying active physically / mentally and generally freedom / flexibility of a schedule without the pressure of work, all while maintaining a sense of purpose and connection to his or her fellow associates.

ARICARE without any hesitation is providing a platform for our retired ICAR employess and also their family members to come closer in order to harvest happiness in this leg of our life and this happiness can make us physically and more importantly mentally sound.Every person's concept of happiness in retirement will be different, depending on their personal values and interests. If there is one thing that can transform our retirement years, it is living with gratitude. Persons who are truly happy in their retirement , make it a habit to count their blessings, not their burdens. They appreciate the freedom that retirement brings, the joy of simple pleasures and the beauty of everyday moments.Besides ,our physical health which is subjected to decline due to the process of ageing , we must have to take care of our mental health to be prioritized in the time to come for ourselves to remain without any sort of stress or agony. It is easy to give advice to others but difficult to live within the ambit of discomfort both physical or mental.**Stephen Hawking's ,inspite of his living with extreme disability, advice to depression sufferers " if you feel like you are in a black hole , do not give up – there must be a way out "**.

ARICARE News (Vol 9 No1) which is the mirror of our activities carried out by our beloved Association for a period of six months from August , 2024 to January , 2025 is published on e- platform and the preparation of this manuscript is made a reality with the help/ assistance of all valued members of our Association. We profusely put on record the assistance with lots of gratefulness and appreciation to all of you particularly President , Secretary , Asstt. Secretary , Treasurer and Asstt. Treasurer for making the present issue of Aricare News in this format. **Happy New Year , 2025** ushering prosperity and progress of our great Nation and also everyone's life being a step forward to **Vikshit Bharat -2047**.

Governing Body Meeting

Joint Meeting (2nd) of Governing Body and Community Service Sub – Committee was held on 22nd January , 2025 at ICAR-IVRI, Kolkata. The meeting was attended by 14 members ,Drs KK Satapathy , M. Datta,D.C. Nayak ,G.Bose,Shri S.R. Sarkar ,Shri B.K. Saha, Drs K. Das ,SS Pal,A. Biswas,D. Pal, S. Chakrabaorti, A.N. Roy ,S.M. Deb and S.N. Sarkar. Past Proceedings of GB meeting held on 30th July , 2024 were discussed with relevant follow up actions. Community Services were initiated during Covid period

and are also continued with the voluntary donations (Rs 1.11 lakh) of our members during 2024-25 and services made so far are discussed with suggestions to bring projects from various sources in order to give a structured approach. Several suggestions for community services by Aricare to memorise close /near ones in their absentia , are also put forward for discussion with a necessity to have a separate meeting on Community Services. Health Camp by a Private Hospital may be organized very soon for health diagnostic services to our members /families .Meeting came to an end with vote of thanks to the chair.



Meeting held on 22ndJanuary , 2025

ARICARE Tour Sub- Committee

Tour Sub- Committee Meeting of Aricare(1st) was held on 3rd August , 2024 at Food Court , Metropolis Mall , Highland Park , Kolkata to discuss and finalise one day out programme, short trips , Domestic and International Tours for the period of 2024-25. The members present in the meeting were Drs K.K. Satapathy , M. Datta , Syamali Chakraborti (Chairperson),S.K. Mahapatra ,Biplab Saha, Madhumita Das , Shri B. K. Saha (Convener) and Mr. Ratan Das.It is necessary to mention that our Tour Sub-Committee is a vibrant one organizing various domestic and International Tours with the interested members of our Association.



Tour Sub- Committee Meeting held on 3rdAugust , 2024

Short Domestic Tour

A short trip was organized at **Dublagadi, Odisha** from 22th to 25th August, 2025. No. of participants were 11. Dublagadi Sea Beach in Balasore District in Odisha is a virgin beach and is an off-beat destination where one can experience the magical phenomenon of Blue Tide, with luminescent marine life. The shoreline is bordered by a dense pine forest having a lush greenery and a mangrove forest with rare flora and fauna.



Visit to Dublagadi, Odisha

2nd meeting of the ARICARE Tour Sub Committee was held at Food Court of Metropolis Mall, Highland Park on 13th November, 2024. The members were present - Dr.K.K.Sathpathy, Dr.Mrinmoy Datta, Dr.D.C.Nayak, Dr. N. C. Pan, Dr. K. Das, Dr.Syamali Chakraborty and Sh.B.K.Saha.



Tour Sub – Committee Meeting held on 13th November, 2024.

Day Out Programme

Day out programme to **Burul** was held on 15th November, 2024 at Ganga Dua Eco Tourism and Resort, Burul Haribashor - Raipur Rd, Naldari, West Bengal. Burul is a tourist village and a gram Panchayatin Budge Budge II CD block in Alipur Sadar Sub-Division of South 24 Parganas in West Bengal. Drs KK Satapathy, M. Datta, MsSyamali Chakraborti and Mr B. K. Saha attended the one day out Tour programme along with their family members. Members present in the tour were 7 (Seven).



Visit to Burul , Soth 24 Paraganas on 15th November , 2024.

On 4th January, 2025 ,**3rd meeting** of the ARICARE Tour Sub-Committee was held at Food Court of Metropolis Mall, Highland Park to select the travel agent for first International Tour for the year 2025 at Vietnam and Cambodia. BonBoyage Travel Club was selected for the forthcoming International Tour to Vietnam and Cambodia.



Tour Sub-Committee Meeting held on 4th January , 2025.

ARICARE Pension , Administration and Medical Sub-Committee

The first meeting of the Pension, Administration and Medical Sub-committee (2024-25) of ARICARE was held on September 03, 2024 (Tuesday) at ICAR-ATARI, Salt Lake, GB Block, Kolkata.

The meeting was attended by Drs KK Satapathy , M. Datta (Chairman) , S. Mahapatra (Convener) , S.M. Deb , A. Bandopadhyay , Shri Balaram Chatterjee , Shri B.K. Saha (Special Invitee) and Mrs J. Nath. The Proceedings of the Meeting are as follows :

1. It was decided to form a Committee to undertake the future course of action. Committee is formed with the following members - Dr KK Satpathy,Dr M.Datta,Dr S.Mahapatra ,Dr S.M.Deb ,Dr. A.Bandopadhyay and Mrs J.Nath to carry out the work under the purview of the Sub- Committee.
2. The committee members will meet Directors of ICAR - NINFET and ICAR- CRIJAF to consider the inclusion of Fortis Hospital,Anandapur and Rashbehari Avenue , Kolkata and Tata Medical Centre, NewTown , Kolkata under the Empanelled Hospitals of the respective ICAR Institutes.
3. Committe Members will also meet Directors of two other ICAR Institutes,ICAR-CIFRI and ICAR- Atari to include two Hospitals as mentioned under Empanelled ones. It is noted that ICAR- CIFRI and ICAR- Atari are having only 6 and 1 empanelledHospitals,respectively thus having a need to have more nos of empanelled Hospitals for the benefit of Pensioners/ their dependents for Medical treatments under CGHS rate.
4. It is found that Pensioners who are having Medical card issued from ICAR - CIFRI, are not eligible to get any cashless medical facility from Hospitals as per office circular. Request will be made to Director ,ICAR- CIFRI to allow the pensioners for availing cashless facility as per CGHS rate following the office guidelines.
5. Hospitals to be included in ICAR- CIFRI are - Fortis Hospital,Tata Medical Centre, Manipal Hospitals,B.M.Birla and Medica Superspeciality.
6. On the other hand , Hospitals to be included in ICAR - Atari are Fortis Hospital,Tata Medical Centre ,Suraksha Diagnostics ,Disha Hospital,B.M.Birla and Medica Superspeciality Hospital in our letter addressed to Directors along with earnest request.
7. Pensioners retired from other ICAR Institutes are being refused to issue IPD Medical Card from some ICAR Institutes located in Kolkata and request will be made to Directors for enrolling Pensioners to issue Medical Card .
8. If needed,DG ,ICAR and Secretary,DARE may be appraised for Medical facilities of ICAR pensioners at Kolkata.The meeting came to an end with thanks to all .



Say Goodbye to Tension and Hello to your Pension



Meeting of Pension , Administration and Medical Sub-Committee held on 3rd September.

ARICARE Social and Cultural Sub-Committee

Illish Utsab



On 17.08.2024, the **IllishUtsab** was organized by ARICARE members and their families at ICAR-CIFRI, Barrackpore, West Bengal. No. of participants along with family members were 33. All had enjoyed the delicious preparation of Illish dishes prepared at the office canteen of ICAR- CIFRI. Photographs of IllishUtsab organized by ARICARE are presented below.



Illish Utsab organized at ICAR-CIFRI ,Barrackpur

---গরম ভাতে ভাজা ইলিশ লাগে দারুন স্বাদ---

Vijoya Sanmelani (বিজয়া সম্মেলনী)

Vijoya Sanmelani Celebration of ARICARE was held on 18th November, 2024 (Monday) in the Indumati Sabagriha, Jadavpur University Campus, Kolkata. Aricare Members along with their families attended the celebration and total persons attended in the celebration were 59. It is pertinent to mention that Vijoya Sanmelani was supposed to be held on 24th October, 2024 but was deferred due to Cyclone Dana expected to bring heavy to very heavy rainfall from 24th October and onwards. The celebration was inaugurated by Chairman and other office bearers of Aricare followed by Songs, Recitation and Sruti Drama etc.



Photographs of Celebration



Members and their families attended the programme

Annual Picnic

A discussion meeting of ARICARE Social and Cultural Sub-Committee was held on 21st December, 2024 at Indian Coffee House, Jadavpur regarding the forthcoming Annual Picnic (held on 8th January, 2025) and the meeting was attended by Dr K.K. Satapathy, Shri Sumit Ranjan Sarkar, Dr (Ms) Syamali Chakraborti, Shri B.K. Saha, Dr Debabrata Das and Shri S.K. Batabayal.



Meeting of Social and Cultural Sub-Committee

Annual Picnic of ARICARE was held on 8th January, 2025 (Wednesday) at No 4 Bheri Fisherman's Cooperative Society Ltd.,PONowbhanga, PS Bidhannagar,36 Ward, Kolkata near Captain Bheri , Chingrighata. Members along with families (Total 78 persons) attended the day long Picnic with Soumptuous breakfast / Snacks / lunch .



Members /families taking lunch in Picnic



Ready for a boat ride in Water body



Aricare members along with families in the Annual Picnic

ARICARE Community Services

On 30.09.2024, a programme of the **Community Services of ARICARE** with Sunderban Rural Health Association, Basanti Block , South 24 Parganas was organised for supply of Sanitary pad among the rural women and engagement of a Teacher to have computer literacy to students of class VI to XII. Some pics including mangrove plantation are presented below.



Distribution of Sanitary Pad



Computer Teaching in the Village



View of Mangrove plantation in Sunderban

Rural Livelihood Programme

On 20/9/24, Dr. K. K. Satpathy, Dr. Mrinmoy Datta and Dr. Krishnendu Das on behalf of the **Community Services subcommittee** of ARICARE visited Sasya Shyamala, KVK, Sonarpur and then met and interacted with the identified beneficiaries of the 5 month old Bengal Goat distribution programme for livelihood project at Village - Madsar, GP- Sonarpur-II, Sonarpur along with Dr. Sarboswarup Ghosh, SMS, Animal Science, Sri Ashis Das, DI, Narendrapur LokShiksha Parishad, Rural Development and other officials.

“ I would say if Village perishes, India will Perish too”-- Mahatma Gandhi.



Visit to Madsar Village in Sonarpur for Goat Distribution Programme

Goat Distribution

An "Awareness Programme & Goat Kid distribution for Rural Livelihood Development jointly implemented by: Sasta Shayamala Krishi Vigyan Kendra, Ramkrishna Mission Vivekananda Educational & Research Institute (RKMVERI), Arapanch, Sonarour, (S) 24-Pgs. & ARICARE, Kolkata was held on 30.11.2024 and 4 Goat Kid were distributed among the two farmers identified in Madsar Village in Sonarpur.



An awareness Programme for goat farming

Booklet for Goat Rearing



Goat Distribution to Farmers organized by ARICARE in collaboration with KVK

Life Member

During this period , 5 (five) retired Scientists have become life Member of ARICARE and they are as follows

- Dr. Suresh Chandra Das
Former Principal Scientist
ICAR-IVRI, Eastern Regional
Centre, Kolkata
- Dr. Partha Sarathi Banerjee
Former Principal Scientist
ICAR-IVRI, Eastern Regional
Centre, Kolkata
- Dr Birendra Nath Ghosh
Former Principal Scientist
ICAR-NBSS& LUP
Kolkata Centre
- Dr Syamal Kumar Dey
Former Senior Scientist
ICAR-CIRCOT , Mumbai
- Dr(Ms) Archana Mukherjee
Former Director , ICAR- CTCRI
Thiruvananthapuram, Kerala



Dr. Suresh Chandra Das



Dr. Partha Sarathi Banerjee



Dr Birendra Nath Ghosh



Dr Syamal Kumar Dey



Dr (Ms.) Archana Mukherjee

Our Achievements / Engagements

Brief of Engagements of **Dr. P. Das**, Former Deputy Director General (Agricultural Extension), ICAR , New Delhi

- Theseventh Dr.M.S.SwaminathanMemorialLecture 'A TransdisciplinaryAnalysis of Performance of Agricultural Production Systems' was deliveredat the Institute of Agricultural Sciences, SOA's Faculty of Agricultural Sciences (Deemed University), Bhubaneshwar on Aug 28, 2024.
- Attended the Annual Zonal Workshop of KVKs, ATARI, Zone VIII, Pune held at Junagadh, Gujarat during Sept 3-6.
- Visit to KVK, Kathua, Jammuon Sept 9.
- Lectures delivered in the Certificate Course for the Prospective Managers /CEOsof FPOs. CAU, Imphal during Sept 12-13.
- Effective Communication Skills for Academicians. Lecture delivered to the Newly Recruited Faculties of CAU, Imphal on Sept 14.
- Presented the Final Report 'A Transdisciplinary Analysis of DSR-Zero-Till-Wheat Production Systems' Wrap-Up Meeting, Lucknow; under the Consultancy Contract on Study and Documentation of Water Saving, GHG Saving,and Crop Economics in DSR under ITC Limited Supported Agriculture

- &Livelihood Initiatives in Gorakhpur, Gonda, and Bahraich Districts of Eastern U.P. on Sept 19.
- Attended Annual Zonal Workshop of KVKs of Uttar Pradesh, SVPUAT, Meerut during Sept 24-26.
- Chaired the Second meeting of the NGO KVK Review Committee of ICAR & Visited the KVKs at Satara, Narayangadh, and Ahmednagar districts of Maharashtra during November 11-14.
- Chaired the Third Research Advisory Committee for ICAR ATARIs, held at Hyderabad during November 19-20.
- Visited the College of Veterinary Sciences and Animal Husbandry, Jalukie, District Peren, Nagaland, and interacted with the faculty members, Visited the KVK, Jalukie, and interacted with the KVK staff & Interacted with the College of Veterinary Sciences and Animal Husbandry students, Jalukie & - Attended the Inaugural Session of the National Conference on Hill Agri systems: Challenges and Opportunities for Achieving Sustainable Development Goals, Organized by ICAR Research Complex for NEH Region, Nagaland Centre, and Indian Association of Hill Farming (IAHF). as a Special Guest. during Nov 27-30.
- Visited Central Agricultural University, Jhansi, Participated in Selection Committee Meeting & Visited the Faculty of Veterinary and Animal Husbandry, and Faculty of Fishery sciences during Dec 24-25.

Dr . D.K. Kundu , Former Principal Scientist , ICAR- CRIJAF, Barrackpur, West Bengal attended second meeting of the Research Advisory Committee of ICAR-MGIFRI at Motihari, Bihar on Dec 23-24 .

Dr . K.K. Satapathy , Former Director , ICAR- NINFET, Kolkata attended Golden Jubilee Celebration (1975-2025) of ICAR Research Complex for NEH Region , Meghalaya during 9-10 th January , 2025.

Dr M. Datta , Former Joint Director , ICAR Research Complex for NEH Region , Tripura attended Golden Jubilee Celebration of ICAR Research Complex for NEH Region , Meghalaya during 9-10 th January , 2025 and Published a book (U.C. Sharma , M. Datta and Vikas Sharma **Global Perspectives on Shifting Cultivation** , NIPA, GENX Electronic Resources & Solutions P.Ltd. , New Delhi, 2025 , ISBN :978-93-58871-75-3 ,pp.659).

Dr B.K. Mahapatra , Former Principal Scientist & SIC , ICAR-CIFE , Kolkata attended Golden Jubilee Celebration of ICAR Research Complex for NEH Region , Meghalaya during 9-10 th January , 2025.

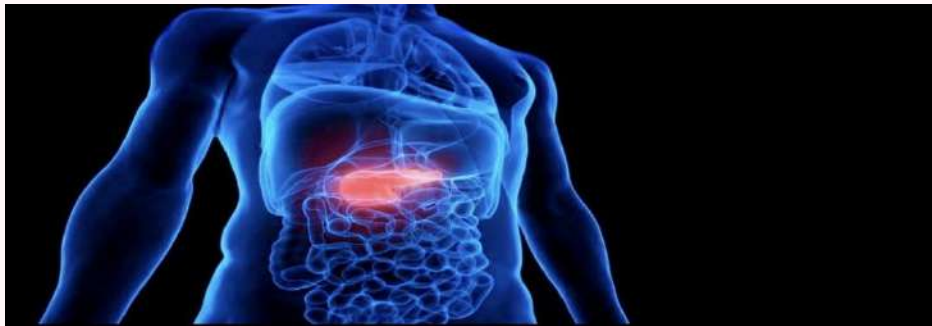
**“ The only way to do great work is to love what you do ”
–Steve Jobs**

Research Thoughts

Groundnut: A Superfood That Fights Pancreatic Cancer and Boosts Brain Health

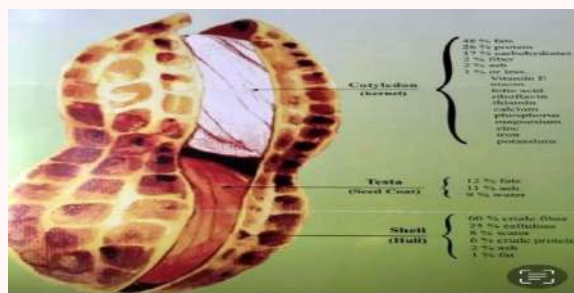
M. S. Basu , Former Director , ICAR- NRCG, Gujarat

Pancreatic cancer, the 7th leading cause of cancer-related deaths globally, is a major health concern. Yet, a simple dietary addition could help reduce its risk. Studies from the Netherlands reveal that consuming just 5 grams of peanut butter daily significantly lowers the risk of microscopically confirmed pancreatic cancer in men. Australian research further highlights the remarkable benefits of groundnuts (peanuts), showing that eating 55 grams a day enhances cognitive function, boosts brain blood flow, and improves short-term memory and word recall.



Pancreatic Cancer

The anti-carcinogenic potential of groundnuts was also studied in National Research Centre for Groundnut (ICAR) . Packed with 15 antimutagenic compounds, many of which are anti-carcinogenic and rich in antioxidants, groundnuts are a nutritional powerhouse. This superfood is also low in sodium, high in fiber, and diabetes friendly. With 26% protein content, it's a treasure trove of essential minerals and vitamins, including E, K, B6, thiamine, niacin, riboflavin, folic acid, calcium, phosphorus, magnesium, zinc, iron, and potassium. Just 50 grams of roasted groundnuts a day can deliver nearly 300 calories—a highly affordable source of nourishment.



Groundnut – Incredible Food

Ironically, this incredible food—celebrated as Gujarat’s pride—is often exported from India as bird feed to Southeast Asia, depriving millions of Indians of its benefits. With over 80% of the population battling protein-energy malnutrition, this is a travesty that has been flagged repeatedly. Yet, governmental skepticism persists, undermining the potential of this humble yet extraordinary crop to transform public health in India. The Fact: Eighty per cent Indians suffer from protein deficiency - The Remedies Just two steps can bail out India from acute protein deficiency:

Make India self-reliant in Pulses & Stop export of plant proteins, more so groundnut as bird feed to Southeast Asian Countries It’s hard to believe, the most dynamic government in power battling for ‘Sashakt Bharat’ is so skeptical to deal with such a national menace and bring India back to health! As the world’s largest producer of groundnuts, it is disheartening that we’ve been exporting these nutrient-dense nuts as bird feed to Southeast Asian countries for decades. It’s time to reconsider our agricultural export policies and prioritize the health and nourishment of our own citizens. Protein waste in India and growing protein energy malnutrition (PEM) India one of the largest producers of food legumes, the sources of quality plant proteins in the world, paradoxically suffers from acute PEM. No other social problems could be as bigger indimension than the malnutrition and consequent health risks in remote India. Question remains: Should India continue to afford 60% waste of protein-rich wholesome food as animal feed in the form of oil-cake just to extract 40% oil by crushing groundnut? It never happens in developed countries. Secondly, should Indian policy permit export of groundnut as ‘Bird Feed’ to South-east Asian countries depriving own people from protein rich natural food? India needs revamping groundnut value chains to boost export to premium world markets The same is true for soybean, the largest food legume crop in India having no use as food but policy permits in exporting oil and soya meal. India a matured country, apparently suffers from immaturity in food policy! In International Millet Year 2023, Indian policy makers are crazy in promoting millet based foods from Parliament Canteen to AIIMS New Delhi but no matching plans to include nutri-rich millets in mid-day meal for school children, challenged nutritionally. Country must have an accelerated nutri-cereals production plan by cutting down irrigated areas of rice, excess in production; ensuring market support for minor millets and raising minimum support price, much above major cereals.

In the journey to New India, the following approach may be thought upon .

1. Plan proportional production of rice and millets to balance food and nutritional security taking the number of malnourished into account.
2. Allocate part of irrigated rice areas to oilseeds and pulses and maintain the production level by intensifying hybrid rice.

3. Millets, a climate resilient crop holds great potential in contributing to food and nutritional security and India must target a matching production reaching to every plate of the needy.
4. Nutrient deficiencies were found less in the wheat-eating northern and western states as compared to rice eating eastern and southern states. The deficiencies are alarming in the case of iron, Vitamin A and protein.
5. Production of foxtail and finger millets (ragi) should be in higher proportion as they are rich in iron, calcium and magnesium. Ragi contains three times the calcium content of milk.
6. Millets are resource efficient crops grown with limited water and little inputs that can reduce import bills/ subsidies on chemical fertilizers.
7. Among the plant-based foods, groundnut is an exceptionally good source of protein (26%) besides healthy fat (PUFA) and plenty of vitamins and minerals.
8. Necessary, as a policy, country may reverse groundnut utilization process, keeping more for food use and banning export as 'bird feed' as health of impoverished Indian is more important.
9. Mortality among children due to acute malnutrition is alarmingly high. An instant mix containing ground nuts, millets, maize, linseed (rich in omega 3), soybean can be developed and served to target groups as power pack, ready to eat.
10. Vegetable pigeon pea and soybean for use as green may be introduced commercially in the states of Uttar Pradesh, Uttarakhand, Jharkhand, where the magnitude of malnutrition problem is high.

Eels (বাইঙ্গমাছ)

Pratap Kumar Mukhopadhyay , ICAR- CIFA , RRC, Rahara, West Bengal

Migratory nature of some fish species is well-recognized. Their journey is purposed for feeding and reproduction. Anadromous is a migratory life cycle where fish live most of their life in marine environment and return to where they hatched to spawn in freshwater. Spawning is the process in which specific aquatic fishes mate through external fertilization of eggs. Catadromous fish spend most of their lives in freshwater and then migrate to sea to breed. This type is exemplified by eels of the genus *Anguilla*. Numbering sixteen species, the best known of which are American eel (*Anguilla rostrata*) and European eel (*Anguilla anguilla*). European eels make specifically epic journeys as long as 16,000 kms. Eels are unique because they can swim in backwards also by reversing the direction of waves. Since eels are nocturnal and thus are rarely

seen. These snake like bony fish have a smooth slimy skin lack pelvic fins and have median fins confluent around the tail. Although they spend most of their time in freshwater, they only love to travel to Atlantic Ocean, when they feel that they should breed. And when they decide to go to Atlantic, they can cross any hurdles whether terrestrial and aquatic and ultimately reach deep into the Atlantic Ocean. They take rest and females lay eggs which are fertilized by the milt ejected by the male. In a few days' time, the deep Atlantic Ocean, becomes full of baby eels.

Again, a great surprising thing is these baby eels (**Elver**) are morphologically totally different from parents. For a very long time, the scientists, the fisherfolk all had the opinion that these baby fishes are actually totally new species. It took about 50 years to know that these baby fishes are actually eel babies; their bodies are flat, transparent and the head portion is immeasurably small. Gradually when they grow, they divide into two groups – the one group starts migrating towards the North American coasts and those eels of European origin they travel towards Europe only and they all reach their own freshwater ecosystem without any mistake. This is still a mystery today how the European eels without any mistake reach Europe and American eel reach America. In course of their long journey their body shape changes, become longer tubular (cylindrical) in shape from the flat body. With great suffering they reach home and start conserving energy for their next journey. This kind of migration follows generations after generations without any mistake. This is still an interesting research issue and hopefully will be able to know in the near future, the mystery of the journey of the eels to the oceans



Baby Eel



Mature Eel

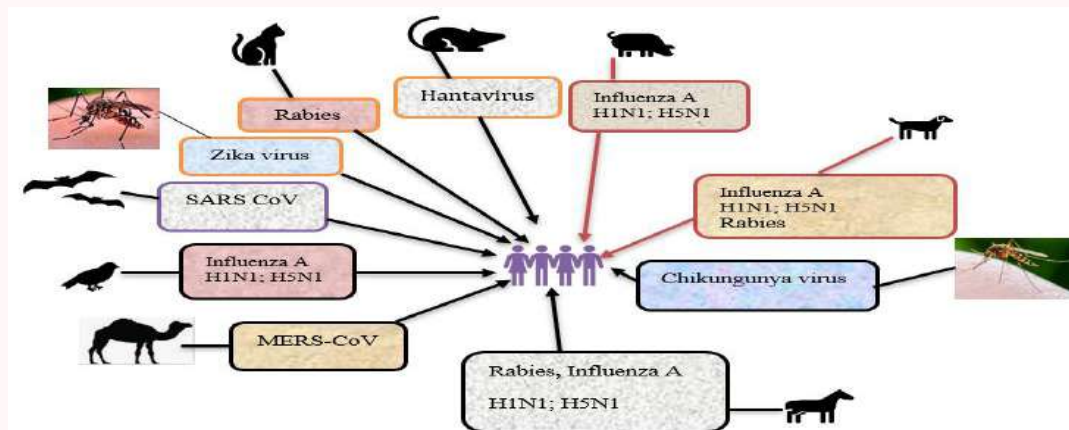
Eels live for an average of 5-20 years in fresh water and brackish water such as rivers, coastal lagoons and lakes. After this time, they return to the sea to spawn once and then die. Eel is a good source of protein, important for muscle building and repair.

One Health Approach for the Control of Major Zoonotic Viral Diseases

Asok Biswas, Chief Technical Officer, ICAR- CIFE, Kolkata

Humans and microbes are engaged in a moral, self-interested, co-evolutionary struggle. The complex relationships between the human and animal have resulted in a human-animal interface since prehistorical times. Research findings have implicated wildlife as an important “zoonotic pool” of novel pathogens, and the domestic animals act as amplifiers of pathogens emerging from the wild. A study has conclusively shown the positive correlation between time since its domestication and the number of infectious diseases (and parasites) shared between domesticated animals and humans. Therefore, domestic animals are also important in influencing the human infectious disease transmission cycle. Diseases and/or infections that are naturally “transmissible from vertebrate animals to man” are classified as a zoonosis. The world has undergone a political revolution, rapid industrial development, and unprecedented growth of primary industries and population that has increased the human, animal, and wildlife interactions at close proximity. The changes also referred to as 5 T’s: Trade, transport, travel, tourism, and terrorism have opened the area for the spillover of epidemic, endemic, and pandemic zoonotic diseases. Understanding this versatile human-animal interface is crucial for characterizing the permanent yet continuously evolving risks of cross-species transmission of pathogens between animals and humans. Causation of diseases includes a web of several factors that change the probability of disease occurrence. The factors are biologic, genetic, ecologic, climatic, anthropogenic, and socioeconomic. Newly emerging infections are those that have not previously been recognized in humans. Reemerging and resurging infections are those that existed in the past but are now rapidly increasing either in incidence or in geographical or human host range. Deliberately emerging microbes are those that have been developed by man, usually for immoral use. Wildlife originated zoonoses have been the most global threat of all emerging infectious diseases. Zoonoses caused by viruses are more of a public health threat and are a cause for global concern. There are several examples that justify that viral zoonotic diseases have shaped the course of human civilization (examples “Black death” spread by rats, “Spanish flu” linked to influenza strains in birds, human sleeping sickness linked to unrestricted cattle restocking). Diseases such as influenza (avian and swine flu), Severe acute respiratory syndrome (SARS), and Nipah virus (NiV) have afflicted the planet over recent times and the viruses are being detected in new places which had never been recorded before. Many of the zoonoses are often highly transmissible and spread rapidly (occasionally causing global pandemics) and can be fatal which has raised a great deal of attention globally.

Zoonoses have proven to be a significant public health problem not to mention the explicit socioeconomic impact it exerts. It is estimated that around **2.7 million human deaths** and around 2.5 billion cases of human illness a year are caused due to 56 zoonoses.



Zoonotic Viruses

Human has had the luxury of forgetting about the catastrophic effects of zoonotic diseases that have occurred in the past. There has definitely been an upsurge of disease emergence particularly zoonotic diseases in the past few decades. It is critical that we do not disregard the possible disease outbreaks and that we combat emerging diseases in a systematic way. Provided the fact that zoonoses have a huge impact on public health as well as the animals and wildlife, employing a systematic One Health approach is important. Finally, it gives a value of interdisciplinary collaboration for reducing threats to global health from infectious diseases.

News/Technology Summary

Krishi Vigyan Kendras

KRISHI Vigyan Kendras (KVKs) - Agricultural Science Centres have completed **50 years of its Journey** in playing a pivotal role as frontline extension systems in India's Agricultural landscape. India currently boasts a robust network of 731 KVKs operating across the country, with one KVK in 545 districts and two KVKs in 93 districts.

(**Source:** www.icar.org.in/sites/default/files/2024-04/Indian-Farming-March-2024-Special-Issue)

Red Okra (Bhindi)

Red okra has high nutritional value over green okra, especially in terms of anthocyanin content and antioxidants. The high antioxidant property of red okra provides protection against several diseases and improves immunity. ICAR-IARI, New Delhi has released one high-yielding and moderately resistant to diseases (YVMV and ELCV) red okra variety, i.e. Pusa Lal Bhindi-1.



(**Source** :www.icar.org.in/sites/default/files/2024-04/March-April%202024)

Organic Products

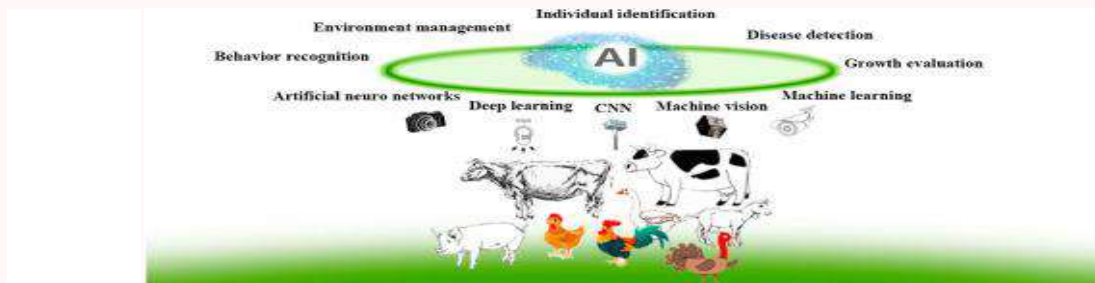
The organic products market in India is growing, with the organic food market valued at \$1.7 billion in 2023. The market is expected to grow to \$10.3 billion by 2032.



(**Source** :<https://www.google.com/organic+products+market+size+in+india>)

AI-based tools can diagnose animal health issues

AI-powered diagnostic tools are emerging as game-changers, promising to revolutionize how veterinarians diagnose and treat animal diseases. These tools leverage machine learning and data analytics to provide accurate, fast, and efficient diagnoses, improving animal health outcomes and transforming veterinary medicine.



(**Source** :<https://www.greyb.com/blog/animal-healthcare-trends/>)

Veterinary Medicine Bank (VMB)

The Eastern Regional Station (ERS) of ICAR-IVRI, Kolkata, under Development Action Plan for Scheduled Caste (DAPSC) Scheme, established a “**Veterinary Medicine Bank (VMB)**” in the Daria village in Canningof West Bengal on 26th of December 2024. The purpose of establishing the village level Veterinary Medicine Bank was to ensure timely availability and accessibility of feed supplements and emergency medicines to the beneficiariesto extend health coverage of their livestock and poultry. This would help in achieving their targets of egg, meat and milk production for household need and income generation in a sustainable manner and thereby support livelihood in a better way.

(**Source:** <https://www.ivri.nic.in/OtherPages/NewsAll.aspx>)

Nanotechnology in Textiles

Nanotechnology in textile is the use of nanomaterials to improve the properties of fabrics. Nanotechnology can give textiles unique properties like water repellence ,UV resistance ,flame retardancy, antimicrobial activity, wrinkle resistance , selfcleaning and conductive textiles etc.



(**Source:** <https://doi.org/10.1021/acsnano.5b08176>)

Obituary

We express our heartfelt condolences to Dr Sachidulal Raychaudhuri , Former Principal Scientist , ICAR-IIWM & **Member of ARICARE** for demise of his spouse , Dr (Ms) Mausumi Raychaudhuri who breathed her last on 26th January, 2025 and we pray for the departed soul rest in eternal peace.



Late Dr. (Ms) Mausumi Raychaudhuri