

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURAL RESEARCH & EDUCATION

LOK SABHA
UNSTARRED QUESTION NO. 1240
TO BE ANSWERED ON 30TH JULY, 2024

CENTRAL INSTITUTE FOR WOMEN IN AGRICULTURE

1240. SHRI KAMAKHYA PRASAD TASA:

Will the Minister of AGRICULTURE AND FARMERS WELFARE कृषि और किसान कल्याण मंत्री be pleased to state:

- (a) the details of the number of research conducted by the Central Institute for Women in Agriculture (CIWA), Bhubaneswar on 'Gender issues in Agriculture and allied fields' in the country;
- (b) the details of outcome of every research conducted since CIWA's establishment;
- (c) whether the Government has conducted any promotion to generate and disseminate knowledge to promote gender sensitive decision making for enhancing efficiency and effectiveness of women in agriculture in the north-eastern region, if so, the details thereof; and
- (d) the list of places where All India Coordinated Research Project Centres working under CIWA are situated, State-wise?

ANSWER

THE MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE
कृषि और किसान कल्याण राज्य मंत्री (SHRI BHAGIRATH CHOUDHARY)

(a)&(b): The details of research conducted by the Central Institute for Women in Agriculture (CIWA), Bhubaneswar on 'Gender issues in Agriculture and allied fields' in India along with the outcome since its establishment are attached as **Annexure I.**

(c) Studies for promotion to generate and disseminate knowledge to promote gender-sensitive decision making for enhancing efficiency and effectiveness of women in agriculture in the north-eastern region have been conducted through All India Coordinated Research Project (AICRP) on Women in Agriculture Centres situated at Jorhat, Assam (viz., Value addition to agro and animal based fibres, enhancement of nutritive value of foods through locally adoptable preserving and processing techniques, development of gender specific extension methodologies, technologies interventions for drudgery reduction, nutritional security and health promotion of farm families etc.) and Tura Meghalaya (viz., drudgery reducing farm technologies for gender equity; ergonomics for work improvement in agro-enterprises; reproductive health care in agrarian families; development of parenting index for rural families; natural dyeing and handicraft making from agro-waste materials; mushroom and other nutri-rich crops cultivation technology, etc).

Activities carried out by Assam Centre & Tura, Meghalaya Centre are attached as **Annexure-II.**

(d) The State-wise list of centers/places where All India Coordinated Research Project Centers working under CIWA are attached as **Annexure III.**

Annexure-I

[Part (a) & (b) of Lok Sabha USQ No. 1240 dated 30TH JULY, 2024]

The details of the number of research conducted by the Central Institute for Women in Agriculture (CIWA), Bhubaneswar on 'Gender issues in Agriculture and allied fields' in the country along with outcomes are:

	Research Areas	Outcomes
1	Repository of information on gender in agriculture	<ul style="list-style-type: none"> ● 'Gender Knowledge System in Agriculture (GKS) Portal' has been developed based on gender disaggregated data, technologies, methodologies etc., which is useful for the policy makers, researchers and other stakeholders.
2	Technological interventions/ programmes for food and nutritional security	<ol style="list-style-type: none"> 1. 'Shree Anna Gram' Programme - A New Vista for Nutritional Security and Women Empowerment' was implemented by ICAR-CIWA during 2023 in 30 villages in Odisha and 12 other states involving 13 All India Coordinated Research Project (AICRP) Centres to mainstream the millets as a means to address nutritional and livelihood enhancement of farm families. A total area of 142.35 ha (from 488.28 ha to 630.63 ha) across 12 states has been enhanced after the needful technological interventions under Shree Anna Gram Programme. 2. "Nutri Smart Villages" - An Innovative Programme for Strengthening Poshan Abhiyan" was launched during 2021 in 75 villages across India. A total of 2500 nutri-gardens and 90 nutri-farming were established under Nutri-Smart Village programme for promoting gender friendly Nutritional Enhancement, Livelihood Upliftment and Entrepreneurship Development. 3. Developed Women Friendly Multipurpose Integrated Vertical Nutri-Farming System (IVNFS) for Vegetable production with Mushroom & Poultry (Commercialized) 4. Eighteen (18) dietary products with Low Glycemic Index were developed by AICRP centres

		<p>5.Process Technology for production of High fibre food mix for management of obesity (Commercialized)</p> <p>6.Developed “High Fibre Ready to Use (RTU) Multigrain Mix” and “Nutri Dense Ready to Use (RTU) Multigrain Mix” (Commercialized)</p>
3	Technologies for farm women developed and popularized	<p>1.Technological information on 800 Technologies, collected from different ICAR Institutes and State Agricultural Universities were assessed for women friendliness using standard checklist. 179 technologies in agriculture and allied sector were found women friendly.</p> <p>2.Developed market oriented value added products in millets, fisheries (fish cutlet, fish momos, fish pickle, fish papad and prawn chutney powder etc.) and horticultural produce (Mango, bale, Jack fruit etc.) have been developed.</p> <p>3.Process of Fermented Fish Silage Manure: A Wealth from Waste Technology (Commercialized)</p> <p>4.Low cost azolla based poultry feed, which reduced feed cost by Rs. 2/ kg due to inclusion of 10 % dried azolla meal.</p> <p>5.Popularized millet processing and established 2 women self help groups (SHGs) based processing units in Odisha</p> <p>6.Popularized and established small scale backyard poultry unit for 300 families</p> <p>7.Popularized gender friendly integrated pest management (IPM) technologies in 10 agro-climatic zones of Odisha</p>
4	Tools developed for reducing Drudgery and Vulnerability of women in agriculture	<p>1. Commercialized Technologies</p> <ol style="list-style-type: none"> i. Revolving milking stool and stand ii. Drudgery Reducing Equipment (Aaram Seat, Comb type groundnut stripper, Apron type vegetable collection bag) iii. Rotary Goat Feeding System iv. Hand Operated Maize Dehusker cum Sheller’ for drudgery reduction of farm women v. Easy Harvest Bag for easy loading and unloading while harvesting (Commercialized & Design Registration granted on 30th Aug 2023 by the Patent office with the design number as 382531-001) <p>2. Pedal Operated Women-friendly Coconut Dehusker</p>

		<ol style="list-style-type: none"> 3. Opium Stripper (Design Registration granted on 28th March 2024 by the Patent office with the design number as 394113-001) 4. Device to Manage Head Load (Patent no.455886.) 5. Power operated groundnut decorticator cum stripper (Design Registration granted on 19 July 2023 by the Patent office with the design number as 385950-001) 6. Vegetable farming structure with internal poultry cage (Design Registration granted on 05th Jan 2024 by the Patent office with the design number as 382532-001) 7. Women Friendly Integrated Vertical Nutri-farming System (IVNFS) for Vegetable Production with Mushroom (Design Registration granted on 15th March 2024 by the Patent office with the design number as 382531-001) 8. Manual disc ridger for drudgery reduction of farm women; Low cost Solar Drying Rack for drying of food products for preservation 9. Drudgery reducing tools disseminated to 50 SHGs through 20 Krishi Vigyan Kendras (KVKs) 10. Established 30 women led small scale Custom hiring centres in Odisha and 2 in other states for supporting Drudgery Reduction, livelihood and entrepreneurship development among women. (Total 350 number of direct beneficiaries)
5	Women oriented income generating agriculture model	<ol style="list-style-type: none"> 1. Five Women led Farmer Producer Organizations (FPOs) got registered with the active support of ICAR-CIWA to increase income of women farmers and their socio-economic empowerment. 2. Formed 12 Women Farmer Interest Groups (FIGs) in Odisha 3. Value added fish product 'Fishlikes' (FSSAI no. 22020026000056 & Trade license number BMC/TL-2020/7086) launched by Biswa Bharati Maa SHG under the guidance of ICAR-CIWA is generating Rs. 0.5 Lakhs per month. 4. Gender Sensitive Models developed for enhancing income and nutrition security of farm families: <ul style="list-style-type: none"> ◦ Gender-Sensitive Extension Model (GSEM) for addressing Livelihood, Nutrition and Entrepreneurship

		<ul style="list-style-type: none"> ◦ Gender-Sensitive Extension Model (GEMED) for Entrepreneurship Development ◦ Gender-Sensitive Community-based Agri-preneurship Model (GCAM) through Livestock and Fisheries Technologies ◦ Sustainable She-Preneurship in Mushroom Cultivation Model (2S2M) ◦ Multi-agency Participatory Extension Model (MAPEM) for sustainable Backyard Poultry by Farm Women ◦ Women Friendly Multipurpose Integrated Vertical Nutri-Farming System (IVNFS) for Vegetable production with Mushroom & Poultry ◦ Six Horticulture based cropping models. ◦ Gender Sensitive Model for Doubling Farmers' Income ◦ Family Poultry Model ◦ Gender Sensitive Entrepreneurship Model developed for dairy, horticulture and farm implements sectors ◦ Agri-Nutri (GSAN) Farming System Model
6	Capacity Building of farm women	<ul style="list-style-type: none"> • 2751 capacity building programmes organized and 102588 participants were benefited. • Under SCSP programme (since 2019), SC Farm women beneficiaries (8650) were provided farm inputs, small tools and equipments.
7	Linkages Established	<ul style="list-style-type: none"> • International: International Livestock Research Institute (ILRI), International Rice Research Institute (IRRI) • National: National Institute of Agricultural Extension Management (MANAGE), Hyderabad, InFED (IIMN Foundation for Entrepreneurship Development), business incubator of the Indian Institute of Management Nagpur (IIM Nagpur), a-IDEA, Technology Business Incubator of ICAR-NAARM Hyderabad, Institute on Management of Agricultural Extension (IMAGE), Bhubaneswar • Universities: Odisha University of Agriculture and Technology (OUAT), Bhubaneswar, Centurian University, Siksha 'O' Anusandhan Deemed to be University (SOA), Ramadevi Women University

		<p>(RDWU), Bhubaneswar, Jaipur National University</p> <ul style="list-style-type: none"> • Non-Government Organizations (NGOs): Mukti Social Service Organization, Puri; Grameen Foundation, UP; Professional Assistance for Development Action (PRADAN), Bhubaneswar. • Women Farmer Producer Organizations (WFPOs)/ Women Farmer Producer Company (WFPCs): CIWANI Women Farmer Producer Company, Nimapara, Puri; Sishu Ananta Farmer Producer Company, Khordha; Ananya Mahila Bikas Samiti, Cuttack; Padmabana Farmer Producer Organization, Cuttack; Maheera Farmer Producer Company, Balipatna, Khordha; Chitri Dora Farmers Producer Company Limited, Koraput, Odisha. • Industries & Others: Mahindra & Mahindra, M/s SAISHAKTI, Cuttack; Centrifugal Products, Valsad, Gujrat; TANAGER, Lucknow; Centre For World Solidarity, Secunderabad; Organic Matter Manufacturing (P) Ltd, Bhubaneswar; Manikstu Agro. Pvt. Ltd, Kalahandi; M/S. SVL Millets, Madurai; Singhvi Sales Corporation, Udaipur, Rajasthan, TATA Steel Foundation, ICICI Foundation.
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[Part (c) of Lok Sabha USQ No. 1240 dated 30TH JULY, 2024]

ICAR-Central Institute for Women in Agriculture, Bhubaneswar has conducted studies related women in agriculture through its All India Coordinated Research Project (AICRP) on Women in Agriculture Centre situated at Jorhat, Assam and Tura, Meghalaya.

Information on activities carried out by AICRP on Women in Agriculture Centre at Assam Agriculture University (AAU), Jorhat, Assam

AICRP on Women in Agriculture (earlier AICRP on Home Science) Centre at Assam Agriculture University, Jorhat, Assam, established in 1996 has been playing a pivotal role in augmenting and recognizing the contributions of women in agriculture and allied areas by doing significant work research and extension activities in the following areas:

Value addition to agro and animal based fibres, enhancement of nutritive value of foods through locally adoptable preserving and processing techniques, development of gender specific extension methodologies, technologies interventions for drudgery reduction, nutritional security and health promotion of farm families, promotion of vocational skills among adolescent girls, value addition of underutilized natural resources for enterprise development, utilization of non-degradable farm waste and empowerment of rural women.

Significant Achievements

- Improvisation of household storage of paddy (Duli). Improvisation of Grain Spreading Tool for sun-drying of paddy grains
- Developed Low GI multigrain mix with Glycaemic Index of 33.12 for pre-diabetics; high fibre multigrain mix for overweight and obesity; nutrient dense multigrain mix for underweight. An app “Diab-fix” for holistic management of diabetes.
- Various ergonomically designed tools and implements useful for farm & allied activities *viz.*, improved ladle for parboiling rice, paddy stripper, Paddy picker for paddy grain storage, Lemon harvester, Ginger peeling knife have been developed for minimizing health hazards and increasing productivity and work efficiency. Also established Resource centre on “Ergonomic agricultural small tools and implements” at adopted village for benefit of farm women to reduce drudgery.
- The upscaling of technologies i.e., fruit harvester, vegetable cutter and bamboo ladle for parboiling of rice have been done through KVKs. Also commercialization of ginger peeling knife and two nos. of natural dye have been done.

- Developed 4 different eco- friendly natural dyes from bark of Arjun, Monkey jack, Cochin goroka and flower of Singhapushpi and also developed dye from root of Achu tree (*Morinda angustifolia*) for cotton, silk & wool yarn.
- Developed protective clothing for pesticide applicator. It protects the pesticide applicators from getting affected by toxic substances.
- Developed protective clothing kit to protect the farmer from harsh climatic condition while performing agricultural work such as harvesting, threshing and winnowing.
- Extraction of non- conventional fibres from Okra (Bhindi) and prepared non-woven fabric from bhindi fibre blending with jute with different proportion.
- Prepared diversified utility products from bhindi fibres and non-woven fabrics like shopping bag, purse, file cover, wall pocket, tea coasters, bed side runner, floor mat, tea-cozy, pot mat, duster, seed pot, pen stand etc.
- Developed different thermal insulating products namely laboratory oven gloves, domestic oven gloves thermo-tiffin bag and sanitary napkins
- Developed 24 designs for area rugs, runner, cushion cover, tapestry, place mat set etc. by combining tribal and non-tribal motifs through CAD software.
- Development of ICT Module: An Innovative Approach for empowering Farm Women
- Climate Smart Intervention Model: A New Approach for empowering Farm Women
- Under Nutri-Smart Village Programme, five villages have been adopted under Central Jorhat block, Jorhat block and Titabor Development block of Jorhat district.
- Under the Shree Anna Gram programme, foxtail millet cultivation was promoted in 3 villages (Upper Temera, No. 1 Saru Bauli, and Gogamukh) in Golaghat and Dhemaji district with the cultivation area increased from 4.5 to 12 ha. Training on post-harvest processing value addition of millets for entrepreneurship through three awareness camps was conducted.

Information on activities carried out by AICRP on Women in Agriculture Centre at Tura, Meghalaya

The AICRP on Women in Agriculture Centre at Central Agricultural University (CAU), Tura, Meghalaya was established in 2018 for carrying out the research and extension activities in the specified areas for women in agriculture viz. drudgery reducing farm technologies for gender equity; ergonomics for work improvement in agro-enterprises; reproductive health care in agrarian families; development of parenting index for rural families; natural dyeing and handicraft making from agro-waste materials; mushroom and other nutri-rich crops cultivation technology etc.

The significant achievements are as follows:

- Five products i.e., low GI *atta*, *cheela* and *upma* mix were developed to address the problem of diabetes among the population in general and in farm women in particular. Human feeding trial was conducted on farm women. Other developed products were High fibre multigrain mix and Energy dense laddoo to tackle the problem of obesity and under nutrition respectively.
- Intervention of refined sickles was carried out in farmwomen of AICRP adopted villages i.e., Latri, Kumligaon, Dighlapara, Chamaguri, Sulguri and Anderkona. A Resource-cum-Custom Hiring Centre was established provided with the equipments viz., Manual Paddy Weeder, Manual Paddy Seeder (01), Mini domestic Rice mill, Leo Power Tiller 13.81, Paddle Operated Rice Thrasher, Flour Mill Multi Grain & Masala and Garden Shovel 3 in 1.
- Capacity building programme and hands on trainings were imparted on processing of local spices, fruits and vegetables, low cost recipes on locally available resources especially on bamboo shoot for developing entrepreneurship among farm women as a commercial venture considering the importance of local food habit.
- A total of 93 capacity building programmes were organized in various areas viz., irrigation and cropping system, cattle vaccination drives programme, vermicomposting, mushroom cultivation, seasonal fruit preservation and value added products, package of practices of different vegetables where 3427 farm women have benefitted.
- Standardization of millet based recipes namely millet chapatti, fried vegetable millet, millet laddoo, millet halwa, millet cookies, millet porridge, millet cake, millet bars, millet veggie *pakoda* and millet *kheer* was done and demonstrated for enriching the family nutrition.
- Drudgery reducing tools viz., improved and refined sickle and improved *kokcheng* (bamboo basket) were developed to minimize musculo-skeletal problems and to reduce cardiac cost of work.
- Under Nutri-Smart Village Programme, five villages have been adopted viz., Gimbilgre, Aminda Rangsangre, Sangsangre, Dighlapara and Edenbari of Gambegre and Rongram blocks of West Garo Hills district.
- Millet cultivation under the Shree Anna Gram programme in five villages (Harigaon, Darechikgre, Nayagaon, Nolbari, and Haribhanga) in West Garo Hills and South West Garo Hills districts was promoted through various demonstration, seed distribution and awareness camp and Field Day on Millet Crops to highlight nutritional benefits and crop resilience, training sessions and demonstrations of nutritious recipes.

[Part (d) of Lok Sabha USQ No. 1240 dated 30TH JULY, 2024]

The State-wise list of All India Coordinated Research Project on Women in Agriculture (AICRP on WiA) is as under:

Name of Centers	Name of State
1. Chaudhary Charan Singh Haryana Agricultural University, Hisar, Haryana	Haryana
2. Punjab Agricultural University, Ludhiana, Punjab	Punjab
3. Govind Ballabh Pant University of Agriculture & Technology Pantnagar, Uttarakhand	Uttarakhand
4. Maharana Pratap University of Agriculture and Technology, Udaipur, Rajasthan	Rajasthan
5. Prof. Jayshankar Telangana State Agricultural University (PJTSAU), Hyderabad ,Telangana	Telangana
6. University of Agricultural Sciences, Dharwad, Karnataka	Karnataka
7. University of Agricultural Sciences, Bengaluru, Karnataka	
8. Assam Agricultural University, Jorhat, Assam	Assam
9. Chaudhary Sarwan Kumar Himachal Pradesh Krishi Vishvavidyalaya, Palampur, Himachal Pradesh	Himachal Pradesh
10. Vasantrao Naik Marathwada Krishi Vidyapeeth Parbhani	Maharashtra
11. Central Agricultural University, Tura, Meghalaya	Meghalaya
12. Tamil Nadu Agricultural University, Madurai, Tamil Nadu	Tamil Nadu
13. Dr. Rajendra Prasad Central Agricultural University, Samastipur, Bihar	Bihar
