



Report of the Quinquennial Review Team (QRT) for the period of 2011-12 to 2018-19



Krishi Vigyan Kendra

Diyankel, Torpa, Khunti, Jharkhand

**ICAR-Indian Institute of natural Resins and Gums Namkum, Ranchi,
Jharkhand**

Prepared by

Dr J Ghosh, Pr. Sc., I/C Head, TOT Division
Dr Nirmal Kumar, Pr. Sc., and I/C Head TOT Division
Dr A Mohanasundaram, Scientist, LP Division
Dr NK Sinha, Pr. Sc., LP Division

Technical Assistance

Mr. Rajan Chowdari, SMS, Agro-Met, KVK, Khunti
Mr. Ashutosh Prabhat, Agro-Met Observer KVK, Khunti

Acknowledgement

- ✓ Director, ICAR-IINRG
- ✓ Director ATARI, Patna
- ✓ Head, TOT, ICAR-IINRG
- ✓ KVK team members

Sl. No.	Contents	Page no
1.	About KVK Khunti	1
2.	Staff Position and their mobility	3
3.	Allocation under various Heads	5
4.	Infrastructural facilities available at KVK	5
5.	Budget (Rs. In lakh) a. ICAR	5
6.	Agro climatic zone (IV. Khunti) and jurisdiction	6
7.	Major Activities Undertaken	6
8.	Events/Programmes organized	10
9.	SWOT Analysis of KVKs	12
10.	Brief account of progress made	13
11.	Human Resource Development	13
12.	Frontline Demonstration Programme	13
13.	Critical input supplied during the period under review	16
14.	Soil Testing and Soil Health Cards Issued	18
15.	Capacity building of KVK Staff / Trainers	19
16.	Publications made during the QRT period	20
17.	Other support to stake holders	22
18.	Future Strategy	22

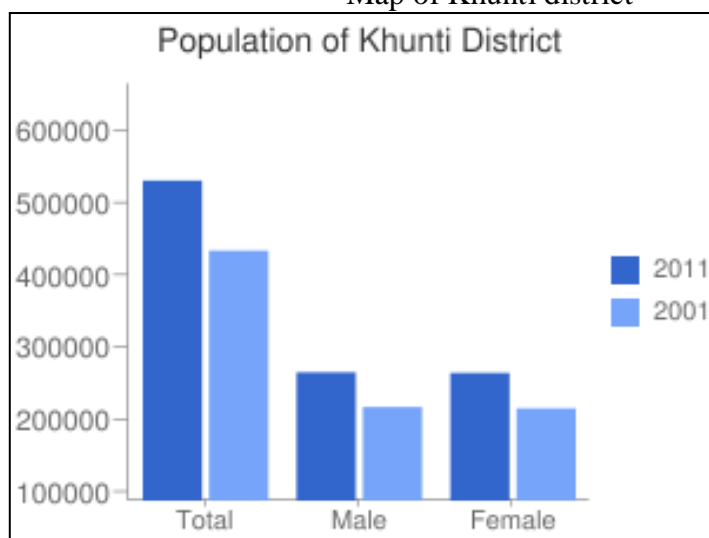
About KVK Khunti

1	Name and location of KVK	Krishi Vigyan Kendra, Diyankel, Torpa, Khunti, Jharkhand
2	Name of the Head of KVK with Postal address and Telephone No.	Dr Jyotirmoy Ghosh Principal Scientist, PB, ICAR-IINRG, Namkum, Ranchi & I/C Head KVK Khunti
3	Name of District and State Head Qtrs.	Khunti, Jharkhand ICAR-IINRG, Namkum, Ranchi
4	Sanction order No. and date	F . No. 6-5/2009-AE-I. dated 23rd December 2013
5	Date of Establishment	5th May 2014
6	Name and Address of the Host Instt.	ICAR-Indian Institute of Natural Resin and Gums Namkum, Ranchi
	Mandate and Functions of KVKs	Mandate: Technology Assessment and Demonstration for its Application and Capacity Development Function: (1) Organizing FLD to establish production potential of various crops and enterprises on the farmers fields. (2) Conducting OFT to identify the location specificity of agricultural technologies under various farming (3) Training to farmers for upliftment

Foundation for 23rd KVK of Jharkhand at Diyankel, Torpa, Khunti was laid on May 05, 2014. KVK, Khunti is under the administrative control of ICAR-IINRG, Ranchi. Demarcation / acquisition work of the land area 49.19 acre was delayed due to payment problems between farmers and DCLR, Khunti. Demarcation work of land for KVK was completed in February, 2016. Trenching on boundary of the KVK land is done. Recruitment of SMS/Scientists and staff for KVK, Khunti is in process.



Map of Khunti district



Population of Khunti district



Foundation stone of KVK, Khunti

Administrative building of KVK under construction

- Demarcation / acquisition work of the land area 49.19 acre was delayed due to payment problems between farmers and DCLR, Khunti.
- Demarcation work of land for KVK was completed in February, 2016. Trenching on boundary of the KVK land is done.
- Recruitment of SMS/Scientists and staff for KVK, Khunti is in process



8. Staff Position (based on Sanctioned Strength) and their mobility

S N	Designation	No. of Sanctioned Post	Name of person	Present Pay scale (Rs.)	Date of Joining	Dt. of Leaving
1.	Senior Scientist	1	Dr S P Singh	37400-67000 with RGP 9000	28/01/2016	30.04.2019 (Retired)

2.	Assistant	1	Smt.Laxmi Kumari	9300-34800 GP-.4200	8 April 2016	Continuing
-----------	-----------	---	---------------------	------------------------	-----------------	-------------------

1.	Senior Scientist	1	Vacant			
2.	SMS	6	Vacant			
3.	Field assistant	2	Vacant			
4	Farm Manager	1	Vacant			
5	Computer operator	1	Vacant			
6.	Driver	2	Vacant			
7	Skilled supporting	2	Vacant			

DETAILS OF RECRUITMENT PROCESS OF KVK KHUNTI

Date	Events/date of correspondence
23.12.2013	Letter was issued by ICAR regarding section for establishment of new KVK at Khunti (Jharkhand)
13.03.2014	Draft advertisement for various post of KVK, Khunti was prepared by the Head, TOT, Division
29.04.2014	A letter was issued to the Zonal Project Director, Kolkata seeking clarification therein relating to recruitment to the posts of KVK, Khunti.
13.05.2014	A letter was issued to the Zonal Project Director, Kolkata seeking clarification relating to educational qualifications etc/mode of recruitment etc for the posts of KVK, Khunti.
23.05.2014	Requisition for filling up the sanctioned posts of PC/Sr. Scientist, KVK, Khunti to be filled-up through ASRB.
10.07.2014	A letter was issued by the Deputy Secretary (AE), wherein it was conveyed that the Institute is competent to fill-up the posts of T-6/SMS. Clarification was also provided regarding qualification/eligibility criteria of T-3 posts.
29.08.2014	A committee was constituted for formulation of terms and conditions of recruitment, screening of applications etc. in connection with various posts of KVK, Khunti.
20.12.2014	Letter was issued to the Employment News for publication of recruitment to different posts of KVK, Khunti.
21.03.2015	The advertisement published in the Employments News issue, dated 21.03.2015 as well as local news papers.
19.08.2019	Certificate regarding vacant posts of SMS for requisition to ASRB.

9. Allocation under various Heads

Budget head	Current plan Utilization (Rs in lakh)					
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Pay & All	-	-	-	14.56	22.04	35.49
TA	0.00	0.00	0.00	1.12	0.41	0.37
Rec. Contingency	0.498	0.235	4.32	0.045	3.40	4.34
NRC			0.00	0.00	0.00	0.00
Works				40.00	0.00	31.00
Vehicle						
Equipment						
Library						
Other, if any						
Total	0.49794	0.23484	4.3224	55.723	25.85	71.19

10. Infrastructural facilities available at KVK

Items	Details
Land	49.19 acre, Diyankel, Torpa, Khunti, Ranchi
Office Building	550 sq. meter
Farmers' Hostel	Nil
Vehicle	Nil
Tractor	Nil
e-connectivity	Nil
Demo unit etc	Nil
Any other	Nil

11. Budget (Rs. In lakh) a. ICAR

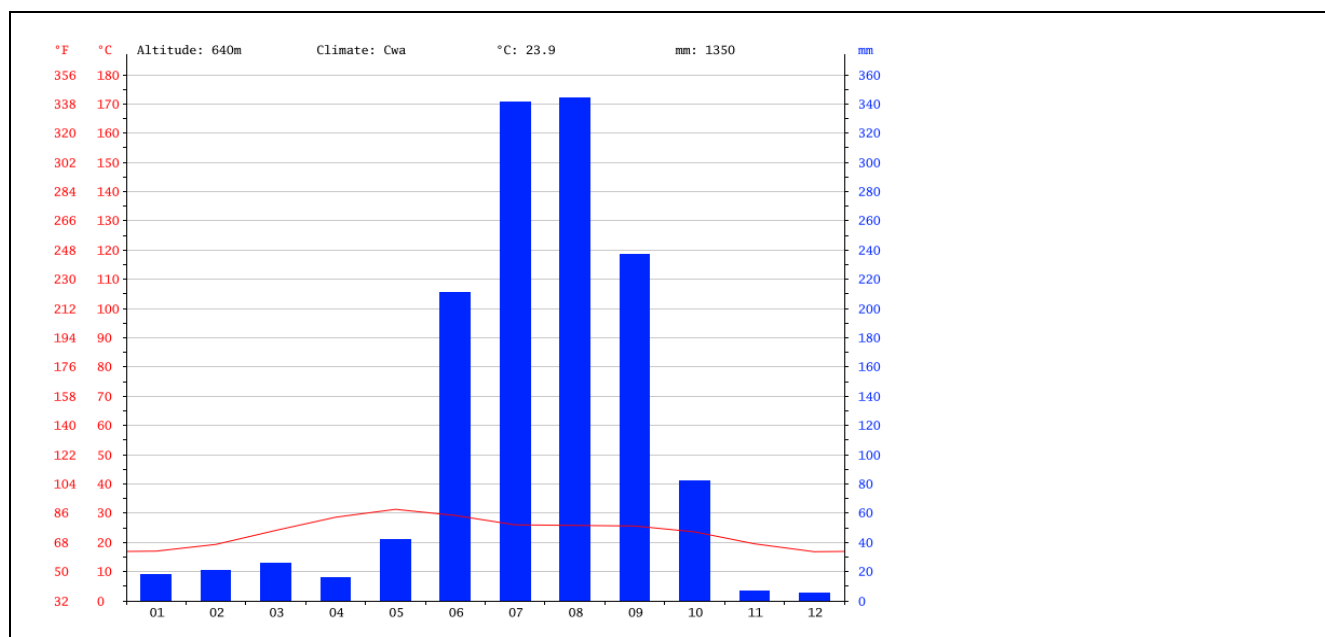
Head	IV (2014-15)	V (2015-16)	VI (2016-17)	VII (2017-18)	VIII (2018-19)	TOTAL
Recurring	5.0	12.0	35.2	20.2	13.9	86.30
Non-Recurring	24.8	16.75	49.5	29.5	3.5	124.05
TA	0.75	1.0	1.0	1.3	0.5	4.55

b. Other than ICAR: Nil.

c. Any other: Nil.

12. Agro climatic zone (IV. Khunti) and jurisdiction (District/State Boundaries):

Climate: The district is characterized by warm climate in March to June and later on there is a gradual decline in temperature from October onwards to December. January is the coolest month of the year.



Traditional crops:

Rice, Wheat, Maize, Pigeon pea, Chickpea, Green gram, Mustard, Potato, Okra, Tomato, other vegetables & Mango, Guava, Papaya, Custard apple, Banana, other fruits and **lac cultivation**

Cropping system/situation:

Mostly mono crop, Paddy sowing in dry method, Prominent cultivars are Sahbhagi Dhan and Birsa Dhan 201. Winter crop lac cultivation

Any other:

Soil of the area is Rocky, Sandy and Red loam. Annual rainfall in the region as whole is between **1000 to 1600 mm**. Average annual temperature is 23.9 °C, Warmest month of the year is May, with an average temperature of 31.3 °C and lowest average temperatures in the year occur in December, which is around 16.8 °C. June to September is the monsoon period.

13. Major Activities Undertaken

- Off Campus training of farmers on cultivation of Paddy, Pigeonpea, Chickpea, Mustard, Green gram and lac cultivation.
- *Kisan Goshthi* / Field day/Seminar (Lac Cultivation/ Agricultural Technology)
- Farmers training on scientific lac cultivation at IINRG campus.
- Off Campus training of farmers on Sampling Techniques.
- Fertilizer awareness programme among ST farmers at IINRG campus

- Monitoring and advisory services by the Scientist of IINRG at farmers field.
- Farmers Interest Group (FIG) meeting organized at Khunti on 22nd May, 2015, in which 37 beneficiaries participated
- A field demonstration on lac processing through Small Scale Lac Processing Unit (SSLPU) was conducted on 21st July, 2015



Field day and *Kisan Ghosti* at Torpa, Silda, Khunti



Field day and Kisan Ghosti at Kota, Arki block, Khunti





Training activities conducted by KVK



Field and monitoring visit

- Residential training programme on 'Preparation of Lac Bangles' facilitated during 28th September to 14th October, 2015.
- Research-Extension Farmer Interface meeting was conducted on different villages throughout the year time to time.
- Small scale Lac Processing Unit (SSLPU) was established at block building of Arki.
- About 21 visits for crop monitoring and 8 SHGs meetings were organized at Khunti.
- Skill development programme on Scientific lac cultivation, processing and utilization through DAO & KVK. Khunti, Jharkhand.

Events/Programmes organized

- *Mahila Kisan Diwas*
- World Soil Day
- *Kisan Diwas*
- *Parthenium* Awareness Program in different villages of Khunti
- *Sawatchta hi seva pakhwada* programme in different villages & schools
- Awareness Training on Protection of Plant Varieties and Farmers' Rights (PPV and FRA) Act, 2001 organized
- Farmer's Fair-cum-Awareness Programme on *Pradhan Mantri Fasal Beema Yojna* (PMFBY) on April 13, 2016
- A Programme on “**New India Manthan-Sankalp Se Siddhi**” was organized by KVK, Khunti at Torpa on August 26, 2017. The Chief Guest Hon'ble Member of Parliament, Khunti Shri Kariya Munda ji inaugurated the programme
- Other assigned activities viz., **Satarkta Jagrukta Saptah**



Mahila Kisan Diwas



World Soil Day



Kisan Diwas



Swachta Hi Seva Karyakaram



Protection of Plant Varieties and Farmers' Rights



Farmer's Fair-cum-Awareness Programme on Pradhan Mantri Fasal Beema Yojna



A Programme on “New India Manthan-Sankalp Se Siddhi



Satarkta Jagrukta Saptah



Swachta Hi Seva Karyakaram

14. SWOT (Strengths, Weakness, Opportunities and threats) Analysis of KVKs

Strengths:

KVK is situated in Tribal dominated area. Crop production especially Rice and lac cultivation are major source of livelihood

Weakness:

Major area is under rainfed, low level of literacy, fragmented land holdings

Opportunities:

Introduction of improved varieties/ breed and technologies, exploitation of available lac host plant

Threats:

Risk to mitigate the effect of climate change

15. Brief account of progress made towards modernization of office, equipment's, staff amenities, Transport, O & M reforms etc.

- Construction of modernized KVK building is under progress
- Rotavator, Disc harrow, MB plough
- Furniture and fixtures
- ICAR-IINRG vehicle facilities are availed and utilized

16. Efforts and achievements made in the last eight years towards up gradation of knowledge and skills of staff of KVK i.e. Human Resource Development (Training of Staff in Trainers' Training Centres and other Institutes etc).- One Management Development Programme at ICAR-NAARM, Hyderabad during April 22 to May 06, 2016; KVK, Gurgaon during May, 11-20, 2016 and ICAR-ATARI, Kolkata during May 23-27, 2016.

17. Frontline Demonstration Programme

Front-line demonstration in *rabi* and *kharif* seasons

Season	Crop	Technology	Area (ha)	No of Demonstrations	Total Farmers
Rabi (Summer2016-17)	Green Gram	Variety (IPM 2-3) +INM (Bio-fertilizers= Rhizobium & PSB)	10	25	50 (ST)
Rabi-2017-18	Chick Pea	Variety (GNG 1581) +INM (Rhizobium & PSB)	10	25	40(Gen22, SC-5, ST-10, OBC-3)

Rabi (Summer 2017-18)	Green Gram	Variety (IPM 2-3) +INM (Bio-fertilizers= Rhizobium & PSB)	10	25	40
Kharif-2017	Pigeon Pea	Variety (LRG-41)+INM (Rhizobium & PSB) (20:50:25:20)	10	25	39 (ST)

Crop (No. of demonstrations).	Variety, Technology	Farmer's Existing plot			Demonstration plot			
		Gross cost (Rs)	Gross return (Rs)	Net return (Rs)	Gross cost (Rs)	Gross return (Rs)	Net return (Rs)	B:C (Rs)
Green Gram (25)	IPM 2-3 +INM (N25:P50:K25) seed treatment with Rhizobium & PSB @200gm/10kg seed	(Not growing in summer season)	-	-	40000	73700	33700	1.84
Pigeon Pea (25)	Variety (LRG-41)+INM (Rhizobium & PSB) (20:50:25:20)	14290	24800	10508	18180	41325	23145	2.27
Chick Pea (25)	Variety (GNG 1581) +INM (Rhizobium & PSB)	(Not growing in summer season)	-	-	19050	67500	48450	3.54

FLD on Paddy (5 No. of demonstration) : Sahbhagi Dhan

Name of the technology demonstrated	No. of FarmerS	Area (ha)	Yield (q/ha)		% change in yield	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
			Demons ration	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Introduction of new variety	7	2.0	34.0	28.0	21.42	30500	51000	20500	1.67	25100	42000	13340	1.67

*Economics worked out based on total cost of production per unit area and not on critical inputs alone

** BCR= Gross Return/Gross Cost

Season	Crop	Technology	Area (ha)	No of Demo.	No. of farmers (villages)	Yield q/ha Demo.	Yield q/ha non demo.	% Increase over non demo
Rabi- 2017-18	Chickpea	Variety (GNG 1581)+INM(Rhizobium+PSB)	10	25	40 (11)	9.50	5.75	65.21
Summer-2018	Green gram	Variety (IPM 2-3)+INM(Rhizobium+PSB)	10	25	44 (04)	8.50	4.50	88.9
Kharif-2018	Paddy	Variety “SahbhagiDhan”	4	10	20 (02)	32.40	14.50	123.4

During Rabi 2017-18, 25 Front Line demonstrations were conducted on Chickpea.

The Chickpea variety GNG1581 given 65.21% more yield over non demonstration having local variety



FLDs on Paddy, Chick pea, Green gram and Pigeonpea

18. Critical input supplied during the period under review: a) Agri-inputs

Inputs	V (2015-16)	VI (2016-17)	VII (2017-18)	VIII (2018-19)	Total
i) Seed - Crop-wise & \ variety-wise					
Paddy (in Kg)					
Sahbhagi			100	200	300
Pigeon Pea (in Kg)					
LRG 41			200		200
Asha		380			380

Green Gram (in Kg)					
IPM Z-3		300	300	200	800
Chick Pea (in Kg)					
JAKI 9218	1125		750		1875
ii) Biofertiliser					
Rhizobium		50 pkts 10 kg	200 pkts 40 kg		250 pkts 50 kg
PSB		50 pkts 10 kg	200 pkts 40 kg		250 pkts 50 kg



Seed distribution at farmers field



Broodlac distribution in Murhu block of Khunti



Broodlac distribution in Rania block of Khunti



Broodlac distribution in Torpa block of Khunti



Broodlac distribution in Kota, Arki block of Khunti

Inputs provided for scientific *Kusmi* lac cultivation

19. Soil Testing and Soil Health Cards Issued

Inputs	V (2015-16)	VI (2016-17)	VII (2017-18)	VIII (2018-19)	Total
Soil Samples tested	-	-	04	05	09
Soil Health Card issued	-	-	130	150	280
No of Farmers benefitted (soil testing awareness)	-	-	250	450	700



Soil Samples tested



Soil Health Card issued

20. Capacity building of KVK Staff / Trainers:**Number of staff trained : One****Area of trainig : Management Development Programme****Utilization of updated knowledge : Yes****Number of Workshops / Seminars attended : 16****21. Number of new crop varieties evaluated by the KVK scientists and identification of most suited one or two**

Crop/variety	Year of testing	Best suited varieties
Paddy: a. Sahbhagi	2017-18, 2018-19	Sahbhagi
Green Gram a. IPM 2-3	2016-17, 2018-19	IPM 2-3
Chick Pea a. GNG-1581	2017-18	GNG-1581
Pigeonpea a. LGR-41 b. Narendra Arhar-1	2017-2018	LGR-41

22. Extension Activities Undertaken (Numbers)

Activity	V (2015-16)	VI (2016-17)	VII (2017-18)	VIII (2018-19)	Total
Field Days			2	1	03
Agril. Exhibition	1				01
Farmers' Fairs	1	1	1	2	05
Radio Talk	2		2		04
TV show	3	1		6	10

Film show	1				01
Training materials produced Pamphlets/ Video-cassette/ CD/ Slides			2	3	05
Farm Science Club organized				1	01
Mahila Mandals Organized			1	1	02
Extension Training meetings organized					
Kisan Ghosthi		04	02	02	08
Farmers Seminar		04	01	03	08
Lectures delivered as resource persons			04	03	07
Newspaper coverage		08	12	15	35
Popular articles				05	05
Advisory Services		10	20	25	55
Scientific visit to farmers field		20	22	63	105
Soil test campaigns		01	03	01	05
Self Help Group Conveners meetings		04	05	01	10
Celebration of important days (Mahila Kisan Diwas, World Soil Day Kisan Diwas)			03		03
Technology week			01		01
Others, if any (FLD)		75	100	60	235

23. Publications made during the QRT period

Type of Publication	Title and publishers/Journal/Magazine
Technical Bulletin	<ul style="list-style-type: none"> Moong ki Vaigyanik Kheti . Bulletin (Prasar) No-1/2018.ICAR IINRG.
Popular article :	<ul style="list-style-type: none"> Singh, SP (2016). Paudha Kism Aur Krishak Adhikar Sanrakshan. ICAR-Indian Institute of Natural Resins and Gums, Ranchi, p. 39. Singh, SP (2016). Bharat Sarkar Ki Krishi Sambandhi Yojnayan. ICAR-Indian Institute of Natural Resins and Gums, Ranchi, Bulletin

	<p>No. 02/2016, p. 19.</p> <ul style="list-style-type: none"> • “गमलों में भी उगायें फल/सब्जियां(आम के आम गुठलिओं के दाम)” published in Laksha,2017(ISSN 2454-7840),ICAR-IINRG, Ranchi,pg55-57 • Singh, S.P. Bharatvarsh Mae Beej Utpadan Va Beej Udhyog Ka Vikas. • A Book Chapter in “Beej Utpadan Takniki, Pirsanskaran, Bhandaran Avm Vipnan” published by Holy Cross KVK, Hazaribag. • Singh SP and Kumar N (2018). Jalagam prabandhan avm saghan tikau kheti. Laksha (ISSN 2454-7840), ICAR-IINRG, 67-68 pp
Extension Literature	<ul style="list-style-type: none"> • Dr SP Singh, delivered a invited lecture on “Seed Production, Registration, Tagging and Seed Act” in a one month training under the project “Seed Processing Worker” funded by Agricultural Skill Council of India was delivered on 24-03-2018 at HC KVK, Hazaribag . • Dr SP Singh, delivered an invited lecture on “Inspection of Seed Production Field and Constraints” in a one month training under the project “Seed Processing Worker” funded by Agricultural Skill Council of India was delivered on 24-03-2018 at HC KVK, Hazaribag
Others, if any (TV talk)	<ul style="list-style-type: none"> • Mitti ki Sehat ke Jaanch ke Tarike. Annadata programme, News 18 (ETV), Bihar, Jharkhand, 29-11-18, 6 minutes. • Choupal Par Kisanou Ki Krishi Samashyayen. Annadata, Krishi Vaarta, Chaupal, News 18 (ETV), Bihar, Jharkhand, 30-11-18, 7.35 minutes. • Rabi Faslon Ka Prabandhan. Annadata, News 18 (ETV), Bihar, Jharkhand, 30-11-18, 3.40 minutes. • Samekit Paddhti Se Kheti Kar Safal Bane Yuva Kisan. News 18 (ETV), Bihar, Jharkhand, 06-12-18, 7.00 minutes. • Kisanou Ki Amadni Badhana. Samachar, Doordarsan, Bihar, Jharkhand, 17-7-18, 1.0 minute
ICAR News	<ul style="list-style-type: none"> • Publicity- Progress of project published in ICAR News entitled, "small Scale Lac Processing Unit established at Khunti, Jharkhand

Participation in *Kisan Mela/ Exhibition/Interface Meeting*

- *Swasthya Mitti- Swasthya Fasal-Swsthya Samaj*’ organised on January 28-29, 2016
- International Women’s Day’ on March 9, 2016
- *Krishi Unnati Mela* - 2016, ICAR-IARI, New Delhi, March 19-21, 2016.
- Attended meeting of Heads of KVKs, DAOs and other government officials of Agriculture Department of Jharkhand called by Chief Secretary, Govt. of Jharkhand, June 04,2016.

- Attended meeting of Heads of KVKs called by Vice Chancellor, BAU, Ranchi, June 04, 2016.
- Participated in National Symposium on “Recent Trends in Biopolymers” on Feb 17-18, 2017.
- Attended a Hindi *Sangosthi* on “*Rajya me’ Bhugarbh Jal Ki istithi evam Jal Chhajan*” on March 1, 2017.
- Attended “Farmers First Program” organized by ICAR-IIAB, Ranchi at ICAR-IINRG, Ranchi on March 25-26, 2017.
- Participated in “Annual Zonal Workshop of KVKs of ICAR-ATARI, Kolkata held on April 14-16, 2017 at ICAR-CIARI, Portblair.
- Participated in “National Workshop on Empowering Farmers of Tribal Areas” on June 7-8, 2017 at NASC Complex, New Delhi.
- Participated in workshop on “Status of Seed Sector in Jharkhand” held on Aug.8,2017.
- Participated 39th Central Shri Ramkrishan Kisan Mela on theme “Jaivik Kheti-Safal Kisan-Samradhya Kisan” on Jan 23-24, 2017.
- Participated 39th Central Shri Ramkrishan Kisan Mela on theme “Jaivik Kheti-Safal Kisan-Samradhya Kisan” on Jan 23-24, 2017.
- Attended “*Kisan Mela- Sah- Takneek evam Machine Pradarshini, 2017*” on Feb 10,2017.
- Participated and presented progress report of KVK, Khunti in workshop of CFLD on Oilseeds and Pulses organized by ICAR-ATARI, Patna (Zone-IV), January 08-09, 2018, CPRS, Patna.
- Participated in 10th Biennial National Conference of KVKs-2018 on Technology for Doubling the Farmers’ Income organized by Agril. Extension Division- ICAR, March16-17, 2018, ICAR-IARI New Delhi.

Other support to stake holders

- *Krishi Kalyan Abhiyan* - 19 lac cultivation programmes were organized and 2182 farmers benefited
- Lac Integrated Agro-Forestry System of World Agro-forestry Centre (ICRAF) at four blocks of Khunti
- District Agriculture Office
- *Mahila Vikash Kendra*
- Scheduled caste sub plan

Future Strategy

- Recruitment of KVK staff
- Infrastructure Development
- Quality Seed Production
- Entrepreneurship development
- Regular KVK activities viz., FLD, Training, Kisan ghosti etc
- Assigned activities

