



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

**C-43 New Garia Development Co-operative Housing Society , Kolkata – 700 094**  
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## **ARICARE NEWS**

### **Office Bearers**

#### **Governing Body**

Dr K.K. Satapathy -President ( ICAR-NINFET) ,Dr . M. Datta – Vice President ( ICAR Res. Complex for NEH Region ,Tripura) ,Dr . D.C. Nayak – Secretary (ICAR - NBSS & LUP) Dr. G. Bose –Asstt. Secretary ( ICAR- NINFET) ,Mr. S. Ranjan Sarkar- Treasurer(ICAR -NINFET) , Mr. B.K. Saha – Asstt. Treasurer (ICAR - NBSS& LUP)

#### **Executive Members**

Dr. A. K. Bandyopadhyay (ICAR - CIARI) , Dr B.K. Bandopadhyay ( ICAR-CSSRI), Dr. M.S. Basu (ICAR - DGR) , Dr D. P. Sinhababu; ( ICAR -NRRI) , Mr. B. Dhar Mandal ( ICAR -CRIJAF) , Dr. S. Saha(ICAR - CRIJAF) ,Mr. S. Ghosh (ICAR - IVRI) , Dr. A. K. Debroy (ICAR - CARI) , Mr.S. C. Chakraborty( ICAR - CRIJAF) ,Mrs. P. R.Ghatak (ICAR - NINFET) , Dr B. Maji (ICAR -CSSRI) ,Dr.M.K.Basak (ICAR -NINFET), Dr. T. H. Das (ICAR - NBSS& LUP) , Dr. A. Majumder (ICAR - NINFET) , Mr U. Ghosh (ICAR -CIFRI) .

#### **Editorial Board**

Dr. M. Datta , Dr . M. S. Basu , Dr ( Prof) A.K. Pal , Dr S.C. Saha, Dr R.K. Sarkar.

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Agriculture has moved us forward in the last 12000 years in different phases viz slash and agriculture, hoe culture, plough culture and mechanized agriculture. But we are at another turning point : automated or smart farming. In the world today, automation appears to be order of the day. It reigns supreme in large number of areas: industries, medicines, offices even in domestic environment. Agriculture is no exception where agricultural automation can help to streamline crop production making it more efficient and less labour consuming. With a global population projection 9.7 billion by 2050, agricultural production need to be increased by at least 70% from current level. Also, despite overall growth of world population, the number of agricultural workers is on the steady decline implying a more dire labour shortage for decades to come. The development of automated farming is an attempt to bring solutions to all these problems. It is now accepted on all hands that a revolution in agriculture is round the corner by way automation in agriculture. Farm operation basically means the use of remote controlled agricultural machineries, variety of sensors, computer systems, electronics and data management to reduce the need for human labour in equipment operation and decision making. The list of modern automated farming techniques encompasses all aspects of crop production like efficient soil, fertilizer and planting management, irrigation and water management, harvesting and processing , dairy and livestock farming and also prediction of yield. Perhaps the most iconic image of farm automation is the self-driving tractor. Many tractor manufacturers have been working on autonomy for its tractors. Such tractors could be controlled remotely or even programmed. Also, drones are gaining ground as autonomous vehicles that can provide information about soil and crops and monitoring conditions remotely. Drones can also be used to apply fertilizers, pesticides and other treatments from above. The data is provided by sensors that trigger certain software algorithms that optimize corresponding agricultural processes at automated farms. Still there are challenges of farm automation that must be overcome. High costs to adopt robotic technologies presents a huge barriers, especially for the developing countries. More than 60% of our population is dependent on agriculture. Most of the Indian farmers work using traditional ways and have very little knowledge about the technologies that have come up over the years. Many of the farmers leave their jobs because of no scope in agriculture.

However, every year automated technology becomes more sophisticated and what cutting edge just a few years ago will become commonplace and cost effective soon. With the introduction of automation, we can foresee in coming decades, agriculture would become user friendly spending less time in the field and more time at computer analyzing the data and diagnosing problems.

The ARICARE news was started its journey in January, 2017 and it has gained name and fame among the retired and serving employees of ICAR. I am very much glad to inform that the Editorial Board members have done well for the publication of Volume 6 (1) of ARICARE news in time.

During this half yearly period, the activities of ARICARE were not undertaken properly due to pandemic situation of COVID-19. However, we have performed some milestones with the great initiatives of our President and the cooperation of all members. About four Get-Together meetings, two Governing Body meetings and Annual General Meeting were held during the period. Various important issues like healthcare in Covid-19 situation, medical treatment facilities, social activities, amendment of bye-laws, membership drive etc were discussed in details and some initiatives were undertaken. Besides the e-Newsletter, the e-magazine named **"ANWESHA"** was also published which was a new initiative of ARICARE. It was highly appreciated among the readers and the members of the Association. We are thankful to all contributors of the magazine and the members of the editorial board.

The Annual General Meeting (7<sup>th</sup> AGM) was held on 10.12.2021 (Friday) in the Auditorium Hall of ICAR-NINFET, Tollygunge. About 46 members were present, senior members of age 75 years and above were facilitated; some important issues like amendment of bye-laws, formation of subcommittee and medical treatment facilities etc were discussed. As a whole, it was a grand success. During the period, a good number of retired ICAR employees have enrolled in the ARICARE association and the society will be enriched and vibrant with their new thoughts and active participation in various activities of ARICARE. Again we are very much shocked and in grief for losing some members on their death and we pray to Almighty for their eternal peace and heartfelt condolences to the bereaved family members.

Presently we are passing through the third wave of Corona virus dominated by Omicron variant. Due to its widespread in nature, the social life is again paralysed and economic activities are seriously affected through many restrictions imposed by the State and Central Government from time to time. I wish good health and mental strength for all members of ARICARE and their family to overcome this critical period of third wave of COVID-19. Wishing you all a Very Happy, Healthy and Prosperous New Year, 2022.

### Editorial

Amid ongoing pandemic period having a distressing threat of new variant of concern across the globe and also in India, We in the Editorial Board of ARICARE are successful in making the Newsletter and releasing ARICARE News in the e-platform for appraisal to all of the members and also others. ARICARE News, as we all know, is published twice in a year with an elaboration of our activities and supplementary information in order to focus the Newsletter comprehensible magazine of retired ICAR association.

Considering the main attention of this research organization in which we had all worked in the domain of Agri Research , Extension and Education ,we are enthusiastic to have, in this News letter , News / Technology summary along with research and entrepreneurship approach of some of our valued members. Investment is definitely vital for working populace but senior citizens are also to remain vigilant for the various options of investment so as to maintain comfortable economic status of all individuals though we all have pensionary benefits in accordance with our last pay drawn.

Who does not want to desire to have a recognition/ remembrance in life predominantly more in the old age and thus our association has been arranging felicitation of retired employees and also family pensioners attaining 75 or more years of age with good wishes to remain happy and healthy in his /her future days of existence in this planet. Persons after retirement normally have a sense of feel isolated and segregated and this gesture is able to memorize the past and zeal of remaining associated with other fellow members. Due to persistent Covid environment , we were not in a position to organize social gatherings but virtual meeting usually held in every month, is an endeavour to get well being information of members. Our welfare fund , recently introduced though as a meager one , has reminded us that we should do benevolent work for the people in the Society who need assistance and support. The mission of having this fund in our association would grow many folds in the time to come. The entry or enrollment of new retired ICAR professionals in our association indicates that we believe in confidence of the collective way of living specially pertinent after retirement but togetherness to walk along , needs to be strengthened so as to feel that inspite of reality of being retired, we are not tired.

Editorial Board has acknowledged the assistance received from all of us in making this January, 2022 issue of ARICARE News and we express sincere gratitude to all the office bearers / members of this association . We do hope all to have sound health and mental strength in this moment of pandemic situation engulfing around us. Regards.

## Meetings and Events

### GB Meeting

The Governing Body Meeting of ARICARE was held on 16.11.2021 at 2.00 P.M. in the meeting room of ARICARE at ICAR-NINFET, Tollygunge. The members present were: Dr.K.K.Satapathy, Dr. Mrinmoy Datta, Dr.D.C.Nayak, Mr. Sumitranjan Sarkar and Mr. B.K.Saha. The President, Dr. K.K. Satapathy, welcomed the members and the meeting was started as per the agenda.

**Agenda-1:** Finalisation of the date of Annual General Meeting

The date of Annual General Meeting (AGM) of ARICARE is fixed on 10.12.2021 (Friday) at the auditorium of ICAR-NINFET, Tollygunge after the discussion.

**Agenda-2: Programmes of AGM**

The Programmes/ different events for the day were thoroughly discussed among the members present. The president reminded to circulate again the amendment of Bye-Laws/ Rules & Regulations among the members for its finalization in the AGM (Attention: D.C.Nayak, Asstt. Secretary & Mr. Sumit Sarkar, Treasurer).

**Agenda-3: Miscellaneous**

The members proposed to organize a picnic within Kolkata or its surroundings in the first/second week of January, 2022 if COVID-19 situation permits. The short tour for 2-3 days within West Bengal /nearby of WB was also discussed. The proposals will be discussed in the AGM for its finalization.

The President thanked all the members for their physical presence and positive discussions. The meeting was ended with vote of thanks.



A view of the GB Meeting at NINFET , Kolkata

## Annual General Body Meeting

The AGM of ARICARE for the year 2020-21 was held on 10.12.2021 (Friday) in the auditorium of ICAR-NINFET, 12 Regent Park, Kolkata-700040. The meeting was started at 11.30 A.M. About 46 members attended physically in the AGM. Dr. Mrinmoy Datta, Vice-President, welcomed all the members, specially the new members of ARICARE. In his condolence note, the Vice-President expressed deep sorrow and gratitude to the departed souls of seven members whom we lost during the crisis period of COVID-19. The departed members are (1) Dr. Rathindra Nath Adhikari had left for his heavenly abode on 23rd February, 2020. He retired from service on 30.06.2013 after superannuation as Principal Scientist from ICAR-CSWCRTI, Dehradun, (2) Ashoke Kumar Karmakar had left for heavenly abode on 29.07.2020. He retired from service on superannuation as Technical Assistant (T4) from ICAR-NBSS&LUP, Regional centre, Kolkata on 31.12.2000, (3) Dr. Swapan Kumar Kundu had left for heavenly abode on

26.10.2020. He retired from service on superannuation as Senior Scientist from ICAR-NINFET Kolkata on 31.07.2006, (4) Dr. Dipak Sarkar had left for heavenly abode on 24.12.2020. He retired from service on superannuation as Director from ICAR-NBSS&LUP, Nagpur on 31.01.2014. Dr Sarkar was also past president of ARICARE; (5) Govinda Kripa Bhattacharya had left for heavenly abode on 27.01.2021. He retired from service on superannuation as Principal Scientist & Head, Mechanical Processing Division from ICAR-NINFET Kolkata on 31.01.2010; (6) Dr Durga Pada Ghorai had left for heavenly abode on 18.06.2021. He retired from service on superannuation as Senior Scientist, ICAR-CRRI, Cuttack on 31.10.1997 and (7) Tapas Kanti Das had left for heavenly abode on 02.08.2021. He retired from service on superannuation as Technical Officer, ICAR- BSS&LUP, Regional centre, Kolkata on 31.08.2013. We pray to the Almighty for eternal peace of the departed souls and render strength to the bereaved families. All members observed two minutes silence to pay homage to the departed souls. Then we also observed the condolence for Late Bipin Rawat, First Chief of Defence Staff, India; his wife and 11 defence staff who lost their lives in Helicopter accident.

In the Presidential address, Dr. K. K. Satapathy briefed the purpose of establishing ARICARE, its objectives and various activities taken to the new members of ARICARE. He mentioned the important activities such as starting and continuing of virtual meetings of all members, Governing Body meetings, New membership drive, Formation of Welfare fund, Formation of COVID-19 Support Group, Publication of e-Newsletter, Publication of first e-magazine "Anwasha", medical cards for pensioners were performed successfully. He also informed that due to the illness of the Secretary, Dr. B.K. Bandyopadhyay; the Assistant Secretary, Dr. Dulal Chandra Nayak was actively involved in various activities of the Society during the reported period. The president expressed his sincere thanks to all members for their active cooperation during this crisis period.

### **Felicitatation of Senior Members**

The felicitatation of Senior members of age 75 years and above was performed. Mr. Sumit Sarkar, the treasurer announced the name of senior members one by one. The felicitated members were: (1) Shri Bansi Dhar Mondal, (2) Dr. Amitava Saha, (3) Dr. Sarabindu Choudhury, (4) Shri Amrita Lal Das, (5) Dr. Mrinal Kanti Basu, (6) Dr. Ashok Kumar Dev Roy, (7) Mrs. Dipika Som, (8) Shri Sanat Kumar Dutta, (9) Dr. Abhindra Day, (10) Smt. Sukla Mukherjee.

### **The agenda of the AGM:**

**Agenda-1:** *Confirmation of the proceedings of last AGM and Secretary's report (2020-2021).*

Mr. Sumitranjan Sarkar, Treasurer presented the proceedings of last Annual General Body Meeting (6<sup>th</sup> AGM) held on 11.10.2021. The proceedings was passed and confirmed unanimously.

The Secretary's report for the period (2020-2021) was presented by Dr. D.C.Nayak, Assistant Secretary as he was actively involved in all activities of ARICARE due to the illness of the Secretary, Dr. B. K. Bandyopadhyay.

**Secretary's Report: Activities of ARICARE during 2020-21**

The major activities of ARICARE during the period are briefly described below.

- During the period from the last AGM to November, 2021, four Governing Body (GB) meetings were held, two were held by virtual mode on 19.5.2021 & 20.6.2021 and other two were held physically on 30.3.2021 & 16.11.2021 in the meeting room of ARICARE at NINFET, Tollygunge. Thanks to the President and the members of GB who attended the meeting and contributed their valuable inputs for the development of ARICARE. On behalf of ARICARE, I wish to express my sincere thanks to the Director, ICAR-NINFET for providing us a room for conducting the GB/other small meetings in the Institute campus.

Besides the GB meetings, monthly Get-Together meetings were arranged since December, 2020. Dr. Debasis Pal, EX-CSSRI, Regional Station, Canning is acting as the convener of this meeting. Thanks to Dr. Debasis Pal for his excellent activity.

- The publication of two issues of '**e-newsletter**' January 2021 & July 2021 were done in time. This outcome was due to very sincere efforts by **Editorial board** of '**e-newsletter**'. Our sincere thanks to Dr. Mrinmoy Datta, the Chairman of the Editorial board and its members and also to the contributors of the write-up of '**e-newsletter**' on different current development of agriculture and allied subjects as well as general issues.
- During this period, the e-magazine named "**ANWESHA**" was published. It was possible due to the great initiative of our President and sincere efforts of Mrs. Chaitali Dutta and other members of the editorial board of the magazine. We are thankful to all contributors of the magazine and the members of the editorial board.
- With the initiative of **Pension, administration and medical** subcommittee of ARICARE, some urgent issues like medical cards of pensioners have been issued from



NINFET, Tollygunge and CRIJAF, Barrackpore. Different medical issues of COVID-19, hospital treatments and medical bills etc were also thoroughly discussed in various virtual meetings.

- A good initiative was done with the formation of “**ARICARE Welfare Fund**”. The decision was taken in the last Annual General Meeting (AGM) on 11.10.2020 to create this Fund for social activities of the Association. In this connection, a circular was given on 16.11.2020 requesting to all members of ARICARE to contribute generously Rs. 500/- or more for raising this fund for future social works. About Rs. 56000/- was raised from the contributions of 48 members. From this fund, a cheque of Rs. 20000/- was handed over to the Swamiji, Nimpith Ramkrishna Ashram, Dist-South 24 Pgs in presence of our President Dr. K. K. Satapathy and Dr. Debasis Pal for the welfare of COVID and YAAS cyclone affected people of the area
- As per the decision taken in the Governing body meeting held on 19.5.2021, a **COVID Support Group** of ARICARE was formed to offer different kind of assistance to our members during this times of crisis. The members are: Dr Mrinmay Datta (Chairman), Dr Dulal Chandra Nayak, Dr Anil Kumar Sahoo, Dr Subhas Chandra Saha, Dr Debasis Pal and Shri Sumitranjan Sarkar. They would be in contact with the organization like Red Volunteers, different hospitals and other organizations for services like supply of oxygen, information on availability of hospital beds, home COVID testing and other home care services. Two/three meetings were held and the information in this regard was circulated through the WhatsApp group.
- In this year, we could not perform some enjoyable and memorial events like Picnics, Get-together and Cultural programme, domestic tour etc due to pandemic COVID situation. We hope that the convener and members of these Sub-committee will be active and organize the various programmes as the situation is improving.
- 8 new members have joined in ARICARE during this period namely Dr. Asit Baran Mandal (Ex-CRIJAF); Shri Amitava Sarkar (Ex-NINFET); Dr. Anil Kumar Sahoo (Ex-NBSS&LUP, Regional Centre,Kolkata); Smt. Namita Sarkar (Wife of Late Dipak Sarkar); Smt. Anima Karmakar (Wife of Late Ashok Kumar Karmakar); Smt Rita Kundu (Wife of Late Dr. Swapan Kumar Kundu); Dr. Utpal Sen (Ex-NINFET); Dr. Narayan Chandra Choudhuri (Ex-CIARI, Port Blair); Dr Asok Biswas (Ex-CIFE, RC, Kolkata); Dr Samar Kumar Gangopadhyay, (Ex-NBSS&LUP, Regional Centre, Kolkata). Six persons also joined in spot as new members. They were Dr Krishnendu Das (Ex-NBSS&LUP, Regional Centre, Kolkata), Dr.Deo Sharan Singh (Ex-NBSS&LUP, Regional Centre, Kolkata), Dr.Nimai Chandra Pan (Ex-NINFET), Dr Swapan Kumar Bhaduri (Ex-NINFET), Smt.Sukla Mukhopadhyay (Ex-NINFET) and Dr.Abhindra Day (Ex-NINFET). All are heartily welcomed in our society. We hope the society will be



enriched and vibrant with their new thought and active participation in various activities of ARICARE.

Lastly, the Assistant Secretary is thankful to all the members particularly the President, Vice-President, Secretary, Treasurer, Assistant Treasurer, the members of the Governing Body and members of different subcommittees for their very active participation and valuable suggestions in virtual mode throughout the period. Again he wishes to thank all members who joined on today's meeting.

#### Agenda-2: Treasurer's Report

Mr. Sumitranjan Sarkar, the treasurer, presented the Auditor's report and the statement of accounts for the period 2020-2021. Regarding ARICARE Welfare Fund, some discussions were undertaken mainly the utilization of rest money and request to the new as well as those members who have not paid yet. Many members suggested that again a circular may be issued in this regard. After the discussion among the members, the account was passed unanimously.

#### Agenda-3: Presentation and Discussion on Bye-laws (Rules and Regulations)

Mr. Sumitranjan Sarkar presented the Bye-laws in which some inclusions and modifications were done after the circulation among the members through email for their valuable suggestions. Some important suggestions were: (1) Inclusion of Patrons, (2) provisions of New Chapters in different geographical area of India, (3) the tenure of the office bearers will be two years instead of one year, (4) Election of office bearers by an Election Committee. After the discussion, the minor change of the Bye-laws was confirmed and it will be circulated to the members.

#### Agenda-4: Election of Office bearers and Formation of Sub-committees for 2021-22.

The President mentioned that there was no need for major change in the Governing Body as within 6 months the next AGM (2021-22) as well as the election of office bearers of GB will be held. For smooth running of the society, Dr. D.C.Nayak will act as the Secretary in place of Dr. B.K.Bandyopadhyay as he is unable to discharge the duties due to his illness and Dr. Goutam Bose will act as the Assistant Secretary.

Governing Body and the Chairman and Convener of the different Sub-committee for 2021-22 are as the following:

#### Governing Body:

1. Dr. Krishna Kishore Satapathy ..... President (ICAR-NINFET)
2. Dr. Mrinmoy Datta..... Vice President (ICAR Res.Complex for NEH Region)
3. Dr. Dulal Chandra Nayak..... Secretary (ICAR-NBSS& LUP)
4. Dr. Gautam Bose..... Assistant Secretary (ICAR- NINFET)
5. Mr. Sumit Ranjan Sarkar ..... Treasurer (ICAR-NINFET)

6. Mr. Binoy Krishna Saha ..... Asstt. Treasurer (ICAR-NBSS& LUP)

Members:

1. Dr. Apurba Kumar Bandyopadhyay (ICAR-CARI)
2. Dr. Bimal Kumar Bandyopadhyay (ICAR-CSSRI)
3. Dr. Mukti Sadhan Basu ( ICAR-DGR)
4. Dr. Dhurjhati Prasad Sinhababu (ICAR-CRRI)
5. Mr. Bansi Dhar Mandal (ICAR-CRIJAF)
6. Dr. Suprakash Saha (ICAR-CRIJAF)
7. Mr. Samar Ghosh (ICAR- IVRI)
8. Dr. Ashok Kumar Dev Roy (ICAR-CARI)
9. Mr.Subhas Chandra Chakraborty (ICAR-CRIJAF)
10. Mrs. Priti Rekha Ghatak (ICAR-NINFET)
11. Dr.Budheswar Maji (ICAR-CSSRI)
12. Dr.Mantu Kumar Basak (ICAR- NINFET)
13. Dr.Thakahari Das (ICAR-NBSS& LUP)
14. Dr.Asok Majumder (ICAR-NINFET)
15. Mr Ujjal Ghosh (ICAR-CIFRI)

There are 3 sub committee for the year 2021-22, Pension , administration and medical with Mr Sujit kumar Mitra ( ICAR Hqrs) as Chairman and Mr. Sumit Ranjan Sarkar (ICAR- NINFET) as convener ,Tour Committee with Dr( Ms) Shyamali Chakrabarti (ICAR- NRC for Orchids) as Chairman , Dr. Krishnendu Das (ICAR- NBSS& LUP) as Convener , Picnic , Get together and Cultural with Dr. Gautam Bose (ICAR- NINFET) as Chairman , Dr.Debasis Pal (ICAR-CSSRI) as Convener. There are 2 Editorial Boards , e-Newsletter with Dr. Mrinmoy Datta as Chairman and e-Magazine with Dr. S. S. Pal as Chairman. Admins of WhatsApp , Facebook and Website are Dr. Gautam Bose, Dr. Krishnendu Das and Mr. Sumit Ranjan Sarkar, respectively. Members will be selected in the next GB meeting.

Concluding remarks

The President expressed his happiness for the physical presence of the members and successful completion of all the programmes in this AGM. He requested the Conveners of all the sub committees to meet physically/ or virtual mode as and when required to discuss and decide about activities to be taken up for the year 2021-22 as we were unable to perform many activities due to pandemic situation of COVID -19. He thanked all the members and wished good health for them and their family members.

At the end, the vote of thanks was given by Dr. Amitava Saha. He expressed his sincere thanks to the President and all members of ARICARE for their presence and active participation in the AGM.



A view of AGM held at NINFET , Kolkata

**Elderly Members of ARICARE at their 75 years of Age and above are being felicitated in AGM.**



Dr Saradindu Choudhury, Formerly HOD  
( ICAR – IARI , Pusa)



Mrs Sukla Mukhopadhyay, Formerly  
Technical Officer (ICAR – NINFET)

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**AJEEERNE BHOJANAM VISHAM**

If previously taken Lunch is not digested..taking Dinner will be equivalent to taking Poison. Hunger is one signal that the previous food is digested

**ARDHAROGAHARI NIDHRAA**

Proper sleep cures half of the diseases..

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Shri Bansi Dhar Mandal , Formerly  
Sr. Adm. Officer ( ICAR – CRIJAF)



Dr Amitava Saha Formerly HOD  
( ICAR – CRIJAF)



Dr Ashoke Kumar Deb Roy, Formerly Principal  
Scientist ( ICAR- CARI)



Mrs Dipika Som Family Pensioner

### MUDHGADHAALI GADHAVYAALI

Of all the Pulses, Green grams are the best. It boosts Immunity. Other Pulses all have one or the other side effects.





Shri Sanat Kumar Datta Formerly Principal Scientist  
( ICAR – CSSRI)



Dr Abhindra Day Formerly HOD , (ICAR-  
NINFET)



Dr Mrinal Kanti Basu Formerly Technical Officer  
( ICAR – NINFET)



Shri Amrita Lal Das Formerly Sr. Technical  
Officer ( ICAR – NBSSLUP)

### **BAGNAASTHI SANDHAANAKARO RASONAHA**

Garlic even joins broken Bones.

### **ATHI SARVATHRA VARJAYETH**

Anything consumed in Excess, just because it tastes good, is not good for Health. Be moderate.

### **NAASTHIMOOLAM ANOUSHADHAM**

There is No Vegetable that has no medicinal benefit to the body.



Members of ARICARE are having lunch in AGM

## **GB Meeting**

The Governing Body Meeting of ARICARE was held on 18.12.2021 at 6.00 P.M. through "Google Meet" App. Total ten members were present namely Dr.K.K.Satapathy, Dr. Mrinmoy Datta, Dr.B.K.Bandyopadhyay, Dr.D.C.Nayak, Mr. Sumitranjan Sarkar, Dr. Syamali Chakrabarti, Mr. B.D.Mondal, Mr. Sujit Kumar Mitra, Mr. Ujjwal Kumar Ghosh and Dr. Dr. Krishnendu Das. The President, Dr. K.K. Satapathy, attended the meeting from New Delhi airport on the way of his journey to Kolkata and welcomed the members. The meeting was started as per agenda.

## **Agenda-1: Formation of different Sub-Committee**

### **1. Pension, administration and medical**

- (1) Mr. Sujit Kumar Mitra ( ICAR HQrs.) ---- Chairman
- (2) Mr. Sumit Ranjan Sarkar (ICAR- NINFET) ----- Convener

#### Members:

- (3) Dr. Mrinmoy Datta (ICAR Res.Complex for NEH Region)
- (4) Mr. B.D.Mondal (ICAR-CRIJAF)
- (5) Mr. Ujjwal Kumar Ghosh (ICAR-CIFRI)
- (6) Dr. A.K. Sahoo (ICAR- NBSS& LUP)
- (7) Mrs. Jayasree Nath (ICAR- NINFET)

## **2. Tours (National, International and Short Tours)**

- (1) Dr( Ms) Shyamali Chakrabarti (ICAR- NRC for Orchids) ---- Chairman
- (2) Dr. Krishnendu Das (ICAR- NBSS& LUP) ----- Convener

### Members:

- (3) Dr. Mrinmoy Datta (ICAR Res.Complex for NEH Region)
- (4) Dr. Gautam Roy (ICAR-NINFET)
- (5) Dr. Gautam Bose (ICAR- NINFET)
- (6) Mr. Sujit Kumar Mitra (ICAR HQrs.)
- (7) Mr. Binoy Krishna Saha (ICAR- NBSS& LUP)

## **3. Picnics, Get-togethers and Cultural**

- (1) Dr. Gautam Bose (ICAR-NINFET) ---- Chairman
- (2) Dr. Debasis Pal (ICAR-CSSRI) ----- Convener

### Members:

- (3) Dr( Ms) Shyamali Chakrabarti (ICAR- NRC for Orchids)
- (4) Dr. Krishnendu Das (ICAR-NBSS& LUP)
- (5) Mr. Swapan Kumar Sinha (ICAR- NINFET)
- (6) Mr. Binoy Krishna Saha (ICAR-NBSS& LUP)
- (7) Mr. Subhas Chandra Chakraborty (ICAR-CRIJAF)

## **4. Editorial Board of “e-Newsletter”**

- (1) Dr. Mrinmoy Datta ---- Chairman

### Members:

- (2) Dr. M. S. Basu (ICAR-DGR)
- (3) Dr. Asim Kumar Pal (ICAR-CIFE)
- (4) Dr. Subhas Chandra Saha (ICAR-NINFET)
- (5) Dr. Ramani Kumar Sarkar (ICAR-NRRI)

## **5. Editorial Board of e-Magazine “ANWESHA”**

- (1) Dr. Sudhansu Sekhar Pal (ICAR-IIFS) ---- Chairman

### Members:

- (2) Dr. Asok Majumder (ICAR- NINFET)
- (3) Dr Asok Biswas (ICAR-CIFE)

## **6. WhatsApp Group (ARICARE official)**



Dr. Gautam Bose ----- Admin

## 7. Facebook

Dr. Krishnendu Das ----- Admin

## 8. Website

Mr. Sumit Ranjan Sarkar ----- Admin

### Agenda-2: Miscellaneous

- a) The circular for raising the Welfare fund will be circulated again for new members and other members who did not pay in earlier occasions.
- b) Mr. Sumit Sarkar suggested the alternate way for felicitation of Senior Members who did not present in the AGM as they stayed outside West Bengal. He told that the gift may be sent to the concerned members through Amazon purchase and one letter of Appreciation from ARICARE may be sent to the candidate by Speed post. Many members suggested that it would be better when they will be visiting Kolkata, it may be arranged after consulting the person.
- c) WhatsApp Posting: Some members raised the issue of unwanted posting in ARICARE WhatsApp group. It was observed that some political/religious messages were posted by some members. In spite of reminding not to post such unwanted messages, it is continuing. In the meeting, it was unanimously decided that it is again requested to all members of ARICARE not to post any political/religious messages in our WhatsApp group.

The meeting came to an end with vote of thanks.

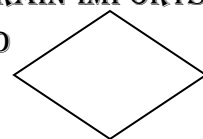
### Felicitations

Dr. P. Das , Formerly DDG( Agri. Extension ) , ICAR , New Delhi , on completion of 75 years of age , was felicitated during his visit to Kolkata on 29<sup>th</sup> December , 2021 in the office of ICAR- Atari , Kolkata. Dr Das ,in his address, had profusely thanked ARICARE for this gesture with a message for this ICAR retired association to remain proactive in the time to come. The special programme on Felicitations came to an end with vote of thanks to all including Director and officials of ICAR – Atari.

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INDIA HAS BROUGHT ABOUT A LANDMARK AGRICULTURAL REVOLUTION THAT HAS TRANSFORMED THE NATION FROM CHRONIC DEPENDENCE ON GRAIN IMPORTS INTO A GLOBAL POWERHOUSE THAT IS NOW A NET EXPORTER OF FOOD WORLD BANK

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A view of Felicitation held in the office of ICAR – Atari.

### **Welfare Fund**

Six of our members had contributed Rs 1000/- ( Rupees one thousand ) each in the Welfare Fund on 10<sup>th</sup> December , 2021 during AGM held at ICAR – NINFET.

- Dr. Saradindu Choudhury
- Dr. Subrata Ghosal Choudhury
- Sri Subhash Sheet
- Dr Amitava Saha
- Dr Dinabandhu Kumar
- Smt Sukla Mukhopadhyay

Total contributed amount in Welfare Fund of ARICARE is Rs 62,000/- and out of which Rs 20,000/- was donated to Ramakrishna Ashram , Nimpith for help to Yaas victims.

### **Life Member**

During the period from August , 2021 to January , 2022 , 9( Nine) retired ICAR officials have become life member of ARICARE.

- Dr.Asok Biswas ( ICAR-CIFE)
- Dr Samar Kumar Gangopadhyay (ICAR-NBSS&LUP)
- Dr Krishnendu Das (ICAR-NBSS&LUP)
- Dr.Nimai Chandra Pan ( ICAR-NINFET)
- Dr.Deo Sharan Singh ( ICAR-NBSS&LUP)
- Dr Swapan Kumar Bhaduri( ICAR-NINFET)

- Smt.Sukla Mukhopadhyay ( ICAR-NINFET)
- Dr.Abhindra Day (ICAR-NINFET)
- Shri Nani Gopal Naskar (ICAR-NINFET)



Dr.Asok Biswas



Dr Samar Kumar Gangopadhyay



Dr Krishnendu Das



Dr.Deo Sharan Singh



Dr. Abhindra Day



Shri Nani Gopal Naskar



Dr Nimai Chandra Pan

### Achievements

1. Dr. K.K. Satapathy, Formerly Director ( ICAR – NINFET) presently President, ARICARE had performed

- Subject expert (external) in Screening-cum Evaluation Committee for screening of application for promotion of Teaching Faculties in Agricultural Engg. Discipline, CAU, Imphal.
- Chairman IAHF Award Evaluation Committee for selecting various Awards of Indian Association of hill Farming, Umiam , Meghalaya.
- Delivered Azadi ka Amrit Mahotsav lecture at ICAR Research Complex for NEH Region , Umiam , Meghalaya on 17<sup>th</sup> September , 2021.

2. Dr S. Biswas, Formerly Principal Scientist (ICAR- CRIJAF), Barrackpore, had been awarded 'Adarsh Vidya Sarswati Rashtriya Puraskar (National Award of Excellence 2021)' by Global Management council, Glacier Journal Research Foundation, Ahmedabad.

3. Dr. M. Datta ,Formerly Joint Director , ICAR Research Complex for NEH Region , Tripura Centre

- Performed as Member, IAHF Award Evaluation Committee for selecting various Awards of Indian Association of hill Farming, Umiam , Meghalaya.
- Delivered Azadi ka Amrit Mahotsav lecture on " Biodiversity: Pool of Local Germplasm" at ICAR Research Complex for NEH Region , Umiam , Meghalaya on 17<sup>th</sup> September , 2021.

4. Dr R.K. Sarkar , Formerly Emeritus and Principal Scientist ,( ICAR – NRRI) was involved
- Release of a Rice variety suitable for coastal areas in Eastern Region , CR Dhan 412 (vernacular name Ambiki) having tolerance under salinity and stagnant flooding condions.
  - Publication of two research articles in high Impact Journals ( <https://doi.org/10.1111/ppl.13536> , DOI:10.1007/s12298-021-01107-x) in 2021.

## Investment

### National Pension Scheme

S. C. Saha , Formerly Principal Scientist , ICAR – NINFET

#### Introduction

On October 10, 2003, the Government of India formed the Pension Fund Regulatory and Development Authority (PFRDA)- An External website that opens in a browser window to strengthen and administer the country's pension industry. On January 1, 2004, the National Pension System (NPS) was established with the goal of providing retirement income to all people.

The National Pension Scheme (NPS) intends to implement pension reforms and instil in citizens the habit of retirement planning. NPS was first intended for new govt recruits (except armed forces). NPS has been made available on a voluntary basis to all inhabitants of the nation, including disorganized sector employees, starting on May 1, 2009.

#### National Pension Scheme Eligibility Criteria

Following are the conditions which one must fulfil in order to be eligible for the National Pension Scheme -

- Employees of the Central Government

It applies to all new Central Government workers (excluding the Armed Forces) and Central Autonomous Bodies who join the government on or after January 1, 2004.

- Employees of the State Government

It applies to all workers of State Governments and State Autonomous Bodies who begin work after the date specified by the relevant State Government.

- Corporate

A corporation would have the option of making investment decisions at the subscriber level or at the company level for all of its fundamental subscribers.

- Individual

**21**

All Indian nationals seen between ages of 18 and 60 on the date of application to a Point of Presence (POP) / Point of Presence-Service Provider (POP-SP) can enter NPS.

- Swavalamban Yojana for Unorganized Sector Workers

A citizen of India between the ages of 18 and 65 on the date of application, who works in the unorganised sector or is not employed by the Central or state governments, or an autonomously body/public private enterprise of the Central or state governments, can create an NPS-Swavalamban account.

### Benefits Of National Pension Scheme

Key benefits offered by the National Pension Scheme are as follows -

- Transparent In Nature

NPS is a transparent and cost-effective system in which pension contributions are invested in pension fund schemes and employees may see the value of their investments on a daily basis.

- Simple Procedure

All the subscriber needs to do is create an account with his or her nodal office and obtain a Permanent Retirement Account Number (PRAN). It is transportable.

- Uniform In Nature

Each employee is recognised by a special code and has a distinct PRAN that is portable, which means that it will remain the same even if an operator is reassigned to another office.

- Income Tax

In addition to Rs 1.5 lakh tax saving under Section 80C , an additional deduction of upto Rs 50,000/-under Section 80CCD (1b) is allowed in NPS.The income accrued during continuance of the account is also tax free.

- It Is Well Regulated by Authorities

It is governed by the Pension Fund Regulatory and Development Authority- External webpage that loads in a new window, and it has transparent investing guidelines as well as frequent monitoring and performance reviews of every individual and organization connected.

### Conclusion

The government aims to create awareness regarding saving for the future by implementing the National Pension Scheme and it is highly advised to all government as well as non-government and corporate employees to invest their hard-earned money and save it for their post-retirement plans.



## Research and Entrepreneurship

Climate Resilient Agriculture in India

R. K. Sarkar, Formerly Emeritus & -Principal Scientist, ICAR – NRRI

In 2011, ICAR started a multi-crores mega-project entitled, “National Initiative on Climate Resilient Agriculture (NICRA)”. Scientists of ICAR –NRRI were involved in this mega project with responsibility to work mainly in two aspects related to germplasm improvement and agronomical manipulation to reduce Green House Gas Emission from rice fields. Being involved in germplasm improvement programme, different abiotic stresses such as drought, submergence, waterlogging / stagnant flooding and salinity were taken into consideration so that high yielding varieties with capacity to withstand adverse situations could be developed. Some of the achievements taking into consideration of coastal ecology and development of rice varieties suitable for coastal region are put forward.

The length of the Indian coastline is nearly 7517 Km and seventeen percent of National population reside within 50 Km stretches of the coastline. Rice is not only provided food security but also support the livelihood to most of them. People living in coastal area are now more vulnerable due to climate change. Different abiotic stresses such as salinity, waterlogging, drought, submergence influence rice productivity in these areas. Extreme events like flood, cyclonic storm are very common now (Fig. 1).

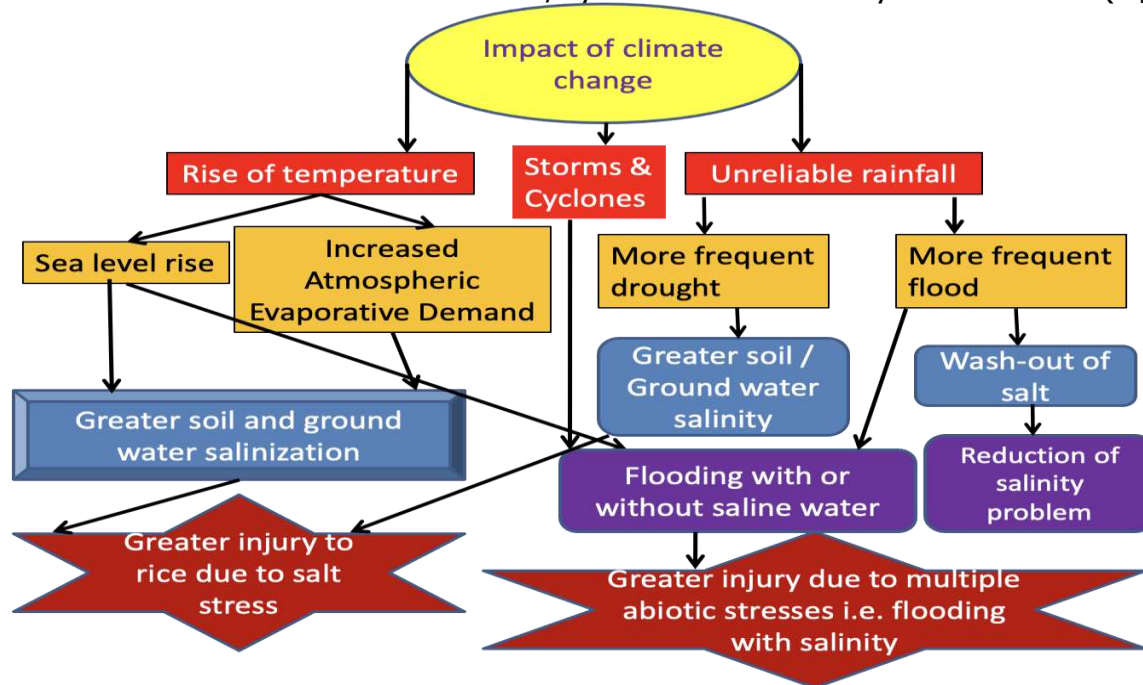


Fig. 1. Impact of climate change increasing the severity of different abiotic stresses in coastal area.



To keep pace with the ever-growing population; progressive and sustained increase in rice production is necessary here. In any achievements a good group is important. We made a team comprised of Plant Breeder, Plant Physiologist and Molecular Biologist. Our approach was to identify tolerant genotypes from Rice Genetic Pools. We carried out research so that basis of tolerance is known and applied such knowledge to discover new genes/QTLs (Quantitative Trait Loci). Molecular as well conventional breeding techniques were employed to develop new varieties tolerant to specific stress or combination of several stresses. Demonstration at farmers field were also carried out with old and newly developed materials at specific location where probability of abiotic stress was also high. Coastal districts of Odisha and Sundarbans area of West Bengal were chosen for demonstrations purposes. In West Bengal demonstrations of climate resilient rice varieties were done in five blocks of Sundarbans region, namely, Sandeshkhali-I and Hingalganj (Eastern part) of North 24 Parganas and Gosaba, Basanti and Patharpratima (Western part) of South 24 Parganas. Among the five blocks Patharpratima is the part of the Sundarbans Biosphere Reserve. Performance of NRRI climate resilient varieties were highly satisfactory (Fig 2 & Fig. 3).



Fig. 2. Performance of NRRI rice varieties at Salt-affected area of Sundarbans.

☞ RICE IS CULTIVATED IN 113 COUNTRIES – THE STAPLE FOOD FOR OVER HALF THE WORLD'S POPULATION. NINE OUT OF EVERY TEN PEOPLE IN THE WORLD WHO EAT RICE , ARE ASIAN ☞



Fig. 3. Performance of variety 'Varshadhan' in medium to semi-deep (water depth 30-70 cm) waterlogged areas in Sundarbans area.

Being involved as Emeritus Scientist, the work carried out , contributed further in the earlier work , done under the project NICRA. The achievements during the year 2021 is worthy to mention. The contribution is the release of rice variety namely, CR Dhan 412 (vernacular name Ambiki). This variety is suitable for coastal areas of eastern India. It can tolerate both salinity and stagnant flooding. It is also tolerant to Bacterial Leaf Blight, moderately tolerant to sheath rot, moderately resistant to stem borer and resistant to leaf folder. Duration of this variety is 140 days. It belongs to fine rice quality. Grain is medium-slender type. Two rice germplasm namely, 'Rahaspunjar' / Rashpanjor (Accession Number 42138, INGR 21116) and 'RemeniPokkali' (Accession Number 41585, INGR 21117) have been registered by Plant Germplasm Registration Committee, ICAR, New Delhi. 'RemeniPokkali' was collected from Kerala. This germplasm is highly tolerant to salinity. 'Rahaspunjar' / 'Rashpanjor', a unique germplasm collected from Odisha. This can tolerant multiple abiotic stresses. It tolerates to germination stage oxygen deficiency. It is also tolerant to salinity and stagnant flooding. As such stagnant flooding with saline water is more injurious to plant. This genotype can withstand such adverse condition of combined stresses. Along with applied research some fundamental works were also carried out that helped in publishing two research articles in high impact journals . In both the article 'Rashpanjor' was a study materials. One study was basic in nature while the another one was related to gene / qtl discovery. To overcome the waterlogging with saline water well developed aerenchyma is essential. Salt stress hamper the development of aerenchyma. Here in 'Rashpanjor' aerenchyma formation occur before the onset of stress. This well-developed constitutive aerenchyma provide an adaptive advantage in 'Rashpanjor'

during waterlogging with saline water. In the second article a recombinant inbred line (RIL) population was developed from crossing between Swarna and Rashpajnor. Genes / QTLs associated with stagnant flooding tolerance were identified .

Coastal ecology is more vulnerable now. Our initiative is already started to help to tackle the problems. The research Group is now working on these aspects are capable to solve such problem. Besides, other working groups from different Institutes would also do better if they utilize the registered germplasm tolerant to multiple abiotic stresses e.g. Rahaspanjur / Rashpanjor. No doubt rice cultivation in coastal areas will encounter more adverse climate, yet I hope the problem will be not be so severe as new technology / material is emerging, which will reduce the severity.

### **Passage to Economic Empowerment of Resource-Poor Forest Dwellers & Landless Farmers**

M.S.Basu MD SBSF Consultancy and Formerly Director ,ICAR-DGR.

Jackfruit, the biggest tree-borne fruits in the world, is believed indigenous to Western Ghats of India but also found in abundance as wild right from Eastern Ghats of Odisha to North-Eastern States without proper utilization by making diversified value added products, exploiting market potential, including export. Jackfruits occurring naturally and so abundantly can play a vital role in alleviating nutritional security and empowering resource-poor tribal farm families, economically. Paradoxically, India happens to be the home of world's largest malnourished and millions living below poverty line. Jackfruit, often referred as poor man's fruit is a good source of Vit. A, Vit. C, Vit. B6 besides iron, potassium, magnesium, and at the same time rich in dietary fibre. The yellow juicy fruit lobes with attractive aroma are also used in ice cream, jam, jelly, paste or papad, or canned and marketed. According to rough estimate, the wastage of jackfruit in India might be worth Rs 2,000 crore or more, annually though we have the Ministry of Food Processing, Public Institutions on Food Technology; Nutrition; Centre for Women in Agriculture to support such activities. It's high time to step out from hibernation in between produce and product to make Indian agriculture dynamic and serve the social cause.







View of Jackfruit and its products

## News / Technology Summary



Azadi Ka Amrit Mahotsav is an initiative of the Government of India to celebrate and commemorate 75 years of progressive India and the glorious history of its people, culture and achievements. This **Mahotsav is dedicated to the people of India** who have not only been instrumental in bringing India thus far in its evolutionary journey but also hold within them the power and potential to highlight the spirit of **Atmanirbhar Bharat**. Azadi ka Amrit Mahotsav is an embodiment of all that is progressive about India's socio-cultural, political and economic identity.

( Source : <https://amritmahotsav.nic.in/about.htm> )

### Agriculture Challenge Details

Besides stupendous progress in Agriculture from food crisis to food sufficiency with projected target of **307 million tones in 2021-22**, One of the biggest issues facing the agricultural sector in India is low yield: India's farm yield is 30-50% lower than that of developed nations. Average farm size, poor infrastructure, low use of farm technologies and best farming techniques, decrease of soil fertility due to over fertilization and sustained pesticide use, are leading contributors to low agricultural productivity. Indian Farmers have limited access to resources such as

financial services, credit (or lenders), support expertise, educational services  
Yield directly impacts a farmer's cash flow and the ability to respond to fluctuations in the market. In Long-term, yield limits a farmer's ability to invest into their farm's future to increase productivity and decrease risks associated with their crops (via inputs such as seeds, fertilizer, crop insurance, market/weather info, livestock health support, etc.) but also to invest into their families in areas such as education, healthcare, training, etc.

( Source : <https://www.startupindia.gov.in/content/sih/en/agriculture-challenges-detail.html> )

### **Natural Farming : NITI Initiative**

Natural Farming promoted under Paramparagat Krishi Vikas Yojana (PKVY), is a chemical-free alias traditional farming method. It is considered as agroecology based diversified farming system which integrates crops, trees and livestock with functional biodiversity. It is largely based on on-farm biomass recycling with major stress on biomass mulching, use of on-farm cow dung-urine formulations; periodic soil aeration and exclusion of all synthetic chemical inputs. Natural farming will reduce dependency on purchased inputs and will help to ease smallholder farmers from credits burden. Presently 4 lakh ha area is under Natural Farming and is expected to rise to 20 lakh ha in India.

( Source : <https://www.niti.gov.in/natural-farming-niti-initiative> )

### **Himachal Farmer's National Award Winning Apples can grow anywhere in India**

Shri Hariman Sharma a renowned progressive farmer hailing from Paniala village of Bilaspur district in Himachal Pradesh has developed an apple variety that can be grown in plain, tropical and subtropical areas. This apple variety does not require chilling hours for flowering and fruit setting. He has become a source of inspiration for thousands of farmers and agriculturists of Bilaspur and other lower hill districts of the state, the areas which earlier could never dream of growing the apple fruits.

Grows in low altitude at 1800 feet above the sea level and does not require chilling hours. Average yield (1 quintal /plant from 7 year old plant) .Ready to harvest in early June (after three years of transplanting). The variety is HRMN99.

( Source : <https://www.indiamart.com/proddetail/hrmn-99-apple-plant-hot-climate-variety-20112677455.html> )

### **New Technologies in Agriculture Sector**

In India, a digital agriculture mission has been initiated for 2021-2025 by the government for projects based on new technologies like artificial intelligence, machine learning, block chain, remote sensing and GIS technology, use of drones and robots etc. Farmers will be able to take informed decisions on what crop to grow, what variety of seed to use and what best practises to adopt to maximise the yield. Farmers can take informed decisions about whether to sell or store their produce and when and where and what price to sell. The digital ecosystem extends from crop selection to crop management and the market.

( Source : <https://www.outlookindia.com/website/story/new-technologies-modernisation-of-agriculture-sector/394823>)

## Ending Hunger

Across the world, **up to 811 million people do not have enough food**. According to recent estimates, **45 million people in 43 countries are at risk of sliding into famine** – the most extreme form of hunger, which can result in death from starvation or disease. The consequence of diets poor in vitamins, minerals and other nutrients are affecting the health and life prospects of millions more, and casting a shadow over the future of communities and entire countries. Although enough food is produced to feed everyone on this planet, the goal of a world with zero hunger, as set out in the 2030 Agenda for Sustainable Development and specifically in Sustainable Development Goal 2, remains hugely challenging due to a **toxic cocktail of conflict, climate change, disasters and structural poverty and inequality**. Over the past year, the **socio-economic consequences of the COVID-19 pandemic** have further exacerbated the situation by pushing millions of vulnerable people into greater food insecurity. **Dr. Rattan Lal**, World Food Laureate - 2020 stated that the "*Healthy Soil = Healthy Diet = Healthy People = Healthy Environment*" is the key to a healthier future. Currently, there are many hunger-fighting initiatives in India that include the National Nutrition Mission (NNM), National Food Security Mission, Zero Hunger Programme, Eat Right India Movement and efforts toward **food fortification**.

( Source : <https://www.wfp.org/ending-hunger>)

## Nutraceuticals

Nutraceuticals are **products**, which other than nutrition are also used as medicine. Nutraceuticals may be used to improve health, delay the aging process, prevent chronic diseases, increase life expectancy, or support the structure or function of the body. The food products used as nutraceuticals can be categorized as dietary fibre, prebiotics, probiotics, polyunsaturated fatty

acids, antioxidants and other different types of herbal/ natural foods. Nutraceutical products are Liquid Prenatal Vitamins ,Vitamin D3,Garcinia Cambogia, Raspberry Ketones, Green Tea Supplements, Echinacea, Probiotics, Omega 3 Fatty Acids, Alpha-lipoic Acid, Vitamin B12.

(Source : : <https://www.google.com/search?q=nutraceutical=Neutraceuticals>)

### Organ Transplant from Pig

A **US man** has become the first person in the world to get a **heart transplant from a genetically-modified pig**. The possibility of using animal organs for so-called xenotransplantation to meet the demand has long been considered, and using pig heart valves is already common. Pigs are increasingly becoming popular candidates for organ transplantation. This is because their organs are anatomically similar to those of humans. What's more, porcine components are more tuned for genetic engineering.

( Source : <https://currentaffairs.adda247.com/david-bennett-world-first-human-receives-a-pig-heart-transplant/>)

### Healthy Biscuits

Looking for healthy replacement of your regular tea-time snacks? Here're some options of healthy cookies and biscuits to choose from.During the ongoing pandemic time , attempts have been made to make healthy and palatable biscuits.Biscuits are Grain Ragi Gluten Free Cookies , Active Oats With Almonds Biscuits, Organic Ginger Oats Cookies, Food Assorted biscuits with dry fruits & seeds , ragi & chocolate, amarnath and multigrain millets , Biscuits made with oats, ragi, quinoa, satttu, amaranth and corn.

( Source : <https://food.ndtv.com/food-drinks/-healthy-cookies-and-biscuits-to-have-with-your-tea-or-coffee-2492003>)

### Obituary

Sri Tapas Kanti Das had left for heavenly abode on 02.08.2021 . .He retired from service on superannuation as Technical Officer(T-5), NBSS&LUP Regional Centre, Kolkata on 31.08.2013. We pray to the Almighty for eternal peace of the departed soul and render strength to the bereaved family.





Late Tapas Kanti Das

ONE INDIVIDUAL MAY DIE FOR AN IDEA , BUT THE IDEA WILL ,  
AFTER HIS DEATH, INCARNATE ITSELF IN A THOUSAND LIVES

NETAJI SUBHAS CHANDRA BOSE

