D.2.g ICAR-ARYA Project (Attracting and Retaining Youths in Agriculture)

ARYA project with financial support of ICAR, New Delhi was started in the year 2019. The main objective of the project was to reinstate rural youths to the farming system so that this dynamic work force can be positively re-engaged for improvement of livelihood. To fulfil the objective three enterprises namely goatery, lac Cultivation and Bee Keeping were chosen under the project.

Summary of major activities which were undertaken during 2023-24

Goatery Enterprise:

- 1(One) Training programmes on scientific goat rearing was conducted involving **39** youth
- No. of Youths established (including restart of closed units) entrepreneurial units (No.) during the reporting period - **08**
- No. of functional entrepreneurial units (No.) since the beginning of the project - **118**
- **One** group of **20** farmers was formed.
- Net benefit per functional unit Rs.1,28,000/-.
- KVK provided critical support to each beneficiary for establishment of their enterprise.
- KVK distributed 8 nos. of feeder, 3 nos. of castector, 11000 nos. of vaccine in project village. 50 raised platforms for goats were constructed for same number of beneficiaries.

Outcome:

- At present **118** farmer families have developed a successful and profitable enterprise in goatery after KVK interventions like housing management with raised platform, breed improvement, regular vaccination and time to time providing of advisory services in project villages.
- Each beneficiary has maintained minimum 26 goats at this time.
- The mortality rate in goats which was 24 % in the beginning has decreased to 13 %.
- Presently each beneficiary is able to generate an income of Rs. Rs.1,28,000/unit/year
- The youths under the project are supporting their families with good socio-economic status and also working as social motivator.
- Every beneficiary is ready to invest more money in expansion of their goat farm so that the goat farms can run in sustainable manner.





·Bee-Keeping Enterprise:

- **55** Selected youths were trained in **2**batches intensively in scientific bee-keeping.
- No. of Youths established entrepreneurial units (No.) since the beginning of the project - **77**
- KVK provided bee friendly sapling for plantation, gloves, smokers, bee veil.

Outcome:

- At present 77 functional units established under ARYA in bee keeping after KVK interventions like training, input distribution and follow-up.
- 77 No. of youths running entrepreneurial units in a sustainable manner.
- Each beneficiary has maintained minimum 15 boxes.
- The mortality rate in bee-keeping which was 23 % in the beginning has decreased to 9 %.
- Presently each beneficiary is able to generate gross income of Rs. 93000/unit/year
- The youths under the project are supporting their families with good socio-economic status and also working as social motivator.





Lac Enterprise:

- No. of Youths established entrepreneurial units (No.) during the reporting period - **14**
- No. of Youths established entrepreneurial units (No.) since the beginning of the project - **116**
- KVK provided lac insect friendly Kusum sapling for planting, brood lac, secateurs, ladder etc.

Outcome:

- 116 nos. of function Entrepreneurial units established under ARYA in bee keeping after KVK interventions like training, input distribution and follow-up.
- Each beneficiary has maintained minimum 10host plants.
- The mortality rate in lac cultivation which was 23 % in the beginning has decreased to 9 %.
- Presently each beneficiary is able to generate an income of Rs. 131000/unit/year
- The youths under the project are supporting their families with good socio-economic status and also working as social motivator.






D.3 Women Empowerment

Women, in the tribal dominated areas of Ranchi and its adjoining areas, have been suffering from various types of discriminations and deprivations due to poverty, low productivity, their primitive way of living and ignorance about socio- moral values. There is a great need to bring women into mainstream of economic activities.

Ramakrishna Mission Ashrama not only organized them to form self help groups but also conducted special training programmes for women in different fields related to skill upgradation. drudgery reduction, fruits and vegetables preservation, value addition, mushroom cultivation, piggery, fisheries, poultry and allied activities to empower them economically as well as socially. Alternative employment opportunities for women are generated through such training programmes. Increased income in the hands of rural women ensures better nutrition, better healthcare facilities and education for their children.

This Ashrama believes that economic empowerment of women with moral and spiritual values at the base will help make them powerful agents to bring about social change.



Following training programmes were conducted to economically empower women

Name of the Training Programme	Number of Batches	No. of Women Trainees
Household food security by kitchen gardening	2	75
Minimization of nutrient loss in processing	1	21
Storage loss minimization techniques	1	20
Value addition	1	50
Capacity building	1	34
Women and child care	1	50
Mushroom Production	1	45



Besides organising on campus training programmes following off campus training programmes were also conducted.

Topic	Venue	Total Participants
Health benefits of ragi grains	Rangamati, Block: Angara	17
Nutri garden	Datma, Block: Ormanjhi	25
Cultivation and value addition of millet	Karanjawatoli, Block: Burmu	25
Millet Processing and Consumption	Tilayi, Block: Lapung	20
Processing of millet	Gutru, Block: Burmu	105
Healthy food for Pregnant lady	Soso, Block: Angara	27
Use of Locally available healthy food	Chotkigorang, Block: Angara	21
Hygiene and sanitation among school going children	Chipibandhdih, Block: Tamar	50
One day training program on food preservation	Chotkigorang, Block: Angara	20
Millets Processing	Kesha, Block: Bero	28



Events organised for nutritional security of rural women and child

Recipe Contest among Rural Women on Millet-based Food Products : The objective of the programme was By participating in these contests, farm women can share their traditional knowledge of millets, fostering a sense of community and cultural pride. This initiative aims to explore the rich biodiversity of millets and enhance practices related to growing and consuming millets among the local population. In all 3(Three)recipe contests were organised in Angara and Burmu Block. All the contest were participated by the farm women very enthusiastically and winners were awarded with prizes and certificates. In all 112 farm-women participated these contest and registered 40 different millet recipes. The details as given below

Sl. No.	Venue	Date	No. of Participants	No. of Recipes	Products
1	Gutru, Block: Burmu	23 Aug 2023	112	40	Roti, Ladoo, Sev, Dhuska, Idli, Pakodas, momo, panipuri, semyi, noodle, barfi. gulab jamun, ghatta, leto, pitha, lapsi, samosa,Bhukka, bharwaparatha, sattu, dima, idli, dosa, halwaetc.
2	Soso, Block: Angara	03 Oct 2023			
3	Khaksitoli, Block: Angara	28 Oct 2023			






An awareness programme with a special emphasis on Natural Farming, Millet Production and Millet consumption for food security to rural women was organized on the occasion of 156th birth anniversary of Sister Nivedita at Khakshitoli village under Nawagarh Panchayat of Angara Block under Ranchi District on 28 October 2023. The chief guest of the programme was Smt. Nirmala Bhagat, Zilla Parishad Adhyaksh. Other guest present were Smt. Anita Gadi, Ex-Block Pramukh, Sri Rajendra Sahi Munda, Zilla Parishad Member. Smt. Bhagat stressed that nutritional food security of the rural women can only achieved through locally available resources. Special lectures on the natural farming by the Divyayan KVK scientists and farmer scientist interaction was held during the programme. The programme was attended by 150 participants.



D4. Production of Seed Material & Related Programmes

The increase in agricultural production directly depends on the quality of seed. Seeds of appropriate characteristics are required to meet the demand of diverse agro-climatic conditions and intensive cropping system. The basic concept behind this programme is to develop a system which will ensure the timely supply of quality seeds to farmers at reasonable rates. To ensure the availability of quality seeds among the farmers, our endeavour is to produce high yielding varieties of the same to gear up the condition of marginal farmers and help lead the country to sufficiency.

Divyayan KVK itself has been optimally using its demonstration farm for the production of seeds and planting materials for the farmers of Ranchi district. Certified seeds were also produced in the farmers' field by providing them foundation seeds and technical guidance.

During the reporting period seeds of different crops and varieties were produced from our demonstration farms as well as by the farmers under Seed Village Programme as per the details given below to make them available to farmers and Govt. of Jharkhand for further distribution :

Sl. No	Crop/Vegetable	Variety	Type of Seed	Qty (in qtl.)
From Divyayan KVK Farm				
1	Paddy	CR Dhan-320 MTU 1010 Rajendra Mansuri Bhutku and Sahbhagi	Foundation	143.47
2	Wheat	DBW-187	Certified	64.80
3	Mustard	PM-30 and BBM-1	Truthful	25.19
4	Linseed	Divya	Certified	1.78
5	Gram	Birsa Chana -3	Certified	9.75
6	Pigeon Pea	Rajeev Lochan	Certified	15.30
7	Vegetable Pea	Pusa Pragati and GS-10	Certified	16.65
8	EFY	Gajendra	Truthful	76.28
9	Potato	Kufri Lalit	Certified	63.50
10	Sesbania		Truthful	6.14
11	Sunn hemp		Truthful	4.2
12	Tephrosia		Truthful	03.1



Seed Production Activity by Divyayan KVK

D.5 Petroleum Conservation Campaign Sponsored by Petroleum Conservation and Research Association (PCRA)

The objective of the programme was to create mass awareness about the methods of effective conservation and efficient use of Petroleum Products (Petrol, Diesel, Kerosine etc.) through available technologies, good operational method and periodic maintenance of equipments, implements and tools used by the rural community in general and farming community in particular by Divyayan KVK in collaboration with PCRA

Activities Undertaken

Under this programme Agricultural Workshops were conducted in different villages of Ranchi district. Audio visual shows were conducted for better understanding of the technologies. Farmers were also motivated through displaying success stories. Details of the programme are as follows :

No. of Agricultural Workshop - 16

No. of Locations/villages - 16

Total Number of participants -1078

Average number of Participants per agricultural workshop was 67. The programme has resulted in effectively reaching the farmers and educating them about good maintenance practices for their pump sets and tractors.



PCRA Agriculture Workshop

D.6 Out Scaling of Natural Farming

Natural Farming is a chemical-free farming system rooted in Indian tradition enriched with modern understanding of ecology, resource recycling and on-farm resource optimization. It is considered as agroecology based diversified farming system which integrates crops, trees and livestock with functional biodiversity. Natural farming aims at restoring soil health, maintenance of diversity, ensure animal welfare, stress on efficient use of natural/local resources and promote ecological fairness.

It works with the natural biodiversity, encouraging the soil's biological activity and managing the complexity of living organisms both plant and animal to thrive along with food production system. Important practices, essential for adoption of natural farming includes: No external inputs, On-farm produced microbial formulation for seed treatment (such as bijamrita), On-farm made microbial inoculants (Jivamrita) for soil enrichment etc.

So, keeping in view the above given views, following activities were organised to create mass awareness among the farmers of Ranchi District.

Training Programmes -10 batches involving 416 Trainees

Awareness Programme - 69 Nos. involving 4668 participants.

Kisan Mela - 4

Demonstration - 01 involving 12 farmers



Training on Natural Farming



Hands-on Training on Natural Farming



Awareness Programme on Natural Farming During Vikshit Bharat Sankalpa Yatra



Live Demonstration of Natural farming during Kisan Mela



Training

D.7 Mustard Production in Rice Fallow Area

A Front Line Demonstration programme on mustard was conducted at **Ganeshpur Under Ormanjhi Block, Sumo under Burmu Block and Tigranayatoli** village of **Ratu** block in collaboration with **ICAR-DRMR, Bharatpur** in 100 acre area. The main objective of the project was to improve tribal farmer's growing practices by undertaking capacity building programmes for the tribal farmers of Ranchi district. The ultimate goal is to increase rapeseed-mustard production in the area to alleviate poverty of the scheduled tribes of the district.

Sl. No.	Activities	No. of Programmes	No of Beneficiaries
1.	Front Line Demonstration	108	108
2.	1-3 -day training programme	2	56 Trainees
3.	Awareness Camp	7	424
4.	Distribution of seed (PM-30)	1	200 kg
5.	Input Distribution		
	a. Nano Urea		50 ltrs.
	b. Sagarika		50 ltrs.
	c. Nano DAP		50 ltrs
	c. Dashparni Bio-pesticide		1000ltrs.
	d. Small equipments(Upto Rs. 2000)		44 nos.
	e. Large equipments (more than Rs. 2000)		148 nos.

Impact of the programme

Previously mustard was taken only as an intercrop with potato and other vegetable in the village. Under this project new high yielding variety BBM-1 was introduced. 108 farmers of the village had cultivated mustard as a sole crop for the first time. After this practice the yield increased by 30 % which is a significant achievement not only for income generation but also for nutritional security.









D.8 Promotion of local resource based technologies for upliftment of socio economic condition of tribal farmers

(Sponsored by ICAR-Indian Institute of Agricultural Bio-technology, Ranchi)

"Traditional wisdom is to be combined with modern science and technology" - Sw. Vivekananda

Natural/organic agriculture is a sustainable and environmentally friendly production method, which has particular advantages for small-scale farmers. Available evidence indicates the appropriateness of Natural farming for small farmers in developing countries like India. Natural Farming can contribute to poverty alleviation and food security by a combination of many features, such as increasing yields in low-input areas, conserving bio-diversity and nature resources on the farm and in the surrounding area, increasing income and/or reducing costs etc.



Hands on Training in Natural Farming



Training in Preparation of Liquid Manure

Keeping in mind above given facts the objectives of the programm were :

1. To demonstrate the principles and practices of natural farming to local farmers.
2. To promote eco-friendly and sustainable agricultural techniques that reduce dependency on synthetic inputs.
3. To enhance soil health, biodiversity, and farm resilience through natural farming methods.
4. To empower farmers with knowledge and skills necessary for adopting natural farming practices on their own farms
5. Upscaling of traditional goat farming in Ranchi district

To meet the above said objectives following strategies/activities were undertaken :

I. Two days training cum awareness programme: -



Training on Natural Farming

S. No.	Project Activity	Physical Progress	
		Target	Achieve.
1.	Cow Floor	75	75
2.	Plastic Drum (2nos for each farmers)	150	150
3.	Training	1	1
75-acre cluster of Natural Farmingwas developed at Chhotkigorang village of Angara block. Number of farmers benefited 75			

Two days training cum awareness programme was organised under KVK training. Off campus training programme were also organized on natural farming at village level. Soil health management, Seed treatment, package and practices of vegetables and agronomical crops, liquid manure preparation, disease and pest management by biological method etc. were taught through theory and practical classes.

II. Establishment of organic input production system: - For developing natural farming cluster all 75 farmers constructed cow floor (150 sqm2) for liquid manure. Constructed animal shed floor in every beneficiary's house for efficient collection of urine, dung and waste fodder to be used as main ingredient for preparation of manure. Two Plastic drums/ cans (200 & 100 liter) were provided to all the farmers for preparation of organic liquid manure and bio-pesticide. Farmers were trained in preparing different types of liquid manure like jeevwamrit, beejamrit, beej sanjeevani, sasyagavya, panchgavya and bio pesticide like dasparni.

III. Regular Monitoring and follow up by KVK scientist: - In the meantime regular follow up and monitoring was done by KVK scientists to solve problems of farmers while starting their own enterprise. The 75-acre natural farming cluster was nurtured, guided and encouraged to grow and flourish as a model natural farming village.

IV. For promotion of Goatery through housing management to raise the socio economic condition of tribal farmers, the project was implemented in three tribal dominated blocks of Ranchi district, namely Gurgurjari (Mandar), Hupai (Burmu) and Rahra (Kanke) are 40 to 60 kms away from Ranchi headquarter. 50 raised platform (40Lx2Wx1H) were constructed in villages.



Distribution of Feeder for Goat Farming



Construction of Cow Floor



Construction of Cow Floor



Construction of Raised Platform for Goat Farming



Distribution of Plastic Drum for Liquid Manure

D9.Workshops, Seminars and other Awareness Programmes

Yoga Practice and Seminar cum workshop Under 100 Day Count Down of 9th International Day of Yoga

To give a wider promotion and publicity to various dimensions of Yoga and its utility, and to kindle a mass movement to promote health and wellbeing and peace, Morarji Desai National Institute of Yoga (MDNIY) has aimed to organize Mass Yoga demonstrations/sessions at 100 cities through 100 organisations on 100 Days across the nation under the name "100 Day Count Down of 9th International Day of Yoga (21st June 2023)"

This Ashrama was entrusted to organize Yoga Programme on 63rd Day (19th April 2023) under the aforesaid programme.

To meet the objective of mass promotion of various dimension of yoga and its utility, a befitting programme was organized in different location of Ranchi (including remote and tribal dominated areas) in collaboration of Indian Yoga Association, Jharkhand chapter and Bharat Swabhiman (Patanjali Yogpith) under the sponsorship on MDNIY, New Delhi.

As per the schedule, Yoga awareness programme was organised at Ashrama Campus, bank of Getalsud Dam, Angara, Ranchi and in more than 50 remote areas of Ranchi and other cities from 6.00 AM to 7.30AM.



A seminar cum workshop was organized from 10 AM to 12.00 PM on the same day in the auditorium of Ramakrishna Mission Ashrama, Morabadi, Ranchi in online / offline mode. The theme of the programme was – "Yoga Yukta Jharkhand, Roga Mukta Jharkhand."

World Environment Day

'On the occasion of World Environment Day a workshop on Natural/Organic Farming was organized on 5th June 2023. This workshop was organized under the banner of Mission Life which was started on 22nd May 2023. Under this programme an awareness programme on "Climate Compatible Agriculture System" was carried out for 420 nos. of farmers. In the first session i.e. in the technical session scientists



of Divyayan KVK addressed the participating farmers on latest climate friendly technologies for growing different crops and rearing animals. In the second session, a special programme was organized on balanced and optimum use of natural resources for agriculture. The Chief Guest of the programme was Dr. Avijit Kar, Director, National Institute of Secondary Agriculture, Namkum, Ranchi. He in his address stressed that we must use the natural resources in a judicious way so that we can use it for long time and to save our future generation.

Kharif cum Millet workshop

A Kharif cum millet workshop was organized on the occasion international year millet on 9th June 2023 in collaboration with District Agriculture Office, Ranchi. The objective of the workshop was to promote new technologies for Kharif crop and particularly millet cultivation. The Chief Guest of the inaugural session of the workshop was Sri Rahul Kumar Sinha, IAS, Deputy Commissioner, Ranchi. Sri Vikash Kumar, DAO, Ranchi and District Cooperative Officer, Ranchi were other distinguished guests present. After the inaugural session, a technical session was conducted in which scientists of Divyayan KVK





addressed the farmers on different new technologies for Kharif Crops and about different schemes of State and Union government.

6th Annual Zonal Workshop of KVKs

In collaboration with ICAR-ATARI, Patna, Annual Zonal Workshop of KVKs of Bihar and Jharkhand was organized from 8th to 10th July 2023. The workshop was participated by KVK heads and senior scientists of all KVKs of Bihar and Jharkhand, DDEs of 4 state and central agricultural universities, Directors and Dy. Directors of different ICAR Institutes.

The chief guest of the inaugural session of the workshop was Dr. U. S. Gautam, DDG, Agrl. Extension, ICAR, New Delhi. Other distinguished guests includes Dr. R. K. Singh, ADG, Agrl. Extension, ICAR, New Delhi, Dr. Anjani Kumar, Director, ICAR-ATARI, Patna, Dr. Amrendra Kumar, ICAR-ATARI, Panta.

There were 5(five) technical sessions in which KVK heads presented their achievement for the year 2022-





23 and action plan for the year 2023-24. It was attended by around 110 scientist, senior scientists, principal scientists, directors and deputy directors of KVK and ICAR institutes.

ICAR Foundation Day Celebration

A series of programmes were planned and executed from 16-18th July 2023 as part of celebration of 95th ICAR Foundation Day and Technology Day Divyayan KVK Ranchi. An awareness programme on importance of technology adoption in agriculture and its potential benefits was conducted on the first day. Input distribution to farmers for demonstration of pigeon pea and black gram was conducted on the 2nd Day and on 3rd day training on rain water harvest was conducted at Barwatoli village under Angara Block.

PM Kisan Samman Nidhi Programme



On 27 July 2023, a training cum awareness programme was organised on management of different Kharif crops and in the second session Sri Narendra Modi, Hon'ble Prime Minister also addressed the participating farmers from Rajasthan via video link. Around 120 farmers participated programme organized at Ashrama Auditorium.

Parthenium Awareness Week

To apprise the farmers about the harmful effects of the Parthenium and its management, Divyayan KVK organized the "Parthenium Awareness Week" from 16th to 22nd August, 2023. During this week, awareness programme was organized at Lawagara village under Burmu Block, Jhiki village under Lapung Block and in Divyayan KVK campus.

Swachhata hi Seva



Under this programme a series of on-campus and off-campus events were organized. At Divyayan, 2(two) programmes were organized on 23 and 27 September on health, hygiene and cleanliness. On 24 September, a special awareness programme was organized at Chotkigorang Village under Angara Block. At the end of the programme a cleanliness drive was conducted in the village. A one-day training program on hygiene and sanitation among school going children was conducted at Chipibandhdih village under Tamar Block On 29 September, 2023.

Celebration of Constitution Day

Constitution Day was celebrated on 26th November 2023 in the conference hall of Divyayan to create awareness among the farmers about the fundamental duties which have been imprinted in the Indian constitution. The programme began with the brief description of the constitution, its foundation and its preamble and reminiscences of the father of the constitution of India and first law minister of the country Dr. Bheem Rao Ambedker. Dr. Ajeet Kumar Singh, senior scientist of DKVK, delivered a speech on the duties of the citizens towards the development of nation. He reminded all 10 fundamental duties as enshrined in the constitution. Further, a pledge on the preamble of Indian constitution was taken by all the farmers and the staff members of the Divayayan Krishi Vigyan Kendra.

Women Farmers' Day

Women Farmers' Day was observed on 15th October, 2023 at Angara Block where 57 farm-women participated in the programme. Through this programme, the women farmers were made aware about

different income generation prgrammes which can be carried out through SHG. A scientist-farmwomen interactive sessions was also organised to link secondary agriculture related activities with livelihood security of farm families, including mushroom cultivation, production of vermi compost in Integrated Framing System etc

Celebration of Jan Jaitya Gourav Divas



Jan Jatiya Gaurav Divas was celebrated on 15th November 2023 to pay tributes to Bhagwan Birsa Munda on his birth anniversary. The day is also dedicated to the memory of brave tribal freedom fighters so that coming generations could know about their sacrifices about the country.

A special programme was organized at Divyayan Conference Hall and was participated by trainees, visiting farmers and staff members. All the participants were made aware about different schemes of state and union government meant for tribal development. On this occasion address of Hon'ble Prime Minister attending a special event on this occasion at Khunti was shown to the participants.

Celebration of World Soil Day

WORLD SOIL DAY-2023 was observed on 05th December 2023 with an aim to create awareness among the people and particularly among the farmers to save and conserve one of the precious natural resources i.e. soil which forms the basis for sustenance of life on the earth.

A workshop-cum-training session was organized to create awareness about the benefits of soil test based low cost and environment friendly farming among the participants.

Viksit Bharat Sanklap Yatra



Hamara Sankalp Viksit Bharat is a nationwide campaign to raise awareness through outreach activities to achieve saturation of schemes of Govt. of India across the country covering all Gram Panchayats, Nagar Panchayats and Urban Local Bodies with the objectives of:

1. Reaching the unreached - reach out to the vulnerable who are eligible under various schemes but have not availed benefit so far.
2. Dissemination of information and generating awareness about schemes.
3. Learning from the citizens - Interaction with beneficiaries of government schemes through their personal stories/ experience sharing.
4. Enrolment of potential beneficiaries through details ascertained during the Yatra.



The campaign was taken up by adopting a whole of government approach with active involvement of various Ministries/Departments of Government of India, State Governments, Central Govt. Organizations and Institutions to ensure the widest possible participation of all concerned for the benefit of Citizens of the country and to realize the vision of Viksit Bharat.

Our Divyayan KVK was entrusted to generate awareness about the schemes related to Agriculture and to motivate the farmers for adopting Natural Farming method and using soil Health Card.

Under this programme 105 awareness programmes were organized at 105 different panchayats of Ranchi district covering 40354 people.

Scientific Advisory Committee Meeting



To discuss and finalize the action plan of Divyayan KVK for the year 2024, Scientific Advisory Committee Meeting was held on 23 December 2023, where all personnel from line department, scientists from state agricultural university and ICAR institutes, farmers attended the meeting. The meeting was chaired by Swami Bhaveshananda, Secretary of this Ashrama. During the meeting activities and achievement of the Divyayan KVK was presented by Dr. Ajeet Kumar Singh and later on action plan for the year 2024 was also presented which was finalized after the discussion in the meeting. Dr. Anjani Kumar, Director, ICAR-ATARI, Patna was the Chief Guest of SAC.

Awareness Programmes for Promotion and cultivation of Millets

Under the International Year of Millet Programme, 10 (ten) awareness programmes were conducted to create awareness on health benefit of millets. The crop can be grown with little management there by making it low cost crop but a super food and its consumption helps in eliminating malnutrition in child and adults. Under this programme 323 farmers were covered.