

ICAR CIWA NEWS

ICAR - CENTRAL INSTITUTE FOR WOMEN IN AGRICULTURE, BHUBANESWAR-751003

INSIDE THE ISSUE

02 Research Highlights

06 Important Events

22 Major Programmes

28 Human Resource Development

30 Extension Activities

34 Patent Granted

34 Technology Commercialized

39 Publications

41 Awards/Achievements /Recognitions

42 ICAR-CIWA in News



From the Director's Desk

The ICAR-Central Institute for Women in Agriculture strives to make significant advancements of techno-socio-economic importance for women in agriculture and allied sectors. Through innovative research, targeted training programs, and supportive policies, the institute aims to enhance women's access to advanced technologies and resources. During this quarter, the Institute achieved two design registrations for 'Vegetable Farming Structure with Internal Poultry Cage' and 'Women Friendly Integrated Vertical Nutri-farming System (IVNFS) for Vegetable Production with Mushroom'. The Institute celebrated its 29th Foundation Day with distinguished guests, including Dr. R.C. Agarwal, Deputy Director General (Agricultural Education) as Chief Guest, and Dr. Bimlesh Mann, ADG (EP & HS), along with Dr. P. K. Roul, Hon'ble Vice Chancellor of OUAT, Bhubaneswar, and Dr. Aparajita Choudhary, Hon'ble Vice Chancellor of Rama Devi Women's University, Bhubaneswar, as Guests of Honour. The significant research highlights for the period include the women empowerment in watershed programmes, *Azotobacter* bio-fertilizer for sustainable nutrient management in papaya for farm women, Impact of backyard poultry farming on household nutrition and income of farm families and farm women's response towards mushroom cultivation. The significant advancement in form of resource development included the inauguration of 'Food Extrusion Unit' and 'Bio-Resource Demonstration Unit'. These facilities are aimed at improving skill and technical expertise of farm women and helping them to develop their micro-enterprises. During this quarter the Institute commercialized the technology Tech CIWA-Hand operated Maize Dehusker-cum-Sheller. As a part of other events, the Institute celebrated the National Science Day and organized several programmes such as *Poshan mela*, Industry-Stakeholders Interface, *Krishi mela* and Millet exhibition. Additionally, other extension activities in form of farmer-scientist interfaces, capacity building, training programs, exhibitions and exposure visits were also conducted to benefit women farmers and other stakeholders. The Institute actively participated in various Government programmes including the Scheduled Castes Sub-Plan (SCSP) and the Swachh Bharat Abhiyan. A collaborative training with MANAGE, Hyderabad on 'Gender-Sensitive Agri-Horti based Dimensions for addressing Livelihood, Nutrition and Entrepreneurship' was also successfully organized during this period.

I am happy to present this edition of the Quarterly Newsletter and extend heartfelt thanks to all our collaborators and contributors for their exceptional efforts and cooperation. This edition highlights our collective achievements and ongoing initiatives, showcasing the remarkable progress we've made together. We look forward to continuing this journey and celebrating many more successes in the future.



(Mridula Devi)

RESEARCH HIGHLIGHTS

Livelihood Empowerment in watershed programmes: An assessment

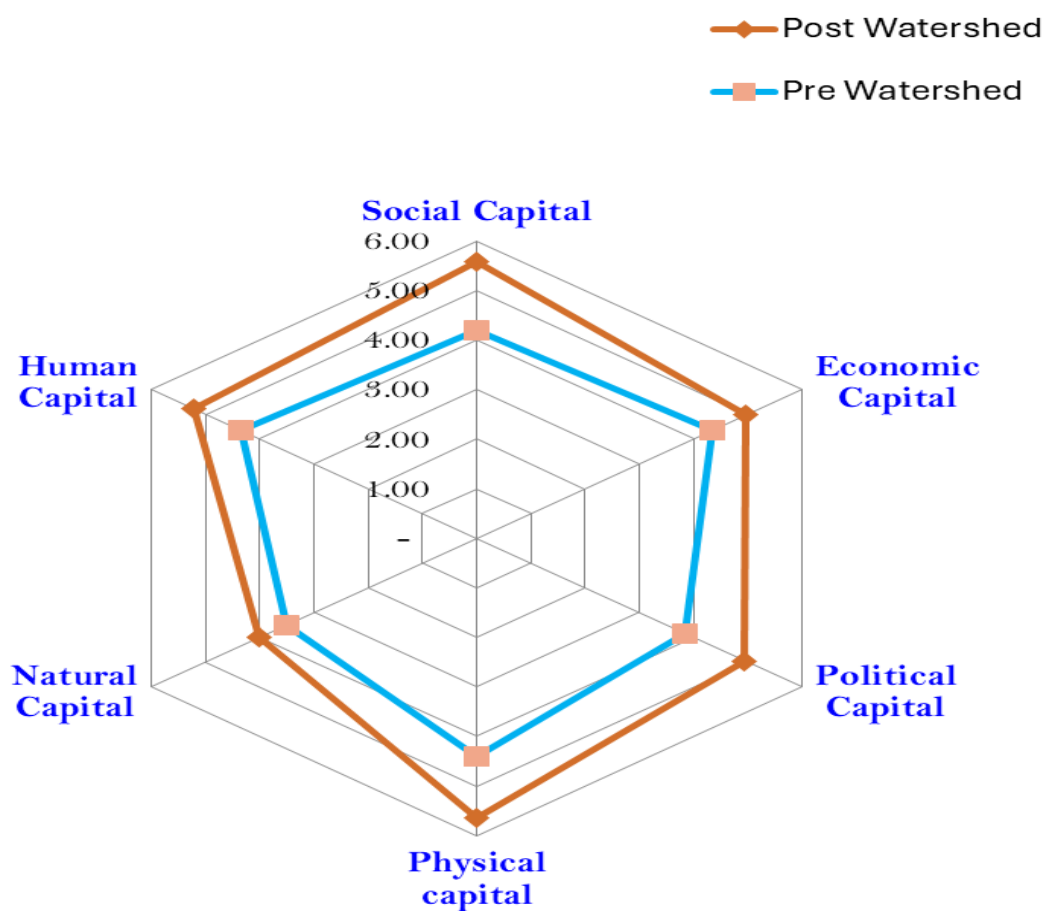
A comparative analysis of farm women in watershed areas and control areas across various dimensions of livelihood empowerment was done. The data shows significant differences between the two groups in almost all dimensions, with farm women in watershed areas consistently scoring higher. Social capital shows notable differences, with more farm women in watershed areas involved in social groups (Mean: 407) compared to control areas (Mean: 153), yielding a z-value of 19.04. Similarly, contact with progressive farmers is significantly higher in watershed areas (Mean: 348), highlighting the greater social networks available to farm women from watersheds. These results suggest that watershed interventions lead to stronger social capital. In terms of economic capital, farm women from watershed areas again fare better, with higher employment availability throughout the year (Mean: 342 vs. 218), resulting in a z-value of 9.75. The number of earning members and enterprises is slightly higher but not statistically significant, indicating room for further economic

inclusivity. Access to financial services is markedly better in watershed areas (Mean: 358 vs. 202), which underscores the importance of financial accessibility in empowering rural women. Political, physical, and human capitals also exhibit considerable differences. Participation in project planning and village development activities is significantly higher in watershed areas (Mean: 392 and 337, respectively), reflecting the active involvement of women in community development. Physical capital improvements such as infrastructure facilities and sanitation are also better in watershed areas, with z-values of 17.9 and 12.89. Notably, human capital indicators like female literacy and nutrition availability are significantly higher in watershed areas, corroborating earlier research that highlights the role of education and health in rural women's empowerment. The findings indicate that watershed development programs have a comprehensive impact on improving the livelihoods of women, enhancing their social, economic, and political standing.

Status of women empowerment: Watershed and controlled watershed villages

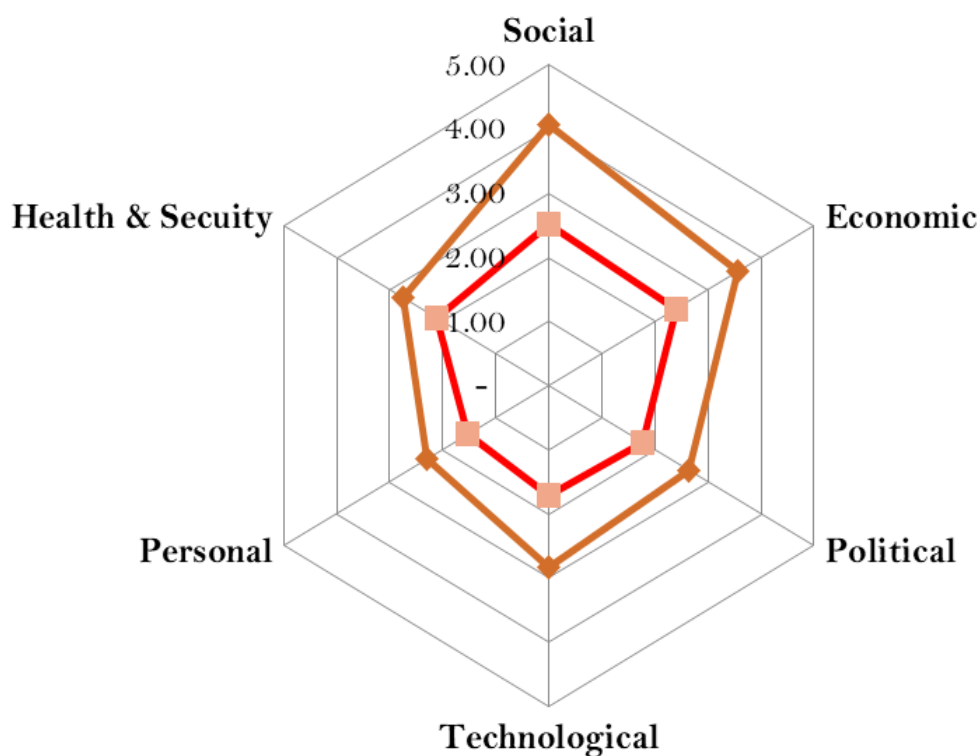
Dimensions of Livelihood empowerment	Sub dimensions	Mean score of farm women watershed (n=560)	Mean score of farm women from control (n=560)	Mann Whitney test z value
Social Capital	More no. of social groups	407	153	19.04
	Contact with progressive farmers	348	212	10.7
Economic Capital	Availability of employment throughout the year	342	218	9.75
	More number of earning members	306	254	3.9
	More number of enterprises	298	262	NS
	Access to financial services	358	202	11.6

Dimensions of Livelihood empowerment	Sub dimensions	Mean score of farm women watershed (n=560)	Mean score of farm women from control (n=560)	Mann Whitney test z value
Political Capital	Participation in project planning, implementation	392	163	17.25
	Participation in village development activities	337	223	8.8
Physical capital	Pucca house /paved roads	324	236	6.61
	Infrastructure facility (water, electricity)	399	161	17.9
	Basic sanitation facility	364	196	12.89
Natural Capital	Purchase of new land	289	211	NS
	Improvement in the existing land	328	232	7.31
Human Capital	Female literacy	350	210	10.5
	Availability of nutritious food for family	306	254	3.99



Changes in the dimension of livelihood wellbeing in pre and post watershed project period

—◆— Post Watershed —■— Pre Watershed



Changes in the dimension of women empowerment in pre and post watershed project period

Influence of *Azotobacter* on soil enzyme activities, nutrient acquisition and plant biomass in Papaya

Azotobacter are potential bio fertilizers to promote plant growth and improve soil properties. With an objective to formulate cost-effective, organic nutrient management practice in papaya for farm women, a study was conducted to evaluate the performance of *Azotobacter* as an organic nutrient management practice for papaya cultivation. The research assessed how different doses of *Azotobacter* (25g, 50g, 100g, 200g, and 400g plant⁻¹), applied at the time of planting influenced plant growth, nutrient content, and soil enzymatic activities, comparing these treatments with a control (unfertilized and un-inoculated) and a recommended dose of nitrogen from inorganic source. The results showed that applying *Azotobacter* @ 200g plant⁻¹ resulted in the

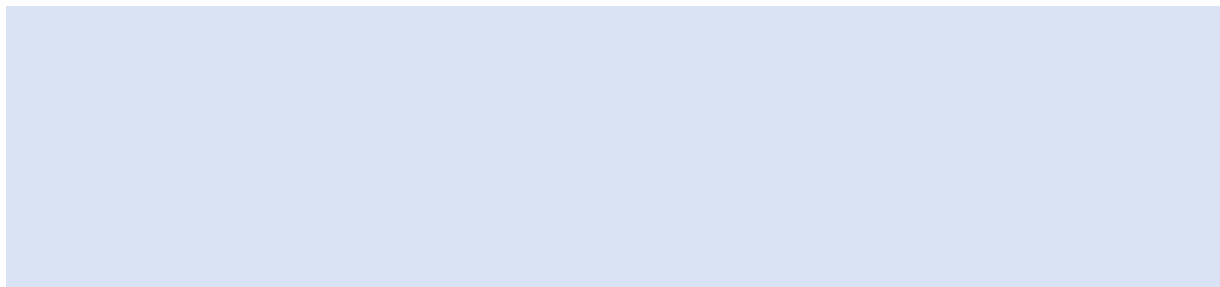
highest soil enzyme activities such as acid phosphatase activity (~1.88 times), dehydrogenase activity (~2.08 times) and FDA hydrolytic activity (~1.69 times) in comparison with inorganic nitrogen treatment. The nutrient levels were significantly higher compared to the control, specially nitrogen, which increased approximately 1.78 times, phosphorus about 2.54 times, potassium by 32.9%, calcium by 1.76 times, and magnesium by 2.13 times. Additionally, the 200g plant⁻¹ *Azotobacter* treatment yielded the highest plant biomass (~35.56% increase) and fruit yield (~33.67% increase), which were statistically comparable to those obtained with inorganic nitrogen. Thus, *Azotobacter* application @ 200g plant⁻¹ appears to be an effective and sustainable

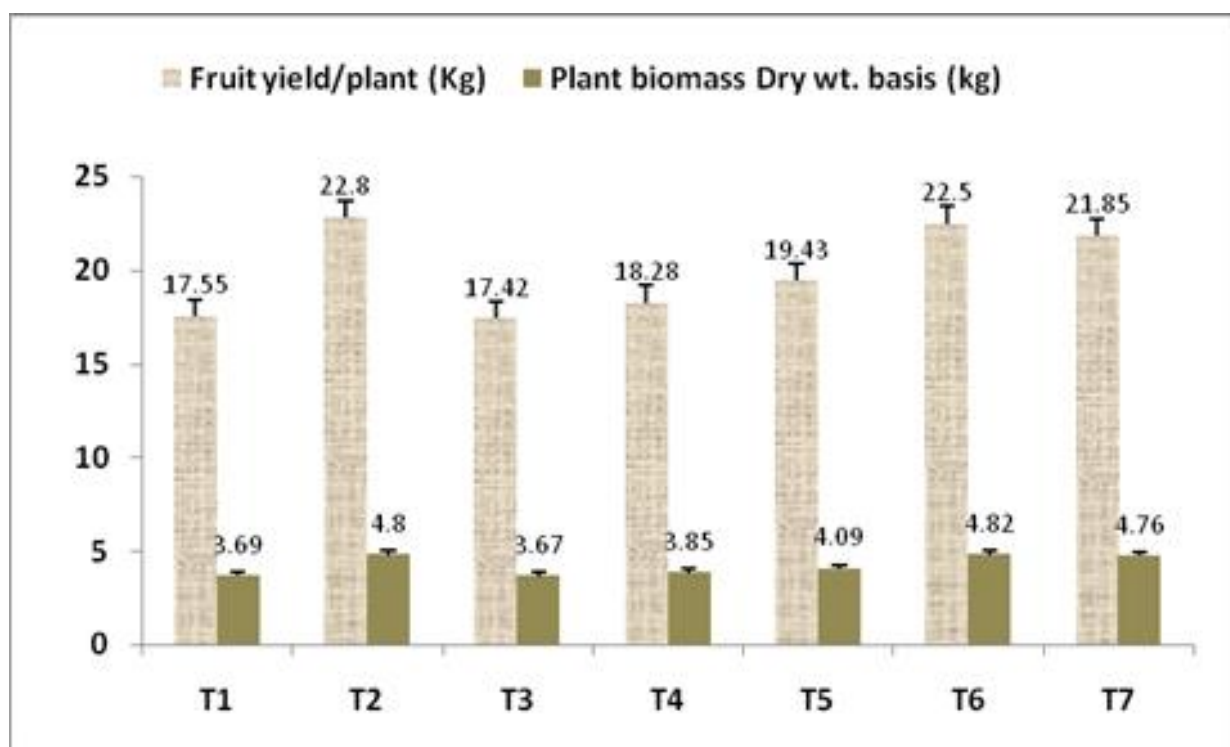
nutrient management approach for papaya cultivation. Its ease of application and integration into existing farming practices can make it a practical choice for small-scale farmers. Specially, for farm women who seek

sustainable and cost-effective farming practices, *Azotobacter* can provide significant advantages with minimal environmental impact and economic strain.



View of Papaya Experimental Unit





Impact of Azotobacter on plant biomass and fruit yield of Papaya

T₁: Control, T₂: Recommended dose of inorganic nitrogen, T₃: *Azotobacter* 25g plant⁻¹, T₄: *Azotobacter* 50g plant⁻¹, T₅: *Azotobacter* 100g plant⁻¹, T₆: *Azotobacter* 200g plant⁻¹, T₇: *Azotobacter* 400g plant⁻¹

Impact of Backyard Poultry Farming on Household Nutrition and Income of Farm Families

Backyard poultry farming has been recognized as one of the effective tools for poverty alleviation in rural households. It also generates supplementary income and provided valuable foods that improved household nutrition. Under the Nutri-smart village programme, a study was conducted to assess the impact of backyard poultry farming on household income and nutrition of 184 farm families in 10 villages of four districts of Odisha. The farm women were imparted training on scientific management practices in backyard poultry rearing. Subsequently, 20 Vanaraja/RIR chicks were distributed to each selected beneficiaries along with critical inputs like poultry feed, feeders and waterers. The performance of the birds was monitored on periodical basis. The rearing of 20 birds (10 males and 10 females) by

household has increased their net income. Around Rs. 3500/- net income was earned by each family through sale of male birds at 3 months of age. Subsequent rearing of females further increased their income by Rs 5100/- through the sale of eggs. Taking eggs and meat, net income per household per annum was around Rs. 8500-8600/-. The higher net income is attributed to the higher price of meat (Rs. 300/kg live weight) and egg (Rs. 10 per egg) in the rural area. One of the most important observations was poultry keeping provided an opportunity to the farm family to make egg an integral part of their diet. The frequency of consumption of eggs and chicken meat increased by 674.59 % and 255.55%, respectively in the study, area which has contributed to household nutrition.



Backyard Poultry Rearing

Farm Women's Attitude towards Mushroom Cultivation

Rice is the major crop in Odisha, leading to an abundant availability of paddy straw in the state. To utilize this resource, paddy straw mushroom cultivation was introduced to 800 farm women across three blocks- Nimapara, Pipili, and Sakhigopal -in Puri district. The initiative aimed to create employment opportunities, increase income, and improve nutritional security for farm families. After two years of this intervention, the attitudes of these farm women towards mushroom cultivation were assessed using a four-point scale: 'strongly positive' (>4.0), 'positive' (3.1-4.0), 'less positive' (2.1-3.0), and 'negative' (up to 2.0). The evaluation focused on ten key aspects of the technology: i)

simplicity, ii) ease of handling, iii) low investment requirement, iv) suitability as a leisure activity, v) profitability, vi) employment opportunities, vii) suitability for small, marginal, and landless farmers, viii) contribution to family nutrition, ix) compatibility with socio-cultural practices, and x) contribution to livelihood improvement. The overall attitude score of the farm women averaged 4.51, indicating a 'strongly positive' response towards mushroom cultivation. These findings suggest that mushroom cultivation is a women-friendly technology that can significantly enhance the livelihoods of rural women, warranting further promotion in these communities.

ESTABLISHMENT OF FACILITIES AT ICAR-CIWA

Food Extrusion Unit

In a bid to enhance economic security and empowerment of women farmers through secondary and tertiary processing of food products, the Institute has established the food extrusion unit, which was inaugurated by Dr. R.C. Agrawal, Hon'ble DDG (Edu.), ICAR-New Delhi on 17 February 2024 during the 28th Foundation Day of the Institute. Extrusion in food processing consists of forcing soft mixed ingredients through an opening in a perforated plate or die designed to produce the required shape. The extruded food is then cut to a specific size by blades. Extrusion

enables mass production of food via a continuous, efficient system that ensures uniformity of the final product. These include some pasta, breads (croutons, bread sticks, and flat breads), many breakfast cereals and ready-to-eat snacks, confectionery, pre-made cookie dough, some baby foods, full-fat soy, textured vegetable protein, some beverages, and dry and semi-moist pet foods. Such facilities at the Institute are aimed to provide entrepreneurship development programmes to women farmers to initiate their agri-business.



Inauguration of Food Extrusion Unit by Hon'ble DDG (Edu.) Dr. R.C. Agrawal and demonstration of millet based extruded products

Bio-Resource Demonstration Unit

The sustainable adoption of organic management practices by farmers depends upon several factors and one significant factor is agri-input provisioning. Timely access to organic inputs, such as soil fertility enhancers, plant growth promoters, bio-formulations for seed treatment and natural pest repellents can encourage small holder farmers to adopt chemical-free farming practices. Encouraging women's groups to initiate mass production of these bio-formulations in villages will serve as an initiative to integrate farm women into

group-based agricultural entrepreneurship and promote socio-economic empowerment. In order to develop capacity building of farm women in preparation of various bio-formulations, a bio-resource demonstration unit has been established at the Institute. The unit has the facility to provide comprehensive training on various aspects viz., preparation of compost, vermicompost, soil fertility enhancers (Jeevamrutha, Ghanajeevamrutha, Sanjivak, Amritpani), plant growth promoters (Panchagavya, enriched Panchagavya, Saptha

Dhanya Kashayam), bio-formulation for seed treatment (Beejamrut) and pest repellants (Neemastra, Agniastra, Brahmastra, Dashparni, Handikhata (pot medicine), Neem leaf extract, Neem seed kernel extract, Garlic, Chilli, Ginger extract and Aloe vera extract. Additionally, the unit also has a compost unit, vermicompost unit

and a bio-garden comprising of several plants, which serve as sources for various inputs required in preparation of several bio-formulations/ botanicals. The unit is established to empower farm women and women groups who aspire to establish a small-scale bio-resource production unit in their villages.



Visit of Hon'ble DDG (Edu.) Dr. R.C. Agrawal to Bio-resource Demonstration Unit

IMPORTANT EVENTS

Celebration of 29th Foundation Day

ICAR-Central Institute for Women in Agriculture celebrated its 29th Foundation Day on 17 February 2024. Dr. R.C. Agrawal, Deputy Director General (Agril. Edu.), ICAR, New Delhi graced the occasion as the Chief Guest. Dr. Bimlesh Mann, ADG (EP & HS), ICAR, New Delhi, Dr. P. K. Roul, Hon'ble Vice

Chancellor, Odisha University of Agriculture & Technology, Bhubaneswar and Dr. Aparajita Choudhary, Hon'ble Vice Chancellor, Rama Devi Women's University, Bhubaneswar were the Guests of Honour. Besides, there were many other dignitaries from ICAR, SAUs and NGOs who attended this auspicious function. The

Director of the Institute, Dr. Mridula Devi, Director ICAR-CIWA welcomed all the delegates and highlighted the significant achievements of the Institute including technology certification and commercialization, patent design registration, extension models, etc. for skill development. The Director also highlighted the role of ICAR-CIWA in empowerment of farmwomen through 'SASHAKTI Krushirat Mahila Club'. Dr. Bimlesh Mann, ADG (EP & HS), ICAR appreciated ICAR-CIWA as a unique and premier Institute for empowering women in the field of agriculture. She further focused upon scientific packaging and branding of different products prepared by SHGs/FPOs. Dr. P.K. Roul, Hon'ble Vice Chancellor, OUAT emphasized on transformation of conventional

agriculture towards smart agriculture. He also highlighted the social enterprise through collective approach, which can strengthen the livelihoods of farm women. Dr. Aparajita Choudhary, Hon'ble Vice Chancellor, Rama Devi Women's University, Bhubaneswar, suggested for conducting research on work life balance of farm women for their better lifestyle. On this occasion, the Food extrusion unit and Bio-resource demonstration unit were also inaugurated by the Dignitaries. Twenty five progressive farm women from different adopted villages were awarded for their noteworthy contribution. About 300 farmwomen from the adopted villages of different districts of Odisha and 240 students of Kendriya Vidyalaya, Bhubaneswar participated in the programme.



Celebration of 29th Foundation Day of ICAR-CIWA

ICAR-CIWA conducted session entitled ‘Redressal of Gender Issues in Agriculture for Growth and Development of Farm Women’ during Krushi Odisha-24

The Institute conducted the session entitled ‘Redressal of Gender Issues in Agriculture for Growth and Development of Farm Women’ on 12 January 2024 during Krushi Odisha-24 in Bhubaneswar. On this occasion, Dr. Mridula Devi, Director ICAR-CIWA delivered a talk on ‘Bridging the gender gap in agriculture: Issues and Strategies, emphasizing on the current needs to be inculcated in the socio-economic scenario for women empowerment’. Padma Shri Dr. Sabarmatee enlightened on ‘Conservation Agriculture: A gender Perspective for the benefit of farm women’. Dr. A.K. Panda, HoD, ICAR-CIWA shared about the ‘Livelihood enhancement opportunities for farm families through Women friendly technologies’. The session highlighted rural women as key custodians of India’s traditional agricultural wisdom, actively conserving soil, water, and resources to mitigate climate change impacts. Women farmers harmonize with nature, reducing ecological harm, essential in our changing climate. As men migrate to cities, women shoulder agriculture's burden, juggling roles as cultivators, entrepreneurs, and laborers. However, their toil poses a challenge to sustainability. To empower women, we must offer user-friendly tools, knowledge, better machinery, and ICT access, ensuring they benefit equally from agricultural advancements



Session lecture delivery by Dr. Mridula Devi, Director ICAR-CIWA



Experience sharing by a progressive women farmer

Poshan Mela cum Exhibition-2024

ICAR-CIWA Poshan Mela cum Exhibition-2024 with the theme '*Suposhit Bharat Sashakt Bharat*' was organized on 6 March 2024. On this occasion, Dr. Sujata Mishra, Director PGIMER and Capital Hospital graced the occasion as Guest of Honour. Dr Mridula Devi, Director, ICAR-CIWA emphasized the importance of balanced diet, nutri-rich foods, exercise and meditation for quality life of farm women. Smt. Kabita Mahapatra, CDPO, Bhubaneswar delivered talk on 'Importance of Nutrition on Human Health with Special Reference to

Vulnerable Group'. She also highlighted various government schemes related to women's health and nutrition. More than 300 farmwomen from various villages of four districts (Khordha, Puri, Cuttack & Jagatsingpur) of Odisha adopted under Nutri-Smart Village Project along with staff of ICAR-CIWA participated in this programme. An exhibition was also organized to showcase the traditional food/recipes/nutri thali prepared by women SHGs to combat malnutrition.



Visit of delegates to various stalls during Poshan Mela-cum-Exhibition-2024

Industry-Stakeholders Interface-2024

ICAR-CIWA-Industry-Stakeholders Interface-2024 was organized on 6 March 2024 to provide a convergence platform for promoting Women Friendly Technologies and Agri-preneurship among farm women and industries. The major objective of the interface was to promote public-private partnerships and provide a platform to showcase women friendly technologies to clients/ technology partners and to receive the feedback from the entrepreneurs. Dr. Mridula Devi, Director, ICAR-CIWA, extended a warm welcome to all the stakeholders from various Govt. Organisations, NGOs, FPOs and

emphasized upon importance of industry meet, agri-preneurship and government policies. The Director also emphasized on different drudgery reducing technologies developed by ICAR-CIWA and their usefulness for farmer community. Invited speaker Mr. Sanjay Patel, Designated Officer, FSSAI enlightened on the importance of FSSAI certification, and detail procedure for applying FSSAI certification. Mr. Manas Kumar Das, Chartered Accountant and GST expert drew attention on importance of GST registration for business carried out by women entrepreneurs.



Organization of Industry-Stakeholders Interface-2024

Krishi Mela-cum-Millet Exhibition

Krishi Mela-cum-Millet Exhibition was organized by the Institute on 14 March 2024 at Srirampur village under Balipatna block of Khordha District. The programme was inaugurated by the Chief Guest Padma Shri Bata Krushna Sahoo and presided over by Dr. Mridula Devi, Director, ICAR-CIWA, Bhubaneswar & Chairperson, KMME-2024. The Director of the Institute, Dr. Mridula Devi delineated the core role of farm women in enhancing the agricultural production and highlighted the different programmes and activities undertaken by the Institute. An Inspirational talk on 'Shree Anna: The Super and Spiritual Food for Taking India towards Food and Nutritional Security' was delivered by Er. Sandip Kumar Sen, Director, Sandipan Research Centre, Puri. The programme was graced by Mr S K Chatterjee, State Head, IFFCO, Bhubaneswar; Er. Sandip Kumar Sen, Director, Sandipan Research Centre, Puri; Mr Brajakishore Swain, Managing Director, Millet

More Industry Pvt. Ltd., Bhubaneswar; Dr Harapriya Nayak, Senior Scientist and Head, KVK, ICAR-CIFA; Mr. Satya Swaroop Nanda, Head of ODI Nature Agro Food Pvt. LTD., Cuttack; Mr Suresh Kumar Tripathy, Secretary, NIGAM NGO, Bhubaneswar; Mr Haraprasad Pradhan, Chairman, Agrodham; Mrs. Kumudini Swain, Chairperson and Mr. Nimai Charan Nayak, Marketing Head, Maheera Farmer Produce Company Limited; Sarpanch, and Nominee of Panchayat Samiti Sabhya etc. In this programme an exhibition has also been organized in which various millet-based products and other women friendly technologies in agricultures and allied sectors have been showcased by ten different organizations and more than 450 participants including scientists and staff of ICAR-CIWA, farm women, farmers, Personnel from Line Department, NGOs, FPCLs, media persons etc. participated in the programme.



Krishi Mela-cum-Millet Exhibition-2024

CIWA Krushi Fair-2024

ICAR-Central Institute for Women in Agriculture, Bhubaneswar organized Krushi Fair-2024 at Balanga Panchayat, Puri district of Odisha on 24 January 2024. The Chief Guest in the Krushi Fair, Shri. Samir Ranjan Dash, Hon'ble Member of Odisha Legislative Assembly, Nimapara, Puri and former Minister of Education (School and Mass Education), Govt. of Odisha inaugurated the programme. Dr. Mridula Devi, Director ICAR-CIWA appreciated the progress of CIWANI Women Farmers Producer Company and highlighted the consistent efforts of ICAR-CIWA in techno-socio-economic empowerment of farm women

for bridging gender gaps. Smt. Anjali Baral, Sarapanch; Sri Sankar Bhoi, Block Chairman; Smt. Anusaya Mohanty, Vice-chairman; Dr. Sumita Acharya, Scientist, KVK; Mr. Jitendra Kumar Jena, Manager, State Bank of India; Mr. Subodh Kumar Naik, IPO also graced the occasion and addressed the gathering. In the Krushi fair, 14 exhibition stalls were established and more than 400 women farmers participated in it. A Custom Hiring Centre (CHC) was also established for income generation by SC farm women in Mandiakud village of Nimapara block on the day.



CIWA Krushi Fair-2024

National Science Day 2024

The Institute organized the National Science Day-2024 at PM SHRI Kendriya Vidyalaya 2, CRPF Bhubaneswar. On this occasion, the school children were sensitized about the importance of the day and a lecture on 'Considering Agricultural Sciences as a choicest career option' was delivered. The school children were enlightened about the National Science Day's theme 'Indigenous Technologies for Viksit Bharat' which embodies the essence of self-reliance and technological advancement in India. In the pursuit of progress and development, the focus on indigenous technologies becomes pivotal, not only for economic growth but also for fostering innovation and sustainability. The children were

motivated for emphasizing the importance of developing a culture of innovation and entrepreneurship in India by leveraging indigenous technologies and emerge as entrepreneurs to create product and services that cater to local demands while also competing in the global market. During the celebration, various other topics were discussed, including pressing global and national scientific concerns such as climate change, sustainable development, nutrition security, and the digitization of agriculture. Overall the celebration encouraged scientific deliberations and discussions. The overarching goal was to inspire young minds to pursue careers in the field of science, fostering enthusiasm and motivation for scientific inquiry and discovery.



Celebration of National Science Day

MAJOR PROGRAMMES

SCSP

Scheduled Castes Sub Plan (SCSP) is a central scheme under which Scheduled Castes persons living below the Poverty line are the target groups. The main objective of the scheme is to give a thrust to family and women-oriented schemes of economic development of SC families below the poverty line, by providing resources for filling the critical gaps. Under this programme, ICAR-CIWA focuses on technology dissemination, capacity building, livelihood support, skill, and entrepreneurship development of farm women for their techno

socio-economic empowerment. During this quarter a total of 5 nos. of capacity building programmes were organised at Puri, Khordha and Institute campus. A total of 215 nos. SC farm women were covered during this quarter under various capacity and skill building programmes. On different occasions, multidisciplinary team of scientists interacted with different women FPOs, Industries and other stakeholders for development of SC women entrepreneurship and enhancing the business and marketing opportunities.

S.No.	Programme	Location	Duration	No. of participants	Coordinator/ Team
1.	Training programme on effective poultry management and chicks distribution	Srirampur, Balipatna, Khordha	9 February 2024	70	Dr. B. Sahoo
2.	Training on rearing of day old chicks	Chhotijodi, Kanas, Puri	9 February 2024	50	Dr. Ananta Sarkar Mr. B.C. Behera
3.	Training on rearing of day old chicks	Balanga, Nimapada, Puri	9 February 2024	10	Dr. Ananta Sarkar Mr. B.C. Behera
4.	Training programme on millet value added products and market linkage for entrepreneurship	ICAR-CIWA, Bhubaneswar	21-23 February 2024	20	Dr. Jyoti Nayak
5.	Training programme on dairy, goatry fodder cultivation and poultry management	Srirampur, Balipatna, Khordha	2 March 2024	65	Dr. B. Sahoo

Swachha Bharat Abhiyan

Initiatives promoting cleanliness both within and outside the campus were organized as a part of Swachha Bharat Abhiyan. Several cleanliness and sanitation drives were organized by ICAR-CIWA during this period.

Demonstration of agricultural technologies for conversion of waste to wealth like vermi-composting was made for farmers in field for resourceful agricultural waste disposal and conversion of waste to wealth.

HUMAN RESOURCE DEVELOPMENT

Training/ Seminar/ Symposium /Workshop organized

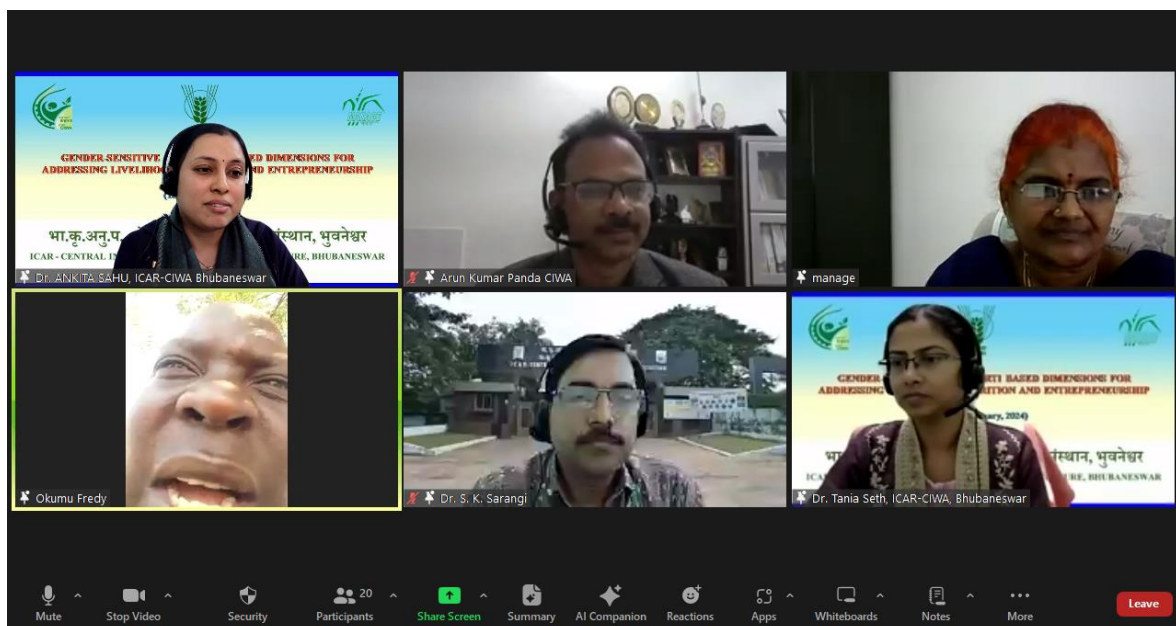
ICAR-CIWA and MANAGE, Hyderabad On-line Collaborative Training Programme

ICAR-Central Institute for Women in Agriculture, Bhubaneswar in collaboration with MANAGE, Hyderabad organized an on-line collaborative training programme on 'Gender-Sensitive Agri-Horti based Dimensions for addressing Livelihood,

Nutrition and Entrepreneurship' during 15-19 January 2024. The training programme was intended to enhance the knowledge and skill of extension functionaries on gender sensitive approaches and technologies in agriculture and horticulture sectors for improving livelihood,

enhancing nutrition and promoting agri-preneurship among rural farm women. The training encompassed lectures from five major domains, viz., Gender-sensitive and gender-centric extension approaches in disseminating agri-horti technologies among farm women; Innovative production technologies in agricultural and horticultural crops for enhanced productivity and profitability; Nutri-sensitive agri-horti technologies, farming models, value addition for enhancing family nutrition; Secondary agriculture and value

addition in agriculture and horticulture sectors for entrepreneurship development among farm women and Agripreneurship promotion through formation of Farmers Producers Organizations (FPOs), multi-stakeholder convergence, market and industrial linkages. The training comprised of 20 lectures including 8 lectures from Guest Experts from various ICAR organizations, viz., IARI, New Delhi; IIHR, Bengaluru; CISH, Lucknow; CIFE, Mumbai, NAARM, Hyderabad; IIWM, Bhubaneswar and MANAGE, Hyderabad.



Glimpses of CIWA-MANAGE Collaborative On-line Training Programme

Training/ Seminar/ Symposium /Workshop attended

- Dr. Ankita Sahu attended a training programme on 'Digital Competency, New Tools and Software for Efficient Computer Applications' organized by ICAR-IASRI, New Delhi from 03-09 January 2024.
- Dr. Jyoti Nayak, Dr. L.P. Sahoo, Dr. S. Swain, Dr. Tanuja S., Dr. Tania Seth and Er. C.S. Mhatre participated in the International Conference on 'Agriculture for Sustainable Development (Agri Vision 2024)' at ICAR-NRRI, Cuttack during 19-21 January 2024.
- All the scientist of the Institute attended the inaugural session of knowledge dissemination workshop (Grameen Foundation) at ICAR-CIWA on 23 January 2024.
- Dr. Praveen Jakhar attended Seminar on ensuring inclusion and equity in Pani Panchayat at Conventional hall, Lok Seva Bhawan, Bhubaneswar on 30 January 2024.

- Dr. Praveen Jakhar attended ‘State Workshop on ICARDA - OIIPCRA Collaborative Project at Mayfair Convention Hall, Bhubaneswar, Odisha on 31 January 2024.
- Er. C.S.Mhatre attended a workshop on ‘Srijan 2.0: Workshop for strengthening

the ITMUs/ZTMCs of ICAR’ at NASC, New Delhi from 13-14 February 2024.

- Er. Chaitrali S. Mhatre Participated and presented technologies of ICAR-CIWA in SANGAM-2024 at ICAR-NRRI, Cuttack on 15 March 2024.

EXTENSION ACTIVITIES

A. Training, Workshops, Demonstrations, Field day & Awareness Programmes

S.No.	Programme	Location	Duration	No. of participants	Coordinator/Team
1.	Awareness programme on ‘Strengthening Livelihood of Women Farmers through Climate Resilient Livestock Production’	Kajipatna, Nimapara Puri	5 January 2024	50	Dr. A. Mohapatra Dr. A. K. Panda
2.	Awareness programme on ‘Post Stocking Management of homestead ponds’	Narakoligoroda, Satyabadi, Puri	10 January 2024	20	Dr. Tanuja S.
3.	Awareness programme on ‘Strengthening Livelihood of Women Farmers through Climate Resilient Livestock Production’	Mamdapur, Kujanga, Jagatsinghpur	19 January 2024	50	Dr. A. Mohapatra Dr. A. K. Panda
4.	Training programme on 'Utilization of fallow homestead through development of green garden for enhancement of family nutri-health'	Balanga, Nimapara, Puri	27-29 February 2024	45	Dr. Sabita Mishra
5.	Demonstration on farm made fish feed preparation and hygienic solar drying	Narakoligoroda, Satyabadi, Puri	28 February 2024	60	Dr. Tanuja S Dr. Sukanta Kumar Sarangi
6.	Training-cum-Demonstration Programme on “Women Friendly	Alando, Jagatsinghpur; Mendhasala, Khordha; ICAR-	4-6 March 2024	65	Dr. Tania Seth Mr. S.K. Behera

S.No.	Programme	Location	Duration	No. of participants	Coordinator/Team
	Multipurpose Integrated Vertical Nutri-Farming System for Household Production and Nutrition”	CIWA, Bhubaneswar			
7.	Capacity Building Programme on “Women Empowerment in Animal Husbandry sector through Women Friendly technologies”	ICAR-CIWA, Bhubaneswar	4-6 March 2024	26	Dr. B. Sahoo Dr. A.K. Panda
8.	CIWA Krushi Upayogi Gyan Mela-2024	Balipatna, Khordha	7 March 2024	350	Dr. Sabita Mishra
9.	Workshop on climate resilient agriculture for sustainable food security and income enhancement	Keonjhar, Odisha	15 March 2024	700	Dr. P. Jakhar
10.	Capacity Building Programme on Application of Drone	Ghsipura & Anandapur Block Keonjhar (2 nos.)	13-14 March 2024	422	Dr. Neetish Kumar Dr. P. Jakhar
11.	Technology for Efficient Resource Management and	KVK, Bhadrak and Rani Taal, Bhadrak (2 nos.)	15 March 2024	750	Dr. Neetish Kumar Dr. P. Jakhar
12.	Sustainable Agriculture	Purshottampur and Rambindha, Balasore (2 nos.)	16 March 2024		Dr. Neetish Kumar Dr. P. Jakhar
13.	Field day on ‘Value Chain Development and Market Linkages: Enhancing Farmers Income and Market Access’	Jogiabandha, Keonjhar	14 March 2024	40	Dr. S. Swain Dr. P. Jakhar Dr. Neetish Kumar
14.	Workshop on ‘Climate Resilient Agriculture for sustainable food security and income enhancement’	Ghasipura Keonjhar	15 March 2024	650	Dr. S. Swain Dr. P. Jakhar Dr. Sabita Mishra Dr. Neetish Kumar
15.	Sensitization programme on ‘Digital Agriculture’	Abhayamukhi, Balipatna, Khordha	16 March 2024	200	Dr. A. Sarkar Dr. Sabita Mishra

B. Exhibitions

- ICAR-CIWA showcased the Institute's technologies in Krushi Odisha-2024 during 12-14 January 2024
- ICAR-CIWA showcased the Institute's technologies at CHES, Bhubaneswar on the occasion of 'Capacity building in Horticultural crops and Essential Input distribution to SC farmers' on 17 January 2024.
- ICAR-CIWA showcased the Institute's technologies in at the International Conference on 'Agriculture for Sustainable Development (Agri Vision 2024)' at ICAR-NRRI, Cuttack during 19-21 January 2024.
- ICAR-CIWA showcased the Institute's technologies at Regional Agricultural Fair (RAF)- North Zone at ICAR-IIVR Varanasi from 3-5 February 2024
- ICAR-CIWA showcased the Institute's technologies at One day Kissan Mela cum Exhibition on Scientific Aquaculture at ICAR – CIFA, Kaushalyaganga on 20 February 2024
- ICAR-CIWA showcased the Institute's technologies in Kisan Gosthi at Mandalia Ground Sambalpur on 13 March 2024
- ICAR-CIWA showcased the Institute's technologies at SOA Agri-confluence 2024 at Siksha O Anusandhan, Bhubaneswar during 12-13 March 2024



Stall of ICAR-CIWA displaying technologies at Krushi Odisha-24



ICAR-CIWA Exhibition stall at Agri Vision 2024



CIWA Exhibition stall at SOA Agri-confluence 2024

C. Exposure visits

S.No.	Programme	Duration	No. of participants	Coordinator/Team
1	Exposure visit of RNTAC, Deogarh (BAU, Ranchi, Jharkhanda)	02 January 2024	86	Mr. M. Prusty
2	Exposure visit of dairy farmers of Ganjam sponsored by Tata Steel Foundation	11 January 2024	32	Dr. A. Mohapatra
3	Exposure visit of Kendriya Vidyalaya-4 Bhubaneswar students under PM Shri Scheme	18 January 2024	270	Dr. D.N. Sarangi Mrs. Tapaswini Sahoo
4	Exposure visit of Kendriya Vidyalaya-4 Bhubaneswar students under PM Shri Scheme	19 January 2024	166	Dr. D.N. Sarangi Mrs. Tapaswini Sahoo
5	Exposure visit for Senior Journalists from Meghalaya under Viksit Bharat Sankalp Yatra (VBSY)	19 January 2024	20	Dr. Sabita Mishra
6	Exposure visit of Kendriya Vidyalaya- 6Bhubaneswar students under PM Shri Scheme	30 January 2024	337	Dr. D.N. Sarangi
7	Exposure visit of Kendriya Vidyalaya- Khurda Road students under PM Shri Scheme	13 February 2024	477	Dr. D.N. Sarangi
8	Exposure visit for the farmers from Tripura	15 February 2024	35	Dr. Sabita Mishra
9	Exposure visit of Kendriya Vidyalaya- Khurda Road students under PM Shri Scheme	17 February 2024	241	Dr. D.N. Sarangi
	Exposure visit of Kendriya Vidyalaya- 3 students under PM Shri Scheme	19 February 2024	235	Dr. D.N. Sarangi
10	Exposure visit of farmers NCUI project, Puri ward no- 4, Bhabanipur Pipili	23 February 2024	25	Mr. M. Prusty
11	Exposure visit of Kendriya Vidyalaya- 3 students under PM Shri Scheme	23 February 2024	318	Dr. D.N. Sarangi
12	Two days exposure visit of farmers from different villages of Anandpur block of Keonjhar district under OIIPCRA Project	5-6 March 2024	25	Dr. P. Jakhar
13	Exposure visit of progressive farmers and farm women from Kandhamal district of Odisha along with officials of Society for Nature, Education and Health (SNEH)	21 March 2024	30	Dr. Ankita Sahu Mr. M. Prusty

DESIGN REGISTRATION

S. No.	Title	Design Application Nos.	Grant Date
1	Vegetable Farming Structure with Internal Poultry Cage	382532-001	05.01.2024
2	Women Friendly Integrated Vertical Nutri-farming System (IVNFS) for Vegetable Production with Mushroom	382531-001	15.03.2024

INTELLECTUAL PROPERTY INDIA
भारत सरकार
The Patent Office, Government Of India

पेटेंट कार्यालय, भारत सरकार | The Patent Office, Government Of India

डिजाइन के पंजीकरण का प्रमाण पत्र | Certificate of Registration of Design

दिनांक / Design No. : 382532-001
 तारीख / Date : 29/03/2023
 परास्परिकता तारीख / Reciprocity Date* :
 देश / Country :

प्रमाणित किया जाता है कि संलग्न प्रति में वर्णित दिनांक नो **VEGETABLE FARMING STRUCTURE WITH INTERNAL POULTRY CAGE** से संबंधित है, का पंजीकरण, तारीख 25-03 में Indian Council Of Agricultural Research, Icar-Central Institute For Women In Agriculture के नाम में उपर्युक्त किया और तारीख में कर लिया गया है।

Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class 25-03 in respect of the application of such design to **VEGETABLE FARMING STRUCTURE WITH INTERNAL POULTRY CAGE** in the name of Indian Council Of Agricultural Research, Icar-Central Institute For Women In Agriculture.

दिनांक अधिनियम, 2000 तथा दिनांक नियम, 2001 के अधीन प्रवचनों के अनुसार।
 In pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001.

यह पत्र जारी की तिथि : 04/01/2024
 Date of Issue :

नियंत्रक जनरल ऑफ डिजाइन और ट्रेड मार्क
 Controller General of Patents, Designs and Trade Marks

*परास्परिकता तारीख (यदि कोई हो) जिसकी अनुमति दी गई है तथा देश का नाम। डिजाइन का स्वतंत्रिकार पंजीकरण की तारीख से दस वर्षों के लिए होगा जिसका विस्तार, अधिनियम एवं नियम के प्रावधानों के अंतर्गत, यदि कोई की अतिरिक्त अवधि के लिए किया जा सकेगा। इस प्रमाण पत्र का उपयोग विभिन्न कार्यवाहियों अथवा विदेश में पंजीकरण प्राप्त करने के लिए नहीं हो सकता है।
 The reciprocity date (if any) which has been allowed and the name of the country. Copyright in the design will subsist for ten years from the date of Registration, and may under the terms of the Act and Rules, be extended for a further period of five years. This Certificate is not for use in legal proceedings or for obtaining registration abroad.



Technology commercialized

The technology ‘TechCIWA-Hand operated Maize Dehusker-cum-Sheller’ was licensed to M/s SAISHAKTI, Cuttack on 17 February 2024 on the occasion of 29th Foundation day of the Institute. The TechCIWA-Hand operated Maize Dehusker-cum-Sheller is a gender-friendly hand operated maize dehusker-cum-

sheller, which was developed using ergonomic and mechanical considerations for dehusking and shelling. The machine can yield an output of 60 kg grain/h when operated by women workers at hand cranking speed of 52 rpm. The equipment can also be operated with 370W/ 750 W single-phase electric motor.



TechCIWA-Hand operated Maize Dehusker-cum-Sheller



Licensing of technology - 'TechCIWA-Hand operated Maize Dehusker-cum-Sheller'

A. Research Papers

1. Agarwal R.C., Das L., Jain R., Kishore P., Nikam V.R. and Mridula D. (2023). Nutri-garden for nutritional security and diversity: Some insights from POSHAN Abhiyan. *Agricultural Economics Research Review*, 36(2): 227-235; DOI: 10.5958/0974-0279.2023.00035.6.
2. Chandan Solanki, Mridula D. and Ranjeet Singh (2023). Buckwheat processing and its utilization in value-added products: A comprehensive review. *The Pharma Innovation Journal*, 12(8): 2746-2752.
3. Goswami D., Bala M., Mridula D. (2023). Optimization of extraction conditions for carotenoids from black gram husk using response surface methodology. *Pharma Innovation*, 12(12): 1269-1272.
4. Jakhar P., Mishra S., Swain S., Kumar N., Sarkar A. and Mridula D. (2023). Farm women's adaptation to climate change: A technology adoption study in northern Odisha. *Indian Journal of Soil Conservation*, 51(3): 236-241.
5. Kumar Pankaj, Bala M., Mridula D. and Sethi S. (2024). Kinetics of Thin Layer Drying of Safed Musli (*Chlorophytum borivilianum*) Roots. *Journal of Agricultural Engineering (India)*, 61(1): 37-51; <https://doi.org/10.52151/jae2024611.1835>.
6. Moharana G., Bal S. K. and Sharma P. (2024). Occupational health problems of women workers while performing turmeric cultivation activities in Punjab. *International Journal of Agriculture Extension and Social Development*, 7(1): 79-83.
7. Moharana G., Bal S. K., Sharma P. and Sandhya (2024) Technological need of women workers involved in turmeric cultivation: An exploratory study. *International Journal of Research in Agronomy*, 7(1): 130-135.
8. Nayak J, Mridula D., Panda A. K. and Mohanty L. (2024). Rural women: Empowerment for sustainable development. *International Journal of Agriculture Extension and Social Development* (Published by Society of Agricultural Research and Social Development), 7(3): 666-669; DOI: <https://doi.org/10.33545/26180723.2024.v7.i3h.489>.
9. Sahoo A., Panigrahy S. R. and Mohapatra A. (2023). Supply Chain of Pahala Rasagola in Odisha. *Economic Affairs*, 68(04): 2305-2308.
10. Sharma A., Yadav M., Tiwari A., Ali U., Krishania M., Bala M., Mridula D., Sharma P., Goudar G., Roy J.K., Navik U. and Garg M. (2023). A comparative study of colored wheat lines across laboratories for validation of their phytochemicals and antioxidant activity. *Journal of Cereal Science*, p.103719. <https://doi.org/10.1016/j.jcs.2023.103719>.
11. Swain S., Bal L. M., Singh S., Kumar N., Mridula D., Gangaiah, B. (2024). Change in Phytochemicals and Antioxidant

Activity of Silk, Husk and Cob of Baby Corn (*Zea mays* L.) during Four Phenological Stages. *Journal of Scientific & Industrial Research*, 83: 322-334.

12. Swati S., Mridula D. and Kumar P. (2024). Legume fortified instant noodles:

optimization of product formulation and processing parameters using response surface methodology. *Journal of Agricultural Engineering (India)*, 61(1): 67-

76; <https://doi.org/10.52151/jae2024611.1828>.

B. Training Manual

- Sahu A., Kumari V., Das L., Seth T. and Mridula D. (2024). Gender-Sensitive Agri-Horti based Dimensions for addressing Livelihood, Nutrition and Entrepreneurship. ICAR-Central Institute for Women in Agriculture, Bhubaneswar. pp. 1-150 (ISBN: 978-81-944268-5-1)

C. Technical Articles in Training Manual

1. Jakhar P., Kumar N., Behera B. C. and Rout P. K. (2024). Gender responsive climate smart agriculture for addressing rural livelihood. In: *Gender-Sensitive Agri-Horti based Dimensions for addressing Livelihood, Nutrition and Entrepreneurship* (eds.) A. Sahu et al. ICAR-CIWA, Bhubaneswar: 99-103.
2. Kishore K. and Sahu A. (2024). Underutilized fruit crops for augmenting family nutrition and scope of valorization for agri-entrepreneurial prospects. In: *Gender-Sensitive Agri-Horti based Dimensions for addressing Livelihood, Nutrition and Entrepreneurship* (eds.) A. Sahu et al. ICAR-CIWA, Bhubaneswar: 43-49.
3. Kumar N., Sarkar A., Jakhar P. and Kumar R. (2024). Digital Agriculture-A Novel Approach for Women Empowerment. In: *Gender-Sensitive Agri-Horti based Dimensions for addressing Livelihood, Nutrition and Entrepreneurship* (eds.) A. Sahu et al. ICAR-CIWA, Bhubaneswar: 143-150.
4. Lipi D. and Sahu A. (2024). Gender-Sensitive Agri-Horti based Dimensions for addressing Livelihood, Nutrition and Entrepreneurship. In: *Gender-Sensitive Agri-Horti based Dimensions for addressing Livelihood, Nutrition and Entrepreneurship* (eds.) A. Sahu et al. ICAR-CIWA, Bhubaneswar: 28-34.
5. Mhatre C .S., Nayak J., Pati M. and Rout P. K. (2024). Women Friendly Farm Mechanization in Agri-Horti Sectors for Drudgery Alleviation. In: *Gender-Sensitive Agri-Horti based Dimensions for addressing Livelihood, Nutrition and Entrepreneurship* (eds.) A. Sahu et al. ICAR-CIWA, Bhubaneswar: 128-133.

6. Panda A. K., Jakhar P. and A. Sahu. (2024). Promotion of Women Agri-Entrepreneurship through Integrated Farming. In: *Gender-Sensitive Agri-Horti based Dimensions for addressing Livelihood, Nutrition and Entrepreneurship* (eds.) A. Sahu et al. ICAR-CIWA, Bhubaneswar: 14-18.
7. Sahoo L. P., Sahoo M., Seth T. and Sahu A. (2024). Promoting Indigenous Seed Production Techniques for Nutrition and Livelihood of Tribal Farm Families. In: *Gender-Sensitive Agri-Horti based Dimensions for addressing Livelihood, Nutrition and Entrepreneurship* (eds.) A. Sahu et al. ICAR-CIWA, Bhubaneswar: 50-56.
8. Sahu A., Seth T., Sahoo L. P., Das L. and Prusty M. (2024). Women Horti-preneurship through Gender-Responsive Value Chain Development. In: *Gender-Sensitive Agri-Horti based Dimensions for addressing Livelihood, Nutrition and Entrepreneurship* (eds.) A. Sahu et al. ICAR-CIWA, Bhubaneswar: 134-142.
9. Sarangi S.K. (2024). Strengthening livelihood of women farmers through conservation agriculture. In: *Gender-Sensitive Agri-Horti based Dimensions for addressing Livelihood, Nutrition and Entrepreneurship* (eds.) A. Sahu et al. ICAR-CIWA, Bhubaneswar: 19-27.
10. Seth T., Deb Roy P., Sahoo L. P. and Sahu A. (2024). Microgreens: a novel entrepreneurial opportunity for peri-urban farmwomen. In: *Gender-Sensitive Agri-Horti based Dimensions for addressing Livelihood, Nutrition and Entrepreneurship* (eds.) A. Sahu et al. ICAR-CIWA, Bhubaneswar: 124-127.
11. Swain S., Mridula D., Nayak J. and Panigrahi S. (2024). Livelihood Enhancement of Farm Women through Value Addition of Horticultural Crops. In: *Gender-Sensitive Agri-Horti based Dimensions for addressing Livelihood, Nutrition and Entrepreneurship* (eds.) A. Sahu et al. ICAR-CIWA, Bhubaneswar: 104-115.
12. Tanuja S. and Seth T. (2024). Gender Responsive Integrated Aqua-Horticulture Farming Systems for Enhancing Livelihood. In: *Gender-Sensitive Agri-Horti based Dimensions for addressing Livelihood, Nutrition and Entrepreneurship* (eds.) A. Sahu et al. ICAR-CIWA, Bhubaneswar: 116-123.

D. Popular Articles/ E-publications

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Behera B. C. and Mishra S. 2024. Khadya Ebam Poshan Surakhyare Millet ba Mota Sashya ra Bhumika. Palli Tharu Delhi Weekly Paper. 11-17, February 2024. 9(33): p. 2. (Article in Newspaper) 2. Behera B. C., Mishra S. and Sarangi D. N. 2024. Khadya O' Poshan Surakhyare Millet/ Mota Sashyara Bhumika (Role of Millets in Food and Nutritional Security). | <ol style="list-style-type: none"> Palli Tharu Delhi (Odia). 14-20 January 2024: p. 2. (Article in Newspaper) 3. Mishra S. 2024. Samashya Suare Krushi Mahila. Palli Tharu Delhi Weekly Paper. 4-10 February 2024. 9(32): p. 7. (Article in Newspaper) 4. Mishra S. and Behera B. C. 2024. Gender and Agriculture Extension. Bhokila Peta Weekly Paper (Eng.). 30 January - 05 |
|---|---|

- February 2024 11(1): p.3. (Article in Newspaper)
5. Mishra S. and Behera B. C. 2024. Outreaching Farm Women through Agriculture Schemes. Bhokila Peta Weekly Paper (Eng.). 6-12 February 2024 11(2): p. 3. (Article in Newspaper)
6. Mishra S., Behera B. C. and Sarangi D. N. 2024. Bharateeya Sanskruti re Barist Nagarik (Senior Citizens in Indian Culture). Palli Tharu Delhi (Odia). 7-13 January 2024: p. 6. (Article in Newspaper)
7. Mishra S., Behera B. C. and Sarangi D. N. 2024. Strategies to Bridge Gender Issues in Agriculture. Vigyan Varta, International e-Magazine for Science Enthusiasts. 5(2): 14-17. (Article in E-magazine)
8. Mishra S., Sarangi D. N. and Behera B. C. 2024. Challenges and Prospects for Rural Youth in Indian Agriculture. Bhokila Peta Weekly Paper (Eng.). 16 -22 January 2024 10(51): p. 3. (Article in Newspaper)
9. Mishra Sabita and Behera B. C. 2024. Farm Women and Nutritional Security through Green Leafy Vegetables. Bhokila Peta Weekly Paper (Eng.). 5-11 March 2024. 11(6): p. 2. (Article in Newspaper)
10. Moharana G and Kaur H (2024) Paryavaraniya Samasyaen Aur Unki Surakksya. Vigyan Pragati. 836(1) : 23-25.

E. Abstract/Presentation in conferences/Seminars/Workshops

1. Sahoo B., Panda A.K, Das L., Tanuja S., Mridula D., Behera S.K., Parida G. (2024). Broiler Goat Rearing: A Profitable Enterprise for Farm Women in Semi Intensive Farming System in Coastal belt of Odisha. In: *20th Biennial International conference of Animal Nutrition Society of India*. 23-25 January 2024: 60-61.
2. Tanuja S., Das L., Sarkar A., Mridula D., Sahoo P.R. and Jena B.B. (2024). Strategic climate smart approaches in freshwater aquaculture: An empirical analysis. In: *International Conference on Agriculture for Sustainable Development (Agri Vision 2024)*. NRRI, Cuttack. 19-21 January 2024: 38.
3. Tanuja S., Panda A.K., Das L., Sahoo B. and Mridula D. (2024). Rural women agripreneurship development for promoting gender equity and strengthening livelihood: a methodology. In. *Book of Abstracts. 13th Indian Fisheries and Aquaculture Forum*. ICAR-Central Inland Fisheries Research Institute, Barrackpore: 668.

AWARDS / ACHIEVEMENTS / RECOGNITIONS

- Dr Sabita Mishra received the ‘Most Consistent Author Award’, by *Vigyan Varta*, International e-Magazine for Science Enthusiasts for excellent articles contribution in the year 2023.
- Dr. B. Sahoo was honoured with ‘Fellow of Animal Nutrition Society of India’ on 23 January 2024.
- Dr. Tanuja S. received ‘Woman Researcher Award’ during Agri-Vision 2024 at ICAR-NRRI, Cuttack organized by Society for Agricultural Research and Management (SARM) on 21 January 2024.

Invited Lectures

- Dr. B. Sahoo delivered a lecture on ‘Balanced feeding, fodder cultivation for animals’ in a training programme at OMTDC, Jagannathpur, OMFED training centre on 10 January 2024.
- Dr. Ananta Sarkar delivered lecture on ‘Gender disaggregated data emphasizing role of women in agriculture’ on 12 January 2024 during the session ‘Redressal of Gender Issues in Agriculture for Growth and Development of Farm Women’ in Krishi Odisha-24 held at Bhubaneswar during 12-14 January 2024.
- Dr. Ankita Sahu delivered a lecture on ‘Strengthening livelihood opportunities for women farmers in organic farming of fruit crops’ through zoom platform on 13 January 2024 in 21 Days National Training Cum Refresher Course on ‘Approaches of Successful Entrepreneurship in Agriculture, Sericulture, Fisheries, Animal Husbandry & Allied Sectors’ organized by Central Tasar Research and Training Institute Central Silk Board and Agro Environmental Development Society.
- Dr. Sabita Mishra delivered a talk on ‘Gender issues in agriculture and strategies for mainstreaming’ during Winter School organized at AAU, Anand, Gujarat on 18 January 2024.
- Dr. Sabita Mishra delivered a talk on ‘Extension issues and strategies for mainstreaming’ during Winter School organized at AAU, Anand, Gujarat on 25 January 2024.
- Dr Sabita Mishra was invited as a Guest to deliver a talk on ‘Women in Agriculture’ on the occasion of ‘International Women Day’ at Derabish, Kendrapara on 9 March 2024, organized by Solidaridad and Sarat Kar & Anima Kar Foundation.

ଡିଜିଟାଲ କୃଷି ଜାଗୃତି କାର୍ଯ୍ୟକ୍ରମ

ବାଲିପାଟଣା ୧୭।୩(ଆପ୍): ବାଲିପାଟଣା ବ୍ଲକ୍ ଅଭ୍ୟନ୍ତରୀଣ ଗ୍ରାମରେ ଆଇସିଏଆର- ସିଆଇଡିବ୍ଲ୍ୟୁର ଆନୁକୂଲ୍ୟରେ ଏକ ଡିଜିଟାଲ କୃଷି ସମ୍ପର୍କିତ ଜାଗୃତି କାର୍ଯ୍ୟକ୍ରମ ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି । ଏଥିରେ ଗ୍ରାମ ଟେକ୍ନୋଲୋଜି ମାଧ୍ୟମରେ କିପରି କୃଷିକାର୍ଯ୍ୟ ସହଜରେ ହୋଇପାରୁଛି, ରୋଗପାକ ନିୟନ୍ତ୍ରଣ କରିବାରେ ଔଷଧ ସିଞ୍ଚନ କରାଯାଇଛି, ଜଳ ସିଞ୍ଚନ କରାଯାଇଛି ଓ କମ୍ ସମୟରେ ଅଧିକ କ୍ଷେତ୍ରରେ ପହଞ୍ଚି ପାରୁଛି, ସେ ସମ୍ପର୍କରେ ଆଲୋଚନା କରାଯାଇଥିଲା । ସଂସ୍କାର ପ୍ରଧାନ ବୈଜ୍ଞାନିକ ଡ. ସବିତା ମିଶ୍ର ସ୍ଥାନୀୟ ଗ୍ରାମବାସୀଙ୍କୁ ଓଡ଼ିଆରେ କୃଷିକ୍ଷେତ୍ରରେ ଗ୍ରାମବାସୀଙ୍କୁ



ବ୍ୟବହାର ସମ୍ପର୍କରେ କହିଥିଲେ । କାର୍ଯ୍ୟକ୍ରମରେ ୨୦୦ରୁ ଊର୍ଦ୍ଧ୍ୱ ପୁରୁଷ ଓ ମହିଳା ଗଣା ଯୋଗ ଦେଇଥିଲେ । ଭାବଗ୍ରାହୀ ନନ୍ଦ, ଶିବପ୍ରସାଦ ଶତପଥୀ, ସତ୍ୟ ନାରାୟଣ ଶତପଥୀ, ସୁଷମା ଆଲୋଚନା କରି ଧନ୍ୟବାଦ ଅର୍ପଣ କରିଥିଲେ ।

ସାଗର,ଦମୋହ,ନରସିଂହପୁର, ରାଜଗଡ଼, ହୋଶାଙ୍ଗାବାଦ, ଧରମୋହ, ଗୁଆଲିଆର,ମିଝି,ସିଂହପୁର, ସିବନୀ

ଭୋପାଳ, ଶୁକ୍ରବାର ୦୧ ମାର୍ଚ୍ଚ ୨୦୨୪

7

CAR-CIWA के माध्यम से एक्वाक्ल्चर और प्रसंस्करण पर कस्टम हायरिंग सेंटर की स्थापना

कस्टम हायरिंग सेंटर जैसे संसाधनों का निर्माण महिलाओं में आत्मविश्वास पैदा करने का एक प्रभावी साधन है

भोपाल, शुक्रवार

ब. क. अ. पु. - डी.डी.ए. कृषि विभाग, भोपाल, बुधवार २८ फरवरी २०२४ को आत्मविश्वास पैदा करने के लिए एक कार्यक्रम आयोजित किया गया था। कार्यक्रम का उद्देश्य महिलाओं में आत्मविश्वास पैदा करना और उन्हें कृषि क्षेत्र में सक्रिय रूप से भाग लेने के लिए प्रोत्साहित करना था। कार्यक्रम में महिलाओं को कृषि के विभिन्न पहलुओं पर जानकारी दी गई थी, जिसमें कृषि के लाभ, जोखिम, और कृषि के माध्यम से आयुष्मान्तरण के बारे में। कार्यक्रम में महिलाओं को कृषि के विभिन्न पहलुओं पर जानकारी दी गई थी, जिसमें कृषि के लाभ, जोखिम, और कृषि के माध्यम से आयुष्मान्तरण के बारे में।



ब. क. अ. पु. - डी.डी.ए. कृषि विभाग, भोपाल, बुधवार २८ फरवरी २०२४ को आत्मविश्वास पैदा करने के लिए एक कार्यक्रम आयोजित किया गया था। कार्यक्रम का उद्देश्य महिलाओं में आत्मविश्वास पैदा करना और उन्हें कृषि क्षेत्र में सक्रिय रूप से भाग लेने के लिए प्रोत्साहित करना था। कार्यक्रम में महिलाओं को कृषि के विभिन्न पहलुओं पर जानकारी दी गई थी, जिसमें कृषि के लाभ, जोखिम, और कृषि के माध्यम से आयुष्मान्तरण के बारे में।

आत्मविश्वास पैदा करने के लिए एक कार्यक्रम आयोजित किया गया था। कार्यक्रम का उद्देश्य महिलाओं में आत्मविश्वास पैदा करना और उन्हें कृषि क्षेत्र में सक्रिय रूप से भाग लेने के लिए प्रोत्साहित करना था। कार्यक्रम में महिलाओं को कृषि के विभिन्न पहलुओं पर जानकारी दी गई थी, जिसमें कृषि के लाभ, जोखिम, और कृषि के माध्यम से आयुष्मान्तरण के बारे में।

महिलाओं को कृषि के विभिन्न पहलुओं पर जानकारी दी गई थी, जिसमें कृषि के लाभ, जोखिम, और कृषि के माध्यम से आयुष्मान्तरण के बारे में। कार्यक्रम में महिलाओं को कृषि के विभिन्न पहलुओं पर जानकारी दी गई थी, जिसमें कृषि के लाभ, जोखिम, और कृषि के माध्यम से आयुष्मान्तरण के बारे में।

महिलाओं को कृषि के विभिन्न पहलुओं पर जानकारी दी गई थी, जिसमें कृषि के लाभ, जोखिम, और कृषि के माध्यम से आयुष्मान्तरण के बारे में। कार्यक्रम में महिलाओं को कृषि के विभिन्न पहलुओं पर जानकारी दी गई थी, जिसमें कृषि के लाभ, जोखिम, और कृषि के माध्यम से आयुष्मान्तरण के बारे में।

कृषि प्रशिक्षण कर्मागार

ବାଲିପାଟଣା, ୧୭।୩(ଅଭିମନ୍ୟୁ ନାୟକ): ବାଲିପାଟଣା ବ୍ଲକ୍ ଅଭ୍ୟନ୍ତରୀଣ ଗ୍ରାମରେ ଆଇସିଏଆର- ସିଆଇଡିବ୍ଲ୍ୟୁର ଆନୁକୂଲ୍ୟରେ ଏକ ଡିଜିଟାଲ କୃଷି ପ୍ରଶିକ୍ଷଣ କର୍ମାଗାର ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି । ଡ.ଅନନ୍ତ ସରକାର ମୁଖ୍ୟ ପ୍ରଶିକ୍ଷକତାରେ ଯୋଗଦେଇ ପ୍ରଶିକ୍ଷଣ ଦେଇଥିଲେ । ଅନ୍ୟମାନଙ୍କ ମଧ୍ୟରେ ଶିବପ୍ରସାଦ ଶତପଥୀ, ସତ୍ୟ ନାରାୟଣ ଶତପଥୀ, ସୁଷମା ନନ୍ଦ ପ୍ରମୁଖ ଅତିଥିତାରେ ଯୋଗଦେଇ ମତବ୍ୟକ୍ତ କରିଥିଲେ । ଡ.ସବିତା ମିଶ୍ର ଅତିଥି ପରିଚୟ ପ୍ରଦାନ କରିଥିଲେ ।



Chief Editor

Dr. Mridula Devi
Director

Editors

Dr. Ananta Sarkar
Dr. Tania Seth
Dr. Ankita Sahu
Mr. Shaji A.

Published by

Director
ICAR-Central Institute for Women in Agriculture
ISO 9001:2015 Certified
P.O. – Baramunda, Bhubaneswar – 751003, Odisha, India
<http://www.icar-ciwa.org.in>
E-mail: director.ciwa@icar.gov.in
Phone No: (0674)-2387940, 2387241

© 2024 ICAR- Central Institute for Women in Agriculture, Bhubaneswar

Printed at: Print-Tech Offset Pvt. Ltd., Bhubaneswar