PROSPER

Empowering Tribes-Transforming Lives

Editors

Dr. Kalyan Sundar Das
Dr. Shyamal Kumar Mondal
Dr. Ankita Begam
Dr. Pradip Dey

भाकृअनुप
ICAR

भाकृअनुप-कृषि तकनीकी अनुप्रयोग अनुसंधान संस्थान कोलकाता
ICAR- Agricultural Technology Application Research Institute
भूमि विहार काम्प्लेक्स, ब्लाक-जी.बी., सेक्टर-3, साल्ट लेक, कोलकाता - 700097
Bhumi Vihar Complex, Block- GB, Sector- III, Salt Lake, Kolkata- 700097, WB

अटारी ATARI
KOLKATA
ZONE-V

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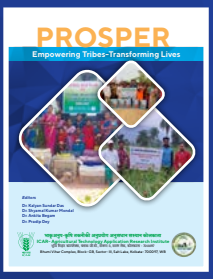

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This publication is an outcome of technical achievements done by 10 KVKs of 8 districts of ICAR-ATARI Kolkata

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Foreword

Tribal Sub-Plan (TSP) was initiated for the rapid socio-economic development and welfare of the tribal people. TSP is a strategy to elevate the economic, educational and social conditions of tribal communities. Agricultural technologies disseminated by KVKs have been instrumental in transforming tribal livelihoods and narrowing the developmental chasm between scheduled tribe and the general populace. The KVKs have been the torchbearers of the Tribal Sub-Plan (TSP) or Scheduled Tribe Component (STC), executing the vision through the diligent efforts of the Agricultural Technology Application Research Institutes (ATARIS).

I am happy to know that ICAR-ATARI Kolkata has undertaken the commendable task of documenting the significant achievements of various KVK activities in tribal dominated districts. The document not only chronicles the success stories but also encapsulates the valuable experiences of the scientists who were engaged with this scheme. It will be helpful for readers, researchers, policy makers and other stakeholders in crafting future roadmaps of tribal development.

I extend my appreciation to Dr. U. S. Gautam, DDG (AE); Dr. Pradip Dey, Director, ICAR-ATARI Kolkata, and their dedicated team for their unwavering commitment in coordinating the TSP/STC activities and meticulously compiling this document.

I compliment the authors for their exceptional contribution in bringing out this book.

Himanshu Pathak

Dated the 4th July, 2024
New Delhi

भाकृअनुप
ICAR

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Foreword

It gives me immense pleasure to learn that the remarkable document compiled by ICAR- Agricultural Technology Application Research Institute, Kolkata, detailing the multi-faceted agricultural activities conducted under Tribal Sub Plan (TSP)/Scheduled Tribe Component (STC) from 2017-18 to 2022-23. This document, aptly titled 'Prosper: Empowering Tribes- Transforming Lives', captures the tireless dedication and innovative spirit of ten KVKs of the Zone. These KVKs have been working at grassroots level in their respective districts, adhering diligently to the Council's guidelines.

Despite the inherent challenges and remoteness of these tribal-dominated districts, the KVKs have played pivotal role in enhancing the livelihoods and socio-economic status of the tribal community. Their efforts in asset creation, technology assessment, demonstrations, capacity building through skill development and conducting other special programmes have inspired, educated and enlightened farmers on the latest agricultural advancements.

This publication stands as a testament to their painstaking efforts and is truly commendable. I extend my heartfelt appreciation to the Director, ICAR-ATARI Kolkata and his team of scientists for their industrious documentation. My congratulations go to the KVKs for their unwavering commitment to the successful implementation of the scheme. Their work not only transforms the lives of the tribal communities but also contributes significantly to the broader goal of inclusive agricultural development in our nation.

Udham Singh Gautam

Preface

The upliftment of the socio-economic status of tribes has always been a top priority for the Government of India (GoI). Specially focused strategies and comprehensive policies have been crafted and adopted over time to ensure that scheduled tribes share the benefits of developmental growth equitably. As the plan evolved, its scope expanded, and even the scheme's name was changed to 'Scheduled Tribe Component (STC)' from erstwhile 'Tribal Sub Plan (TSP)'. The Ministry of Tribal Affairs, GoI, identified tribal-dominated districts (with over 50% tribal population) to improve the quality of life for the tribal community. Under ICAR-ATARI Kolkata, eight such districts- seven from Odisha and one from the Andaman & Nicobar Islands were earmarked for STC/TSP. In these districts, 10 Krishi Vigyan Kendras (KVKs) under the Division of Agricultural Extension, ICAR, New Delhi, actively implemented the scheme. These KVKs included Nicobar from Andaman & Nicobar Islands and Gajapati, Kandhamal, Mayurbhanj-I, Mayurbhanj-II, Malkangiri, Nabarangapur, Raygada, Sundargarh-I and Sundargarh-II from Odisha.

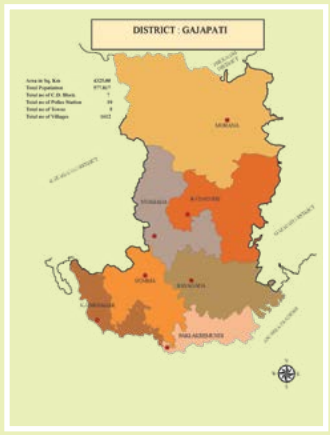
I am delighted to share that all 10 KVKs in this zone did splendid work from 2017-18 to 2022-2023, significantly benefiting the tribal community through holistic agricultural development. Despite limited manpower, they covered 760 villages during this period. The KVKs conducted a total of 476 On-Farm Testing (OFT), 11110 Front Line Demonstrations (FLDs), 3402 training sessions, and 2440 special programs, benefiting 3285, 11110, 89721 and 196546 tribal farmers, respectively. A substantial number of assets (23979) were created and distributed among 12335 tribal farmers. Additionally, the KVKs produced 6944 quintals of seeds, 33.72 lakh planting materials and 3.18 lakh livestock and fish fingerlings, benefiting 37602, 24312 and 6383 farmers, respectively. KVK scientists also tested 22392 soil and 200 water samples, benefiting 57945 farmers. A total of 3070 agro-advisories covering crops, livestock, fisheries, weather, marketing and enterprises were communicated to 54.31 lakh tribal farmers. The STC/TSP not only enhanced average family income and consumption levels by about 21% each but also increased the availability of agricultural implements per household by 3.62%. It improved access to refined agricultural technologies, seeds, planting materials, livestock, fish fingerlings and upgraded knowledge and skills for soil test-based fertilizer use and other agricultural practices.

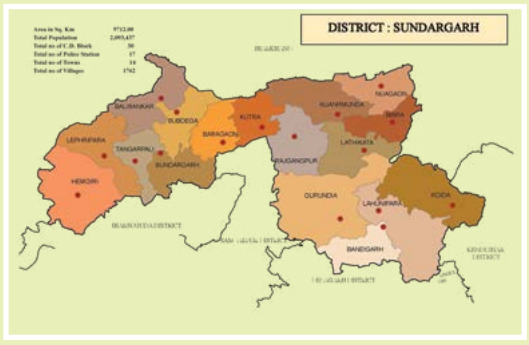
I must commend the hard work and tireless efforts of all 10 KVK personnel in implementing this scheme systematically and achieving remarkable milestones during the reporting period. This book, titled *'Prosper: Empowering Tribes-Transforming Lives'*, provides comprehensive and detailed information about the physical and financial achievements of various activities conducted under STC/TSP by the ten KVKs in this zone over six years. The book highlights the transformative potential of STC/TSP activities in tribal areas, empowering communities and paving the way for a sustainable, prosperous future, while inspiring action and dialogue among policymakers and stakeholders. I sincerely acknowledge the encouragement and guidance from the Agricultural Extension Division, ICAR, New Delhi; the help from the Director, ICAR-CIARI, Port Blair and the Dean, Extension Education, OUAT, Bhubaneswar; as well as the contributions of the Scientists and Staff of ICAR-ATARI Kolkata for their hard work in bringing out this publication.

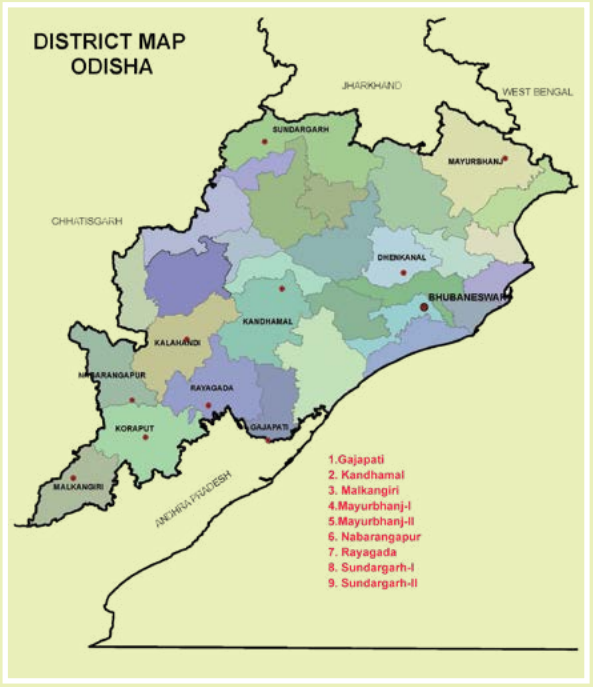
Kolkata
04.07.2024

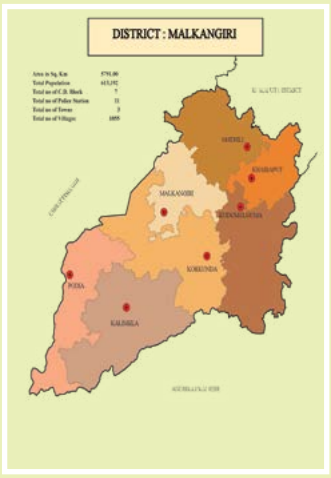
(Pradip Dey)
Director

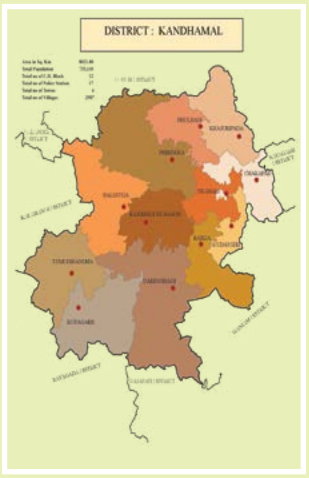
District Map of TSP KVKs

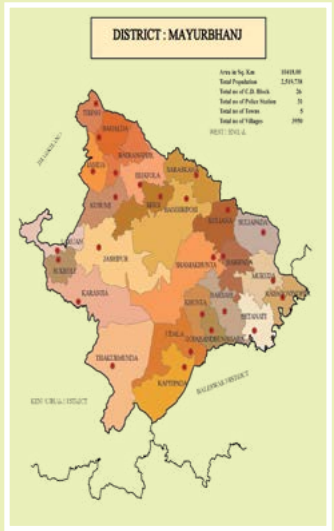


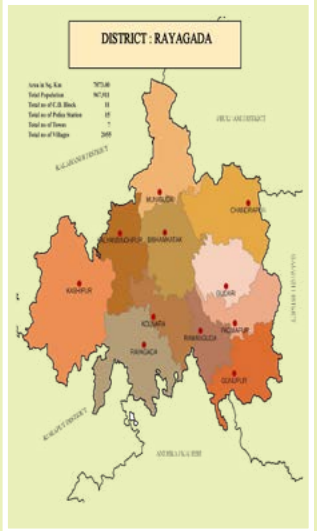












Contents

CHAPTER 1

INTRODUCTION

Primitive, geographically isolated, shy and socially, educationally and economically backwardness are the traits that distinguish Scheduled Tribes of our country from other communities. The report of National Commission for Scheduled Tribes (NCST), GoI envisaged that tribal communities live in about 15% of the country's areas in various ecological and geo-climatic conditions ranging from plains to forests, hills and inaccessible areas. Tribal groups are at different stages of social, economic and educational development. While some tribal communities have adopted a mainstream way of life at one end of the spectrum, there are 75 Primitive Tribal Groups (PTGs), at the other, who are characterized by (a) a pre-agriculture level of technology, (b) a stagnant or declining population (c) extremely low literacy and (d) a subsistence level of economy. As per article 342 of the Constitution of India, there are more than 500 tribes (with many overlapping communities in more than one State) spread over different States and Union Territories of the country and the largest number of tribal communities are found in the State of Orissa.

Promotion of all round development of tribals inhabiting the length and breadth of our country has received prior attention of the government. The Tribal Sub Plan (TSP) was a planning concept which was implemented in 17 states and 2 union territories of India for the first time during Fifth Five Year Plan (1974-1979) to channelize the flow of benefits from the general sectors in the Central Ministries/ Departments for the development of tribal population. The sphere of the plan has been gradually increased with the passage of time. At the end of the Ninth Five Year Plan (2002), 23 states and union territories were covered under that plan. The concept was intended to address the issues of backwardness in tribal areas and tribal population in an integrated way. The purpose of TSP was to minimize the gap between the livelihood of tribal people and other general communities both in physical and financial terms through addressing the issues relating to education, health services, housing, income generating opportunities and protection against exploitation and oppression.

The TSP strategy had twin objectives- i) socio-economic development of scheduled tribes and ii) protection of tribal people against exploitation. Guidelines on formulation, implementation and monitoring of TSP were issued by the Planning Commission from time to time to the States/UTs and Central Ministries for the formulation and effective implementation of the TSP. In the year 2005, it was revised and during 2006, guidelines were issued. In 2010, a task force identified 28 Central Ministries/departments to earmark allocation in proportion to the population of STs. Initially, the blocks or tehsils with 50 per cent or more tribal population were included under TSP and the development was closely monitored by the tribal welfare departments of the respective states.

At the Indian Council of Agricultural Research (ICAR) in the year 2015-16, Zonal Project Directorates were renamed as Agricultural Technology Application Research Institute (ATARI) and subsequently, three new ATARIs were created. Accordingly, KVKs were redistributed under 11 ATARIs in the year 2017-18. Since then, ICAR-ATARI Kolkata is monitoring different activities of 8 tribal dominated districts covering 10 Krishi Vigyan Kendras (KVKs) which were identified by the Ministry of Tribal Affairs, GoI to provide the tribal people a better quality of life. Ten KVKs, who are dealing with TSP, are Gajapati, Kandhamal, Mayurbhanj-I, Mayurbhanj-II, Malkangiri, Nabarangapur, Rayagada, Sundargarh-I and Sundargarh-II from Odisha and Nicobar (Andaman and Nicobar Islands). The monitoring of TSP plan was being done by erstwhile Planning Commission till the year 2017-18.

The earlier system of planning was discontinued and the TSP was renamed as Scheduled Tribe Component (STC) by the Ministry of Finance after merging of Plan and Non-Plan schemes and the responsibility of monitoring of STC plan was given to the Ministry of Tribal Affairs. Forty-one Central Ministries/Departments were identified for earmarking STC and the State Governments were supposed to earmark TSP funds in proportion to ST population (Census 2011) in the States with respect to total State Plan. The Government allocated funds for different schemes/programmes across Ministries/ Departments for targeted financial and physical benefits to the Scheduled Tribes. Ministry of Tribal Affairs launched an online portal as *'Scheduled Tribe Component Management Information System (STCMIS)'* in 2018. The portal monitors the funds allocated/released for the welfare of Scheduled Tribes in Union Budget. In the year 2022-23, the STC scheme was continued in the name of Development Action Plan for Scheduled Tribes (DAPST).

However, all 10 above mentioned KVKs of ICAR-ATARI Kolkata were continuously engaged with conducting different mandated activities which included asset creation, on-farm trials (OFTs), frontline demonstrations (FLDs), capacity building training of farmers/farm women/rural youth, training of extension functionaries, various extension programmes, seed/planting materials/livestock/fish fingerlings production, soil/water testing, plant/livestock disease diagnosis, providing agro-advisories etc. for the benefit of tribal farmers in their respective districts. Through this publication, an effort has been made to document various activities conducted by 10 tribal KVKs of this zone during the year 2017-18 to 2022-23 which have been presented under the following heads.

CHAPTER 2

DETAILS OF TRIBAL DISTRICTS UNDER ICAR-ATARI KOLKATA

2.1 Details of tribal districts with population

The total number of blocks under the jurisdiction of different KVKs under ICAR-ATARI Kolkata, their total population and tribal population including male amd female have been shown in the following table.

Table: Details of population of tribal districts

State/UT	District	Name of KVK	Total No. of Blocks	Total Population in District	Population		Total ST Population in District	Population	
					M	F		M	F
Odisha	Gajapati	Gajapati	07	577817	282882	294935	313714	151902	161812
	Kandhamal	Kandhamal	12	733110	359945	373165	392820	190506	202314
	Malkangiri	Malkangiri	07	613192	303624	309568	354614	171717	182897
	Mayurbhanj	Mayurbhanj-I	26	2519738	1256213	1263525	1479576	730487	749089
		Mayurbhanj-I							
	Nabarangpur	Nabarangpur	10	1220946	604812	616134	5060	2497	2563
	Rayagada	Rayagada	11	967911	471960	495951	541905	259040	282865
	Sundargarh	Sundargarh-I	17	2093437	1061147	1032290	1062349	526856	535493
		Sundargarh-II							
Total			**90**	**8726151**	**4340583**	**4385568**	**4150038**	**2033005**	**2117033**
A & N Islands	Nicobar	Nicobar	03	36842	20727	16115	23681	12198	11483
Grand Total			***93***	***8762993***	***4361310***	***4401683***	***4173719***	***2045203***	***2128516***

Source: Census (2011)

2.2 Details of villages covered

The total number and name of villages covered by the different KVKs of this zone for different activities during the year 2017-18 to 2022-23 under TSP/STC are mentioned in the following table.

Table: Details of villages where different activities of TSP conducted during the year 2017-18 to 2022-23

Year	Name of KVK	Name of district	Sub-district	No. of Village	Name of village(s)
2017-18	Gajapati	Gajapati	Gajapati	5	Bhubani, Landusahi, Anukampa, Kaithapada and Titisingh
	Kandhamal	Kandhamal	Kandhamal	9	Burbinag, Nilungia, Kaladaganda, Kilakia, Simanbadi, Sudhipada, Gunjigaon, Sugadabadi and Bandaguda
	Malkangiri	Malkangiri	Malkangiri, Korkunda, Podia and Kalimela	12	Machhia, Kansapal, Ambdubi, Belam, Kochilapada, Pandasole, Sikargahi, Kisandahi, Brahamnigaon, Talabandha, Gargaria and Salabani
	Mayurbhanj-I	Mayurbhanj	Kaptipada, Bangiriposi, Shamakhunta, Badasahi, Kuliana, Baripada and Betnoti	12	Machhia, Kansapal, Ambdubi, Belam, Kochilapada, Pandasole, Sikargahi, Kisandahi, Brahamnigaon, Talabandha, Gargaria and Salabani

Year	Name of KVK	Name of district	Sub-district	No. of Village	Name of village(s)
	Mayurbhanj-II		Karanjia and Rairangpur	5	Badsole, Sialinai, Godapalsa, Kulgi and Mayurdar
	Nabarangapur	Nabarangpur	Jharigaon, Umerkote, Dabugaon, Raighar and Nandahandi	5	Monoguda, Chikalpadar, Junapani, Chatabeda and Sindhiguda
	Rayagada	Rayagada	Gunupur	14	Pradhaniguda, Dandaguda, Neelamguda, Bentiguda, Gadiakhala, Sanhuma, Garanda, Nalpanda, Laxmanguda, Rupapadar, Armada, Putasingh, Talana and Bhaleri Kudia
	Sundargarh-I	Sundargarh	Balisankara, Rajgangpur, Sadar, Tangarpali and Bargaon	6	Kinjrikela, Ranibandh, Lahandabud, Sundargarh, Khamarbahal and Talimunda
	Sundargarh-II		Panposh and Bonei	7	Guduguda, Khatankudar, Ranto, Nuniapalli, Putrikhaman, Bijadihi and Soleguda
	Nicobar	Nicobar	Car Nicobar	5	Big Lapathi, Arong, Tapoiming, Tamaloo and Kinyuka
Sub-total				***80***	
2018-19	Gajapati	Gajapati	Gumma, Mohana, R. Udayagiri, Kasinagar, Gosani, Rayagada, Nuagada	55	Loba, Gaiba, Parida, Jhami, Serango, Bapunbudi, Tarangada, Tarava, Bhubani, Neridiguda, Anukunda, Chandiput, Birikote, Govindapur, Labarsingi, Jubagaon, Kaithapada, P.Govindpur, Ranalai, Chellagada, Mahendragada, Ramgiri, Sabarpalli, Phatachanchada, Kushapalli, Lubursing, Sunduruba, Chadiapada, Makapada, Kankadaguda, Anukumpa, Alama, R.Udayagiri, Tadava, k. sitapur, Allada, Kharsanda, Jajpur, Bhuskudi, Bagasola, Uppalada, Tatipati, Gandahati, Burujang, Jiranga, Narayanpur, Landusahi, Koinpur, Badapada, Tabarada, Luhangar, Titising, Souri, Leoba and Attarsing
	Kandhamal	Kandhamal	G. Udayagiri, Tikabali, Raikia, Daringibadi, K. Nuagaon, Khajuripada	15	Katadaganda, Bearpanga, Dakapala, Kilakia, Sujeli, Lamungia, Sirki, Penala, Burbinaju, Beredakia, Ladamala, Gindapanga, Bandaguda, Bedangpaju and Suduli
	Malkangiri	Malkangiri	Malkangiri	10	MV-2, MV-3, MPV-1,Boilapari, Tandapali, MV-9, MPV-6, MV-72, Siripeta and Jharapali
	Mayurbhanj-I	Mayurbhanj	Bangiriposi, Badasahi, Kuliana, Kaptipada, Baripada, Chitrada, Rasgovindpur, Shamakhunta and GB Nagar	34	Ghatkuanri, Slaghati, Domuhani, Bhandibil, Baskitola, Bautia, Jamtola, Kukurbhuka & Kamolpur, Kanchinda, Laxmiposi, Rangamatia, Brahmanigaon, Nayabasan, Unchabali, Chalkmadhapur, ABC Pur, Keutunimari, Betana,Ranigbeda, Fuljhara, Dardara, Macchia, Orachandabila Garudanesa, Betna, Astia, Thankaripal, Chakulia, Biripal, Tarajodi, Jambani, Jualirama and Nuagaon
	Mayurbhanj-II		Jashipur, Karanjia, Sukuruli, Kusumi, Raruan	26	Kasipal, Jumukakudar, Deuli, Kankadani, Kapanda, Chadripahadi, Handipuhan,Tulasibani, Jamunalia, Kaptira, Chatrisahi, Kusumi, Badsole, Godapalsa, Tarana, Badbil, Kaptira, Chinabeda, Kalapathara, Jashipur, Tangabila, Kasipal, Chadripahadi, Sialinai,Suanpal and Matiagarh Colony Sahi
	Nabarangapur	Nabarangpur	Nabarangpur	12	Monoguda, Chikalpadar, Bhamini, Chatabeda, Adibasi, Junapani, B.S Padar, Majhiguda, Nayakguda, Sanakumari, Badakumari and Badabharandi
	Rayagada	Rayagada	Gunupur	24	Pradhaniguda, Nuagaon, Neelamguda, Sanhuma, Gadiakhala, Nalpanda,Garanda, Rupapadar,Laxmanguda, Buting,Armada, Talana, Pagadabilli, Chalkamba, Kaithapadar, Bagsala, Turkaniguda, Bhaleri, Kudia, Ghanantri, Dandaguda, Putasingh, Majhiguda and Bharsingh

Year	Name of KVK	Name of district	Sub-district	No. of Village	Name of village(s)
	Sundargarh-I	Sundargarh	Sadar, Bargaon, Tangarpalli Rajgangpur	9	Salangabud, Lahandabud, Birjaberna, Kinjrima, Barangakacchar, Talimunda, Khamarbahal, Ranibandh and Jhagarpur
	Sundargarh-II		Nuagaon, Lathikata, Panposh	9	Guduguda, Birkera, Ranto, Putrikhaman, Guduguda, Nuniapalli, Bagbudi, Khatankudar and Gotitangar
	Nicobar	Nicobar	Car Nicobar	10	Chuckchucha, Tapoiming, Kinyuka, Tamaloo, Perka, Mus,Big Lapathy, Small Lapathy,Arong and Kakana
Sub-total				***204***	
2019-20	Gajapati	Gajapati	Gumma, Mohana, R.Udayagiri, Nuagada, Kashinagar	32	Tarava, Kaithapada, P. Govindpur, Jubagaon, Kaliapeta, Kankadaguda, Lubursingi, Muningadiha, Bayaguda, Kharipada, Jiranga, Jagannathapur, Sinisingi, Bastriguda, Atarsing, Goli, Badapada, Khajuripada, Rajaamba, Anusahi, Leoba, Titising, Upalada, Agarakhandi, Jamdeppur, Adagam, Hrischandrapur, Lingipur, Luhagudi, Mohana, Chandiput and Chandragiri
	Kandhamal	Kandhamal	G. Udayagiri, Tikabali, Raikia, Daringibadi, K. Nuagaon, Khajuripada	15	Sirki, Katadaganda, Bearpanga, Burbinaju, Dakapala, Kilakia, Sujeli, Lamungia, Penala, Beredakia, Ladamala, Gindapanga, Bandaguda, Bedangpaju and Suduli
	Malkangiri	Malkangiri	Malkangiri	8	MV-2, MV-3, MPV-6, MV-9, Pedawada, Boilapari, MV-4 and Dumaliguda
	Mayurbhanj-I	Mayurbhanj	Kaptipada, Rasgovindpur, Bangiriposi, Shamakhunta, Saraskana, Udala, Baripada, GB Nagar	37	Pedagadi, Badakhaladi, Macchia, Karanjapada, Singrisahi, Patharaghera, Gendapokhari, Chandibil, Bautia, Chalunia, Chalunia, Bankoda, Bhaduabada, Kuabuda, Ghuntibili, Nachhipur, Tulasiguth, Medam, Chakulia, Dulikisahi, Tadekiswar, Udala, Guhaldihi, Baripada, K.C. Pu, Sankhapata, Sunraikali , Khunta, Kirikichia, Chiktamatia, Tarakuti, Salbani Nadasole, Gargadia, Chikitamatia, Gundihudi and Dangarsahi
	Mayurbhanj-II		Jashipur, Karanjia, Raruan, Sukruli	17	Badbil, Badasialinai, Kasipal, Angarpada, Tangabila, Badsole, Jhumkakudar, Jamunalia, Begnabinda, Godapalsa, Kulundi, Durdura, Handipuhan, Kaptira, Palasagadia, Sialinai and Sukruli
	Nabarangapur	Nabarangpur	Nabarangpur	7	Monoguda, Chikalpadar, Bhamini, Majhiguda, BS Padar, Sanakumari and Badakumari
	Rayagada	Rayagada	Gunupur, Ramnaguda, Padmapur, Chandrapur	26	Pradhaniguda, Dandaguda, Neelamguda, Nuagaon, Gadiakhala, Sanhuma, Garanda, Nalpanda, Laxmanguda, Rupapadar, Armada, Putasingh, Talana, Bhaleri Kudia, Majhiguda, Pagadabilli, Sanyasipur Bagsala, Neelamguda, Sanhuma, Garanda, Nalpanda, Armada, Achhaba and Laxmanguda
	Sundargarh-I	Sundargarh	Badgaon, Rajgangpur, Tangarpali, Sundargarh	12	Barangakachhar, Talimunda, Birjaberna, Lahandabud, Jhagarpur, Ranibandh, Khamarbahal, Kinjrima, Kesramal, Lahandabud, Birjaberna and Tinkuda
	Sundargarh-II		Sundargarh Lathikata, Gurundia, Bonei	18	Ranto, Guduguda, Sorda, Nuniapalli, Garda, Khatankudar, Arjunchua, Bhaliadihi, Jamudarah, Kudabira, Deoposh, Teliposh, Nuagaon, Ghodabondh, Goldaru, Chikitia, Budeljore and Gudgudjor
	Nicobar	Nicobar	Car Nicobar	12	Tapoiming, Small Lapathy, Big Lapathi, Kinyuka, Kinmai, Tee-Top, Radhanaga, Vijaynagar, Govindnagar Baraenaka, Changamong and Taeela
Sub-total				***184***	

Year	Name of KVK	Name of district	Sub-district	No. of Village	Name of village(s)
2020-21	Gajapati	Gajapati	Gumma, Mohana, Gosani, R.Udayagiri, Nuagada, Kashinagar	90	Abarsing, Alanga, Andarsing, Anukumpa, Ashrayapur, Attarsingh, Baunsasahi, Betaring, Bhandarisahi, Budhisila, Bulabagumma, urusing, Chandiput, Chandragiri, Cheligada, D. Katuru, Dhadiamaba, Dihudisahi, Dihudisahi, Dimirijholi, Dumba, Gamangosahi, Gholakana, Gobindpur, Guluba, Jagannathapur, Jeeba, Jhami, Jhola, Jodaamba, Jubagaon, K.M. Bhaliasahi, Kailashguda, Kaliapata, Kamarsahi, Kanchimula, Kankadaguda, Kankarada, Karanjasahi, Kendusahi, Kodikuma, Kuanpada, Kuttam, Ladiguda, Leoba, Liliguda, Limarsing, Makapada, Manikapur, Marlaba, Munigadia, Munising, N. Rogeising, Nuagada, Nuasahi, Padampur, Phatachanchada, Pindiki, Puspanga, R. Sitapur, R. Udayagiri, Raghunathpur, Raijuka, Ranalai, Randiba, Ringising, Rumunda, Sabarpalli, Sambalpur, Sialilati, Simulisahi, Subalada, Sunduraba, Sureikhamar, Tai, Tandiguda, Taraba, Tarangada, Tarboal, Tikamala, Titisingh, Tubursing, Tuman and Tumba
	Kandhamal	Kandhamal	G. Udayagiri, Tikabali, Raikia, Daringibadi, K. Nuagaon, Khajuripada	15	Bandaguda, Baudinaju, Bearpanga, Brahmanapada, Brainguda, Raipada, Gadaguda, Gindapanga, Kilakia, Kiramaha, Penala, Raipada, Sirki, Sudhipada and Sujeli
	Malkangiri	Malkangiri	Malkangiri	11	Bailapari, Dariguda, Jharapalli, MPV-1, MV-2, MV-3, MV-4, MV-9, Pedawada, Pradhanigu and Tandapalli
	Mayurbhanj-I	Mayurbhanj	Badsahi, Bangiriposi, Baripada, Betnoti, Kaptipada, Khunta, Kuliana, Sarskana Shamakhunta Udala	29	Alhapani, Ambdubi, Arpata, Badakhaladi, Badakuchiamara, Badkuldhia, Bandhagada, Bautia, Bholagodia, Chandibil, Charimania, Gohaldihi, Gundihudi, Jarkani, Jhinkipada, Kakarpani, Khaladi, Khirpada, Kisandahi, Kochilakhunta, Kukudagadi, Kusanpur, Madhapur, Matihudi, Nedam,Nuhamalia, Rangamatia, Sanabisal and Sharata
	Mayurbhanj-II		Jashipur, Raruan, Karanjia, Thakurmunda, Kusumi, Sukruli, Rairangpur, Jamda	24	Askipal, Badbil, Chhemundia, Goudagaon, Hatabadada, Hatigoda, Jamda, Jamunalia, Jhumkakudar, Kalanda, Kalapathar, Kaliani, Kaptira, Kasipal, Kulandi, Kumari, Matiagarh, Nihangandi, Podadiha, Rasamtala, Salarapada, Sangaon, Tangabila and Tilusahi
	Nabarangapur	Nabarangpur	Nabarangpur	5	Bhamini, Chikalpadar, Junapani, Monoguda and Nayakguda
	Rayagada	Rayagada	Gunupur and Raygada	30	Armada, Badabangi Kalma, Bhaleri Kudia, Chalkamba, Chinnasari, Garanda, Ghanantri, Gugurpang, Hadaguda, Jaripang, Khaira, Kulusing, Labba and Laxmanguda, Majhiguda, Nalpanda, Neelamguda, Omding, Ompara, Pandrajholli, Podosingh, Pradhaniguda, Purtiguda,Regeda, Rupapadar, Sanahuma, Srirampur, Talana and Turkaniguda
	Sundargarh-I	Sundargarh	Balisankara, Bargaon, Lephripara, Rajgangpur, Subdega Sundargarh,Tangarpali	12	Barangakacchar, Birjaberna, Damkuda, Khamarbahal, Kinjirkela, Kumbahal, Lahandabud, Masabira, Ranibandh, Talimuna, Tinkuda and Turungagarh)
	Sundargarh-II		Bisra,Gurundia, Kuarmunda, Lathikata and Nuagaon	15	Bagdega, Bareiguda, Ghodabandha, Guduguda, Gudugudejore, Khatankudar, Kutida, Lukumbeda, Nuniapalli, Putrikhaman, Ranto, Sanpokhar, Sona Parbat, Sorda and Yerla
	Nicobar	Nicobar	Car Nicobar	13	Arong, Big Lapathy, Chukchucha, Kakana, Kimious, Kinmai, Kinyuka, Malacca, Mus, Perka, Small Lapathy, Tamaloo and Tapoiming
Sub-total				***244***	

Year	Name of KVK	Name of district	Sub-district	No. of Village	Name of village(s)
2021-22	Gajapati	Gajapati	Gumma, Kashinagar, Mohana, Nuagada, R.Udayagiri	30	Arsisahi, Atarasing, Bachama, Basidar, Bhalipanka, Dhimirijholi, Dihudisahi, Dimirijholi, Gobindapur, Jungjung, Kaliapata, Kankadaguda, Kesara, Kirtingi, Leobo, Lubursing, Luhangar, Narayanpur, Nuagada, Phatachanachada, Pindiki, Punjasaragi, R. Udayagiri, Religuda, Rumunda, Seranga, Sinising, Souri, Sureikhamar and Tuman
	Kandhamal	Kandhamal	Chakapada, Daringbadi, G. Udayagiri, K. Nuagaon, Khajuripada and Tikabali	30	Badakapalla, Badenaju, Badimunda, Bakikamba, Bandaguda, Baudinaju, Bearpanga, Brahmanapada, Brainguda, Gadaguda, Gindapanga, Indrapadia, Kanbagiri, Katadaganda, Kilakia, Kiramaha, Kurumingia, Lingagada, Penala, Pleheri, Raipada, Ratingia, Retudi, Sirki, Srirampada, Sudhipada, Sudsuli, Sujeli, Telengia and Tiangia
	Malkangiri	Malkangiri	Malkangiri	11	Dariguda, Kotliguda, Kotliguda, MPV-1, MPV-6, MV-2, MV-3, MV-8, MV-9, MVV-1 and Pedawada
	Mayurbhanj-I	Mayurbhanj	Badasahi, Bangiriposi, Baripada, Betnoti, G B Nagar, Kaptipada, Kuliana, Morada, Rasgovindpur, Shamakhunta	37	Ambdubi, Astatpura, Badakuldhia, Baghusole, Bagirathipur, Bholagadia, Brahamanigaon, Chakidi, Chalunia, Danagrbila, Domuhani, Ghatakuaniri, Gudughia, Jagganathpur, Jambani, Jualirama, Junapada, Kainchkothi, Karangapada, Kathruma, Khandukhal, Kochilakhunta, Kundalbani, Lalganj, Majhiani, Nagrasole, Nischinta, Palaspani, Sabania, Sadanandapur, Saratchandrapur, Saria, Shymasundarpur, Sikarghati, Sorispal, Tangasole and Tarajodi
	Mayurbhanj-II		Bijatala, Bisoi, Jashipur, Karanjia, Rairangpur, Raruan, Sukruli, Thakurmunda, Tiring	37	Anlabeni, Askipal, Badadeoli, Badajodi, Badapahad, Badateranti, Badbil, Bakala, Balibhol, Bansanali, Batapandugandi, Beaunria, Begunia, Bisoi, Dhatkia, Digdhara, Ghosada, Godapalsa, Jamukesawar, Jaralu, Jharbeda, Kadapandugandi, Kulanda, Madarangajodi, Mahardapalsa, Matiagarh, Moudi, Nuagoan, Podadiha, Purunadeogaon, Rangalbeda, Sangaon, Sialinai, Singarpur, Sulurpada, Tilusahi and Tuntuna
	Nabarangapur	Nabarangpur	Nabarangpur	13	Badakumari, Bhamini, BS Pader, Chhatabeda, Chikalpadar, Chingudiguda, Chitabeda, Dangariguda, Gauintiaguda, Junapani, Kumuli, Managuda and Nayakguda,
	Rayagada	Rayagada	Bargaon, Lephripara, Rajgangpur, Subdega, Sundargarh, Tangarpali	9	Barngakachhar, Birjaberna, Damkuda, Kumbahal, Lahandabud, Phuldhudi, Ranibandh, Sahebdera and Talimunda
	Sundargarh-I	Sundargarh	Bisra, Bonei, Gurundia, Kuarmunda, Lathikata, Nuagaon, Panposh,	14	Bareiguda, Dalakudar, Erla, Ghodabandh, Gopapalli, Guduguda, Khatankudar, Kulenbahal, Lungei, Nuniapali, Putrikhaman, Ranto, Sonaparvat and Sorda
	Sundargarh-II		Gudari, Gunupur Padmapur Ramnaguda	37	Achhaba, Armada, B. Gumarguda, Bada Sangidi, Bada, BadaAchhaba, BadaBangi, Bagsala, Bhimpurguda, Buting, Chalkamba, Garanda, Ghanatri, Gugurpang, Gulumunda, Jaripang, Jerling, Kalma, Khilapadar, Kukurguda, Laba, Limameda, Nalpanda, Nalpandaguda, Nilamguda, Nuagaon, Pagadabili, Pandrajholi, Podosing, Pradhaniguda, Rupapadar, Sanhuma, Sirijholi, Srirampur, Tada, Tolana and Turkaniguda
	Nicobar	Nicobar	Car Nicobar	16	Arong, Big Lapathy, Chuckchucha, Kakana, Kimious, Kinmai, Kinyuka, Malacca, Mus, Kinmai, Perka, Sawai, Small Lapathy, Tamaloo, Tapoiming and Tee-Top
Sub-total				***234***	

Year	Name of KVK	Name of district	Sub-district	No. of Village	Name of village(s)
2022-23	Gajapati	Gajapati	Mohana, Nuagada, R.Udayagiri, Rayagada and Gumma	58	Abarsing, Adava, Alama, Arsis ahi, Attarsing, B.Kalakote, Badapada, Badapur, Bagam, Balibandha, Bayaguda, Bhaliasahi, Chadiapada, Cheligada, Dagharia, Darupani, Dhimirijholi, Dihudisahi, Dimiripanka, Ghodakana, Goli, Jang jang, Jodamba, Jungjung, K.Jhalarsingh, Kaliapata, Kankadaguda, Kankarada, Kere, Kirting, Krushnapur, Leoba, Lubursing, Luhakhunti, Luhangar, Mahulapada, Mohana, Munising, Paniganda, Parimala, Phatachanachada, R.Udayagiri, Rajamba, Rangamunda, Rogalsing, Rumunda, Sabarapalli, Seranga, Sialilati, Sinising, Souri, Sureikhamar, Tangili, Tarava, Tikamal, Tubursing, Tuman and Ukarsing
	Kandhamal	Kandhamal	Chakapada, G. Udayagiri, and K. Nuagaon	18	Bandaguda, Baudinaju, Bearpanga, Brahmanapada, Brainguda, Gadaguda, Gindapanga, Kainjhar, Kalikheata, Kilakia, Kiramaha, Mazadada, Penala, Raingia, Raipada, Sirki, Sudhipada and Sujeli
	Malkangiri	Malkangiri	Malkangir	11	Bandhaguda, Boilapari, MPV-6, Mv-2, MV-3, Mv-8, MV-9, MVV-1, Sargiguda and Tingiliguda
	Mayurbhanj-I	Mayurbhanj	Bangirposi, Baripada, Betnoti, G.B Nagar, Kaptipada, Khunta, Kuliana, Mayurbhanj-I, Morada, Rasgovindpur, Saraskana, Shyamakhunta, Suliapada and Udala	102	Ambapichhula, Ambdubi, Anua, Arjunbaria, Athanigaon, Asana, Badakhaladi, Baghuasole, Balimunduli, Bangiriposi, Bathudibandha, Bedkerko, Bhaliatilou, Bhalki, Bhandarikala, Bhandaripal, Bhanjpur, Bharardadihi, Bholagadia, Bhugupal, Biripal, Buhugdakuta, Chakdar, Chakulia, Chamapagadi, Chandanpur, Chilabasa, Dagnarsahi, Dahikuti, Dangarsahi, Deulidihi, Dhabanijoda, Dhanghera, Dubuksahi, Dukura, Gadargodi, Ghantabari, Ghuntabani, Gopalpur, Guhaldhi, Gundihudi, Ialmunduli, Itagada, Juna Khadikasol, Khunta, Kishandahi, Kuliana, Jadunathpur, Jagannathpur, Jualirama, Kaptipada, Karanajia, Kartnala, Kathpal, Khadiakasole , Khajuria, Khandia, Kuchei, Kukudapada,Kundalbani, Moroda, Madhunanada, Mahanala, Mankadapal, Monhinganj, Mundasahi, NewDihipasahi, Nischinta, Palasbani, Pannudash, Purunapani, Patapur, Purusottampur, Rajabasa, Ramhari pur, Rangamatia, Rathasole, Sankeraka, Saria, Sendhapachha, Sindurgoura, Singimara, Sorispal, Saliasahi, Sikarghati, Tangasole, Taradapal, Talabani, Talapada, Taragodi, Tarakoti and Tikayatpur
	Mayurbhanj-II		Bahalda, Bisoi, Jamada, Jashipur, Karanjia, Kusumi, Rairangpur, Sukruli and Thakurmunda	33	Askipal, Badabil, Badapahad, Beaunria, Begunia, Bhejidiha, Dubulbeda, Ektali, Goily Durdura, Jamada, Jamukeswar, Jarali, Jhumkakudar, Kalanda, Kaptira, Kasipal, Kunjia, Kusumi, Mahuldiha, Manada, Mata, Matiagarh, Mituani, Mota, Nuabeda, Nuagaon, Podagarh, Purunadeogaon, Salarapada, Sanagoan, Sannai,Tato and Tilusahi
	Nabarangapur	Nabarangpur	Nabarangpur	10	Bhamini, BS Padar, Chhatabeda, Chikalpadar, Chitabeda, Junapani, Kumuli, Managuda, Nayakguda and Patia
	Rayagada	Rayagada	Gunupur	25	Armada, Bada Achhaba, Badabangi, Bagsola, Bhaleri Kudia, Bhalerikudia, Bhimpurguda, Chalkamba, Chintaluguda, Garanda, Gugurpang, Gugurupanga, Gulumunda, Gumuda, Kalma, Nalpanda , Nilamguda, Nuagaon, Pagadabili, Podosing, Pradhaniguda, Rupapadar, Srirampur, Tolana and Turkaniguda

Year	Name of KVK	Name of district	Sub-district	No. of Village	Name of village(s)
	Sundargarh-I	Sundargarh	Bargaon, Lephripar, Rajgangpur, Sadar, Subdega, Sundargar, Sundargarh and Tangarpali	10	Barngakachhar, Damkuda, Jarangloi, Katrabudabahal, Lahandabud, Phuldhudi, Ranibandh, Sahebdera, Samina and Talimunda
	Sundargarh-II		Panposh, Bonei	21	Andali, Ankurpali, Bagbudi, Baraiguda, Bundop, Dolengsera, Erla, Gopapali, Guduguda, Gundipali, Jadakudar, Jaydega, Khuntgaon, Kundra, Kutida, Nuagaon, Nuniapali, Pradhanpali, Putrikhaman, Ranto and Suruda
	Nicobar	Nicobar	Car Nicobar	14	Arong, Big Lapathy, Chuckchuka, Kakana, Kinmai, Kinyuka, Malacca, Mus, Perka, Sawai Small, Lapathy, Tamaloo, Tapoiming and Tee Top
Sub-total				***302***	
Total				***1248***	

The district-wise total number and name of villages covered during six years by the KVKs of ICAR-ATARI Kolkata are presented below.

Table: District-wise total villages covered during 2017-18 to 2022-23 under Tribal Sub Plan w.r.t. ICAR-ATARI Kolkata

Name of KVK	No. of village	Name of villages covered
Gajapati	169	Abarsing, Adagam, Adava, Agarakhandi, Alama, Alanga, Allada, Andarsing, Anukumpa, Anukunda, Anusahi, Arsisahi, Ashrayapur, Atarasing, B.Kalakote, Bachama, Badapada, Badapur, Bagam, Bagasola, Balibandha, Bapunbudi, Basidar, Bastriguda, Baunsasahi, Bayaguda, Betaring, Bhaliasahi, Bhalipanka, Bhandarisahi, Bhubani, Bhuskudi, Birikote, Budhisila, Bulabagumma, Burujang, Chadiapada, Chandiput, Chandragiri, Cheligada, D. Katuru, Dagharia, Darupani, Dhadiamaba, Dhimirijholi, Dihudisahi, Dimirijholi, Dimiripanka, Dumba, Gaiba, Gamangosahi, Gandahati, Ghodakana, Gholakana, Gobindapur, Goli, Govindapur, Guluba, Hrischandrapur, Jagannathapur, Jajpur, Jamdeppur, Jang jang, Jeeba, Jhami, Jhola, Jiranga, Jodamba, Jubagaon, Jungjung, K. sitapur, K.Jhalarsingh, K.M. Bhaliasahi, Kailashguda, Kaithapada, Kaliapata, Kamarsahi, Kanchimula, Kankadaguda, Kankarada, Karanjasahi, Kendusahi, Kere, Kesara, Khajuripada, Kharipada, Kharsanda, Kirting, Kodikuma, Koinpur, Krushnapur, Kuanpada, Kushapalli, Kuttam, Labarsingi, Ladiguda, Landusahi, Leoba, Liliguda, Limarsing, Lingipur, Loba, Lubursing, Luhagudi, Luhakhunti, Luhangar, Mahendragada, Mahulapada, Makapada, Manikapur, Marlaba, Mohana, Munigadia, Muningadiha, Munising, N. Rogeising, Narayanpur, Neridiguda, Nuagada, Nuasahi, P.Govindpur, Paniganda, Parida, Parimala, Phatachanachada, Pindiki, Punjasaragi, Puspanga, R. Sitapur, R. Udayagiri, Raghunathpur, Raijuka, Rajamba, Ramgiri, Ranalai, Randiba, Rangamunda, Religuda, Ringising, Rogalsing, Rumunda, Sabarapalli, Sambalpur, Seranga, Sialilati, Simulisahi, Sinising, Souri, Subalada, Sunduruba, Sureikhamar, Tabarada, Tadava, Tai, Tandiguda, Tangili, Taraba,Tarangada, Tarava, Tarboal, Tatipati, Tikamal, Titising, Tubursing, Tuman, Tumba, Ukarsing, Upalada and Urusing.
Kandhamal	47	Badakapalla, Badenaju, Badimunda, Bakikamba, Bandaguda, Baudinaju, Bearpanga, Bedangpaju, Beredakia, Brahmanapada, Brainguda, Burbinag, Burbinaju, Dakapala, Gadaguda, Gindapanga, Gunjigaon, Indrapadia, Kainjhar, Kaladaganda, Kalikheata, Kanbagiri, Katadaganda, Kilakia, Kiramaha, Kurumingia, Ladamala, Lamungia, Lingagada, Mazadada, Nilungia, Penala, Pleheri, Raingia, Raipada, Ratingia, Retudi, Simanbadi, Sirki, Srirampada, Sudhipada, Sudsuli, Suduli, Sugadabadi, Sujeli, Telengia and Tiangia
Malkangiri	34	Ambdubi, Bailapari, Bandhaguda, Belam, Boilapari, Brahamnigaon, Dariguda, Dumaliguda, Gargaria, Jharapali, Kansapal, Kisandahi, Kochilapada, Kotliguda, Machhia, MPV-1, MPV-6, MV-2, MV-3, MV-4, MV-72, MV-8, MV-9, MVV-1, Pandasole, Pedawada, Pradhanigu, Salabani, Sargiguda, Sikargahi, Siripeta, Talabandha, Tandapali and Tingiliguda

Name of KVK	No. of village	Name of villages covered
Mayurbhanj-I	189	ABC Pur, Alhapani, Ambapichhula, Ambdubi, Anua, Arjunbaria, Arpata, Asana, Astatpura, Astia, Athanigaon, Badakhaladi, Badakuchiamara, Badakuldhia, Baghuasole, Bagirathipur, Balimunduli, Bandhagada, Bangiriposi, Bankoda, Baripada, Baskitola, Bathudibandha, Bautia, Bedkerko, Belam, Betana, Bhaduabada, Bhaliatilou, Bhalki, Bhandarikala, Bhandaripal, Bhandibil, Bhanjpur, Bharardadihi, Bholagadia, Bhugupal, Biripal, Brahmanigaon, Buhugdakuta, Chakdar, Chakidi, Chakulia, Chalunia, Chamapagadi, Chandanpur, Chandibil, Charimania, Chikitamatia, Chilabasa, Dagnarsahi, Dahikuti, Danagrbila, Dardara, Deulidihi, Dhabanijoda, Dhanghera, Domuhani, Dubuksahi, Dukura, Dulikisahi, Fuljhara, Gadargodi, Gargadia, Gargaria, Garudanesa, Gendapokhari, Ghantabari, Ghatakuaniri, Ghatkuanri, Ghuntabani, Ghuntibili, Gohaldihi, Gopalpur, Gudughia, Guhaldhi, Gundihudi, Ialmunduli, Itagada, Jadunathpur, Jagannathpur, Jambani, Jamtola, Jarkani, Jhinkipada, Jualirama, Juna, Junapada, K.C. Pu, Kainchkothi, Kakarpani, Kamolpur, Kanchinda, Kansapal, Kaptipada, Karanajia, Karangapada, Kartnala, Kathpal, Kathruma, Keutunimari,Khadiakasole, Khajuria, Khaladi, Khandia, Khandukhal, Khirpada, Khunta, Kirikichia, Kisandahi, Kochilakhunta, Kochilapada, Kuabuda, Kuchei, Kukudagadi, Kukudapada, Kukurbhuka, Kuliana, Kundalbani, Kusanpur, Lalganj, Laxmiposi, Macchia, Madhapur, Madhunanada, Mahanala, Majhiani, Mankadapal, Matihudi, Medam, Monhinganj, Moroda, Mundasahi, Nachhipur, Nadasole, Nagrasole, Nayabasan, Nedam, New Dihipasahi, Nischinta, Nuagaon, Nuhamalia, Orachandabila, Palasbani, Pandasole, Pannudash, Purunapani, Patapur, Patharaghera, Pedagadi, Purusottampur, Rajabasa, Ramhari pur, Rangamatia, Ranigbeda, Rathasole, Sabania, Sadanandapur, Salbani, Saliasahi, Sanabisal , Sankeraka, Sankhapata, Saratchandrapur, Saria, Sendhapachha, Sharata, Shymasundarpur, Sikargahi, Sikarghati, Sindurgoura, Singimara, Singrisahi, Slaghati, Sorispal, Sunraikali, Tadekiswar, Talabandha, Talabani, Talapada, Tangasole Taradapal, Taragodi, Tarakoti , Thankaripal, Tikayatpur, Tulasiguth, Udala and Unchabali.
Mayurbhanj-II	96	Angarpada, Anlabeni, Askipal, Badabil, Badadeoli, Badajodi, Badapahad, Badasialinai, Badateranti, Badbil, Badsole, Bakala, Balibhol, Bansanali, Batapandugandi, Beaunria, Begnabinda, Begunia, Bhejidiha, Bisoi, Chadripahadi, Chatrisahi, Chhemundia, Chinabeda, Deuli, Dhatkia, Digdhara, Dubulbeda, Durdura, Ektali, Ghosada, Godapalsa, Goily Durdura, Goudagaon, Handipuhan, Hatabadada, Hatigoda, Jamada, Jamda, Jamukesawar, Jamunalia, Jarali, Jaralu, Jashipur, Jharbeda, Jumukakudar, Kadapandugandi, Kalanda, Kalapathar,Kalapathara, Kaliani, Kankadani, Kapanda, Kaptira, Kasipal, Kulanda, Kulandi, Kulgi, Kulundi, Kumari, Kunjia, Kusumi, Madarangajodi, Mahardapalsa, Mahuldiha, Manada, Mata, Matiagarh, Mayurdar, Mituani, Mota, Moudi, Nihangandi, Nuabeda, Nuagoan, Palasagadia, Podadiha, Podagarh, Purunadeogaon, Rangalbeda, Rasamtala, Salarapada, Sanagoan, Sangaon, Sannai, Sialinai, Singarpur, Suanpal, Sukruli, Sulurpada, Tangabila, Tarana, Tato, Tilusahi, Tulasibani and Untuna
Nabarangpur	21	Adibasi, B.S Padar, Badabharandi, Badakumari, Bhamini, BS Pader, Chatabeda, Chikalpadar, Chingudiguda, Chitabeda, Dangariguda, Gauintiaguda, Junapani, Kumuli, Majhiguda, Managuda, Monoguda, Nayakguda, Patia, Sanakumari and Sindhiguda
Rayagada	60	Achhaba, Armada, Bada, Badabangi, Bagsala, Barngakachhar, Bentiguda, Bhaleri Kudia, Bharsingh, Bhimpurguda, Birjaberna, Buting, Chalkamba, Chinnasari, Chintaluguda, Damkuda, Dandaguda, Gadiakhala, Garanda, Ghanantri, Gugurupanga, Gulumunda, Gumuda, Hadaguda, Jaripang, Kaithapadar, Kalma, Khaira, Kudia, Kulusing, Kumbahal, Labba, Lahandabud, Laxmanguda, Majhiguda, Nalpanda, Neelamguda, Nilamguda, Omding, Ompara, Pagadabilli, Pandrajholli, Phuldhudi, Podosing, Podosingh, Pradhaniguda, Purtiguda, Putasingh, Ranibandh, Regeda, Rupapadar, Sahebdera, Sanahuma, Sanhuma, Sanyasipur, Srirampur, Talana, Talimunda, Tolana and Turkaniguda.
Sundargarh-I	39	Kinjirkela, Barangakacchar, Bareiguda, Barngakachhar, Birjaberna, Dalakudar, Damkuda, Erla, Ghodabandh, Gopapalli, Guduguda, Jarangloi, Jhagarpur, Katrabudabahal, Kesramal, Khamarbahal, Khatankudar, Kinjrikela, Kinjrima, Kulenbahal, Kumbahal, Lahandabud, Lungei, Masabira, Nuniapali, Phuldhudi, Putrikhaman, Ranibandh, Ranto, Sahebdera, Salangabud, Samina, Sonaparvat, Sorda, Sundargarh, Talimuna, Talimunda, Tinkuda and Turungagarh.

Name of KVK	No. of village	Name of villages covered
Sundargarh-II	81	Achhaba, Andali, Ankurpali, Arjunchua, Armada, B. Gumarguda, Bada Sangidi, Bada, Bada Achhaba, Bada Bangi, Bagbudi, Bagdega, Bagsala, Baraiguda, Bhaliadihi, Bhimpurguda, Bijadihi, Birkera, Budeljore, Bundop, Buting, Chalkamba, Chikitia, Deoposh, Dolengsera, Erla, Garanda, Garda, Ghanatri, Ghodabandha, Goldaru, Gopapali, Gotitangar, Gudgudjor, Guduguda, Gudugudejore, Gugurpang, Gulumunda, Gundipali, Jadakudar, Jamudarah, Jaripang, Jaydega, Jerling, Kalma, Khatankudar, Khilapadar, Khuntgaon, Kudabira, Kukurguda, Kundra, Kutida, Laba, Limameda, Lukumbeda, Nalpanda, Nalpandaguda, Nilamguda, Nuagaon, Nuniapali, Pagadabili, Pandrajholi, Podosing, Pradhaniguda, Pradhanpali, Putrikhaman, Ranto, Rupapadar, Sanhuma, Sanpokhar, Sirijholi, Soleguda, Sona Parbat, Sorda, Srirampur, Suruda, Tada, Teliposh, Tolana, Turkaniguda and Yerla.
Nicobar	24	Arong, Baraenaka, Big Lapathi, Changamong, Chuckchucha, Chuckchuka, Govindnagar, Kakana, Kimious, Kinmai, Kinyuka, Lapathy, Malacca, Mus, Perka, Radhanaga, Sawai Small, Sawai, Small Lapathy, Taeela, Tamaloo Tapoiming, Tee Top and Vijaynagar.
Total	***760***	

CHAPTER 3

DETAILS OF KVK PERSONNEL INVOLVED

The following table depicts the involvement of Senior Scientist and Heads (SSHs) including Subject Matter Specialists (SMSs) of 10 KVKs of this zone who were actively involved in this programme in conducting various activities during the period 2017-18 to 2022-23.

Table: Details of KVK personnel involved

State/UT	Name of KVK	Name of concerned person(s)	Designation	Contact no.	E-mail ID
A & N Islands	Nicobar	Dr. Santosh Kumar	Senior Scientist and Head	8787629636	santosh.kumar13@icar.gov.in
		Dr. Y. Ramakrishna	PS and Former Senior Scientist and Head (I/C)	9436158901	yeraboina@icar.gov.in
		Dr. Sanjay Kumar Pandey	Former SMS and Sr. Scientist and Head (I/C)	6387222166	sanjay.pandey1@icar.gov.in
		Dr. Zachariah George	Former SMS (Animal Science)	9434271615	z.george@icar.gov.in
Odisha	Gajapati	Dr. Sangram Paramaguru	Senior Scientist and Head	9437492769	kvkgajapati.ouat@gmail.com
		Mr. Sanjib Kumar Mandi	SMS (Agronomy)	9679309801	kvkgajapati.ouat@gmail.com
		Mr. Jayashankar Pradhan	SMS (Agrometeorology)	9438285742	kvkgajapati.ouat@gmail.com
	Kandhamal	Dr. Narayan Bar	Senior Scientist and Head	8917575257	kvkkandhamal.ouat@gmail.com
		Dr. Debasis Mishra	Former Senior Scientist and Head	9438357962/ 7978872158	kvkkandhamal.ouat@gmail.com
		Mr. Sujit Ku. Mukhi	SMS (Soil Science)	7978176700	sujitbbsr1soil@yahoo.co.in
	Malkangiri	Dr. Sidhartha Kar	Senior Scientist and Head	9437633251	sidharthakar7@gmail.com
		Sri Nigamananda Behera	Former SMS (Agronomy) and Senior Scientist and Head (I/C)	9438188832	kvkmalkangiri.ouat@gmail.com
		Dr. Samir Ranjan Dash	Former Senior Scientist and Head	9438531167	kvkmalkangiri.ouat@gmail.com/ malkangirikvk@yahoo.co.in/ samirdash2007@rediffmail.com
	Mayurbhanj-I	Dr. Sanghamitra Pattnaik	Senior Scientist and Head	9437147934	kvkmayurbhanj1.ouat@gmail.com
		Sh. Debasis Jayapuria	Former SMS (Agril. Extension)	9337892822	jayapuria1947@gmail.com
	Mayurbhanj-II	Dr. Deepak Kumar Mohanty	Senior Scientist and Head	9437237790 /7978953120	kvkmayurbhanj2.ouat@gmail.com
		Mrs. Bidyut Lata Mallick	SMS (Home Science)	9777852674 9861429778	bidyutlatamallick10@gmail.com

State/UT	Name of KVK	Name of concerned person(s)	Designation	Contact no.	E-mail ID
	Nabarangpur	Dr. Sasanka Lenka	Senior Scientist and Head ((I/C)	7008090385 9437264994	lenka57@gmail.com
		Dr. Gobinda Chandra Sahoo	Former Senior Scientist and Head	9178993612	kvknabarangapur.ouat@gmail.com
		Dr. Paritosh Murmu	SMS (Agronomy)	7077342555 7381820220	murmuparitosh1@gmail.com
	Rayagada	Dr. (Mrs.) Susmita Mohanty	Senior Scientist and Head	9937789325	kvkrayagada.ouat@gmail.com
		Shri Rajib Tudu	SMS (Plant Protection) and Senior Scientist and Head (I/C)	9933536220	kvkrayagada.ouat@gmail.com/ rajibtudu84@gmail.com
		Shri Bonod kumar Jena	SMS (Plant Science) and Senior Scientist and Head (I/C)	9439487631	kvkrayagada.ouat@gmail.com
		Shri Binod Chandra Behera	Scientist (Ag. Extension)	7749927750	bcbehera22@gmail.com
	Sundargarh-I	Dr. Laxmipriya Pradhan	Senior Scientist and Head	9438041580	kvksundargarh1.ouat@gmail.com
		Mr. David James Bage	SMS (Agril. Extension)	9438427784	kvksundargarh1.ouat@gmail.com
	Sundargarh-II	Sri. Jayant Kumar Pati	Senior Scientist and Head	9040579454	kvksundergarh2.ouat@gmail.com/jayantp69@yahoo.co.in
		Dr. Manasi Bhol	Former Senior Scientist and Head	9437068616	manasibhol@yahoo.co.in
		Mr. Samarendra Baral	SMS (Plant Protection)	7008963838	samarendra.baral@gmail.com

CHAPTER 4

YEARLY FUND ALLOCATION

The fund allocation under Capital and General Head of ten KVKs of this Zone in different financial year has been given in the following table.

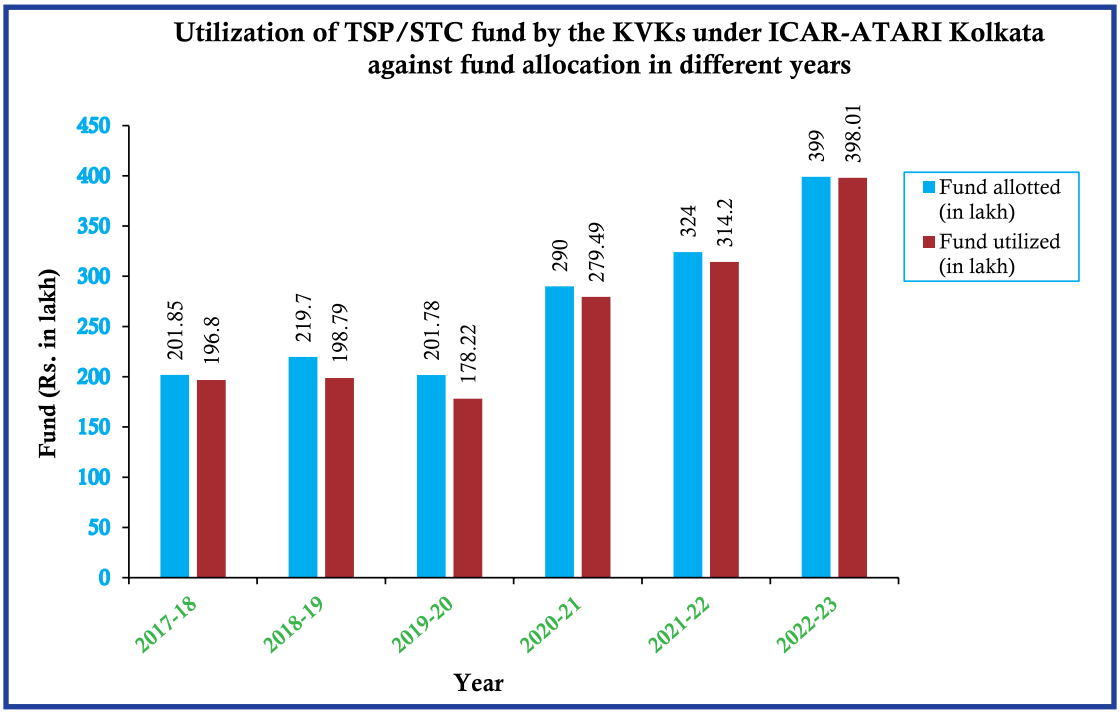
Table: Fund allocation under TSP/STC from 2017-18 to 2022-23 w.r.t. ICAR-ATARI Kolkata

(Rs. in Lakhs)

Name of State/UT	Name of KVK	2017-18			2018-19			2019-20			2020-21			2021-22			2022-23		
		Cap	Gen	Total	Cap	Gen	Total	Cap	Gen	Total	Cap	Gen	Total	Cap	Gen	Total	Cap	Gen	Total
A & N Islands	Nicobar	7.50	14.50	22.00	0.00	11.00	11.00	0.10	8.98	9.08	0.10	14.00	14.10	0.10	13.50	13.60	2.10	6.50	8.60
Sub-total		***7.50***	***14.50***	***22.00***	***0.00***	***11.00***	***11.00***	***0.10***	***8.98***	***9.08***	***0.10***	***14.00***	***14.10***	***0.1***	***13.50***	***13.60***	***2.10***	***6.50***	***8.60***
Odisha	Gajapati	5.00	14.50	19.50	0.00	7.00	7.00	38.10	8.60	46.70	15.10	13.50	28.60	45.20	14.46	59.66	28.35	8.50	36.85
	Kandhamal	5.35	13.50	18.85	7.43	10.00	17.43	0.10	8.60	8.70	0.10	14.00	14.10	1.60	15.50	17.10	21.85	10.00	31.85
	Malkangiri	5.50	14.50	20.0	0.00	8.00	8.00	0.10	8.60	8.70	0.10	14.00	14.10	4.60	14.50	19.10	11.10	10.00	21.10
	Mayurbhanj-I	5.50	17.50	23.00	7.00	10.00	17.00	0.10	8.60	8.70	0.10	14.00	14.10	8.52	16.37	24.89	1.90	10.00	11.90
	Mayurbhanj-II	5.50	13.00	18.50	97.38	10.00	107.38	25.47	8.60	34.07	20.10	14.00	34.10	32.15	14.40	46.55	12.95	10.00	22.95
	Nabarangapur	5.50	14.50	20.00	5.97	10.00	15.97	50.70	8.60	59.30	40.10	14.00	54.10	57.33	15.00	72.33	49.34	10.00	59.34
	Rayagada	5.50	14.50	20.00	0.00	11.00	11.00	0.10	8.60	8.70	8.10	14.00	22.10	6.20	14.27	20.47	23.32	10.00	33.32
	Sundargarh-I	5.50	14.50	20.00	4.19	10.73	14.92	0.53	8.60	9.13	0.10	13.50	13.60	16.30	15.00	31.30	50.15	10.00	60.15
	Sundargarh-II	5.50	14.50	20.00	0.00	10.00	10.00	0.10	8.60	8.70	67.10	14.00	81.10	3.00	16.00	19.00	102.94	10.00	112.94
Sub-total		***48.85***	***131.00***	***179.85***	***121.97***	***86.73***	***208.70***	***115.30***	***77.40***	***192.70***	***150.90***	***125.00***	***275.90***	***174.90***	***135.5***	***310.40***	***301.90***	***88.50***	***390.40***
Total		***56.35***	***145.5***	***201.85***	***121.97***	***97.73***	***219.70***	***115.40***	***86.38***	***201.78***	***151.00***	***139.00***	***290.00***	***175.00***	***149.00***	***324.00***	***304.00***	***95.00***	***399.00***

Cap= Capital Head; Gen= General Head

The allotment of fund to the TSP/STC KVKs by ICAR-ATARI Kolkata and the utilization of fund by the KVKs during the year 2017-18 to 2022-23 under TSP/STC have been presented in the following figure.



CHAPTER 5

ACHIEVEMENTS

The achievements of ten TSP/STC KVKs of this zone during the year 2017-18 to 2022-23 have been presented under physical output and physical outcome below.

5.1 Physical output

The physical output of KVKs of this zone under TSP/STC during the period of six years i.e. 2017-18 to 2022-23 has been discussed under the following subheads.

5.1.1 Asset creation

The tribal farmers of eight selected districts of this zone were supported with supplying various types of implements and equipments related to different agricultural operations under TSP/STC scheme in different years which have been shown in the following table.

Table: Name and number of assets created and distributed to the tribal farmers by the KVKs during the year 2017-18 to 2022-23

Name of assets created	*No. of assets distributed during the year*						*Total*
	2017-18	*2018-19*	*2019-20*	*2020-21*	*2021-22*	*2022-23*	
Garden rake	35	30	60	70	210	408	**813**
Hand maize sheller	525	270	280	224	615	758	**2672**
Vermi-bed	150	40	65	267	670	55	**1247**
Backyard poultry breed/strain (10 nos.=1 unit)	125	240	197	190	200	110	**1062**
Nutritional garden	250	530	1560	30	30	0	**2400**
Pump set etc.	0	50	7	20	6	0	**83**
Sprayer	75	121	54	63	153	251	**717**
Improved sickle	500	245	400	424	1050	1721	**4340**
Rose cane	130	33	290	615	385	1088	**2541**
Agro-shade net (bundles)	5	5	5	108	227	335	**685**
Khurpi	0	0	0	0	9	123	**132**
Trowel	0	0	0	0	200	108	**308**
Cycle weeder	0	0	0	0	70	47	**117**
Sapling (20 nos.= 1 unit)	0	0	0	0	100	15	**115**
Vermicompost (5 kg = 1 unit)	10	0	0	10	290	0	**310**
Bhendi plucker	100	150	150	269	920	760	**2349**
Fruit plucker	0	0	0	10	0	0	**10**
Ridge maker	0	25	10	30	20	20	**105**
MB plough (bullock drawn)	20	0	0	0	0	0	**20**
Bullock drawn one row seed cum fertilizer drill	6	0	0	0	0	0	**6**
Bullock drawn puddler	5	0	0	0	0	0	**5**
Bullock drawn seeder	1	0	0	0	0	0	**1**
Multipurpose dry grinder (2 hp)	3	0	0	0	0	0	**3**

Name of assets created	No. of assets distributed during the year						Total
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	
Juice extractor	3	0	0	0	0	0	**3**
Chaff cutter	10	20	30	15	20	0	**95**
Garden hoe	0	0	0	0	380	178	**558**
Hand weeder	0	10	0	0	35	30	**75**
Solar dryer	0	1	0	0	0	0	**1**
Low-cost poly tunnel	0	0	10	10	20	0	**40**
Chick brooding unit	0	0	0	3	4	0	**7**
Straw cutter	0	0	0	5	10	13	**28**
Bee box with hive	0	0	10	10	10	15	**45**
UV stabilised polythene	0	0	10	10	20	4	**44**
Fish yearlings (100 nos. per farmer)	0	0	0	0	50	0	**50**
Mushroom spawn (paddy straw & Oyster; 10 bottles= 1 unit)	10	120	1200	200	300	0	**1830**
Lopper	0	0	0	0	0	0	**0**
Secateur	0	0	0	50	350	40	**440**
Hand cultivator	0	0	0	0	0	168	**168**
Knapsack sprayer	0	0	0	0	0	344	**344**
Coconut climber	0	0	0	0	100	56	**156**
Fishing rods	0	0	0	0	20	34	**54**
Total	**1963**	**1890**	**4338**	**2633**	**6474**	**6681**	**23979**
No. of benefitted farmers							
Male	581	342	630	1029	1490	1985	**6057**
Female	861	284	669	991	1312	2161	**6278**
Total	**1442**	**626**	**1299**	**2020**	**2802**	**4146**	**12335**
Total cost involved (Rs. In lakh)	**29.17295**	**3.88304**	**6.36922**	**10.36497**	**29.96536**	**35.35158**	**115.1071**

5.1.2 On-farm trials (OFTs)

The KVK scientists were continuously engaged with transferring proven technologies available at different ICAR institutes and State Agricultural Universities (SAUs) to the farmers' field. Depending upon the agroclimatic conditions, sometimes assessment and refinement of technologies were required which were conducted by the scientists at the KVK Campus in the form of OFTs before taking them in the farmers' field for adoption.

5.1.2.1 Total OFTs conducted

The total number of OFTs along with area covered, number of beneficiaries and cost involved in different years by the KVKs of this zone have been given in the following table.

Table: Details of on farm trials (OFTs) conducted during the year 2017-18 to 2022-23

Year	Name of KVK	No. of OFT	No. of trials	Area covered (Acre)	Livestock (No.)	No. of benefitted farmers			Cost involved (Rs.)
						Male	Female	Total	
2017-18	Gajapati	6	35	7.00	0	21	14	35	78510
	Kandhamal	7	56	5.00	50	37	19	56	9621
	Malkangiri	6	45	7.50	0	28	17	45	32000
	Mayurbhanj-I	7	57	5.93	60	32	25	57	15728
	Mayurbhanj-II	6	47	5.50	10	25	22	47	31386
	Nabarangapur	6	49	3.00	0	31	18	49	15500
	Rayagada	7	54	10.00	0	34	20	54	58450
	Sundargarh-I	7	49	11.40	200	27	22	49	32000
	Sundargarh-II	6	43	8.65	0	23	20	43	10907
	Nicobar	5	34	0.50	100	22	12	34	25500
Sub-total		***63***	***469***	***64.48***	***420***	***280***	***189***	***469***	***309602***
2018-19	Gajapati	7	48	10.00	0	27	21	48	48869
	Kandhamal	8	61	10.00	40	32	29	61	18452
	Malkangiri	7	52	12.50	0	29	23	52	85000
	Mayurbhanj-I	8	51	12.11	30	27	24	51	3185
	Mayurbhanj-II	8	53	7.00	100	31	22	53	42425
	Nabarangapur	9	57	9.00	0	34	23	57	40000
	Rayagada	8	59	14.60	20	38	21	59	63623
	Sundargarh-I	9	63	34.00	30	47	16	63	48000
	Sundargarh-II	8	58	12.10	30	39	19	58	43066
	Nicobar	5	31	0.50	100	28	3	31	27000
Sub-total		***77***	***533***	***121.81***	***350***	***332***	***201***	***533***	***419620***

Year	Name of KVK	No. of OFT	No. of trials	Area covered (Acre)	Livestock (No.)	No. of benefitted farmers			Cost involved (Rs.)
						Male	Female	Total	
2019-20	Gajapati	9	56	8.00	0	31	25	56	102209
	Kandhamal	9	64	15.00	50	38	26	64	19521
	Malkangiri	9	63	15.00	0	49	14	63	90000
	Mayurbhanj-I	9	59	2.97	0	35	24	59	23537
	Mayurbhanj-II	9	67	8.50	2	45	22	67	34815
	Nabarangapur	9	58	6.00	0	34	24	58	30000
	Rayagada	10	61	20.90	0	45	16	61	112330
	Sundargarh-I	9	68	27.13	0	43	25	68	45000
	Sundargarh-II	9	62	15.80	0	37	25	62	53385
	Nicobar	5	32	0.50	100	21	11	32	45000
Sub-total		***87***	***590***	***119.8***	***152***	***378***	***212***	***590***	***555797***
2020-21	Gajapati	7	62	7.00	20	37	25	62	131738
	Kandhamal	9	55	15.00	50	32	23	55	19122
	Malkangiri	8	49	17.50	0	29	20	49	105000
	Mayurbhanj-I	7	50	0.99	50	26	24	50	37591
	Mayurbhanj-II	8	49	7.50	10	28	21	49	39655
	Nabarangapur	8	52	7.00	0	30	22	52	30000
	Rayagada	8	53	14.80	0	32	21	53	98240
	Sundargarh-I	9	56	23.80	50	34	22	56	40000
	Sundargarh-II	9	57	22.20	200	34	23	57	96162
	Nicobar	4	20	0.50	85	12	8	20	51000
Sub-total		***77***	***503***	***116.29***	***465***	***294***	***209***	***503***	***648508***
2021-22	Gajapati	7	43	7.50	0	23	20	43	76982
	Kandhamal	12	80	10.00	40	47	33	80	18215
	Malkangiri	13	95	32.50	20	59	36	95	175000
	Mayurbhanj-I	10	71	8.71	14	42	29	71	42708
	Mayurbhanj-II	9	67	5.00	210	41	26	67	36289
	Nabarangapur	9	62	6.00	0	39	23	62	45000
	Rayagada	9	61	6.70	0	37	24	61	75625
	Sundargarh-I	9	59	10.00	30	31	28	59	35000
	Sundargarh-II	9	58	17.50	20	31	27	58	3939
	Nicobar	3	19	0.05	100	11	8	19	42500
Sub-total		***90***	***615***	***103.96***	***434***	***361***	***254***	***615***	***551258***
2022-23	Gajapati	6	40	6.00	0	23	17	40	1200
	Kandhamal	10	76	2.00	60	45	31	76	14000
	Malkangiri	9	70	25.20	30	55	15	70	135000
	Mayurbhanj-I	10	72	3.00	686	51	21	72	27316
	Mayurbhanj-II	8	58	8.00	30	42	16	58	21530

Year	Name of KVK	No. of OFT	No. of trials	Area covered (Acre)	Livestock (No.)	No. of benefitted farmers			Cost involved (Rs.)
						Male	Female	Total	
	Nabarangapur	10	69	30.00	0	49	20	69	120000
	Rayagada	9	58	24.00	140	41	17	58	98120
	Sundargarh-I	9	58	7.50	28	37	21	58	157000
	Sundargarh-II	9	62	10.80	20	47	15	62	53820
	Nicobar	2	12	2.00	10	7	5	12	49700
Sub-total		***82***	***575***	***118.5***	***1004***	***397***	***178***	***575***	***677686***
Total		***476***	***3285***	***644.84***	***2825***	***2042***	***1243***	***3285***	***3162471***

5.1.2.2 Details of selected OFTs

The details of selected OFTs recommended for the tribal farmers by the KVKs during the year 2017-18 to 2022-23 have been described briefly as under.

Gajapati KVK

Assessment of performance of different cowpea varieties

A multi-locational trial was conducted by Gajapati KVK at 7 different locations of the district for evaluating YMV resistant variety of cowpea. The problem of low yield due to the infestation was attempted to be addressed through this trial. The results revealed that *'Kashi Kanchan'* variety of cowpea registered the highest yield of 61.4 q/ha with a B:C ratio of 4.08. This variety was recommended for the farmers of this tribal district.

Technology option	No. of trials	Yield component			Disease/ insect pest incidence (%) (YMV)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ ha)	Net return (Rs./ ha)	B:C ratio
		No. of YMV affected plant/m^2	Pod length (cm)	Test wt. (100 grain wt.)						
FP: Cultivation of local cowpea variety	7	7.2	18.4	-	80	38.6	8150	19150	11000	2.34
TO-1: Cultivation of cowpea var. *'Utkal Manik'*	7	1.5	28.8	-	16	52.5	10700	36750	26050	3.43
TO-2: Cultivation of cowpea var. *'Kashi Kanchan'*	7	0	33.2	-	-	61.4	10520	42980	32460	4.08

Assessment of performance of various marigold cultivars

To evaluate different marigold cultivars for augmenting the yield, a field level trial was carried out by Gajapati KVK at 7 different locations of the district. The low flower yield of marigold due to cultivation of local cultivar by farmer was identified as a major problem which was tried to be solved though conducting this trial. The results showed that cultivation of *'Seracole'* variety of marigold yielded 13.2 t/ha and recorded a B:C ratio of 3.51. It was recommended that this variety should be cultivated by the farmers.

Technology option	No. of trials	Yield component			Yield (t/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
		Plant height (cm)	Flower diameter (cm)	10 flower weight (g)					
FP: Cultivation of local marigold cultivar	7	82	3.1	32	5.6	12000	39200	27200	3.26
TO-1: Cultivation of marigold var. *'Seracole'*	7	67.5	3.6	57	13.2	45000	158400	113400	3.51
TO-2: Cultivation of marigold var. *'Pusa Basanti'*	7	69.7	3.4	44	12.5	45000	150000	105000	3.33

Assessment of different types of power weeder in paddy

Small scale use of farm implements remained an issue of tribal districts in general. It has also been observed that small farm implements have a potential in such districts in easing the cultivation practices of paddy. Keeping this in view, Gajapati KVK undertook a field trial in order to assess the efficacy of various types of power weeder in paddy at 7 different locations of the district. It was evident from the trial that weeding by Hatchet power weeder covered the highest field capacity (0.065 ha/hr) with weeding index of 76 and the highest B:C ratio of 2.03. In the light of the results, the farmers were advised to use Hatchet power weeder for their weeding operation in paddy.

Technology option	No. of trials	Yield component		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
		Field capacity (ha/hr)	Weeding index (%)					
FP: Weeding by Mandava weeder	7	0.023	80	28.5	25675	44175	18500	1.83
TO-1: Weeding by Hatchet power weeder	7	0.065	76	28.2	22710	43710	21000	2.03
TO-2: Weeding by L-type power weeder	7	0.062	69	28.0	22900	43400	20500	2.00

Assessment of improved ragi varieties during kharif

Problem of low yield of Ragi due to cultivation of local variety has been a major concern for the ragi growers of the district. Gajapati KVK identified this problem and addressed this by conducting a field trial on assessment of various ragi varieties at 7 different locations. It was found that the highest yield of ragi was obtained (15.26 q/ha) in cultivation of *'Arjuna (OEB-526)'* variety with the highest B:C ratio of 2.14. Therefore, this variety of ragi was recommended for the district.

Technology option	No. of trials	Yield component			Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ ha)	Net return (Rs./ ha)	B:C ratio
		No. of effective tillers/hill	No. of fingers per panicle	Test wt. (100 grain wt.)					
FP: cultivation of local variety *'Bada Mandia'*	7	4.5	5	0.32	8.6	16560	25800	9240	1.56
TO-1: Cultivation of *'Arjuna (OEB-526)'*	7	11.6	7	0.325	15.26	22786	48821	26037	2.14
TO-2: Cultivation of *'Kalua (OEB- 532)'*	7	10.6	6.5	0.324	13.94	22300	44617	22317	2.0

Assessment of different management approaches for controlling Fall Army Worm in maize

Infestation of Fall Army Worm in maize has been a major concern of the district. In order to address this issue, a trial was undertaken by KVK Gajapati at 7 different locations of the district. Spraying of Azadirachtin and *T. chilonis* was found to be the most effective way of controlling this infestation. By spraying these, the pest infestation was 10.9% (lowest), yield was 52.8 q/ha (highest) and B:C ratio was 2.06. This control measure was recommended for the maize growers of the district.

Technology option	No. of trials	No. of plants affected/ sq.m	Pest infestation (%)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
FP: Spraying with Profenophos	7	4.5	40.9	35.3	40943	56480	15537	1.38
TO-1: Spraying of Azadiractin and *T. chilonis*	7	1.2	10.9	52.8	40971	84480	43509	2.06
TO-2: Apply *Beauveria bassiana*	7	2.0	18.2	51.6	40771	82560	41789	2.03

Kandhamal KVK

Assessment of different integrated nutrient management measures in tomato

Tomato is a very prominent crop of Kandhamal district during *rabi* season. This crop often faces a lower yield due to improper nutrient management during its cultivation. In order to address this issue, a multi-locational trial was started at 5 different locations. The results of the trial showed that the application of 75% STBFR through chemical fertilizers + 25% STBFR through organic sources (FYM and Vermicompost) + bio-inoculation with diazotrophs and PSB i.e. *Azotobacter*, *Azospirillum* and *PSB* @ 4 kg each per hectare) registered the highest yield of 343.2 q/ha with a B:C ratio of 2.5. Therefore, this management practice was recommended for the tomato growers of the district.

Technology option	No. of trials	Yield component		Yield (q/ ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
		No. of fruits per plant	Plant height in cm					
FP: No INM practices; Application of lower rate of organic inputs (FYM-1.5 t/ha) and inadequate fertilizer use (29.5-46-30 kg N-P2O5-K2O)	5	21.6	67.2	250.4	60300	125200	64900	2.1
TO-1: Soil test based NPK through chemical fertilizers	5	29.7	72.1	300.4	66500	150200	83700	2.3
TO-2: Organic fertilization through FYM and vermicompost (Full dose of Nitrogen will be supplied through FYM and vermicompost in the ratio of 5:1)	5	35.8	74.2	313.5	67400	156750	89350	2.3

Technology option	No. of trials	Yield component		Yield (q/ ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
		No. of fruits per plant	Plant height in cm					
TO-3: 75% STBFR through chemical fertilizers + 25% STBFR through organic sources (FYM and Vermicompost) + bioinoculation with diazotrophs and PSB i.e. *Azotobacter*, *Azospirillum* and *PSB* @ 4 kg each per hectare)	5	40.4	78.1	343.2	68900	171600	102700	2.5

Evaluation of various integrated nutrient management measures in mustard

Lower yield of mustard due to improper management of nutrients was identified as a major problem. To solve this problem, Kandhamal KVK conducted a field trial at 5 different locations for assessing various INM measures applied to the mustard. It was found that Soil test based NPK application + FYM @ 2 t/ha + Soil application of Zinc Sulphate @ 12.5 kg/ha as basal and two foliar spray of Zinc Sulphate @ 0.2% at two active growth stages + soil application of borax @ 0.5 kg/ha and two foliar spray of borax @ 0.2 % at 15 days interval from 30 days after transplanting yielded the highest (7.9 q/ha) with the highest B:C ratio of 1.7. Thus, this management measure was recommended for the mustard growers of the district.

Technology option	No. of trials	Parameter		Yield (q/ ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net Income (Rs./ha)	B:C ratio
		No. of siliqua / plant	No. of seeds/ siliqua					
FP: Application of N:P_2O_5:K_2O @ 10.5:11.5:0 kg/ ha and no use of micronutrients like boron and zinc	5	189.6	9.6	5.4	15100	21600	6500	1.4
TO-1: Soil test based NPK application + FYM @ 2 t/ha	5	220.5	10.3	6.5	17300	26000	8700	1.5
TO-2: Soil test based NPK application + FYM @ 2 t/ha + Soil application of Zinc Sulphate @ 12.5 kg/ha as basal and two foliar sprays of Zinc Sulphate @ 0.2% at two active growth stages	5	274.8	10.9	7.2	18000	28800	10800	1.6
TO-3: Soil test based NPK application + FYM @ 2 t/ha+ Soil application of Zinc Sulphate @ 12.5 kg/ha as basal and two foliar spray of Zinc Sulphate @ 0.2% at two active growth stages + soil application of borax @ 0.5 kg/ha and two foliar spray of borax @ 0.2 % at 15 days interval from 30 days after transplanting	5	294.7	12.1	7.9	18900	31600	12700	1.7

Assessment of integrated weed management measures in groundnut

A trial was conducted at 5 different locations of Kandhamal district by KVK for evaluating the performance of various weed control measures on weed density and yield of groundnut. It was evident for the results that post-emergence application of Imazethapyr (10% SL) @ 750ml/ha at 20-30 days after sowing recorded the lowest (2.58 no./m^2) weed density and the highest (17.4 q/ha) groundnut yield with B:C ratio of 2.1. This practice was recommended for the groundnut farmers of the district.

Technology option	No. of trials	Yield component		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
		No. of pods per plant	Weed density (no./m^2)					
FP: No IWM practices; One hand weeding at 20-25 DAS	5	20.2	3.42	13.6	31400	55760	24360	1.8
TO-1: Pre-emergence application of Pendimethalin @ 2.5 lit/ha within 3 days of sowing & one hand weeding at 20 DAS	5	23.4	3.10	14.8	32800	60680	27880	1.9
TO-2: Pre-emergence application of Oxyfluorfen @ 1.0 lit/ha within 3 days after sowing & one hand weeding at 20-25 DAS	5	23.9	2.60	16.2	33100	66420	33320	2.0
TO-3: Post-emergence application of Imazethapyr (10% SL) @ 750ml/ha at 20-30 days after sowing	5	25.6	2.58	17.4	33500	71340	37840	2.1

Assessment of effect of application of bio-fertilizers of yield of chilli

Krishi Vigyan Kendra Kandhamal carried out a field trial on chilli at 5 different locations of the district considering the injudicious application of fertilizers by the farmers. The trial involved use of FYM, vermicompost and bio-fertilizers like *Azotobacter, Azospirillum* and *PSB*. Results revealed that STBFR + Bio-fertilizer (*Azotobacter, Azospirillum* and *PSB* 1:1:1 @ 4

kg each per ha) yielded the highest (136.1 q/ha) with B:C ratio of 4.8. It was recommended that this fertilizer application could be followed by the farmers of the district.

Technology option	No. of trials	Yield component				Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
		Plant height (cm)	Fruit yield (g) /plant	No. of Fruits/ plant	Fruit diameter (cm)					
FP: Application of 1t FYM /ha and fertilizer application @ 20-20-30 kg N-$P_2O_5K_2O$/ha	5	75.1	163.2	72.4	1.47	94.3	84200	330050	245850	3.9
TO-1: STBFR based N:P_2O_5:K_2O + FYM @ 5 t / ha	5	80.4	179.15	80.6	1.86	112.3	89400	393050	303650	4.4
TO-2: STBFR + Vermi-compost @ 5 t / ha (*on-farm production*)	5	85.3	186.34	84.3	2.04	129.1	97800	451850	354050	4.6
TO-3: STBFR + Bio-fertilizer (*Azotobacter, Azospirillum* and *PSB* 1:1:1 @ 4 kg each per ha)	5	92.8	201.9	97.3	2.22	136.1	99400	476350	376950	4.8

Evaluation of boron application in cauliflower

Reduced yield of cauliflower due to injudicious use of fertilizers has been identified as a major concern of the district. To solve this problem, Kandhamal KVK undertook a field trial on assessment of effect of boron application alongwith other fertilizers. It was found that Soil test based NPK application + FYM @ 5 t/ha + boron @ 0.5 kg/ha applied at the time of sowing, and two foliar spray of borax @ 0.25% at 15 days interval from 30 days after transplanting resulted into the highest curd weight of 401.5 gm, the highest yield of 203.2 q/ha with the highest B:C ratio of 3.0. This practice was recommended for the farmers of the district.

Technology option	No. of trials	Yield component		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
		Plant height (cm)	Single curd weight (gm)					
FP: Application of inappropriate NPK and no application of boron	5	28.3	289.3	143.2	59300	143200	83900	2.4
TO-1: Recommend dose of NPK application i.e. 120:60:60 kg/ha	5	29.5	328.8	162.8	62400	162800	100400	2.6
TO-2: Soil test based NPK application + FYM @ 5 t/ha	5	30.9	359.6	184.2	65300	184200	118900	2.8
TO-3: Soil test based NPK application + FYM @ 5 t/ha+ boron @ 0.5 kg/ha applied at the time of sowing, and two foliar spray of borax @ 0.25% at 15 days interval from 30 days after transplanting	5	32.7	401.5	203.2	67900	203200	135300	3.0

Assessment of different processing and packaging methods of tender jackfruit

Jackfruit production in Kandhamal district is an important activity. However, poor price realisation from sale of fresh whole tender jackfruit has been found to be a problem of the district. To solve this problem, a trial was conducted for assessing the performance of various processing and packaging methods of tender jackfruits. It was evident from the trial that surface cleaning/dirt removal by washing, peeling and cutting into pieces. Dipping in 0.5% (w/v) citric acid and 0.1% ascorbic acid for 7 minutes, surface drying and packaging in pun net pack or PP pouch with 0.0675% perforation and refrigerated storage at 10°C could improve the keeping quality and the highest B:C ration of 2.0 was obtained. It was concluded that value addition of tender jackfruit gave higher net return and BC ratio over the farmer practice.

Technology option	Sensory parameter (5-point hedonic rating)	Keeping quality (day)	Gross income (Rs./ kg)	Net Income (Rs./kg)	B:C Ratio
FP: Direct selling of whole tender jackfruit	-	-	18	10	1.2
TO-1: Peeling of jackfruit by knife/ paniki cut into pieces and packaging in polythene	4.1	1	30	19.5	1.8
TO-2: Surface cleaning/dirt removal by washing, peeling and cutting into pieces. Dipping in 0.5% (w/v) citric acid and 0.1% ascorbic acid for 7 minutes, surface drying and packaging in punnet pack or PP pouch with 0.0675% perforation and refrigerated storage at 10°C	4.8	5-7	40	27	2.0

Malkangiri KVK

Assessment of bacterial wilt tolerant tomato varieties

Bacterial wilt infestation in tomato is a major problem of the state of Odisha in general and the district of Malkangiri in particular. Some high yielding tomato varieties are available which are believed to be bacterial wilt tolerant. Therefore, a field level trial was carried out by Malkangiri KVK at 7 different locations to address this issue and also to increase the production. The results showed that HYV of tomato var. *'Arka Samrat'* recorded the highest yield of 433.9 q/ha with a B:C ratio of 2.6 and it was recommended for the farmers to adopt.

Technology option	*No. of trials*	*Yield (q/ha)*	*Cost of cultivation (Rs./ha)*	*Gross return (Rs./ha)*	*Net return (Rs./ha)*	*B:C ratio*
FP: Cultivation of local variety of tomato	7	285.9	80000	142950	62950	1.7
TO-1: HYV of tomato var. *'Arka Rakshak'*	7	404.2	85000	202100	117100	2.4
TO-2: HYV of tomato var. *'Arka Samrat'*	7	433.9	85000	216950	131950	2.6

Assessment of BPH/WBPH tolerant low land rice varieties

Brown Plant Hopper/ White Backed Plant Hopper has been found to be a major pest problem of commonly used rice varieties. They are also known to have resistance to the commonly used insecticides. Keeping this in view, Malkangiri KVK carried out a field trial at 7 different locations for evaluating WPH/ WBPH tolerant rice varieties. The trial revealed that cultivation of paddy variety *'Hasanta'* yielded the highest (48.2 q/ha) with a B:C ratio of 2.1. The rice variety *'Hasanta'* was recommended for the low land rice cultivation in the district.

Technology option	No. of trials	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
FP: Cultivation of paddy variety *'Pooja'*	7	40.3	38000	70525	32525	1.8
TO-1: Cultivation of paddy variety *'Swarna'*	7	44.8	40000	78400	38400	1.9
TO-2: Cultivation of paddy variety *'Hasanta'*	7	48.2	40000	84350	44350	2.1



Assessment of different finger millet varieties

Lower yield of finger millet due to cultivation of local varieties has been found to be a problem. In order to address this, a multi-locational trial was conducted by KVK Malkangiri at 7 different locations using improved varieties like *'Bhairabi'* and *'Arjun (OEB-526)'*. The results revealed that cultivation of *'Arjun (OEB-526)'* recorded the highest yield of 18.8 q/ha with a B:C ratio of 2.4. This variety was recommended for the district from the trial.

Technology option	No. of trials	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
FP: Cultivation of *'Dasraberi'* (Local)/ *'Nali Mandia'*	7	8.62	18000	24926	6926	1.4
TO-1: Cultivation of *'Bhairabi'*	7	15.33	23000	44289	21289	1.9
TO-2: Cultivation of *'Arjun (OEB-526)'*	7	18.80	23000	54332	31332	2.4



Assessment of various stem borer management measures in low land rice var. 'Partiksha'

Incidence of stem borer in low land rice has been a major concern. It resulted in huge yield losses of rice. For addressing this issue, a field trial was carried out by Malkangiri KVK at 7 different locations involving two different management measures of stem borer. The results of the trial showed that spraying of insecticide Rynaxypyr 18.5 SC @ 150 ml/ha or combination insecticide Spinetoram 6% + Methoxyfenozide 30% SC @ 375 ml/ ha at 20, 45 and 65 DAT was found to be the most effective practice for management of stem borer yielding 42.8 q/ha and recording a B:C ratio of 1.9. This practice was recommended for the district's low land rice growing areas.

Technology option	No. of trials	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
FP: No/ injudicious application of stem borer management measures in low land rice	7	38.9	40800	71960	31130	1.8
TO-1: Nursery treatment with fipronil 0.3G @ 20 kg/ ha followed by soil application of chlorantraniliprole 0.4G @ 10 kg/ha at 30 days after transplanting (DAT)	7	41.5	43200	76775	33550	1.8
TO-2: Spraying of insecticide Rynaxypyr 18.5 SC @ 150 ml/ha or combination insecticide Spinetoram 6% + Methoxyfenozide 30% SC @ 375 ml/ ha at 20, 45 and 65 DAT	7	42.8	43400	83180	35760	1.9



Assessment of suitable sowing time for YMV management in green gram

Lower yield of green gram due to incidence of Yellow Mosaic Virus (YMV) has been identified as a problem of Malkangiri district. In order to tackle this problem, a trial was undertaken by Malkangiri KVK at 7 different locations considering the alteration of sowing time. The trial revealed that altering of the date of sowing in 2nd week of December in residual moisture with need-based PP measures resulted into the highest yield of 7.5 q/ha with a B:C ratio of 2.7. Thus, it was recommended for the green gram growers of the district.

Technology option	No. of trials	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
FP: Late sowing (20th of January), no seed treatment, high seed rate, use of 30 kg DAP/ acre	7	5.6	9600	31080	21480	2.1
TO-1: Date of sowing in 1st week of January in residual moisture with need-based PP measures	7	6.2	8700	34410	25710	2.4
TO-2: Date of sowing in 2nd week of December in residual moisture with need-based PP measures	7	7.5	7750	41625	33875	2.7



Assessment of performance of rice varieties for rainfed medium land situation

Low yield of rice due to stress condition at tillering and flowering stage under rainfed medium land situation of Malkangiri district has been found to be a problem for most of the rice growers. For addressing this problem, a varietal trial was carried out by Malkangiri KVK at 7 different locations of the district. The results of the trial showed that rice variety *'Kalinga dhan-1203'* yielded the highest (52.5 q/ha) with the highest B:C ratio of 1.6. It was recommended that *'Kalinga dhan-1203'* rice variety was suitable for the farmers under rainfed medium land situation.

Technology option	No. of trials	Yield component			Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
		Plant height (cm)	No of tillers/hill	Panicle length (cm)					
FP: *'MTU-1001'*	7	96.5	6	20.4	40.1	49146	80950	31804	1.4
TO-1: *'Kalinga dhan-1203'*		98.4	8	21.6	52.5	61848	104050	42202	1.6
TO-2: *'Kalinga dhan-1205'*		102.5	6	21.2	49.2	63670	99040	35368	1.5

Mayurbhanj-I KVK

Assessment of triple disease resistant tomato hybrid 'Arka Rakshak' and 'Arka Samrat'

In paddy-vegetable cropping system under medium and irrigated land situation, low yield of tomato due to incidence of predominant diseases viz. Bacterial wilt, Early blight and ToLCV (tomato leaf curl virus) was identified as a major problem. Use of commonly control measures was found to be inefficacious and also to increase the cost of cultivation considerably. Therefore, Mayurbhanj-I KVK conducted a multi-locational field trial at 13 different locations of the district for evaluating the triple disease resistant varieties of tomato. The results showed that cultivation of Arka Samrat recorded the lowest disease incidence (0%), the highest yield (570 q/ha) with a B:C ratio of 6.1. Thus, this variety of tomato was recommended for the medium land and irrigated situation of the district. Some problem relating to this technology was that seeds were not available in the market. Farmers were willing to adopt these varieties as more than 50% areas affected due to incidence of diseases and their concern was that more no. of disease resistant varieties should be tried in different locations and released.

Technology option	No. of trials	Yield component	Wilt incidence (%)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
		Fruit wt. in gm						
FP: Local variety	13	45	40	160	55000	240000	185000	4.4
TO-1: *'Arka Rakshak'*	13	70	0	530	140000	795000	655000	5.7
TO-2: *'Arka Samrat'*	13	95	0	570	140000	855000	715000	6.1

Assessment of paddy straw mushroom production by using threshed straw

Non-utilization of threshed paddy straw for mushroom production was identified as a concern. In an attempt to address this, a field level trial was conducted by KVK Mayurbhanj-I at 7 different locations involving three different technologies for utilizing the threshed paddy straw for mushroom production. It was evident from the trial that mushroom production by using threshed paddy straw (soaking in water for 6 hr, paddy straw 5 kg, pulse powder 3%) yielded 0.55 kg/bed (lower than FP) but recorded the highest B:C ratio of 2.8. Therefore, it was concluded that mushroom should be produced by using threshed paddy straw and soaking in water for 6 hr, paddy straw 5 kg and pulse powder 3%. Farm women were satisfied with the technology.

Technology option	*No. of trials*	*Yield component*			*B:C ratio*
		Pin head appearance (days)	*Biological efficiency (%)*	*Yield (kg/ bed)*	
FP: Non-utilization of threshed paddy straw for mushroom production	7	8-10	8.5	0.65	2.0
TO-1: Mushroom production by using threshed paddy straw (soaking in water-7 hr, paddy straw 5 kg, pulse powder 3%)	7	8-10	7.14	0.50	2.5
TO-2: Mushroom production by using threshed paddy straw (soaking in water-6 hr, paddy straw 5 kg, pulse powder 3%)	7	8-10	7.85	0.55	2.8
TO-3: Mushroom production by using threshed paddy straw (soaking in water-5 hr, paddy straw 5 kg, pulse powder 3%)	7	8-10	7.5	0.52	2.6

Assessment of application of micronutrients in groundnut in rabi

In the areas of rice-groundnut cropping system of Mayurbhanj district, use of imbalanced fertilizer without micronutrient application in groundnut during *rabi* season has been found to be a problem. For solving this problem, Mayurbhanj-I KVK undertook a multi-locational field trial at 13 different locations involving balanced use of NPK fertilizers along with micronutrients. Results indicated that application of 20-40-40 kg of nitrogen, phosphorus and potash along with 0.2% each of calcium nitrate, magnesium nitrate and sulphur nitrate gave better result, with the highest yield of 17 q/ha and B:C ratio of 1.7. Thus, the practice was recommended for the ground nut farmers of such areas of the district.

Technology option	No. of trials	Yield component (plant height) (cm)	Disease/ insect pest incidence (%)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
FP: Inbalanced use of fertilizer with no micronutrient application	13	14.16	64	10	25000	30000	5000	1.2
TO-1: 20-40-40 kg of nitrogen, phosphorus and potash along with 0.1% each of calcium nitrate, magnesium nitrate and sulphur nitrate	13	21.4	57	14	28000	42000	14000	1.5
TO-2: 20-40-40 kg of nitrogen, phosphorus and potash along with 0.2% each of calcium nitrate, magnesium nitrate and sulphur nitrate	13	27.8	41	17	30000	51000	21000	1.7

Assessment of growth performance of Amur carp (Cyprinus carpio) under composite fish culture

Slow growth rate of mrigal affects the average yield from composite carp culture. Amur carp is a bottom feeder and can suitably substitute mrigal. It is a genetically improved common carp with a slender body and grows faster than mrigal and is hardy to withstand adverse environmental conditions. With this background, a field trial was carried out at 5 different locations of the district for evaluating the growth performance of Amur carp under composite fish culture. The results showed that by incorporating Amur carp in composite fish culture with stocking ratio Catla:Rohu:Mrigal:Amur carp = 3:4:1:2, better result was obtained with 22.9 q/ha yield and B:C ratio of 2.8. This technology option was recommended for adoption among the farming community. Farmers were very happy with the growth performance of the Amur carp and also the fish species is having good market demand. However, the availability of quality seed of Amur carp was identified as a constraint.

Technology option	No. of trials	Yield component		SGR (%)	Yield (q/ha)	B:C ratio
		Survivability (%)	% change in yield			
FP: C:R:M=3:4:3	5	-	-	-	17.5	1.8
TO-1: C:R:M:Amur carp = 3:4:2:1	5	80	19.42	2.1	20.9	2.6
TO-2: C:R:M:Amur carp = 3:4:2:1	5	85	30.85	2.3	22.9	2.8
TO-3: C:R:Amur carp = 3:4:3	5	84	20.60	2.5	21.6	2.4

Assessment of integrated nutrient management in papaya

Under irrigated and medium land situation of the Mayurbhanj district, low yield of papaya due to injudicious application of fertilizers was identified as a problem. In order to address this, a field trial was undertaken by KVK Mayurbhanj-I at 7 different locations of the district through integrated nutrient management in papaya. It was found from the trial that the practice of applying 75% of RDF + Straw mulch + Vermicompost (4 t/ha) + Azotobacter (1 kg/ac) + PSB Culture (1 kg in 10-15 lt water/ac) gave the highest yield of 378 q/ha with the highest B:C ratio of 3.12. Farmers are willing to adopt above mentioned

technologies and adopting the process of vermicomposting in initial levels. However, the constraint was low availability of vermicompost and azotobacters in local market.

Technology option	No. of trials	Yield component			Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
		Days of flowering	No. of fruits/plant	Fruit wt. (in gm.)					
FP: Injudicious application of NPK fertilizers	7	110	35	145	275	120000	330000	210000	2.75
TO-1: RDF (300:300:300 N:P:K kg/ha) + straw mulch + vermicompost	7	105	50	255	341	140000	409200	269200	2.92
TO-2: 75% of RDF + straw mulch + Vermicompost (4 t/ha) + Azotobacter (1 kg/ac) + PSB culture (1 kg in 10-15 lt water/ac)	7	100	55	275	378	145000	453600	308600	3.12

Assessment of performance of different poultry breeds under backyard system of rearing

Low income from rearing local non-descript poultry birds was found to be a major problem faced by backyard poultry rearers of the district. To overcome this, a breed evaluation multi-locational field trial was carried out at 7 different locations by Mayurbhanj I KVK incorporating *'Aseel'* and *'Kadaknath'* breed of poultry in backyard system. The farm women were selected for the trial. The results indicated that B:C ratio of Aseel was 4.07 as against *'Kadaknath'* (5.11) but ease of marketing and overall acceptability of farm women for *'Aseel'* breed of poultry chick was more than that of *'Kadaknath'* poultry breed. It can be concluded that farm women can rear *'Aseel'* breed of poultry at backyard. Acceptability of *'Aseel'* breed was more among farm women due to its easy marketability. Farm women were satisfied with the technology.

Technology option	No. of trials	Yield component		Cost of cultivation (Rs./unit)	Gross return (Rs./ unit)	Net return (Rs./unit)	B:C ratio
		Body weight (kg/year)	Eggs (no./ year)				
FP: Rearing of local non-descript poultry birds	7	1.2	54	1645	5490	3845	3.33
TO-1: Backyard rearing of poultry breed *'Aseel'*	7	1.8	76	1980	8060	6080	4.07
TO-2: Backyard rearing of poultry breed *'Kadaknath'*	7	2.3	92	1980	10120	8140	5.11

Assessment of performance of different ragi threshing machines for small and marginal farmers

Manual threshing of ragi, usually practised by the farmers of Mayurbhanj-I district, was found to cost intensive and labour-intensive. To overcome this, a field trial was conducted by Mayurbhanj I KVK at 7 different locations of the district for assessing the performance of different threshing machines. The results revealed that threshing by power operated mini ragi thresher cum pearler had the highest threshing capacity of 30.5 kg/h with the highest cost saving of 58.8%. Therefore, threshing by power operated mini ragi thresher cum pearler was recommended for ragi threshing.

Technology option	No. of trials	Threshing capacity (kg/h)	Threshing efficiency (%)	Cleaning efficiency (%)	Cost of threshing (Rs./quintal)	Cost saving in threshing (%)
FP: Manual threshing	7	6.5	85	81	450	-
TO-1: Threshing by paddle operated paddy thresher	7	12.4	73	63	380	15.5
TO-2: Threshing by power operated mini ragi thresher cum pearler	7	30.5	95	93	185	58.8

Assessment of bio-fortified rice varieties for nutritional security

Cultivation of bio-fortified rice has been a major concern for ensuring nutritional security of the farm families as well as the consumers. Keeping this in view, a varietal evaluation trial was undertaken by Mayurbhanj-I KVK involving different bio-fortified rice varieties. It was found from the trial that *'CR Dhan 311'* variety of the bio-fortified rice yielded the highest (41.6 q/ha) with the highest B:C ratio of 1.43.

Technology option	Crude protein content (%)	Zinc content (ppm)	Yield (q/ ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
FP: *'Lalat'*	7.87	16.3	38.24	54038	74184	20146	1.37
TO-1: *'CR Dhan 315'*	8.1	23.8	41.2	56000	79928	23928	1.42
TO-2: *'CR Dhan 311'*	10.26	19	41.62	56000	80122	24122	1.43

Mayurbhanj-II KVK

Assessment of planting methods for plant population management in finger millet

Under rainfed upland situation of Mayurbhanj district, broadcasting method of planting resulted in uneven plant stands. Moreover, labour scarcity and high labour requirement in broadcasting was identified as a problem. To solve this, a field trial was undertaken by Mayurbhanj-II KVK at 7 different locations of the district through the intervention of planting methods by seed drills for plant population management in finger millet. The results of the trial revealed that the practice of tractor drawn seed cum fertilizer drill used for line sowing of finger millet gave the highest yield of 15.6 q/ha with the highest B:C ratio of 2.30. Therefore, tractor drawn seed cum fertilizer drill may be used for line sowing of finger millet for more area coverage within the specified season. Farmers appreciated this technology due reduction in labour cost.

Technology option	No. of trials	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
FP: Broadcasting method	7	10.5	28510	34650	6140	1.21
TO-1: Bullock drawn seed cum fertilizer drill, 4 row, capacity-0.1 ha/h, line sowing	7	12.4	31360	40920	9560	1.30
TO-2: Tractor drawn seed cum fertilizer drill, 9 row, capacity-0.35 ha/h, line sowing	7	15.6	22340	51480	19140	2.30

Assessment of integrated nutrient management in tomato

Under rainfed medium land situation of the Mayurbhanj district, application of imbalanced dose of fertilizer (more N and less P & K) was identified as a problem. In order to solve this, a field trial was undertaken by KVK Mayurbhanj-II at 5 different locations of the district through undertaking integrated nutrient management in tomato**.** It was evident from the trial that the practice of applying FYM 5 ton /ha and inoculation of bio-fertilizer @ 4 kg each of *Azotobacter, Azospirillum* and *PSB* per ha + 100% STBF reduced the use of chemical fertilizer and gave the highest yield of 324 q/ha with the highest B:C ratio of 2.3. Farmers were willing to adopt above mentioned technology.

Technology option	No. of trials	No. of fruits/ plant	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
FP: Imbalanced use of NPK fertilizers	5	32	272	64200	129100	64900	2.0
TO-1: FYM 5 ton/ha and inoculation of bio-fertilizer @ 4 kg each of *Azotobacter, Azospirillum* and *PSB* per ha + 75% of soil test-based fertilizer (STBF)	5	38	293	81100	178500	97400	2.2
TO-2: FYM 5 ton /ha and inoculation of bio-fertilizer @ 4 kg each of *Azotobacter, Azospirillum* and *PSB* per ha + 100% STBF	5	43	324	82300	189300	107000	2.3

Assessment of management of Fall Army Worm in maize

Under rainfed upland situation of the Mayurbhanj district**,** low yield due to severe Fall Army Worm attack as a sporadic pest was identified as a problem. To control this pest, a field trial was carried out by KVK, Mayurbhanj-II at 7 different locations of the district through various management interventions for controlling Fall Army Worm in maize. The results showed that applying *Beauveria bassiana* @ 400 gm/acre and applying 1.5% Chlorpyrifos dust thickly in the field bund for avoiding migrating from one field to another field gave the highest yield of 35.2 q/ha with the highest B:C ratio of 1.71. Farmers were willing to adopt this technology and adopting the process resulted in increased yield as well as income.

Technology option	No. of trials	Disease/ insect pest incidence (%)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
FP: Use of non-specific control measures for the pest	7	10-16	30.3	41390	54540	13150	1.40
TO-1: Applying 5% active ingredient of Azadiractin, release 20000 *Trichogramma chilonis* parasite at 4-5 days interval in a week interval	7	4-6	33.4	41620	60120	18500	1.58
TO-2: Applying *Beauveria bassiana* @ 400 gm/ acre and Apply 1.5% Chlorpyrifos dust thickly in the field bund for avoiding migrating from one field to another field	7	3-5	35.2	41460	63360	21900	1.71


Assessment of performance of different poultry breeds under backyard system of rearing

Under homestead income generation activity of the Mayurbhanj district, backyard poultry farming is most common practice. But low productivity and high mortality of desi birds was identified as a problem. To overcome this, a field trial was undertaken by Mayurbhanj-II KVK at 7 different locations of the district through incorporation of improved poultry breed in backyard condition. Results revealed that the practice of rearing Aseel breed recorded the lowest mortality with the highest B:C ratio of 2.9. Farmers appreciated and were interested to rear this improved poultry *'Aseel'* under backyard farming condition.

Technology option	*No. of trials*	*Yield component*			*Mortality (%)*	*Cost of cultivation (Rs./10 no. poultry bird)*	*Gross return (Rs./10 no. poultry bird)*	*Net return (Rs./10 no. poultry bird)*	*B:C ratio*
		Body weight, male (kg/yr)	*Body weight, female (kg/yr)*	*Egg laying (no.)/yr*					
FP: Rearing of desi bird (egg laying period- 60-70 days)	7	1.1	0.8	62	45	1800	5781	3981	2.2
TO-1: Backyard rearing of poultry breed *'Aseel'* (egg laying period- 120-130 days)	7	2.4	1.5	78	34	4030	15450	11420	2.9
TO-2: Backyard rearing of poultry breed *'Kadaknath'* (egg laying period- 80-90 days)	7	1.2	1.0	87	39	4050	14540	101190	2.5


Assessment of high yielding species of oyster mushroom in extreme cold below 20°C

Under homestead situation of the Mayurbhanj district, low yield of oyster mushroom during extreme cold was identified as a problem. In order to address this, a field trial was undertaken by KVK Mayurbhanj-II at 7 different locations of the district through incorporating high yielding species of oyster mushroom in extreme cold below 20°C. It was found from the trial that the cultivation of oyster mushroom species *Hypsizygus ulmarius*, gave the highest yield of 2.7 kg/bed with the highest B:C ratio of 3.75. Farmers are willing to adopt this species as it performs better than other varieties.

Technology option	No. of trials	Yield component		Yield (kg/ bed)	Cost of cultivation (Rs./10 bed)	Gross return (Rs./ 10 no. bed)	Net return (Rs./ 10 bed)	B:C ratio
		Pinhead head appearance (day)	Biological efficiency (%)					
FP: Oyster mushroom cultivation species *Pleurotus sajorcaju*	7	19	90	1.8	720	1800	1300	2.5
TO-1: Oyster mushroom cultivation species *Pleurotus florida*	7	20	70	2.1	720	2100	1600	2.9
TO-2: Oyster mushroom cultivation species *Hypsizygus ulmarius*	7	15	60	2.7	720	2700	2200	3.75

Assessment of performance of different ragi threshing machines

Manual threshing of ragi, usually practised by the farmers of Mayurbhanj district, was found to cost-intensive and labour-intensive. To overcome this, a field trial was conducted by Mayurbhanj-I KVK at 7 different locations of the district for assessing the performance of different threshing machines. The results revealed that threshing by 0.5 hp motor operated mini ragi thresher cum pearler had the highest threshing capacity of 32.6 kg/h with the highest cost saving of 70.4%. Therefore, threshing by 0.5 hp motor operated mini ragi thresher-cum-pearler was recommended for ragi threshing.

Technology option	No. of trials	Threshing capacity (kg/h)	Threshing efficiency (%)	Cleaning efficiency (%)	Time saving (%)	Cost of threshing (Rs./kg)	Cost saving in threshing (%)
FP: Manual threshing	7	15.0	69	62	-	10.80	-
TO-1: Threshing by paddle/ treadle operated paddy thresher	7	25.5	76	71	55.3	5.30	50.9
TO-2: 0.5 hp motor operated mini ragi thresher-cum-pearler	7	32.6	91	89	65.1	3.20	70.4

Nabarangpur KVK

Assessment of herbicide for weed management in transplanted rice

Under rainfed medium land situation of the district, heavy weed infestation is a major cause of low yield of rice. For solving this problem, a multi-locational field trial was undertaken by Nabarangpur KVK at 7 different locations of the district. The results of trial revealed that post-emergence application of Bispyribac Sodium @ 20 g a.i/ ha + Ethoxysulfuron @ 15 g a.i/ ha at 20 DAT reduced weed biomass (23.59 g/m^2), increased weed control efficiency (89.76%) and recorded the highest yield of 37.95 q/ha with the highest B:C ratio of 2.60. Therefore, the practice was recommended for the weed control in transplanted rice in the district.

Technology option	No. of trials	Yield component		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
		Weed control efficiency (%)	Weed biomass (g m^{-2})					
FP: Pyrazosulfuron ethyl 10% WP (Sathi) @300 g/ha as PE followed by one hand weeding at 30 DAT	7	69.89	46.45	32.25	25000	59660	34660	2.37
TO-1: Post-emergence application of Bispyribac Sodium @ 20 g a.i/ ha + Almix @ 4 g a.i/ ha at 20 DAT	7	87.24	26.85	36.85	27000	68170	41170	2.53
TO-2: Post-emergence application of Bispyribac Sodium @ 20 g a.i/ ha + Ethoxysulfuron @ 15 g a.i/ ha at 20 DAT	7	89.76	23.59	37.95	27000	70200	43200	2.60
				CD (P-0.05) = 3.896				

Assessment of management of Fall Army Worm in maize

Extreme yield loss in maize due to severe Fall Army Worm incidence has been a major concern of the district. To address this, Nabarangpur KVK conducted at field trial at 7 different locations of the district's rainfed upland situation. It was found that application of 5% active ingredient of Azadiractin and release of 20000 *Trichograma chilonis* parasite 4-5 times in a week interval was most effective against Fall Army Worm infestation in maize (24% infested) and yielded the highest (47 q/ha) with the highest B:C ratio of 2.41. Therefore, farmers were advised to use 5% active ingredient of Azadiractin with release of 20000 *Trichograma chilonis* parasite 4-5 times in a week interval for effective control of this infestation.

Technology option	No. of trials	% of pest infestation (no. of insect/plant)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
FP: Application of Chloropyriphus, Profenophos @ 2 ml/lit.	7	48 (13)	41	20500	51250	30250	1.98
TO-1: Application of *Beauveria bassiana* @ 400 g/ acre and 1.5% Chloropyriphus dust thickly in the field bund	7	33 (7)	45	20700	53420	32720	2.41
TO-2: Application of 5% active ingradient of Azadiractin and release of 20000 *Trichograma chilonis* parasite 4-5 times in a week interval	7	24 (4)	47	21000	58750	38250	2.56

Assessment of rice variety 'Hasanta' for BPH management

Under rainfed medium land condition of Nabarangpur district, the most prevalent maize-rice cropping system faces the problem of BPH incidence in medium duration rice varieties. In order to address this issue, a field trial was carried out by Nabarangpur KVK at 7 different locations of the district. It was evident from the trial that *'Hasanta'* var. recorded highest yield of 41.5 q/ha with the highest B:C ratio of 2.24. It was recommended that BPH tolerant rice variety *'Hasanta'* should be adapted by the farmers in the area.

Technology option	No. of trials	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
FP: Rice var. *'Pratikshya'*	7	34.75	38062.50	60812.50	22750	1.87
TO-1: Rice var. *'Pooja'*	7	36	38500	63000	24500	1.94
TO-2: Rice var. *'Hasanta'*	7	41.5	40425	72625	32200	2.24

Evaluation of rice varieties for direct seeded crop in non-puddled soil

In rainfed upland situation of Nabarangpur district, the problem of low yield of direct seeded rice due to scarcity of water and disease pest attack has become a major concern. To solve this, Nabarangpur KVK conducted a field trial at 7 different locations involving some resistant rice varieties. Results showed that the rice variety *'CR Dhan 200 (Pyari)'* recorded the highest yield of 36.25 q/ha with the highest B:C ratio of 2.37. Therefore, farmers were advised to adopt the direct seeded rice var. *'CR Dhan 200'* for better result.

Technology option	No. of trials	Yield component		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
		No. of effective tillers/hill	No. of panicles/m^2					
FP: Local variety *'Bharati'*	7	3	189	25.5	25090	45900	20810	1.83
TO-1: *'CR Dhan 200 (Pyari)'*	7	9	245	36.25	27500	65250	37750	2.37
TO-2: *'CR Dhan 202'*	7	6	215	31.45	27000	56610	29610	2.09

Assessment of herbicide for better weed management in maize

Under rainfed medium land situation of Nabarangpur district, low yield of maize due to heavy weed infestation has been a problem of maize growers. For addressing this, Nabarangpur KVK carried out a field trial at 7 different locations involving various weed control measures. It was found that pre-emergence application of Atrazine @ 1.5 kg/ha + Tembotrione (Laudis) 120g/ha at 25 DAS showed the best results with 56.25 q/ha yield and 2.08 B:C ratio. Farmers were advised to adopt the weed management practice of pre-emergence application of Atrazine @ 1.5 kg/ha + Tembotrione (Laudis) 120 g/ha at 25 DAS.

Technology option	No. of trials	Yield component		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
		Weed biomass (g/m^2) at 40 DAS	Weed control efficiency (%)					
FP: Manual weeding, improper herbicide application	7	319.5	72	46.75	38000	70125	32125	1.84
TO-1: Pre-emergence application of Atrazine @ 1.5 kg/ha at 1-3 DAS	7	285	79	48.45	40000	72675	32675	1.81
TO-2:Pre-emergence application of Atrazine @ 1.5 kg/ha + Tembotrione (Laudis) 120 g/ha at 25 DAS	7	155	89	56.25	40500	84375	43875	2.08

Assessment of finger millet varieties

Low yield of finger millet due to cultivation of the local variety (*'Nali Mandia'*) has been a problem for the farmers of the district. In an attempt to overcome this problem, a varietal evaluation trial was undertaken by Nabarangpur KVK involving improved finger millet varieties. The results revealed that Finger millet variety *'Arjun (OEB 526)'* was superior in yield (13.5 q/ha) with the highest B:C ratio of 2.45. It was recommended that finger millet var. *'Arjun (OEB 526)'* was the best suited for rainfed area of Nabarangpur district due to its resistance to drought, neck blast, finger blast and higher yield potential than existing variety. This *'Arjun'* variety of finger millet was incorporated in OMM (Odisha Millet Mission).

Technology option	No. of trials	Yield (q/ha)	% change in yield	No. of effective tillers/hill	No. of finger/ear	Finger length (cm)	Ear wt.(g)	Net income (Rs./ha)	B:C Ratio
FP: Local ragi (*Nali Mandia*)	7	7.5	-	2.17	3.08	5.05	4.50	13000	1.76
TO-1: Finger millet var. *'Arjun (OEB 526)'*	7	13.5	80	4.25	5.46	8.10	7.79	32000	2.45
TO-2: Finger millet var. *'Kalua (OEB 532)'*	7	11.15	53.33	3.55	5.08	7.10	5.45	24600	2.23
		CD (P-0.05) 2.308							

Rayagada KVK

Assessment of drought tolerant paddy variety in rainfed upland situation

Under rain-fed upland situation of the Rayagada district, low yield of paddy variety was identified as a problem. In order to address this, a field trial was undertaken by Rayagada KVK at 7 different locations of the district. It was found from the trial that the *'Sahabhagi Dhan'* gave the highest yield of 26.8 q/ha with the highest B:C ratio of 1.61. Farmers were willing to adopt this variety in future for upland situation.

Technology option	No. of trials	Parameter			Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ ha)	Net return (Rs./ ha)	B:C ratio
		No. of effective tillers/hill	No. of spikelet per panicle	Test wt. (100 grain wt.)					
FP: Cultivation of existing cultivar *'Khandagiri'*	7	6.7	121	2.12	18.6	21000	28800	7340	1.37
TO-1: Paddy Var. *'Sahabhagi Dhan'* duration - 100 - 105 days with soil test-based fertilizer application	7	8.3	139	2.31	26.8	25570	41200	15630	1.61
TO-2: Paddy var. *'Jyotirmayee'*, duration - 95 - 100 days with soil test- based fertilizer application	7	7.5	128	2.19	23.7	23500	36735	13235	1.56

Assessment of medium duration rice varieties for tolerance to BPH

Under rain-fed medium land situation of the Rayagada district, low yield due to more infestation of BPH/ WBPH was identified as a problem. To solve this problem, a field trial was undertaken by KVK Rayagada at 7 different locations of the district. It was found from the trial that there was no incidence of BPH in *'Hasant'* and recorded 17 % higher yield with B:C ratio 1.71 than var. *'Pooja'*.

Technology option	No. of trials	Parameter			Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ ha)	Net return (Rs./ ha)	B:C ratio
		No. of effective tillers/hill	No. of spikelet per panicle	Test wt. (100 grain wt.)					
FP: Cultivation of rice var. *'Pooja'*	7	8	134	2.34	46.8	57000	81900	24900	1.43
TO-1: *'Pratikshya'*-The plant grows up to 110 cm tall and the average yield 5- 5.5 tonnes per ha	7	11	156	2.41	48.3	57000	84525	27525	1.48
TO-2: *'Hasant'* -Small bold grains, white kernel, straw colour hull, moderately resistance to leaf folder, leaf blast, sheath blight & bacterial leaf blast, av. yield-5.5 tonnes/ha, duration- 145 days	7	12	169	2.49	54.7	56000	95725	39725	1.71

Assessment of Fall Army worm Management in maize

Under rain-fed upland land situation of the Rayagada district, low yield of maize due to infestation of Fall army worm was identified as a problem. In order to overcome this, a field trial was undertaken by KVK Rayagada at 7 different locations of the district. The results of the trial showed that the application of 0.15% active ingredient of Azadiractin/ 1500 ppm @ 3.0 ml/ lt of water, with release 20000 *Trichogramma* parasite at 4-5 days interval in a week, application of *Beauveria bassiana* @ 400 gm/acre, Chloropyriphus 50% EC + Cypermethrin 5% EC @ 400 ml/acre during evening hour gave the highest yield of 53.6 q/ha with the highest B:C ratio of 2.02. Farmers are willing to adopt above mentioned technology.

Technology option	No. of trials	Parameter		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
		No. of larvae of FAW/m²	No. of damaged fruits/m²					
FP: Spraying of Chlorpyrifos @ 4 ml/lt.	7	3	4	41.3	43800	72688	28888	1.66
TO-1: Application of 0.15% active ingredient of Azadiractin/ 1500 ppm @ 3.0 ml/lt of water, release of 20000 *Trichogramma* parasite at 4-5 days interval in a week, application of *Beauveria bassiana* @ 400 gm/acre, Profenophos @ 400 ml/ acre	7	1.5	1.4	46.7	46000	82192	36192	1.79
TO-2: Application of 0.15% active ingredient of Azadiractin/ 1500 ppm @ 3.0 ml/lt of water, with release 20000 *Trichogramma* parasite at 4-5 days interval in a week, application of *Beauveria bassiana* @ 400 gm/acre, Chloropyriphus 50% EC + Cypermethrin 5% EC @ 400 ml/acre during evening hour	7	1.3	1.2	53.6	46600	94336	47736	2.02

Assessment of triple resistant tomato hybrids 'Arka Rakshak' and 'Arka Samrat'

Under irrigated upland situation of the Rayagada district, loss in yield of tomato due to incidence of predominant diseases viz. bacterial wilt, early blight and ToLCV (tomato leaf curl virus) was identified as a problem. In order to solve this, a field trial was undertaken by Rayagada KVK at 7 different locations of the district. It was found from the trial that the *'Arka Rakshak'* is high yielding triple disease resistant F1 hybrid, gives 33.7% higher yield with reduction in use of pesticides and fungicides due to its triple disease resistance to important diseases with the highest B:C ratio of 2.53. Farmers are willing to grow this variety in future for irrigated upland situation.

Technology option	No. of trials	Parameter		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
		No. of branches/ plant	Fruits/ plant					
FP: Tomato var. *'Laxmi'*	7	6.7	25.7	308.0	79500	147500	68000	1.85
TO-1: Tomato var. *'Arka Samrat'* -High yielding F1 hybrid with triple disease resistant to ToL CV, bacterial wilt and early blight	7	10	33	410.5	123500	302500	179000	2.45
TO-2: Tomato *'Arka Rakshak'* - High yielding F1 hybrid with triple disease resistant to ToL CV, bacterial wilt and early blight	7	9.5	34.3	412	119500	302000	182500	2.53

Assessment of IPM for pod borer in pigeon pea

Under rainfed upland situation of the Rayagada district, low yield of pigeon pea due to pod borer infestation was identified as a problem. In order to address this, a field trial was undertaken by Rayagada KVK at 7 different locations of the district. Results showed that maize as border crop, pheromone traps & helilure @20 nos./ha, spraying of Azadiractin 0.15% @ 1.5 l/ha at 50% flowering followed by Flubendiamide 48 SC @ 200 ml/ha (2ml/5 lt water) at pod formation stage and Bt @ 1 kg/ha (2g/lt) at 15 days intervals recorded less infestation of pod borer and 33.33 % more yield with the highest B:C ratio of 2.97. Farmers are willing to adopt this technology for pod borer management.



Technology option	No. of trials	Parameter		Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ ha)	Net return (Rs./ ha)	B:C ratio
		No. of adult male moth/ trap	Pest infestation (%)					
FP: Spraying of Profenophos @ 2ml/lt. of water	7	-	32	12.3	32750	77490	44740	2.36
TO-1: Maize as border crop, pheromone traps & helilure @ 20 nos./ha, spraying of HaNPV @ 250LE/ha, Emamectin benzoate 5% SG @ 200 g/ha + Azadirachtin 0.15% @ 1.5 l/ha alternately and release of *T. chilonis* @ 50000/ha at 7 days after spaying of insecticide/ pod formation stage	7	13	13.5	15.6	34300	98280	63980	2.86
TO-2: Maize as border crop, pheromone traps & helilure @20 nos./ha, Spraying of Azadiractin 0.15% @ 1.5 l/ha at 50% flowering followed by Flubendiamide 48 SC @ 200 ml/ha (2 ml/5 lt water) at pod formation stage and Bt @ 1 kg/ha (2g/lt) at 15 days intervals	7	8	7.8	16.4	34800	103320	68520	2.97



Assessment of different sucking pest management measures in chilli

Low yield of chilli due to sucking pest attack has been a major concern for the farmers of Rayagada district. To address this issue, Rayagada KVK carried out a multi-locational field trial involving various measures of sucking pest control. It was found from the trial that seed treatment with Imidachloprid 600 FS @ 5 ml /kg seed and foliar spraying of Spiromesifen 22.9% SC @ 0.8 ml/ l of water twice at 30 and 45 DAT significantly reduced the incidence of sucking pest complex (thrips and mite) in chilli with 29.5% more yield recorded as compared to farmers' practice. This technology resulted into the highest yield of chilli (116.2 q/ha) with the highest B:C ratio of 3.62. Therefore, this practice can be recommended for the chilli growers of the district.

Technology option	No. of trials	Yield (q/ha)	Total cost (Rs./ha)	Gross income (Rs./ha)	Net income (Rs./ha)	B:C ratio
FP: Spraying of Diamethoate @ 2ml/lt.	8	89.75	112000	314125	202125	2.8
TO-1: Foliar spray of Spiromesifen 22.9% SC @ 400 ml/ha effectively lowered incidence of pests, with least reduction in population of beneficial insects and increase yield	8	112.5	112000	393750	281750	3.52
TO-2: Seed treatment with Imidachloprid 600 FS @ 5ml/kg seed and foliar spraying of Spiromesifen 22.9% SC @ 0.8 ml/ lt of water twice at 30 and 45 DAT	8	116.2	112500	406875	294375	3.62

Sundargarh-I KVK

Assessment of herbicide in transplanted rice

One of the major challenges in transplanted rice cultivation is reduced yield due to high weed infestation. In Sundargarh district, farmers typically resort to two rounds of hand weeding at 21 and 45 days after transplanting to manage weeds in rice fields. However, this method is extremely time-consuming, labour-intensive and expensive, especially considering the high labour wages and shortage of labourers in the region. In light of these challenges, Sundargarh-I KVK conducted a field trial at seven different locations within the district. Among the various treatment combinations tested, weed management using Londax power at a rate of 10 kg per hectare applied 3-7 days after transplanting showed superior weed control, resulting in a higher net return of Rs. 32925/- and a favorable B:C ratio of 1.95. Farmers in the region were eager to adopt this technology to increase their yields and net income.

Technology option	No. of trials	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
FP: Two hand weeding at 21 & 45 days	7	36.5	36000	56575	20450	1.58
TO-1: Application of Bispyribac Sodium @ 25 g a.i/ha after 20 – 25 DAS	7	38.8	33600	60140	26540	1.78
TO-2: Application of Londax power @ 10 kg granule /ha 3-7 DAT	7	43.5	34500	67425	32925	1.95




Assessment of herbicide performance in weed control in black gram

High weed infestation leading to reduced yield is a significant issue in black gram cultivation. In Sundargarh district, farmers typically resort to 3-4 rounds of manual weeding to manage weeds in black gram fields. However, this approach is highly time-consuming, labour-intensive and expensive, particularly in the context of high labour wages and a shortage of workers. To address these challenges, Sundargarah-I KVK conducted a field trial at seven different locations within the district. Among the various treatment combinations tested, weed management using the post-emergence herbicide Imazthapyr 10% SL at 20 to 22 days after sowing, applied at a rate of 250 ml per acre, demonstrated superior weed control. This resulted in a higher net return of Rs. 28800/- with a B:C ratio of 2.21.

Technology option	No. of trials	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
FP: 3-4 hand weeding	7	4.6	23800	32200	8400	1.35
TO-1: Application of pre-emergence herbicide pendimethaline @ 1 lt per acre followed by one hand weeding	7	6.8	22750	47600	24850	2.10
TO-2: Application of post-emergence herbicide Imazthapyr 10% SL at 20 to 22 DAS @ 250 ml per acre	7	7.5	23700	52500	28800	2.21


Assessment of performance of different ragi varieties

Sundargarh district possesses significant potential for millet cultivation, particularly ragi achieving 3983 ha in 2019-20. Currently, farmers predominantly cultivate the 110-day local variety known as *'Jaguli'*. However, this variety yields relatively low compared to recently developed ragi varieties. Recognizing this disparity, Sundargarh-I KVK initiated a comprehensive field trial across seven different locations within the district. Among the various varieties tested, *'Arjuna'* emerged as the top performer, yielding an impressive 7.9 quintals per hectare with a commendable B:C ratio of 2.5. Notably, these results were observed under upland rainfed conditions. The farmers' response to the trial results was overwhelmingly positive, as they were delighted to witness the superior performance of the tested varieties compared to the local *'Jaguli'* variety. Consequently, there is a strong eagerness among farmers in the region to adopt this technology, anticipating increased yields and improved net income.



Technology option	No. of trials	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
FP: Local available var. *'Jaguli'* (110 day)	7	5.6	10000	17920	7920	1.72
TO-1: Line transplanting of *'Arjuna'* with RDF 60:30:30 (105-110 days duration, yield potential 2.6 t/ha, moderately resistant to leaf neck and finger blast disease)	7	8.6	10500	27520	17020	2.62
TO-2: Line transplanting of *'Bhairabi'* with RDF 60:30:30 (100-108 days duration, yield potential 1.6 to 2.0 t/ha, 8.1 % protein, moderately resistant to leaf, neck, finger, sheath blast)	7	7.9	10500	26500	16000	2.52

Assessment of suitable varieties of tomato for long-term keeping quality

The diminished keeping quality of cultivated varieties stands as a primary catalyst for distress sales in Sundargarh district, causing farmers to receive lower prices for their produce. Farmers are cultivating hybrid variety, *'Laxmi'* and have bumper yield but have low keeping quality. To counteract this challenge, a strategic approach involving the cultivation of varieties with their higher keeping quality was implemented. For this, Sundargarh-I KVK took the initiative to conduct an extensive field trial spanning seven different locations within the district, focusing on varieties (F1 hybrid *'Arka Rakshak'* and F1 hybrid *'Arka Samrat'*) with enhanced skin thickness. In the rigorous testing, the F1 hybrid Arka Rakshak emerged as a standout performer, exhibiting an impressive medium to large size (80-100 g), deep red, very firm with good keeping quality (11.1days) as long transportability, suitable for both fresh market and processing. Suitable for summer, kharif and rabi seasons compared to other varieties. This translated into a significantly higher net return of Rs. 317900/-, accompanied by a commendable B:C ratio of 3.23. The positive outcomes of this trial met with enthusiasm among farmers, who were pleased to witness the superior performance of the tested varieties in comparison to their conventional practices. As a result of the promising trial results, there was a palpable eagerness among farmers in the region to adopt this technology. The anticipation was centered on the expectation of increased yields and improved net income, further solidifying the potential positive impact of adopting varieties with enhanced keeping quality on the agricultural landscape in Sundargarh district.

Technology option	No. of trials	Keeping period (days)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
FP: F1 hybrid var. *'Laxmi'*	7	2.5	135250	360000	224850	2.66
TO-1: F1 hybrid var. *'Arka Rakshak'*	7	11.1	142500	460400	317900	3.23
TO-2: F1 hybrid var. *'Arka Samrat'*	7	7.4	142500	420300	277800	2.95



Assessment on different methods of pasteurization of straw for controlling of Inkcaps in paddy straw mushroom bed

In Sundargarh district, paddy straw mushroom is a remunerative enterprise for farming community. Due to lack of knowledge on pasteurization of substrate for controlling competitive mould, the yield of paddy straw mushroom per bed is declined. It mainly happens due to the development of competitive mould i.e. Inkcaps. In order to address this, a field trial was undertaken by Sundargarh-I KVK at 7 different locations of the district. Pre-soaking of substrate in 2% calcium carbonate for six hrs gives best results among all the treatment combinations with highest biological efficiency (12.2%), an average yield of 856 g per bed with less infestation of Inkcaps/Copernicus (4%) with the highest B:C ratio of 1.80. Farmers are willing to adopt the above-mentioned technology for getting higher yield and net income. Most of mushroom growers are highly appreciating and adopting the technology.

Technology option	No. of trials	Intensity of Inkcaps / Copernicus %	Yield (g/bed)	Biological efficiency	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
FP: *Volvariella volvacea*	7	33.01	465	6.6	85	93.0	8.0	1.09
TO1: Pre-soaking of substrate in 0.2% bleaching powder for 6 hrs	7	11.30	681	9.7	95	136.2	41.2	1.43
TO2: Pre-soaking of substrate in 0.2% calcium carbonate for 6 hrs	7	4.0	856	12.2	95	171.2	76.2	1.80

Sundargarh-II KVK

Assessment of kharif onion varieties in Sundargarh upland situation

In rainfed upland situation of Sundargarh district, cultivation of onion during *kharif* season is an important practice. But, low yield of onion due to use of local variety has been a major concern of the district. To overcome the situation, a multi-locational field trial was conducted by Sundargarh-II KVK at 7 different locations of the district incorporating different improved varieties for *kharif* onion production. The results of the trial showed that the onion var. *'L-883'* recorded the highest yield of 188 q/ha with the highest B:C ratio of 2.54. Therefore, it was cleared that both the improved varieties performed better than the local available variety. Farmers appreciated *'L-883'* as it matured 10-15 days earlier than other two varieties.

Technology option	No. of trials	Yield Component		Yield (q/ha)	Total cost (Rs./ha)	Gross income (Rs./ha)	Net income (Rs./ha)	B:C ratio
		Wt. of the bulb (gm)	Duration (days)					
FP: Use of Local var. *'N-53'*	7	50	160	154	106500	231000	124500	2.16
TO-1: Use of *kharif* onion var. *'Agri Found Dark Red'*	7	57	145	177	111000	265550	154550	2.39
TO-2: Use of *kharif* onion var. *'L-883'*	7	60	135	188	111000	282200	171200	2.54

Assessment of rice varieties for tolerance of BPH and WBPH

Under rainfed medium land situation, cultivation of rice is common in Sundargarh district. But, due to attack of BPH and WBPH, low yield of medium land rice is a major problem. In order to solve this, a field trial on varietal evaluation was undertaken by Sundargarh-II KVK at 6 different locations of the district. It was evident from the results that cultivation of *'Hasanta'* variety of rice yielded the highest (45 q/ha) and recorded the least disease/ pest incidence of 3% with the highest B:C ratio of 1.68. Therefore, the variety was recommended for the district's rice growers.

Technology option	No. of trials	Disease pest incidence (%)	Yield (q/ha)	Total cost (Rs./ha)	Gross income (Rs./ha)	Net income (Rs./ha)	B:C ratio
FP: Cultivation of *'Pooja'* variety	6	8	42.5	36700	59500	22800	1.62
TO-1: Cultivation of *'Pratiksha'* variety	6	5	43.8	37000	61300	24320	1.65
TO-2: Cultivation of *'Hasanta'* variety	6	3	45	37500	63000	25500	1.68

Assessment of herbicides for weed management in transplanted rice

Transplanted rice is a major cultural practice of Sundargarh district. Emergence of weeds in transplanted was identified as a problem. To come out with an effective weed control measure, a field trial was taken up by Sundargarh-II KVK at 10 different locations of the district. The results revealed that application of Pendimethalin @ 750 g a.i./ha as pre-emergence followed by Bispyribac sodium @ 25 g a.i./ha as post-emergence (25 DAT) recorded the highest yield of 42.9 q/ha with the highest B:C ratio of 1.70. The recommendation of the trial was that application of Pendimethalin @ 750 g a.i./ha as pre-emergence followed by Bispyribac sodium @ 25 g a.i./ha as post-emergence (25 DAT) could be used as the most effective weed control measure in the district.

Technology option	No. of trials	Yield Component		Yield (q/ha)	Total cost (Rs./ha)	Gross income (Rs./ha)	Net income (Rs./ha)	B:C ratio
		Weed density (per sq. mt.)	Disease pest incidence (%)					
FP: Manual weeding	10	51	15	37.2	35800	55800	20000	1.56
TO-1: Pre-emergence application of Pretilachlor @ 750 g a.i./ha	10	32	12	40.1	36700	60150	23450	1.64
TO-2: Application of pendimethalin @ 750 g a.i./ha as pre-emergence followed by Bispyribac sodium @ 25 g a.i./ha as post-emergence (25 DAT)	10	21	10	42.9	38900	64650	25750	1.7

Assessment of nutrient management for Blossom End Rot (BER) in tomato

Low yield of tomato due to BER has been a major concern for the tomato growers of Sundargarh district. In order to manage the situation, nutritional intervention was taken up by Sundargarh-II KVK at 7 different locations of the district. It was evident from the trial that the foliar application of calcium 5% @ 1-2 Tbsp/4.5lt water performed the best with the yield of 326 q/ha and B:C ratio of 2.70. It was concluded that foliar application of calcium 5% @ 1-2 Tbsp/4.5lt water can be the most effective way to combat the BER in tomato.

Technology option	No. of trials	No. of infested fruits per sq. mt.	Yield (q/ha)	Total cost (Rs./ha)	Gross income (Rs./ha)	Net income (Rs./ha)	B:C ratio
FP: Lack of nutrient management practices leads to BER	7	0.6	295	92800	177000	84200	1.90
TO-1: Foliar application of calcium 5% @ 1-2 Tbsp/4.5lt water	7	0.1	326	96600	260800	163400	2.7
TO-2: Use of Arka vegetable micronutrient formulation as spray after flowering @ 10-20 g/lt	7	0.2	322	98200	193200	95000	1.96

Assessment on suitable cold tolerant varieties of oyster mushroom during low temperature condition

Under homestead situation of the Sundargarh district, low yield of oyster mushroom during extreme cold was identified as a problem. To overcome this situation, a field trial was undertaken by Sundargarh-II KVK at 5 different locations of the district through incorporating high yielding species of oyster mushroom in extreme cold below 20°C. It was evident from the trial that the cultivation of oyster Mushroom species *Hypsizygus ulmarius*, gave the highest yield of 2.4 kg/bed with the highest B:C ratio of 3.27. Farmers were willing to adopt this species as it performs better than other varieties and and it was very good for processing (drying and powder).

Technology option	No. of trials	Yield Component		Yield kg/ bed	Total cost (Rs./ha)	Gross income (Rs./ha)	Net income (Rs./ha)	B:C ratio
		Avg. wt. of buttons (gm.)	No. of days for pin head appearance					
FP: Cultivation of oyster mushroom var. *P. sajorcaju*	5	42	12	1.4	5800	1,1200	7800	1.93
TO-1: Cultivation of oyster mushroom var. *P. florida*	5	27	13	2.0	5800	16000	11500	2.75
TO-2: Cultivation of oyster mushroom var. *Hypsizygus ulmarius*	5	30	13	2.4	5800	19000	14500	3.27

Assessment on integrated management of panicle mite in rice

Failure to diagnose the pest due to appearance of symptoms during grain filling stages of rice has been identified as a problem. It led to lower yield of rice in Sundargarh district. Taking up the issue, Sundargarh-II KVK undertook a field trial at 6 different locations involving various measures to control the panicle mite in rice. The results revealed that foliar spraying of diafenthiuron 50 WP @ 2 gm/lt at PI stage was the best management measure yielding the highest (42 q/ha) with the highest B:C ratio of 1.68. So, the practice was recommended for the district's rice growers.

Technology option	No. of trials	No of infected panicle/hill	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Net return (Rs./ha)	B:C ratio
FP: Spraying of carbendazim 50 WP @ 1kg/ha	6	11.2	35	35000	52500	17500	1.50
TO-1: Seed treatment with imidacloprid 70% WS @ 7 g/ kg seeds, installation of YST @ 20/ha and need based spraying of acetamiprid 20 SP @ 250 gm/ha at seven days interval	6	4.3	39.5	38000	59250	21250	1.55
TO-2: Foliar spraying of diafenthiuron 50 WP @ 2 g/lt at PI stage	6	2.5	42	37500	63000	25500	1.68

Nicobar KVK

Effect of decomposers on soil properties and yield of coconut

Under coconut based traditional farming system of Car Nicobar district, a decreasing trend of coconut yield due to senile palms and nutrient deficiency of soil has been identified as a major problem. In order to solve this problem, Nicobar KVK took up a field trial involving use of decomposers for amending soil properties and increasing coconut yield. The result revealed that average coconut yield under different treatments viz. FP, TO-1 and TO-2 were 22.34, 28.25 and 32.50 nuts/palm/annum, respectively along with enrichment of soil properties. It can be concluded from the study that use of waste decomposer pre- and post-monsoon may increase the yield of coconut in the existing plantation at Car Nicobar.

Technology option	Available nutrients in kg/ha before use of decomposer						Available nutrients in kg/ha after use of decomposer						Coconut yield (nuts/ palm/year)
	pH	EC	OC	N	P	K	pH	EC	OC	N	P	K	
FP: Traditional farming (no management)	8.14	102.8	0.2	127.9	6.4	72	8.15	272.7	0.2	130.5	6.9	80	22.34
TO-1: Use of decomposer pre & post monsoon (100 ml/ 5 lt water/ palm)	8.13	108.4	0.8	126.7	4.2	81	8.12	157.8	0.8	133.0	4.8	67	28.25
TO-2: External application of enriched compost/CIAR bio-consortia (1 kg effective microbes/100 kg compost)	8.22	115.6	0.2	123.0	4.9	76	8.20	128.4	0.6	131.0	5.7	89	32.50

Effect of organic manures on growth and yield of Nicobari Aloo (Diascoraea) at Car Nicobar

Nicobari Aloo is the main tuber crop of Nicobar. Nicobari Aloos are cultivated in traditional way without any nutrient and other management. The soil (sandy loam) is also deficient in many nutrients. The subsequent cultivation in same field leads to decreasing trend yield. Hence, Nicobarese practice shift cultivation year after year for their Nicobari Aloo production and return to the same site after five years. This leads to requirement of more labour and more area. Hence, to utilize every piece of land with maximum productivity year after year nutrient management of soil through organic inputs is called for. With this background, Nicobar KVK undertook a field trial at 5 different locations using organic manure for increasing yield. The result showed that the application of poultry manure yielded the highest maximum Nicobari Aloo from given unit area (400 m^2) followed by waste decomposer, bio-zyme and farmers practice in the tune of 890.80 kg, 812.00 kg, 756.00 kg and 351.25 kg, respectively while the recpective B:C ratio were found to be 5.09, 4.99, 5.04 and 3.51. It was concluded from the trial that applying poultry manure @ 6 t/ha increased the yield of Nicobari Aloo under field conditions.

Technology option	*Yield (kg/400 m^2)*	*Yield (q/ ha)*	*Gross cost (Rs.)*	*Gross income (Rs.)*	*B:C ratio*
FP: Traditional farming (digging, sowing and harvesting)	351.25	80.0	4000	14050	3.51
To-1: Application of waste decomposer (20 ml/lit. of water)	812.00	180.0	6500	32480	4.99
To-2: Application of bio-zyme (10 kg/acre) at sowing time	756.00	170.0	6000	30240	5.04
To-3: Application of poultry manure (@ 6t/ha)	890.80	200.0	7000	35632	5.09

Evaluation of supplementation of minerals and vitamins in enhancing growth of Teressa Goats

The Nicobarese rear goats in traditional way with minimal management practice and nutritional supplementation. This may be affecting overall body weight gain in field conditions compared to farm conditions. Considering this as a problem of goat production of Car Nicobar, a field level trial was conducted by Nicobar KVK to evaluate the performance of Teressa goats fed with minerals and vitamins supplementation. It was evident from the trial that supplementation of vitamin (B complex) and mineral mixture improved the body weight of Teressa goats at farmer's field. The average body weight at six months of age in different treatment groups viz. FP, TO-1, TO-2 and TO-3 were in the tune of 12.06 kg, 14.34 kg, 14.29 kg and 15.01 kg, respectively. The average net income from above treatment groups were in the tune of Rs. 2124/-, Rs.2936/-, Rs. 2966/- and Rs. 3154/-, respectively with the B:C ratio of 1.76, 2.05, 2.08 and 2.11, respectively. It was concluded that the combined supplementation of vitamin (B complex) and mineral mixture had a positive effect on body weight gain in Teressa goats and ultimately led to the higher returns.

Technology option	*Average bwt. at 3 months (kg)*	*Average bwt. at 6 months (kg)*	*Average gross cost (Rs.)*	*Average gross income (Rs.)*	*Average net income (Rs.)*	*B:C ratio*
FP: Traditional farming (No supplementation)	7.36	12.06	2700	4824	2124	1.79
TO-1: FP + 5g/d min. mix. for 3 months	7.31	14.34	2800	5736	2936	2.05
TO-2: FP + 10 ml/d vitamins (B complex) for 3 months	7.18	14.29	2750	5716	2966	2.08
TO-3: FP + 5 g/d min. mix. & 10 ml/d vitamins (B complex) for 3 months	7.40	15.01	2850	6004	3154	2.11

Evaluation of different indigenous poultry birds under backyard condition at Nicobar

The Nicobarese rear poultry birds under backyard condition with minimum management practice. This leads to lower marketability of the birds. Hence evaluation of different poultry for their suitability in Nicobar condition is a must. Keeping this in view, Nicobar KVK carried out a field trial to evaluate different poultry birds under backyard farming system. The result revealed that the average body weight of adult desi birds, *'Nicobari Fowl'* and *'Naked Neck'* were in the tune of 1.71 kg, 1.59 kg and 1.96 kg, respectively and the average age of first egg laying were 182 days, 166 days and 184 days, respectively. The average egg production per annum was 70.96, 112.64 and 81.64 eggs with net income of Rs. 962/- , Rs. 1534/- and Rs.1125/- and B:C ratio of 2.10, 2.78 and 2.06, respectively for Desi birds, *'Nicobari fowl'* and *'Naked Neck'*. As per B:C ratio, the backyard farming of Nicobari fowl was more profitable followed by Desi birds and *'Necked Neck fowl'*.

Technology option	Average bwt. at 8 months (kg)	Average age of first egg laying (days)	Egg production / annum (no.)	Gross cost (in Rs.)	Gross return (in Rs.)	Net return (in Rs.)	B:C ratio
FP: Rearing of desi poultry birds	1.71	182	70.96	872	1834	962	2.10
TO-1: Backyard rearing of *'Nicobari Fowl'*	1.59	166	112.64	872	2406	1534	2.78
TO-2: Rearing of *'Naked Neck* fowl'	1.96	184	81.64	981	2106	1125	2.06

Evaluation of different papaya varieties at Car Nicobar

There is much demand of papaya fruits in Car Nicobar. The local varieties' yield is low. Hence, introduction and evaluation of new varieties of papaya is required. Therefore, a multi-locational field trial was taken up by Nicobar KVK at 7 different locations of the district for assessing the performance of different varieties of papaya. It was cleared that number of fruits per plant was higher in *'Arka Prabhat'* (20.86) followed by *'Arka Surya'* (18.57) and local variety (15.86). The same trend was observed for other parameters viz. fruit weight, gross return, net return and B:C ratio. It was concluded that *'Arka Prabhat'* performed better in both yield and economic parameters, hence it was promoted in Car Nicobar.

Technology option	No. of trials	Yield component			weight of fruit (kg)	Yield (q/ha)	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
		Plant height 180 days (cm)	Days of flowering	No. of fruits/ plant						
FP: Local variety	7	189.29	142	15.86	0.79	386.66	654020	1546640	892620	2.36
TO-1: *'Arka Prabhat'*	7	109.86	84	20.86	1.24	798.24	808320	3192960	2384640	3.95
TO-2: *'Arka Surya'*	7	137.29	96	18.57	1.12	641.84	808320	2567360	1759040	3.18

5.1.3 Front line demonstrations (FLDs)

The proven technologies derived either from research institutes or from OFTs of a particular KVK or from nearby KVKs were taken to the fields of selected farmers' through FLDs. Thus, farmers can get the opportunity to check the yield advantage of the demonstrated technology against their practiced technology. This is one of the ways to spread new technologies among the farmers within a very short period of time. The TSP/STC KVKs of this zone conducted many FLD programmes for the benefit of tribal farmers during the period under report.

5.1.3.1 Total number of FLDs conducted

The KVK-wise total number of FLDs, area covered, number of beneficiaries including male and female and cost involved in different years have been shown in the following table.

Table: Details of FLDs conducted by the KVKs under TSP/STC during the year 2017-18 to 2022-23

Year	Name of KVK	Total no. of FLDs	Total area of demonstration (Acre)	No. of benefitted farmers			Cost involved (Rs.)
				Male	Female	Total	
2017-18	Gajapati	295	39.50	197	99	295	209821
	Kandhamal	325	47.50	195	130	325	68544
	Malkangiri	278	30.00	168	110	278	151200
	Mayurbhanj-I	278	15.00	169	109	278	29028
	Mayurbhanj-II	289	24.00	156	133	289	83550
	Nabarangapur	309	36.00	181	128	309	24000
	Rayagada	289	70.00	167	122	289	122900
	Sundargarh-I	298	32.50	165	133	298	145000
	Sundargarh-II	341	41.34	198	143	341	363948
	Nicobar	152	2.50	121	31	152	28000
Sub-total		***2854***	***338.34***	***1702***	***1152***	***2854***	***1225991***

Year	Name of KVK	Total no. of FLDs	Total area of demonstration (Acre)	No. of benefitted farmers			Cost involved (Rs.)
				Male	Female	Total	
2018-19	Gajapati	154	27.50	89	65	154	108460
	Kandhamal	198	27.50	123	75	198	80657
	Malkangiri	189	40.00	103	86	189	210000
	Mayurbhanj-I	177	20.26	104	73	177	19040
	Mayurbhanj-II	195	21.50	121	74	195	79400
	Nabarangapur	154	16.10	102	52	154	31000
	Rayagada	158	24.14	98	60	158	102400
	Sundargarh-I	208	25.00	145	63	208	401000
	Sundargarh-II	159	53.00	94	65	159	266520
	Nicobar	123	3.00	86	37	123	21000
Sub-total		***1715***	***258.00***	***1065***	***650***	***1715***	***1319477***
2019-20	Gajapati	197	22.50	112	85	197	102897
	Kandhamal	210	32.50	156	54	210	89379
	Malkangiri	263	30.00	189	74	263	119200
	Mayurbhanj-I	216	9.68	124	92	216	32953
	Mayurbhanj-II	196	15.00	127	69	196	81600
	Nabarangapur	215	18.50	131	84	215	35000
	Rayagada	189	44.00	111	78	189	133140
	Sundargarh-I	207	15.00	126	81	207	287000
	Sundargarh-II	194	30.80	114	80	194	99825
	Nicobar	114	1.55	62	52	114	33000
Sub-total		***2001***	***219.53***	***1252***	***749***	***2001***	***1013994***
2020-21	Gajapati	140	12.00	91	49	140	70399
	Kandhamal	131	42.50	111	20	131	100138
	Malkangiri	162	33.00	130	32	162	298200
	Mayurbhanj-I	81	14.01	50	31	81	25274
	Mayurbhanj-II	100	12.55	59	41	100	114200
	Nabarangapur	150	15.00	125	25	150	30000
	Rayagada	240	36.00	193	47	240	178180

Year	Name of KVK	Total no. of FLDs	Total area of demonstration (Acre)	No. of benefitted farmers			Cost involved (Rs.)
				Male	Female	Total	
	Sundargarh-I	270	32.5	174	96	270	212600
	Sundargarh-II	331	45.07	200	131	331	152135
	Nicobar	8	0.16	1	7	8	38000
Sub-total		***1613***	***242.79***	***1134***	***479***	***1613***	***1219126***
2021-22	Gajapati	50	16.50	28	22	50	967
	Kandhamal	127	41.20	75	52	127	161293
	Malkangiri	175	50.00	89	86	175	340000
	Mayurbhanj-I	94	14.00	52	42	94	57322
	Mayurbhanj-II	128	18.00	71	57	128	94800
	Nabarangapur	158	16.00	87	71	158	45000
	Rayagada	148	13.00	74	74	148	176800
	Sundargarh-I	126	30.90	83	43	126	247900
	Sundargarh-II	148	31.00	82	66	148	273745
	Nicobar	22	0.40	13	9	22	76000
Sub-total		***1176***	***231.00***	***654***	***522***	***1176***	***1473827***
2022-23	Gajapati	162	15.00	97	65	162	5400
	Kandhamal	186	17.50	113	73	186	179259
	Malkangiri	165	29.50	96	69	165	249000
	Mayurbhanj-I	144	16.00	84	60	144	12000
	Mayurbhanj-II	150	15.20	91	59	150	166289
	Nabarangapur	192	37.00	123	69	192	108450
	Rayagada	168	15.00	107	61	168	142016
	Sundargarh-I	198	30.00	109	89	198	333200
	Sundargarh-II	274	37.50	154	120	274	195960
	Nicobar	112	0.50	73	39	112	32000
Sub-total		***1751***	***213.20***	***1047***	***704***	***1751***	***1423574***
Grand total		***11110***	***1502.86***	***6854***	***4256***	***11110***	***7675989***

5.1.3.2 Details of FLDs

The KVK-wise details of FLDs, varieties/breed/strain demonstrated, area/no. of units, number of beneficiaries including male and female and total cost involved are presented in the table shown below.

Table: Important demonstrations under TSP/STC by the KVKs of this zone during the period 2017-18 to 2022-23

Year	Name of KVK	Demonstrations on	Details of demonstrations/ varieties or breeds or strains demonstrated	Area of demonstration (Ac)/ Livestock unit size (No.)	No. of benefitted farmers			Total cost involved (Rs.)
					Male	Female	Total	
2017-18	Gajapati	Nutritional garden	Papaya-*Red lady*, drum stick-*PKM 1*, other vegetable seeds	4.0	4	21	25	19415
		Rice	IDM in rice	7.5	10	0	10	19880
		Brinjal	IDM in brinjal	2.5	5	0	5	16021
		Mango	IDM in mango	2.5	5	0	5	4480
		Wilt tolerant tomato hybrid	*Swarna Sampada*	1.0	3	2	5	7600
		Wilt tolerant brinjal	*Swarna Shyamali*	1.0	3	2	5	31300
		Broccoli	*Green Magic*	1.0	5	0	5	105600
		Maize planter	Use of maize planter	10.0	10	0	10	2000
		OUAT three row manual transplanter in rice	Three row manual transplanter	5.0	5	0	5	0
		Bullock drawn puddler in rice	Bullock drawn puddler	5.0	5	0	5	3525
	Total			**39.5**	**197**	**99**	**295**	**209821**
	Kandhamal	Maize	*Hybrid*	5	24	14	38	3500
		Groundnut	*Srumti*	5	21	15	36	2150
		Turmeric	*Roma*	5	27	21	48	2150
		Garden pea	*GS 10*	18	59	32	91	35621
		Cabbage	*Harekrishna*	14.5	64	48	112	25123
	Total			**47.5**	**195**	**130**	**325**	**68544**
	Malkangiri	Paddy	HYV *Ajay*	6	25	16	41	9000
		Sweet corn	*Sugar 75*	6	40	23	63	90000
		Groundnut	*Devi*	6	23	14	37	19000
		Mushroom	*P Sajarkaju*	200 nos.	3	17	20	15000
		Green gram	*IPM02-14*	6	35	17	52	17000
		Rice	*MTU-1001*	6	35	15	50	1200
	Total			**30**	**168**	**110**	**278**	**151200**
	Mayurbhanj- I	Capsicum	var. *Indo American Bharat*	4.95	25	18	43	5000
		Poultry	*Rainbow Roaster*	100 nos.	10	0	10	6500
		Mechanized line transplanting of rice	Four-row walk behind rice transplanter	5.00	28	26	54	6528
		Mechanized line sowing of maize	Tractor drawn seed cum fertilizer drill	5.00	29	13	42	6500
		Dal mill	Dal mill machine	10 nos.	15	10	25	1000
		Mechanized digging of groundnut	Bullock drawn groundnut digger	5.00	18	7	25	3500
		Lifting of water by solar pump	Solar pump	10 nos.	21	12	33	0

Year	Name of KVK	Demonstrations on	Details of demonstrations/ varieties or breeds or strains demonstrated	Area of demonstration (Ac)/ Livestock unit size (No.)	No. of benefitted farmers			Total cost involved (Rs.)
					Male	Female	Total	
		Mechanical thresher bench of sunflower	Sunflower thresher	10 nos.	14	8	22	0
		Groundnut stripper	Groundnut stripper	10 nos.	9	15	24	0
	Total			**15.00**	**169**	**109**	**278**	**29028**
	Mayurbhanj- II	Chick Pea	*Shubhra*	5 .0	21	12	33	12400
		Maize	*VNR 4226*	5 .0	19	13	32	12650
		Paddy	*Swarna Sub-I*	5 .0	23	7	30	8400
		Cauliflower	*Megha*	5 .0	21	14	35	14300
		Chilli	*Utkal Rashmi*	2.0	26	15	41	13500
		Mushroom	Paddy straw mushroom	10 nos.	12	23	35	8900
		Mahua	Value added products	10 nos.	16	28	44	5000
		Nutritional garden	Vegetables	1.0	18	21	39	8400
	Total			**24.00**	**156**	**133**	**289**	**83550**
	Nabarangpur	Black gram	*PU-31*	4	23	12	35	3000
		Rice	*Mandakini*	6	27	24	51	4000
		IPM of yellow stem borer in rice	Pest management practices	5	24	17	41	2000
		Vermicompost	Vermicompost production techniques	5	24	18	42	7000
		Wilt management in brinjal	Sclerotial wilt management	6	35	24	59	2000
		Green gram	*IPM 02-03*	5	24	18	42	4000
		Rice	Use of LCC	5	24	15	39	2000
	Total			**36**	**181**	**128**	**309**	**24000**
	Rayagada	Maize	Sweet corn	7.5	36	24	60	59400
		Blast management in rice	Application of Tricycloazole/ Isoprothialine	5.0	21	9	30	4500
		Sunflower	*PAC 334*	5.0	12	7	19	2500
		Pigeon pea	*Asha*	5.0	15	8	23	4000
		Black gram	*PU- 31*	12.5	9	4	13	13000
		Pigeon pea	*ICPL 14001*	25.0	33	23	56	22000
		Cotton	*RCH 688*	2.5	12	6	18	5000
		Sunhemp	Sunhemp production practices	7.5	21	17	38	5000
		Backyard poultry rearing	*Vanaraja*	100 nos.	8	24	32	7500
	Total			**70**	**167**	**122**	**289**	**122900**
	Sundargarh- I	Paddy	*Swarna*	5.0	10	8	18	18000
		Green gram	*PDM 139*	5.0	10	5	15	17000
		Chilli	Utkal Ragini	2.5	7	15	22	6000
		Mango	*Amrapalli*	10 nos.	6	4	10	5000
		Rice	*Pratikshya*	5.0	8	2	10	10000
		Mustard	*Anuradha*	5.0	40	10	50	20000
		Green gram	*IPM-02-14*	5.0	50	9	59	20000
		Nutritional garden	Improved varieties of vegetables	10 nos.	0	20	20	10000
		Oyster mushroom	*P. sajarcaju*	10 nos.	2	24	26	10000
		Backyard poultry rearing	*Vanraja*	10 nos.	1	19	20	10000

Year	Name of KVK	Demonstrations on	Details of demonstrations/ varieties or breeds or strains demonstrated	Area of demonstration (Ac)/ Livestock unit size (No.)	No. of benefitted farmers			Total cost involved (Rs.)
					Male	Female	Total	
		Ragi	*Bhairabi*	5.0	31	17	48	19000
	Total			**32.50**	**165**	**133**	**298**	**145000**
	Sundargarh- II	Rice	*Naveen*	2.5	17	5	22	15850
			Sahabhagi	2.5	16	5	21	14470
			Nutrient Management in hybrid rice	2.5	18	0	18	11320
		Cowpea	*Kashi Kanchan*	2.5	17	0	17	14180
		Tomato	Demonstration of staking in tomato	0.5	15	0	15	14600
		Sweet corn	*Sugar-75*	1.0	0	4	4	12440
		Okra	Nutrient management in okra	1.0	14	0	14	11680
		Onion	*Bhima Shakti*	1.0	12	0	12	11570
		Brinjal	Nutrient management in brinjal	1.0	15	0	15	11440
		Garden pea	High yielding variety	17.5	44	6	50	74450
		Nutritional garden	Backyard kitchen gardening	9.34	30	73	103	151948
		Mushroom cultivation	Paddy straw mushroom	200	0	20	20	6000
			Oyster mushroom	200	0	20	20	6000
		Poultry rearing	Calcium and mineral supplementation during egg laying period in backyard poultry	200 nos.	0	10	10	8000
	Total			**41.34**	**198**	**143**	**341**	**363948**
	Nicobar	Popularization of maize crop	Sweet corn	1.50	30	7	37	2000
		Organic manure production	Vermi composting	0.50	32	5	37	1000
		Organic manure production	Coconut composting	0.50	37	10	47	8000
		Dairy farming	Mineral mixture supplementation	19 nos.	14	5	19	2000
		Piggery	Intensive pig farming	12 nos.	8	4	12	15000
	Total			**2.50**	**121**	**31**	**152**	**28000**
	Sub-total			***338.34***	***1702***	***1152***	***2854***	***1225991***
2018-19	Gajapati	Black gram	Weed management in black gram	4.5	10	8	18	3235
		Green gram	INM in green gram	3.5	11	7	18	0
		Tomato	Weed management in tomato with var. *Arka Samrat*	3.5	14	9	23	3540
		Rice	Management of gall midge in rice	1.5	8	5	13	0
		Rice	Sheath blight management in rice	2.5	14	6	20	6502
		Cow pea	Bushy type YMV resistant cowpea var. *Kashi Kanchan*	2.5	6	2	8	12403
		Brinjal	Wilt tolerant brinjal var. *Swarna Shyamali* application	2.5	5	0	5	28980
		Broccoli	Arka Microbial Consortium (AMC) in broccoli	3.5	12	5	17	0
		Marigold	Seedling raising of marigold cultivar *Seracole* in Aug.- Sept.	2.5	9	3	12	53800
		Nutritional garden	Use of HYV crops in backyard	1	0	20	20	0
	Total			**27.5**	**89**	**65**	**154**	**108460**

Year	Name of KVK	Demonstrations on	Details of demonstrations/ varieties or breeds or strains demonstrated	Area of demonstration (Ac)/ Livestock unit size (No.)	No. of benefitted farmers			Total cost involved (Rs.)
					Male	Female	Total	
	Kandhamal	Groundnut	*Smruti*	2.5	15	12	27	3000
		Turmeric	*Rajendra Sonia*	2.5	19	11	30	3000
		Garden pea	*GS 10*	7.5	34	19	53	36210
		Cabbage	*Harekrishna*	9.5	25	13	38	26251
		Field pea	*Udaya*	3	13	8	21	2564
		Sweet corn	*Sugar 75*	2.5	17	12	29	9632
	Total			**27.5**	**123**	**75**	**198**	**80657**
	Malkangiri	Rice	*MTU-1001*	2.5	8	2	10	1200
		Rice	*Pratikshya*	5.00	6	4	10	2500
		Rice	*Swarna Shreya (IET 24003)*	2.5	7	5	12	1500
		Rice	*LCC*	5.00	8	2	10	6000
		Sweet corn	*Sugar 75*	2.50	10	0	10	11700
		Oyster mushroom	*P Eryngii*	2000 nos.	8	16	24	8000
		Backyard poultry	*Vanaraja*	1000 nos.	16	25	41	45000
		Backyard poultry	*Kadaknath*	1000 nos.	15	23	38	45000
		Groundnut	*Devi*	12.00	12	5	17	57600
		Sesame	*GT-10*	10.50	13	4	17	31500
	Total			**40**	**103**	**86**	**189**	**210000**
	Mayurbhanj- I	IWM in transplanted rice	Treatment of weeds	5.95	28	17	45	3600
		Toria	*Sushree*	4.95	24	12	36	1800
		Green gram	Pre- and post-emergence herbicide for control of weed in green gram	9.06	35	9	44	1500
		Maize + cowpea intercropping	Maize and cowpea	0.25	2	0	2	1200
		Ornamental plants cultivation in poly house throughout the year	Gerbera and Rose	5 nos.	5	0	5	6000
		Duckery for income generation of farm women	*Khaki Campbell*	100 nos.	10	0	10	2600
		Nutritional garden	Backyard nutritional garden for round the year production	0.05	0	10	10	2340
		Drudgery reduction of farm women	NRRI paddy parboiling drum	15 nos.	0	15	15	0
		Drudgery reduction of farm women	Rotary maize sheller	15 nos.	0	10	10	0
	Total			**20.26**	**104**	**73**	**177**	**19040**
	Mayurbhanj- II	Maize	*VNR 4001*	5 .0	29	6	35	13600
		Paddy	Pooja	5 .0	26	10	36	9800
		Brinjal	*Swarna shakti*	5 .0	28	11	39	12600
		Tomato	*Utkal Pragyan*	5 .0	29	18	47	12400
		Nutritional garden	Vegetables	1.5	9	8	17	8500
		Duck	*Khaki Cambell*	10 nos.	1	1	12800	1
		Tamarind	Value added products	10 nos.	10	10	4200	10
		Tomato	Value added products	10 nos.	10	10	5500	10
	Total			**21.5**	**121**	**74**	**195**	**79400**

Year	Name of KVK	Demonstrations on	Details of demonstrations/ varieties or breeds or strains demonstrated	Area of demonstration (Ac)/ Livestock unit size (No.)	No. of benefitted farmers			Total cost involved (Rs.)
					Male	Female	Total	
	Nabarangpur	Nutritional garden	Vegetables and fruits	1	0	10	10	2000
		Oyster mushroom	Oyster mushroom production technology	4	0	10	10	2000
		IDM in banana	Disease management practices	0.4	10	3	13	2000
		IDM in ground nut	Disease management practices	1	9	4	13	2000
		Papaya	*Red Lady*	0.4	8	2	10	2000
		Tomato	*Arka Rakshyak*	1	7	3	10	3000
		Marigold	*BM2*	0.3	8	2	10	2000
		Maize-black gram intercropping	Intercropping of maize and black gram	1	8	3	11	2000
		Weed management in rice	Weed management practices	2	13	4	17	4000
		Maize-cowpea intercropping	Intercropping of maize and cowpea	1	9	5	14	2000
		INM in rice	Micronutrient management	1	7	4	11	2000
		INM in brinjal	INM practices	3	23	2	25	6000
	Total			**16.1**	**102**	**52**	**154**	**31000**
	Rayagada	Sweet corn	*Sugar- 75*	7.5	21	11	32	69300
		Ragi	*Arjuna*	2.5	15	9	24	1000
		Maize	Management of soil acidity	5	17	12	29	16800
		Rice	Management of blast disease	1.5	7	5	12	4500
		Cotton	Management of mealy bug	5.14	22	12	34	5800
		Onion	*Bhima Super*	2.5	16	11	27	5000
	Total			**24.14**	**98**	**60**	**158**	**102400**
	Sundargarh-I	Rice	*Swarna Shreya*	5	21	0	21	20000
		Mustard	*Uttara*	5	18	0	18	20000
		Bottle gourd	Local cultivar *Lephripara*	5	22	2	24	15000
		Sesamum	*GT-10*	10	34	3	37	15000
		Value addition of tomato	Tomato powder preparation technique of *Arka Rakshak* variety	50 kg	0	5	5	10000
		Paddy straw mushroom	*Volvariella volveacea*	20 nos.	0	5	5	45000
		Nutritional garden	Improved variety of vegetables	400 kits	40	45	85	135000
		Oyster mushroom	*Pleurotus sajorcaju*	30 nos.	0	3	3	21000
		Vermicomposting	*E. foiditida*	10 nos.	10	0	10	75000
		Rearing of backyard poultry	*Vanraja*	10 nos.	0	0	0	45000
	Total			**25**	**145**	**63**	**208**	**401000**
	Sundargarh-II	Rice	*Sahabhagi*	2.5	6	2	8	14430
			Green manuring of sunhemp in rice	2.5	5	1	6	7850
			IPM in rice	5	6	2	8	16320
		Groundnut	IPM in groundnut	5	6	2	8	12740
		Tomato	Wilt management in tomato	2.5	6	2	8	8575
		Cabbage	IPM of diamond back moth in cabbage	2.5	7	1	8	8970

Year	Name of KVK	Demonstrations on	Details of demonstrations/ varieties or breeds or strains demonstrated	Area of demonstration (Ac)/ Livestock unit size (No.)	No. of benefitted farmers			Total cost involved (Rs.)
					Male	Female	Total	
		Chick pea	Chickpea cultivation in rainfed rice fallow	2.5	8	3	11	12540
		Cow pea	*Kashi Kanchan*	2.5	6	0	6	14950
		Sweet potato	INM in sweet potato	2.5	8	6	14	9045
		Tomato	*Arka Rakshak*	2.5	8	2	10	8180
		Onion	Use of weedicide Oxyfluorfen in *rabi* onion	2.5	6	0	6	4720
		Nutritional garden	Vegetable production in backyard	1.5	2	4	6	56500
		Black gram	*OBG-17 (Ujala)*	8	7	5	12	25000
		Field pea	*Prakash*	7	7	3	10	23000
		Garden pea	*Sweet pearl*	4	6	8	14	19700
		Mushroom cultivation	Paddy straw mushroom	100 bed	0	8	8	7000
			Oyster mushroom	100 bed	0	8	8	7000
		Poultry	Rearing of *Kadaknath* under backyard system	10 units	0	8	8	10000
	Total			**53**	**94**	**65**	**159**	**266520**
	Nicobar	Okra	*Arka Anamika*	1.5	29	14	43	2000
		Maize crop	Sweet corn	1.5	27	11	38	2000
		Goatery	Supplementation of mineral mixture	35 no.	18	4	22	2000
		Piggery	Intensive pig farming	6 no.	12	8	20	15000
	Total			**3**	**86**	**37**	**123**	**21000**
	Sub-total			***258***	***1065***	***650***	***1715***	***1319477***
2019-20	Gajapati	BPH tolerant rice	*Hasanta*	2.5	15	8	23	1302
		Rice	Weed management in transplanted rice	2.5	15	4	19	3275
		Maize + cowpea (2:2) intercropping	Two rows of cowpea var. *Kashi Kanchan*	2.5	18	10	28	4750
		Green gram	Weed management in green gram (post-emergence)	2.5	10	6	16	3870
		Wilt tolerant brinjal	*Swarna Shyamli* during *kharif* season	1.25	5	3	8	28400
		Kharif onion	*Arka Kalyan*	1.25	5	4	9	41000
		Bullock drawn puddler	Bullock drawn puddler during *kharif* season	2.5	5	3	8	120
		Power Weeder in rice	Weeding using wet land power weeder during *kharif season*	2.5	5	4	9	120
		Manually operated Maize dehusker-cum-sheller	Manually operated dehusker-cum-sheller during *kharif season*	2.5	5	24	29	120
		INM in TC banana	*G9* during *rabi* season	1.25	11	7	18	8640
		IPM in mango	IPM for fruit fly in mango during *rabi* season	1.25	5	5	10	11300
		Short videos on technology adoption	Video (1.5-2.0 min) show on different activities of production and process of selected commodities	0	13	7	20	0
	Total			**22.5**	**112**	**85**	**197**	**102897**

Year	Name of KVK	Demonstrations on	Details of demonstrations/ varieties or breeds or strains demonstrated	Area of demonstration (Ac)/ Livestock unit size (No.)	No. of benefitted farmers			Total cost involved (Rs.)
					Male	Female	Total	
	Kandhamal	Turmeric	*Rajendra Sonia*	2.5	21	4	25	3000
		Garden pea	*GS 10*	12.5	54	15	69	37541
		Cabbage	*Harekrishna*	6.25	24	11	35	18256
		Field pea	*Udaya*	2.5	14	2	16	4526
		Sweet corn	*Sugar 75*	2.5	12	8	20	7800
		Cauliflower	*Snow ball*	6.25	31	14	45	18256
	Total			**32.5**	**156**	**54**	**210**	**89379**
	Malkangiri	Paddy	*MPU-1001*	4.5	14	5	19	1200
		Paddy	*Pratikshya*	4.5	18	7	25	3500
		Paddy	*Kalajeera*	2.5	14	5	19	2000
		Paddy	*MPU-1001*	5	33	4	37	6000
		Leafy vegetable	Hybrid seeds of vegetables	10 nos.	4	9	13	5000
		Tomato	*Arka Samrat*	2.5	17	2	19	8500
		Sweet Corn	*Sugar-75*	2.5	15	2	17	12000
		Green gram	*IPM-02-14*	5	21	3	24	6500
		Mushroom	V. Volvacea	100 nos.	6	11	17	11000
		Cauliflower	*Kurstaki*	2.5	12	3	15	5500
		Poultry	*Kadaknath*	200 nos.	8	12	20	16000
		Mahua	*Mahua*	10 nos.	6	4	10	7500
		Pisciculture	*Catla, Rohu, Mrigal*	1	7	3	10	14000
		Duckery	*White Pekin*	100 nos.	6	4	10	6000
		Honey bee	*Cerena Indica*	10 nos.	8	0	8	14500
	Total			**30**	**189**	**74**	**263**	**119200**
	Mayurbhanj-I	Ornamental plants cultivation in poly house throughout the year	Gerbera and Rose	1.5	20	11	31	6000
		Short duration video show for technology dissemination	Videos on different technologies	5 nos.	35	12	47	1800
		IMC	Fry-Fingerling production in small season ponds	2.24	24	8	32	3800
		IMC	Intercropping of minor carps	2.47	23	7	30	4500
		Carp-Mola polyculture	Carp-Mola	2.47	18	9	27	3500
		Multipurpose dry-grinder for preparation of *Chatua*	Multipurpose dry-grinder	10 nos.	0	10	10	3600
		Drudgery reduction of farm women	NRRI paddy parboiling drum	10 nos.	0	10	10	2200
		Nutritional garden for improving nutritional security of farm family	Production of different vegetables	2.5	4	15	19	6444
		Mango	Mango leather in Solar cabinet dryer	10 nos.	0	10	10	1109
	Total			**9.68**	**124**	**92**	**216**	**32953**
	Mayurbhanj-II	Mustard	*Tapeswari*	2.5	19	9	28	9700
		Cauliflower	*Barkha*	2.5	18	10	28	12400
		Poultry	*Kadaknath*	10 nos.	2	8	10	10200

Year	Name of KVK	Demonstrations on	Details of demonstrations/ varieties or breeds or strains demonstrated	Area of demonstration (Ac)/ Livestock unit size (No.)	No. of benefitted farmers			Total cost involved (Rs.)
					Male	Female	Total	
		Nutritional garden	Vegetables	1	2	14	16	7800
		Tomato	*Arka Rakshak*	2.5	21	7	28	11200
		Finger millet	*CO 9*	2.5	16	9	25	6500
		Capsicum	*Indra*	1.5	24	7	31	14900
		Pigeon pea	*PRG-176*	2.5	25	5	30	8900
	Total			**15**	**127**	**69**	**196**	**81600**
	Nabarangpur	IDM in rice	IDM practices	2.5	20	9	29	5000
		IPM in brinjal	IPM practices	1.5	10	8	18	3000
		IPM in onion	IPM practices	1.5	12	7	19	4000
		Tomato	*Arka Rakshyak*	2.5	21	7	28	4000
		Post harvest management in pulses	Technology to reduce post-harvest loss	3	7	15	22	5000
		INM in maize	INM practices	1	10	6	16	2000
		Weed management in maize	Weed management practices	1	10	6	16	2000
		Weeds management in rice	Direct seeded rice technology	1	10	5	15	2000
		INM in green gram	Nutrient management practices	1.5	14	8	22	3000
		INM in onion	Nutrient management practices	1.5	9	6	15	3000
		INM in cauliflower	Micronutrient management practices	1.5	8	7	15	2000
	Total			**18.5**	**131**	**84**	**215**	**35000**
	Rayagada	Paddy	*Nua Acharmati*	3.5	13	9	22	2000
		Sweet corn	*Sugar-75*	5.5	18	13	31	69300
		Ragi	*Arjuna*	4.5	16	8	24	1140
		Pigeon pea with cotton	Intercropping with 8:2 ratio	4.5	7	7	14	2500
		IWM in cotton	Weed management practices	4.5	8	7	15	4300
		Maize and cowpea	Intercropping with 2:2 ratio	3.5	10	8	18	6400
		Cotton	High density planting system	6.5	11	6	17	15600
		IDM in cotton	Mealy bug management practices	5.5	6	8	14	5400
		IDM in okra	YMV management practices	2.5	10	7	17	13800
		Wilt management in brinjal	Wilt management practices	3.5	12	5	17	12700
	Total			**44**	**111**	**78**	**189**	**133140**
	Sundargarh-I	IWM in rice	Weed management practices	2.5	17	0	17	20000
		IWM in groundnut	*Kadaria*	2.5	19	0	19	25000
		IDM in bottlegourd	Local cultivar *Lephripara*	2.5	16	1	17	20000
		Rice	*Pratikshya*	2.5	18	0	18	10000
		Value addition of tomato	Tomato powder preparation technique of *Arka Rakshak* variety	50 kg	0	10	10	20000
		Rearing of back yard poultry	*Vanraja*	400 nos.	4	6	10	20000
		Oyster mushroom	*Hyspizygus ulamarius*	300 beds	0	15	15	20000
		Paddy straw mushroom	V. volvacea	300 beds	0	15	15	20000

Year	Name of KVK	Demonstrations on	Details of demonstrations/ varieties or breeds or strains demonstrated	Area of demonstration (Ac)/ Livestock unit size (No.)	No. of benefitted farmers			Total cost involved (Rs.)
					Male	Female	Total	
		Nutritional garden	Use of improved varieties of vegetable kit, seedling and saplings	0.5	0	12	12	65000
		Safe storage of pulses	Use of grain pro super bag	100 bags	14	4	18	22000
		Ragi	Biscuit preparation from *Bhairabi* ragi	5 kg	0	11	11	25000
		Mustard	*Uttara*	4.5	38	7	45	20000
	Total			**15**	**126**	**81**	**207**	**287000**
	Sundargarh-II	Rice	Management of stem borer in *kharif* rice	2.5	8	0	8	5240
		Ragi	INM in ragi	2.5	6	2	8	3584
		Sesamum	*GT-10*	2.5	6	0	6	2870
		Black gram	Management of YMV in *kharif* black gram	2.5	8	2	10	3986
		Chickpea	Chick pea in rainfed rice fallow	2.5	9	1	10	6650
		Tomato	*Arka Rakshak*	2.5	10	2	12	4180
		Cauliflower	Arka microbial consortium for improvement of curd size of cauliflower	2.5	9	3	12	3780
		Banana	INM practices in banana	0.5	7	3	10	3450
		Marigold	*Bidhan Marigold 2*	0.5	8	3	11	3980
		Brinjal	Wilt management in brinjal	1.5	6	2	8	3575
		Maize + Cowpea	Crop diversification with maize + cowpea intercropping	2.5	8	3	11	4440
		Nutritional garden	Vegetable production in backyard kitchen garden	2.5	0	10	10	2000
		Black gram	*Pu-31*	1.5	9	6	15	14600
		Field Pea	*Field pea var- Prakash*	2.5	11	2	13	8880
		Garden pea	*KSP-110*	1.8	9	3	12	4610
		Mushroom cultivation	Paddy straw mushroom	300 beds	0	15	15	7000
			Oyster mushroom	300 beds	0	15	15	7000
		Poultry rearing	Brooding management	5 nos.	0	8	8	10000
	Total			**30.8**	**114**	**80**	**194**	**99825**
	Nicobar	Okra	*Arka Anamika*	1	19	9	28	2000
		Brinjal	*CARI Brinjal 1*	0.5	16	7	23	2000
		Nutri-gardening	Backyard kitchen garden	0.05	7	13	20	4000
		Poultry farming	Broiler	1000 nos.	15	12	27	20000
		Post harvest technology	Shreekhand production	4 kg	0	7	7	2500
		Post harvest technology	Paneer production	8 kg	5	4	9	2500
	Total			**1.55**	**62**	**52**	**114**	**33000**
	Sub-total			***219.53***	***1252***	***749***	***2001***	***1013994***
2020-21	Gajapati	BPH tolerant rice	*Hasanta in kharif* season	2.5	12	7	19	5200
		Rice	Weed management in transplanted rice (pre-emergence)	2	11	5	16	3110
		Maize + cowpea (2:2) intercropping	Two rows of cowpea var. *Kashi Kanchan*	2	13	6	19	6500
		kharif onion	*Arka Kalyan*	1.5	12	2	14	30000

Year	Name of KVK	Demonstrations on	Details of demonstrations/ varieties or breeds or strains demonstrated	Area of demonstration (Ac)/ Livestock unit size (No.)	No. of benefitted farmers			Total cost involved (Rs.)
					Male	Female	Total	
		Chilli	INM in chilli	1	10	2	12	500
		INM in TC banana	G9 during *rabi* season	1	6	3	9	9600
		Bullock drawn puddler	Bullock drawn puddler during *kharif* season	1	9	2	11	212
		OUAT ragi thresher cum pearler	OUAT ragi thresher cum pearler during *kharif* season	0	0	5	5	212
		Short videos on technology adoption	Video (1.5-2.0 min) show on different activities of production and process of selected commodities	0	13	7	20	0
		IPM in mango	IPM for fruit fly in mango during *rabi* season	1	5	0	5	11800
		Cashew by-product	Preparation of cashew nut butter	0	0	10	10	3265
	Total			**12**	**91**	**49**	**140**	**70399**
	Kandhamal	Groundnut	*Smruti*	2.5	5	5	10	8102
		Turmeric	*Rajendra Sonia*	2.5	7	3	10	3962
		Garden pea	*GS 10*	12.5	53	3	56	37852
		Cabbsge	*Harekrishna*	6.25	14	6	20	18258
		Field pea	*Udaya*	5	6	0	6	3025
		Sweet corn	*Sugar 75*	2.5	6	0	6	7900
		Cauliflower	*Snow Ball*	6.25	13	3	16	18527
		Cowpea	*Kashi Kachan*	5	7	0	7	2512
	Total			**42.5**	**111**	**20**	**131**	**100138**
	Malkangiri	Rice	*Hasanta*	2.5	9	1	10	8000
		Rice	*Nua Kalajeera*	2.5	7	0	7	5000
		Rice	*MTU 1001*	2.5	6	0	6	0
		Maize	*Rishi 44*	1.5	8	2	10	24000
		Groundnut	*Dharani*	1.5	6	4	10	89000
		Rice	*MTU 1010*	2.5	9	1	10	0
		Tomato	*Arka Samrat*	2.5	8	0	8	8000
		Green gram	*IPM 02-14*	2.5	6	0	6	4000
		Cauliflower	*Kurstaki*	2.5	7	0	7	1200
		Water melon	*Arka Manik*	2.5	3	0	3	3500
		Pigeon pea	*PRG-176*	2.5	8	2	10	9000
		Sweet Corn	*Sugar-75*	2.5	6	0	6	13500
		Rice	*CLCC*	3.5	6	4	10	6000
		Ducks	*White Pekin*	100 nos.	8	2	10	8000
		Mushroom	*V. Volvacea*	100 beds	0	5	5	6000
		Poultry	*Kadaknath*	100 nos.	0	5	5	82000
		Mahua	*Mahua*	10 nos.	5	2	7	5000
		Pisciculture	Rohu, Catla, Mrigal	0.5	7	1	8	14000
		Ragi thresher	*Popularization of ragi thresher*	10 nos.	5	1	6	3000
		Honey bee	*Cerena indica*	5 nos.	3	2	5	0
		Pisciculture	Rohu, Catla, Mrigal	0.5	8	0	8	4000

Year	Name of KVK	Demonstrations on	Details of demonstrations/ varieties or breeds or strains demonstrated	Area of demonstration (Ac)/ Livestock unit size (No.)	No. of benefitted farmers			Total cost involved (Rs.)
					Male	Female	Total	
		Fish	Grass carp	0.5	5	0	5	5000
	Total			**33**	**130**	**32**	**162**	**298200**
	Mayurbhanj-I	Groundnut	*Dharini*	2.47	10	0	10	5792
		Black gram	*IPU 2-43*	2.55	5	1	6	2500
		Tomato	*Arka Rakshak*	1.75	10	0	10	10000
		IMC	Fry-fingerling production in small season ponds	2.24	5	0	5	3800
		IMC	Intercropping of minor carps	2.75	5	0	5	0
		Carp-Mola polyculture	Carp-Mola	2.25	5	0	5	0
		Mango	Mango leather in Solar cabinet dryer	10 nos.	0	10	10	0
		Nutritional garden for improving nutritional security of farm family	Production of different vegetables and fruits	10 nos.	0	10	10	3182
		Drudgery reduction of farm women	NRRI paddy parboiling drum	10 nos.	0	10	10	0
		Short duration video show for technology dissemination	Videos on different technologies	10 nos.	10	0	10	0
	Total			**14.01**	**50**	**31**	**81**	**25274**
	Mayurbhanj-II	Cabbage	*BC 19*	2.5	9	7	16	14500
		Tomato	*Arka Rakshak*	1.55	8	6	14	12600
		Brinjal	*Arka Aanad*	1.55	10	9	19	16900
		Sweet Potato	*Kishan*	2.45	9	5	14	14400
		Maize	*Kalinga Raj*	2	16	7	23	40200
		Chilli	*HPH 5531*	2.5	7	7	14	15600
	Total			**12.55**	**59**	**41**	**100**	**114200**
	Nabarangpur	Finger millet	*Arjuna*	1.5	10	0	10	4000
		Maize	*Sugar 75*	1.5	10	0	10	2000
		Weed management in rice	Weed management practices	1	10	0	10	2000
		INM in black gram	Nutrient management practices	1	10	2	12	2000
		INM in green gram	Nutrient management practices	1	10	2	12	2000
		INM in onion	Nutrient management practices	1	11	1	12	2000
		INM in cauliflower	Micronutrient management practices	1.5	10	0	10	2000
		Rice	Water stress management	1.5	14	0	14	2000
		INM in maize	Nutrient management practices	1	10	0	10	2000
		IDM in Rice	Disease management practices	1	10	0	10	2000
		IPM in maize	Pest management practices	1.5	10	0	10	2000
		IPM in tomato	Pest management practices	1.5	10	0	10	2000
		Paddy straw mushroom	Volvariella volvacea, strain-OSM-11	100 beds	0	10	10	2000
		Oyster mushroom	Hypsizygous ulmarius	100 beds	0	10	10	2000
	Total			**15**	**125**	**25**	**150**	**30000**

Year	Name of KVK	Demonstrations on	Details of demonstrations/ varieties or breeds or strains demonstrated	Area of demonstration (Ac)/ Livestock unit size (No.)	No. of benefitted farmers			Total cost involved (Rs.)
					Male	Female	Total	
	Rayagada	Rice	*Aromatic rice production practices*	3.5	16	2	18	4000
		Rice	*Swarna Shreya*	3.5	15	4	19	4520
		Rice	*Hasanta*	2.5	14	3	17	4520
		Ragi	*Arjuna*	3.5	14	3	17	1140
		Intercropping of cotton and pigeon pea	Intercropping of cotton and pigeon pea with 8:2 ratio	1.5	11	3	14	3200
		IDM in okra	YMV management in okra	2.5	12	3	15	13850
		Wilt management in brinjal	Wilt management practices	2.5	18	2	20	13100
		Intercropping of maize and cowpea	Intercropping of maize and cowpea with 2:2 ratio	1.5	13	3	16	7200
		Marigold	*Seracole*	2.5	6	2	8	7500
		Nutritional garden	Vegetables and fruit in backyard farming	2.5	14	3	17	18300
		IWM in cotton	Integrated weed management practices	2.5	17	4	21	4700
		IDM in cotton	Mealy bug management practices	2.5	16	3	19	9300
		Sweet corn	*Sugar-75*	2.5	10	1	11	39600
		Ragi	Ragi thresher cum pearler	2.5	8	2	10	6500
		Cotton	Cotton picker	10 nos.	7	3	10	40000
		Maize	Maize sheller	5 nos.	2	6	8	750
	Total			**36**	**193**	**47**	**240**	**178180**
	Sundargarh-I	Rice	*Swarna Shreya*	4.5	15	7	22	12500
		Rice	*CR Dhan311*	5.5	21	6	27	16000
		Rice	*Pratikshya*	5	14	4	18	10000
		Arhar	*PRG 176*	3.5	15	8	23	14600
		Ragi	HYV variety *Arjuna*	4	12	7	19	12000
		IPM in Okra	Use of Spinosad 45% SC	2.5	13	7	20	8000
		Rice	*Hasanta*	3	11	5	16	7000
		Pisciculture	IMC practices	1.5	16	7	23	12000
		Feed management in fish pond	Use of fermented mustard cake oil + deoiled rice bran+ molasses as natural fertilizer	1.5	9	4	13	12000
		Poultry	Brooding management of *Kadaknath*	100 nos.	0	5	5	40000
		Nutritional garden	Improved varieties of vegetable seeds with poly tunnel	1.5	0	5	5	1500
		Apiary	*Apis cerena Indica*	10 boxes	10	0	10	25000
		Paddy straw Mushroom	*Volvariella volvaceae* in threshed straw	100 beds	0	10	10	15000
		Oyster mushroom	*Hypsizygus ulmarius*	100 beds	0	10	10	17000
		Vermicompost production	*Eisenia foetida*	10 beds	3	7	10	8000
		Short duration video show for technology dissemination	Videos on different technologies	5 nos.	35	4	39	2000
	Total			**32.5**	**174**	**96**	**270**	**212600**

Year	Name of KVK	Demonstrations on	Details of demonstrations/ varieties or breeds or strains demonstrated	Area of demonstration (Ac)/ Livestock unit size (No.)	No. of benefitted farmers			Total cost involved (Rs.)
					Male	Female	Total	
	Sundargarh-II	Rice	Weed management in transplanted rice during *kharif*	2.5	10	4	14	5240
			Hasanta	2.5	9	3	12	5090
			Management of stem borer in medium land rice	2.5	10	2	12	5380
			INM in *Sahbhagi* dhan	2.5	7	2	9	6470
			Nutrient & pest management in hybrid rice	2.5	5	0	5	7280
			INM & IPDM in *Naveen*	2.5	5	2	7	7370
		Ragi	*Arjun*	2.5	9	1	10	3480
		Cauliflower	Arka microbial consortium for improvement of curd size of cauliflower	2.5	10	0	10	3900
		Marigold	*Bidhan Marigold 2*	2.5	10	0	10	8850
		Banana	INM in banana	2.5	10	0	10	5680
		Mango	Management of alternate bearing in mango	2.5	12	4	16	7400
		Black gram	Management of YMV in *kharif* black gram	2.5	10	0	10	4930
		Chilli	Demonstration on Integrated management of thrips in *rabi* chilli	2.5	10	0	10	5215
		Bitter gourd	IPM in melon fruit fly in *kharif* bitter gourd	2.5	10	0	10	4745
		Vegetables	Raising of vegetable seedlings	0.07	2	5	7	3080
		Cowpea	INM in cowpea	1	12	5	17	5140
		Tomato	Adoption of tomato with staking	0.5	14	4	18	4750
		Sweet corn	INM in sweet corn	1.5	4	5	9	4320
		Okra	Nutrient and pest management in okra	0.5	13	6	19	5320
		Bottle gourd	INM in bottle gourd	0.5	10	5	15	4840
		Garden pea	Demonstration of garden pea cultivation under TSP	3.5	16	5	21	15600
		Nutritional garden	Vegetables production in kitchen garden	2.5	2	18	20	5055
		Mushroom cultivation	Paddy straw mushroom	200 beds	0	20	20	7000
			Oyster mushroom	200 beds	0	20	20	7000
		Poultry production	Artificial brooding management	100 birds	0	10	10	4500
			Kadaknath	100 birds	0	10	10	4500
	Total			**45.07**	**200**	**131**	**331**	**152135**
	Nicobar	Okra	*Arka Anamika*	0.10	1	1	2	2000
		Vegetable cultivation	Kitchen gardening	0.05	0	1	1	4000
		Maize	Green cobs production	0.01	0	1	1	2000
		Poultry farming	Intensive broiler farming	50 nos.	0	1	1	15000
		Poultry farming	Nicobari fowl rearing under semi intensive system	50 nos.	0	3	3	15000
	Total			**0.16**	**1**	**7**	**8**	**38000**
	Sub-total			***242.79***	***1134***	***479***	***1613***	***1219126***

Year	Name of KVK	Demonstrations on	Details of demonstrations/ varieties or breeds or strains demonstrated	Area of demonstration (Ac)/ Livestock unit size (No.)	No. of benefitted farmers			Total cost involved (Rs.)
					Male	Female	Total	
2021-22	Gajapati	Crop ragi	*Arjuna*	5.5	9	1	10	444
		IPM in maize	Control measures for Fall Army Worm	5.5	9	1	10	523
		Ragi +pigeon pea	Ragi and pigeon pea cultivation	5.5	8	2	10	0
		OUAT ragi thresher cum pearler	OUAT ragi thresher cum pearler during *kharif* season	4 nos.	1	9	10	0
		Hand maize sheller	Octagonal hand maize sheller	4 nos.	1	9	10	0
	Total			**16.5**	**28**	**22**	**50**	**967**
	Kandhamal	Rice	*Sahabhagi*	5	9	4	13	3500
		Maize	*Hybrid*	8	8	6	14	23000
		Ragi	*Kalua*	2.5	6	4	10	3500
		Cabbage	*Harekrisna*	5	9	6	15	35210
		Cauliflower	*Snow ball*	5	7	5	12	38529
		Garden pea	*GS 10*	7.5	7	5	12	40256
		Cow pea	*Kashi Kachan*	1	3	4	7	1256
		Chilli	*Suryamukhi*	1.2	7	4	11	3500
		Bittergourd	*Sarita*	1	7	4	11	3500
		Groundnut	*Smruti*	2.5	6	5	11	4521
		Niger	*Utkal Niger 150*	2.5	6	5	11	4521
	Total			**41.2**	**75**	**52**	**127**	**161293**
	Malkangiri	Paddy	*Hasanta*	5.5	12	5	17	26150
		Pigeon pea	*PRG-176*	6.5	11	2	13	17600
		Rice	*CLCC*	5	9	2	11	16000
		Tomato	*Arka Samrat*	5	9	3	12	13200
		Finger millet	*Arjun*	5.5	10	3	13	15000
		Sesame	*GT-10*	7.5	10	3	13	30000
		Oyster mushroom	*P. Sajarcaju*	100 nos.	0	10	10	6000
		Maize	*Sugar 75*	6.5	10	5	15	23500
		Brinjal	*Bluestar*	5	10	5	15	10300
		Poultry	*Kadaknath*	500 nos.	0	25	25	80000
		Mahua	*Mahua*	1.5	1	8	9	75900
		Ragi thresher	Popularization of ragi thresher	20 nos.	0	10	10	3200
		Fish	*Rohu, Catla, Mrigal*	2	7	5	12	23150
	Total			**50**	**89**	**86**	**175**	**340000**
	Mayurbhanj-I	Tomato	*Arka Rakshak*	2.5	10	0	10	12500
		Groundnut	*Dharaini*	2.5	10	0	10	6751
		Blackgram	*IPU 2-43*	2.5	10	0	10	5800
		Paddy	IDM in rice	2.5	10	0	10	8500
		Arhar	IDM in arhar	2.5	10	0	10	7500
		Drudgery reduction of farm women	NRRI paddy parboiling drum	10 nos.	0	10	10	4500
		Tomato to avoid distress sale	Preparation of tomato powder	10 nos.	2	2	4	2500

Year	Name of KVK	Demonstrations on	Details of demonstrations/ varieties or breeds or strains demonstrated	Area of demonstration (Ac)/ Livestock unit size (No.)	No. of benefitted farmers			Total cost involved (Rs.)
					Male	Female	Total	
		Mango	Mango leather in Solar cabinet dryer	10 nos.	0	10	10	1500
		Mushroom	Scrambled paddy straw as substrate for Paddy straw mushroom cultivation	10 nos.	0	10	10	5200
		Nutritional garden for improving nutritional security of farm family	Production of different vegetables and fruits	1.5	0	10	10	2571
	Total			**14**	**52**	**42**	**94**	**57322**
	Mayurbhanj-II	Maize	*Kalinga Raj*	10	31	15	46	39200
		Mustard	*Tapeswari*	3	12	7	19	14600
		Tomato	*Arka Rakshak*	2.5	17	8	25	13500
		Sweet Potato	*Kishan*	2.5	7	9	16	9600
		Mushroom	Paddy straw mushroom	100 beds	3	9	12	8700
		Mushroom	Oyster mushroom	100 beds	1	9	10	9200
	Total			**18**	**71**	**57**	**128**	**94800**
	Nabarangpur	Weed management in maize	Weed management practices	1	7	2	9	2000
		Rice	*CR Dhan 202*	2	7	3	10	4000
		Weed management in black gram	Weed management practices	1	5	5	10	2000
		IPM in rice	Pest management practices	2	11	9	20	6000
		IDM in rice	Disease management practices	1	6	4	10	3000
		Tomato	*Arka Rakshyak*	1	6	4	10	4000
		Onion	*Line 883*	1	6	5	11	4000
		Mushroom	Paddy straw mushroom cultivation technology	100 beds	0	10	10	4000
		INM in maize	Nutrient management practices	1	6	7	13	3000
		INM in red gram	Nutrient management practices	1	5	5	10	2000
		INM in green gram	Nutrient management practices	2	7	4	11	3000
		IPM in chilli	Pest management practices	1	7	4	11	3000
		INM in black gram	Nutrient management practices	1	7	5	12	2000
		INM in maize	Nutrient management practices	1	7	4	11	3000
	Total			**16**	**87**	**71**	**158**	**45000**
	Rayagada	Rice	*Swarna Shreya*	1.5	10	4	14	2500
		Rice	*Hasanta*	1.5	13	4	17	2500
		IDM in brinjal	Wilt complex management practices	0.5	9	3	12	13300
		IDM in okra	YMV management practices	1	6	4	10	14200
		IPM in cashew	Tea mosquito bug management practices	1.5	11	5	16	11500
		Mango	Fruit fly management practices	1.5	12	4	16	17800
		Honey bee	Scientific beekeeping	10 boxes	8	5	13	40000
		Paddy straw mushroom	Paddy straw mushroom with scrambled straw	1.5	1	9	10	5000
		Oyster mushroom	*Pleurotus pulmorius*	0.5	2	8	10	3000
		Nutritional garden	Vegetable production practices under backyard farming	0.5	0	10	10	20000

Year	Name of KVK	Demonstrations on	Details of demonstrations/ varieties or breeds or strains demonstrated	Area of demonstration (Ac)/ Livestock unit size (No.)	No. of benefitted farmers			Total cost involved (Rs.)
					Male	Female	Total	
		Mechanized ragi thresher-cum-pearler	Use of power operated OUAT ragi thresher-cum-pearler	1.5	0	10	10	7000
		Drudgery reduction for women farmers	Use of portable cotton picker	1.5	2	8	10	40000
	Total			**13**	**74**	**74**	**148**	**176800**
	Sundargarh-I	Rice	Pratikshya	5	8	0	8	12000
		Ragi	HYV *Arjuna*	5	8	2	10	5000
		Maize	Hybrid *Kalinga Raj*	5	7	1	8	14000
		Arhar	*PRG 176*	5	8	0	8	18200
		INM in tomato	Nutrient management practices in *Arka Rakshak* variety	2.5	8	0	8	15000
		INM in brinjal	Nutrient management practices in *Bluestar* variety	2.5	9	1	10	8000
		Banana	*G 9*	5	8	0	8	12000
		Poultry	Brooding management of *Sonali* strain	200 nos.	5	5	10	80000
		Pisciculture	Yearling production of IMC in seasonal ponds	5 units	5	0	5	15000
		Oyster mushroom	*H. ulmarius*	100 beds	0	10	10	9600
		Paddy straw mushroom	*V. volvacea* using threshed straw	100 beds	0	10	10	8000
		Nutritional garden for	Backyard vegetable production through polytunnel	0.5	0	5	5	12600
		Vermicomposting	*Eisenia foetida*	5 tanks	7	4	11	11500
		Apiary	Scientific rearing of *Apis cerena Indica*	10 boxes	10	0	10	15000
		Tomato	Long term preservation techniques of *Arka Rakshak* variety	0.4	0	5	5	12000
	Total			**30.9**	**83**	**43**	**126**	**247900**
	Sundargarh-II	Rice	BPH tolerant variety *Hasanta*	2.5	7	2	9	25140
		Ragi	INM in ragi	1.5	2	5	7	18900
		Mustard	INM in mustard	1	7	1	8	18700
		Nutritional garden	Vegetable production in backyard kitchen garden	2.5	2	17	19	17925
		Chilli	INM in chilli	1	4	4	8	16560
		Mango	Management of alternate bearing in mango	1	7	3	10	15150
		Banana	INM in banana	1	7	2	9	10570
		Bottlegourd	INM in bottle gourd	0.5	5	2	7	13780
		Marigold	Management of mites in marigold	0.5	0	5	5	14840
		Tomato	Leaf curl disease management in tomato	1	7	1	8	14200
		Chilli	Integrated management of thrips in *rabi* chilli	1	5	2	7	12000
		Tomato	Management of blossom end rot in tomato	0.5	5	1	6	15680
		Maize	*Kalinga Raj*	8	12	5	17	48000
		Garden pea	Hybrid variety garden pea cultivation	9	12	6	18	22300
		Poultry rearing	*Kadaknath*	10 units	0	10	10	10000
	Total			**31**	**82**	**66**	**148**	**273745**

Year	Name of KVK	Demonstrations on	Details of demonstrations/ varieties or breeds or strains demonstrated	Area of demonstration (Ac)/ Livestock unit size (No.)	No. of benefitted farmers			Total cost involved (Rs.)
					Male	Female	Total	
	Nicobar	Crop diversification	Protected cultivation	0.05	4	2	6	20000
		Nutri-garden	Vegetables cultivation under backyard	0.15	4	2	6	4000
		Bio-control of pests and diseases	Use of biocapsule	0.1	4	0	4	2000
		Bio-control of pests and diseases	CIARI Bio Consortia	0.1	1	1	2	20000
		Pig farming	*Nicobari* Pig	5 nos.	0	2	2	15000
		Goat farming	*Teressa* goat farming under semi-intensive system	5 nos.	0	2	2	15000
	Total			**0.4**	**13**	**9**	**22**	**76000**
	Sub-total			***231.00***	***654***	***522***	***1176***	***1473827***
2022-23	Gajapati	Groundnut	Herbicides for weed management in groundnut (pre-emergence)	2.5	21	14	35	2900
		Sesame	INM in Sesame	2.5	19	11	30	2500
		Single row vegetable transplanter	Use of single row vegetable transplanter	5	31	21	52	0
		Drudgery reduction	Mini dryland power weeder	5	26	19	45	0
	Total			**15**	**97**	**65**	**162**	**5400**
	Kandhamal	Finger Millet	Kalua	5.5	35	23	58	59259
		Rice	Lalata	5.5	33	21	54	60000
		Onion	*Arka Niketan*	6.5	45	29	74	60000
	Total			**17.5**	**113**	**73**	**186**	**179259**
	Malkangiri	Rice	*Hasanta*					
		Rice	*Hasanta*	5	9	1	10	12000
		Pigeon pea	PRG-176	3.5	8	1	9	13000
		Rice	*Nua Kalageera*	3.5	7	1	8	12000
		Tomato	*Arka Samrat*	2.5	7	1	8	11000
		Finger millet	*Arjun*	2.5	8	1	9	10000
		Sesame	*Smarak*	2.5	7	1	8	16000
		Ducks	*White Pekin*	0	0	10	10	14000
		Mushroom	V. Volvacea	20 beds	0	2	2	6000
		Maize	*Kalingaraj*	4	6	3	9	10000
		Brinjal	Hybrid	0	9	2	11	6000
		Poultry	*Kadaknath*	200 nos.	2	8	10	40000
		Mahua	Mahua processing	0	3	7	10	5000
		Ragi	Ragi Thresher	20 nos.	0	20	20	13000
		Fish	Gift Tilapia	2	8	1	9	15000
		Fish	Jayanta Rohu	1.5	8	3	11	15000
		Fish	Desi Magur	1.5	8	3	11	21000
		Fish	IMC	1	6	4	10	30000
	Total			**29.5**	**96**	**69**	**165**	**249000**

Year	Name of KVK	Demonstrations on	Details of demonstrations/ varieties or breeds or strains demonstrated	Area of demonstration (Ac)/ Livestock unit size (No.)	No. of benefitted farmers			Total cost involved (Rs.)
					Male	Female	Total	
	Mayurbhanj-I	CRIJAF cycle weeder in ragi	CRIJAF cycle weeder	5	34	24	58	0
		Tomato	Ridge and furrow irrigation with organic mulching in tomato	5	28	21	49	12000
		Bullock drawn CIAE four row seed drill for sowing mustard	Bullock drawn CIAE four row seed drill	3	14	11	25	0
		Wetting and drying method of irrigation in puddled rice	Alternate wetting and drying method of irrigation	3	8	4	12	0
	Total			**16**	**84**	**60**	**144**	**12000**
	Mayurbhanj-II	Mushroom	*Volvarila volvacea* and *Pleurotus sajorcaju*	100 beds	0	5	5	7000
		Poultry	*Aseel*	100 nos.	0	5	5	40000
		Marigold	*Bidhan 1* and *Bidhan II*	2	8	6	14	12000
		Papaya	Papaya cultivation with different vegetables	1.5	28	4	32	25600
		IDM in vegetables	Single line trellis system in bitter gourd	0.4	10	1	11	13240
			Management of bacterial wilt in tomato	2.5	10	0	10	3059
		IPM in vegetables	Management of red spider mite in brinjal	2.5	10	0	10	8750
		Cultivation of mushroom	Oyster mushroom (*Hysipigygus ulmarius)*	100 nos.	0	5	5	3800
		Jackfruit	Value addition	1 kg	0	5	5	2300
		Nutri-garden	Cultivation of vegetables under backyard system	0.4	0	5	5	8640
		Ragi	Use of CRIJAF weeder	2.5	10	0	10	1500
		Seed drill equipment	Use of bullock drawn CIAE three row seed drill	1.5	10	0	10	1500
		IDM in brinjal	Practicing single line trellis system in brinjal	0.4	3	7	10	5600
		Maize	*Kalingraj*	1.5	2	4	6	25900
		Tomato	Value addition	50 kg	0	6	6	1000
		Manual maize sheller	Use of flexible maize sheller	5 nos.	0	6	6	6400
	Total			**15.2**	**91**	**59**	**150**	**166289**
	Nabarangpur	Maize	*Pioneer*	8	25	5	30	13750
		Direct seeded rice	Bharati	2.5	21	5	26	11500
		Rice	*MTU 1010*	2.5	10	5	15	7800
		Rice	*MTU 1010*	3.5	10	4	14	6150
		Rice	Kaveri	2.5	10	4	14	7500
		Maize	Pioneer	2.5	8	5	13	5500
		Arahar	PRG-176	1.5	9	2	11	5000
		Groundnut	Dharani	2.5	10	4	14	12350
		Black gram	INM in *PU-31*	2.5	10	2	12	7450
		Maize	INM in *DKC 9126*	2.5	10	3	13	14250

Year	Name of KVK	Demonstrations on	Details of demonstrations/ varieties or breeds or strains demonstrated	Area of demonstration (Ac)/ Livestock unit size (No.)	No. of benefitted farmers			Total cost involved (Rs.)
					Male	Female	Total	
		Kharif onion	*Line 883*	2.5	0	10	10	7850
		Paddy straw mushroom	*OSM-12*	2	0	10	10	3000
		Bio-fortified sweet potato	*Bhu Sona, Bhu Krishna*	2	0	10	10	6350
	Total			**37**	**123**	**69**	**192**	**108450**
	Rayagada	Rice	Santha Bhima (CR Dhan 102)	2	14	2	16	4200
		Rice	Sheath blight management in rice	2	17	1	18	12580
		Pigeon pea	Pod borer management in pigeon pea	2	14	1	15	25000
		Tomato	*Arka Samrat*	2	16	2	18	5386
		Maize	Management of fall armyworm (Spodoptera frugiperda)	2	14	1	15	16480
		Bitter gourd	Fruit fly management	2	12	3	15	12020
		Paddy straw mushroom	Production of paddy straw mushroom with scrambled straw	50 beds	0	5	5	1650
		Oyster mushroom in winter	*Pleurotus pulmonarius*	100 beds	0	10	10	2500
		Nutritional garden	Cultivation practices of vegetables and fruits in backyard	1	0	8	8	19750
		Drudgery reduction	Groundnut decorticator	2 nos.	4	6	10	5500
		Bullock drawn puddler	Use of bullock drawn puddler	2 nos.	0	8	8	3750
		Mini dry land power weeder in maize	Mini dry land power weeder	2 nos.	0	8	8	4200
		Single row vegetable transplanter	Single row vegetable transplanter	2	9	3	12	22000
		Fruit harvester	Fruit harvester	2 nos.	7	3	10	7000
	Total			**15**	**107**	**61**	**168**	**142016**
	Sundargarh-I	Rice	*Pratikshya*	5.5	10	0	10	25000
		Maize	*Kalinga Raj*	5	18	10	28	28000
		Ground nut	*Devi*	4.5	10	2	12	25000
		Tomato	*Utkal Kumari*	4.5	9	2	11	24000
		Brinjal	*F1 Hybrid Syngenta*	4.5	10	2	12	18000
		Banana	*Bantal*	5.5	10	0	10	32000
		Pisciculture	IMC	5 nos.	5	2	7	20000
		Oyster mushroom	Oyster mushroom	100 bag	0	10	10	12000
		Paddy mushroom	Paddy straw mushroom	100 beds	0	20	20	14000
		Vermicomposting	*Eisenia foetida*	20 tanks	10	0	10	10000
		Honey bee	*Apis cerena indica*	10 boxes	6	4	10	10000
		Crop	Nutrigarden	0.5	0	12	12	15200
		Poultry	*Kadaknath*	50 nos.	0	5	5	20000
		Machinery	Power sprayer	20 nos.	0	20	20	80000
		Video showing	Short videos on technology adoption	5 nos.	21	0	21	0
	Total			**30**	**109**	**89**	**198**	**333200**

Year	Name of KVK	Demonstrations on	Details of demonstrations/ varieties or breeds or strains demonstrated	Area of demonstration (Ac)/ Livestock unit size (No.)	No. of benefitted farmers			Total cost involved (Rs.)
					Male	Female	Total	
	Sundargarh- II	Groundnut	Weed management in *kharif* groundnut	2.5	6	4	10	8320
		Maize	Integrated management of FAW	2.5	7	3	10	7340
		Rice	Integrated management of BLB	2.5	7	3	10	7920
		Mango	Integrated management of mango hopper	2.5	8	2	10	6870
		Marigold	Integrated management of mites	2.5	5	4	9	7380
		Cowpea	*Kashi Nidhi*	4	10	1	11	3640
		Bitter gourd	Nutrient management	2.5	10	0	10	6970
		Mango	Management of alternate bearing	2.5	7	3	10	7320
		Tomato	Production under staking	1	10	2	12	6540
		Poultry	Artificial brooding management	200 nos.	1	10	11	9800
		ICT	short duration videos showing	0	20	8	28	2200
		Black gram	*PU-10-23*	2.5	12	5	17	7300
		Field pea	*Pant B-243*	2.5	14	4	18	7700
		Groundnut	*GJG-32*	2.5	11	6	17	12000
		Garden pea	Garden pea	2.5	12	5	17	7400
		Poultry	*Kadaknath*	200 nos.	0	20	20	60000
		Maize	*Kalinga Raj*	2.5	14	11	25	11000
		Nutri-garden	Cultivation of vegetables in backyard	1	0	17	17	8960
		Mushroom	Paddy straw mushroom	1.5	0	12	12	7300
	Total			**37.5**	**154**	**120**	**274**	**195960**
	Nicobar	Tomato	*Arka Rakshak*	0.05	15	7	22	2000
		Okra	*Kashi Lalima*	0.06	16	9	25	2000
		Okra	Arka Nikitha	0.12	13	4	17	2000
		Brinjal	*Pusa B5*	0.05	18	8	26	2000
		Nutri-garden	Vegetable cultivation in backyard	0.2	3	9	12	4000
		Protected cultivation	Use of rain shelter	0.02	8	2	10	20000
	Total			**0.5**	**73**	**39**	**112**	**32000**
	Sub-total			***213.2***	***1047***	***704***	***1751***	***1423574***
	Grand total			***1502.86***	***6854***	***4256***	***11110***	***7675989***

5.1.4 Details of training

Tribal farmers of different districts were trained by the scientists and staff of respective KVKs through organizing on-campus and off-campus training programmes on various agri-operations for improving their skill and scientific knowledge. The KVKs also conducted various hands-on-trainings for the farmers.

5.1.4.1 Training of farmers/farm women and rural youth

The year-wise details of number of training programmes conducted by different KVKs of this zone and number of beneficiaries including farmer/farm women and rural youth during the period of six years have been shown in the table given below.

Table: Details of farmers, farm women and rural youth trained by KVKs during the year 2017-18 to 2022-23

Year	Name of KVK	Farmers and farm women				Rural youth			
		No. of programme conducted	No. of beneficiaries (Lakh)			No. of programme conducted	No. of beneficiaries (Lakh)		
			Male	Female	Total		Male	Female	Total
2017-18	Gajapati	34	0.00763	0.00231	0.00994	10	0.00195	0.00085	0.00280
	Kandhamal	33	0.00719	0.00238	0.00957	16	0.00310	0.00131	0.00441
	Malkangiri	34	0.00684	0.00297	0.00981	14	0.00256	0.00149	0.00405
	Mayurbhanj-I	31	0.00578	0.00293	0.00871	15	0.00297	0.00124	0.00421
	Mayurbhanj-II	42	0.00480	0.00689	0.01169	16	0.00247	0.00178	0.00425
	Nabarangapur	37	0.00687	0.00349	0.01036	23	0.00445	0.00199	0.00644
	Rayagada	63	0.01023	0.00552	0.01575	23	0.00433	0.00207	0.00640
	Sundargarh-I	46	0.00753	0.00412	0.01165	38	0.00553	0.00412	0.00965
	Sundargarh-II	46	0.00580	0.00701	0.01281	21	0.00411	0.00165	0.00576
	Nicobar	12	0.00225	0.00161	0.00386	10	0.00141	0.00113	0.00254
Sub-total		***378***	***0.06492***	***0.03923***	***0.10415***	***186***	***0.03288***	***0.01763***	***0.05051***
2018-19	Gajapati	34	0.00585	0.00315	0.00900	12	0.00273	0.00104	0.00377
	Kandhamal	41	0.00795	0.00435	0.01230	21	0.00410	0.00162	0.00572
	Malkangiri	38	0.00815	0.00325	0.01140	20	0.00335	0.00196	0.00531
	Mayurbhanj-I	35	0.00552	0.00392	0.00944	15	0.00306	0.00127	0.00433
	Mayurbhanj-II	36	0.00628	0.00457	0.01085	15	0.00328	0.00112	0.00440
	Nabarangapur	44	0.00778	0.00457	0.01235	23	0.00405	0.00250	0.00655
	Rayagada	68	0.01118	0.00582	0.01700	27	0.00586	0.00192	0.00778
	Sundargarh-I	45	0.00797	0.00501	0.01298	33	0.00535	0.00351	0.00886
	Sundargarh-II	47	0.00612	0.00563	0.01175	17	0.00384	0.00119	0.00503
	Nicobar	11	0.00213	0.00138	0.00351	10	0.00182	0.00085	0.00267
Sub-total		***399***	***0.06893***	***0.04165***	***0.11058***	***193***	***0.03744***	***0.01698***	***0.05442***
2019-20	Gajapati	44	0.00828	0.00454	0.01282	14	0.00310	0.00101	0.00411
	Kandhamal	53	0.01059	0.00477	0.01536	24	0.00494	0.00213	0.00707
	Malkangiri	51	0.00997	0.00523	0.01520	26	0.00459	0.00243	0.00702
	Mayurbhanj-I	31	0.00621	0.00309	0.0093	21	0.00364	0.00213	0.00577
	Mayurbhanj-II	33	0.00489	0.00537	0.01026	19	0.00377	0.00192	0.00569
	Nabarangapur	50	0.00817	0.00632	0.01449	26	0.00565	0.00175	0.00740
	Rayagada	81	0.01324	0.00824	0.02148	33	0.00606	0.00371	0.00977
	Sundargarh-I	44	0.00571	0.00796	0.01367	24	0.00199	0.00399	0.00598
	Sundargarh-II	59	0.00878	0.00598	0.01476	21	0.00473	0.00147	0.00620
	Nicobar	12	0.00191	0.00121	0.00312	2	0.00024	0.00012	0.00036
Sub-total		***458***	***0.07775***	***0.05271***	***0.13046***	***210***	***0.03871***	***0.02066***	***0.05937***

Year	Name of KVK	Farmers and farm women				Rural youth			
		No. of programme conducted	No. of beneficiaries (Lakh)			No. of programme conducted	No. of beneficiaries (Lakh)		
			Male	Female	Total		Male	Female	Total
2020-21	Gajapati	29	0.00312	0.00420	0.00732	13	0.00186	0.00049	0.00235
	Kandhamal	20	0.00345	0.00190	0.00535	9	0.00129	0.00037	0.00166
	Malkangiri	13	0.00232	0.00143	0.00375	5	0.00089	0.00032	0.00121
	Mayurbhanj-I	25	0.00539	0.00206	0.00745	9	0.00141	0.00036	0.00177
	Mayurbhanj-II	19	0.00260	0.00305	0.00565	4	0.00065	0.00028	0.00093
	Nabarangapur	24	0.00306	0.00324	0.00630	7	0.00147	0.00031	0.00178
	Rayagada	47	0.00817	0.00548	0.01365	9	0.0017	0.00052	0.00222
	Sundargarh-I	11	0.00061	0.00230	0.00291	24	0.00241	0.00365	0.00606
	Sundargarh-II	30	0.00397	0.00458	0.00855	7	0.00123	0.00047	0.00170
	Nicobar	5	0.00062	0.00038	0.00100	6	0.00067	0.00036	0.00103
Sub-total		***223***	***0.03331***	***0.02862***	***0.06193***	***93***	***0.01358***	***0.00713***	***0.02071***
2021-22	Gajapati	14	0.00219	0.00131	0.00350	3	0.00056	0.00014	0.00070
	Kandhamal	41	0.00549	0.00492	0.01041	5	0.00075	0.00009	0.00084
	Malkangiri	28	0.00605	0.00225	0.00830	4	0.00081	0.00019	0.00100
	Mayurbhanj-I	30	0.00448	0.00302	0.00750	14	0.00162	0.00065	0.00227
	Mayurbhanj-II	35	0.00437	0.00608	0.01045	6	0.00057	0.00033	0.00090
	Nabarangapur	60	0.00901	0.00584	0.01485	20	0.00240	0.00060	0.00300
	Rayagada	48	0.00737	0.00563	0.01300	16	0.00237	0.00163	0.00400
	Sundargarh-I	31	0.00354	0.00556	0.00910	28	0.00254	0.00456	0.00710
	Sundargarh-II	50	0.00732	0.00547	0.01279	8	0.00073	0.00047	0.00120
	Nicobar	14	0.00219	0.00131	0.00350	3	0.00056	0.00014	0.00070
Sub-total		***342***	***0.05038***	***0.04114***	***0.09152***	***106***	***0.01257***	***0.00875***	***0.02132***
2022-23	Gajapati	14	0.00221	0.00129	0.00350	5	0.00054	0.00006	0.00060
	Kandhamal	24	0.00130	0.00470	0.00600	4	0.00025	0.00060	0.00085
	Malkangiri	48	0.00878	0.00197	0.01075	4	0.00044	0.00036	0.00080
	Mayurbhanj-I	29	0.00379	0.00379	0.00758	16	0.00250	0.00148	0.00398
	Mayurbhanj-II	34	0.00422	0.00578	0.01000	13	0.00182	0.00107	0.00289
	Nabarangapur	55	0.00943	0.00412	0.01355	20	0.00240	0.00060	0.00300
	Rayagada	55	0.00776	0.00599	0.01375	14	0.00254	0.00076	0.00330
	Sundargarh-I	35	0.00402	0.00549	0.00951	4	0.00048	0.00068	0.00116
	Sundargarh-II	50	0.00616	0.00664	0.01280	8	0.00099	0.00051	0.00150
	Nicobar	25	0.00645	0.00320	0.00965	2	0.00024	0.00009	0.00033
Sub-total		***369***	***0.05412***	***0.04297***	***0.09709***	***90***	***0.0122***	***0.00621***	***0.01841***
Total		***2169***	***0.34941***	***0.24632***	***0.59573***	***878***	***0.14738***	***0.07736***	***0.22474***



FRIENDS OF COCONUT TREE (FOCT) TRAINING




TRAINING FOR RURAL YOUTH


TRAINING PROGRAMME FOR RURAL YOUTH
KRISHI VIGYAN KENDRA
GAJAPATI


TRAINING PROGRAMME FOR RURAL YOUTHS
COMMERCIAL MUSHROOM CULTIVATION
FOR SUSTAINABLE ENTERPRISE

TRAINING PROGRAMME FOR RURAL YOUTHS
COMMERCIAL MUSHROOM CULTIVATION
FOR SUSTAINABLE ENTERPRISE








TRAINING PROGRAMME FOR
FARMERS AND FARM WOMEN
KRISHI VIGYAN KENDRA
GAJAPATI

5.1.4.2 Training of extension personnel

Training of extension personnel plays important role in disseminating technology very quickly among the farmers at every nook and corner of the district. The total number of training programmes conducted by the KVKs under ICAR-ATARI Kolkata and number of benefitted farmers in different years have been presented in the table as under.

Table: Details of extension personnel trained by the KVKs under TSP/STC during the year 2017-18 to 2022-23

Year	Name of KVK	Extension personnel trained			
		No. of programme conducted	No. of beneficiaries (Lakh)		
			Male	Female	Total
2017-18	Gajapati	7	0.00137	0.00035	0.00172
	Kandhamal	8	0.00147	0.00052	0.00199
	Malkangiri	9	0.00138	0.00055	0.00193
	Mayurbhanj-I	7	0.00097	0.00054	0.00151
	Mayurbhanj-II	12	0.00168	0.00058	0.00226
	Nabarangapur	11	0.00182	0.00071	0.00253
	Rayagada	12	0.00204	0.00074	0.00278
	Sundargarh-I	12	0.00097	0.00181	0.00278
	Sundargarh-II	8	0.00125	0.00065	0.00190
	Nicobar	7	0.00137	0.00035	0.00172
Sub-total		***89***	***0.01335***	***0.00659***	***0.01994***
2018-19	Gajapati	5	0.00082	0.00041	0.00123
	Kandhamal	8	0.00109	0.00056	0.00165
	Malkangiri	9	0.00134	0.00021	0.00155
	Mayurbhanj-I	6	0.00093	0.00018	0.00111
	Mayurbhanj-II	8	0.00111	0.00043	0.00154
	Nabarangapur	12	0.00168	0.00087	0.00255
	Rayagada	12	0.00172	0.00098	0.00270
	Sundargarh-I	11	0.00089	0.00174	0.00263
	Sundargarh-II	9	0.00137	0.00069	0.00206
	Nicobar	2	0.00022	0.00080	0.00102
Sub-total		***82***	***0.01117***	***0.00687***	***0.01804***
2019-20	Gajapati	6	0.00082	0.00024	0.00106
	Kandhamal	7	0.00098	0.00061	0.00159
	Malkangiri	7	0.00084	0.00066	0.00150
	Mayurbhanj-I	5	0.00078	0.00044	0.00122
	Mayurbhanj-II	9	0.00119	0.00098	0.00217
	Nabarangapur	11	0.00164	0.00078	0.00242
	Rayagada	10	0.00136	0.00089	0.00225
	Sundargarh-I	6	0.00092	0.00041	0.00133
	Sundargarh-II	7	0.00074	0.00035	0.00109

Year	Name of KVK	Extension personnel trained			
		No. of programme conducted	No. of beneficiaries (Lakh)		
			Male	Female	Total
	Nicobar	2	0.00019	0.00009	0.00028
Sub-total		**70**	**0.00946**	**0.00545**	**0.01491**
2020-21	Gajapati	2	0.00033	0.00012	0.00045
	Kandhamal	3	0.00031	0.00011	0.00042
	Malkangiri	2	0.00024	0.00009	0.00033
	Mayurbhanj-I	3	0.00034	0.00012	0.00046
	Mayurbhanj-II	3	0.00047	0.00023	0.00070
	Nabarangapur	6	0.00050	0.00014	0.00064
	Rayagada	4	0.00047	0.00021	0.00068
	Sundargarh-I	5	0.00025	0.00045	0.00070
	Sundargarh-II	5	0.00037	0.00013	0.00050
	Nicobar	1	0.00009	0.00004	0.00013
Sub-total		**34**	**0.00337**	**0.00164**	**0.00501**
2021-22	Gajapati	2	0.00038	0.00012	0.0005
	Kandhamal	4	0.00073	0.00023	0.00096
	Malkangiri	3	0.00045	0.00011	0.00056
	Mayurbhanj-I	4	0.00063	0.00033	0.00096
	Mayurbhanj-II	6	0.00098	0.00094	0.00192
	Nabarangapur	8	0.00161	0.00039	0.002
	Rayagada	3	0.00069	0.00017	0.00086
	Sundargarh-I	4	0.00024	0.00072	0.00096
	Sundargarh-II	4	0.00074	0.00031	0.00105
	Nicobar	2	0.00016	0.00007	0.00023
Sub-total		**39**	**0.00661**	**0.00339**	**0.01000**
2022-23	Gajapati	2	0.00034	0.00010	0.00044
	Kandhamal	2	0.00015	0.00015	0.00030
	Malkangiri	4	0.00050	0.00025	0.00075
	Mayurbhanj-I	6	0.00102	0.00045	0.00147
	Mayurbhanj-II	7	0.00126	0.00049	0.00175
	Nabarangapur	5	0.00080	0.00018	0.00098
	Rayagada	5	0.00075	0.00041	0.00116
	Sundargarh-I	5	0.00060	0.00050	0.00110
	Sundargarh-II	4	0.00058	0.00017	0.00075
	Nicobar	1	0.00010	0.00004	0.00014
Sub-total		**41**	**0.00610**	**0.00274**	**0.00884**
Total		**355**	**0.05006**	**0.02668**	**0.07674**

5.1.5 Participants in extension activities

The KVKs of this zone conducted various extension activities viz. field day, kisan mela, kisan gosthi, exhibition, film show, workshop, farmers' seminar, exposure visit, field visit, ex-trainee sammelan etc. for the tribal farmers during the period under report. Total number of such programmes along with details of participants have been depicted in the following table.

Table: Details of participants in different extension activities during the year 2017-18 to 2022-23

Year	Name of KVK	Participants in extension activities			
		No. of programme conducted	No. of beneficiaries (Lakh)		
			Male	Female	Total
2017-18	Gajapati	136	0.04327	0.01827	0.06154
	Kandhamal	180	0.06429	0.01294	0.07723
	Malkangiri	114	0.03659	0.00998	0.04657
	Mayurbhanj-I	194	0.06755	0.03716	0.10471
	Mayurbhanj-II	161	0.05089	0.02648	0.07737
	Nabarangapur	126	0.03557	0.02127	0.05684
	Rayagada	267	0.06539	0.02831	0.09370
	Sundargarh-I	109	0.03483	0.01115	0.04598
	Sundargarh-II	59	0.01809	0.00549	0.02358
	Nicobar	136	0.04327	0.01827	0.06154
Sub-total		***1440***	***0.43982***	***0.18690***	***0.62672***
2018-19	Gajapati	128	0.04184	0.01560	0.05744
	Kandhamal	158	0.04895	0.01152	0.06047
	Malkangiri	167	0.04571	0.01343	0.05914
	Mayurbhanj-I	129	0.03912	0.01567	0.05479
	Mayurbhanj-II	116	0.03268	0.01820	0.05088
	Nabarangapur	167	0.06311	0.02112	0.08423
	Rayagada	285	0.08633	0.05462	0.14095
	Sundargarh-I	186	0.04434	0.02408	0.06842
	Sundargarh-II	84	0.02064	0.01428	0.03492
	Nicobar	66	0.01118	0.00673	0.01791
Sub-total		***1486***	***0.4339***	***0.19525***	***0.62915***
2019-20	Gajapati	192	0.06440	0.02603	0.09043
	Kandhamal	67	0.01250	0.01000	0.02250
	Malkangiri	184	0.05601	0.02025	0.07626
	Mayurbhanj-I	166	0.04385	0.02505	0.06890
	Mayurbhanj-II	139	0.02753	0.04780	0.07533
	Nabarangapur	96	0.01801	0.01057	0.02858
	Rayagada	247	0.07967	0.03885	0.11852
	Sundargarh-I	234	0.06150	0.03003	0.09153
	Sundargarh-II	42	0.00789	0.00649	0.01438

Year	Name of KVK	Participants in extension activities			
		No. of programme conducted	No. of beneficiaries (Lakh)		
			Male	Female	Total
	Nicobar	54	0.01012	0.00669	0.01681
Sub-total		**1421**	**0.38148**	**0.22176**	**0.60324**
2020-21	Gajapati	141	0.02306	0.01067	0.03373
	Kandhamal	68	0.01452	0.00732	0.02184
	Malkangiri	145	0.02350	0.01081	0.03431
	Mayurbhanj-I	117	0.01478	0.01045	0.02523
	Mayurbhanj-II	53	0.01686	0.01059	0.02745
	Nabarangapur	93	0.03233	0.01338	0.04571
	Rayagada	174	0.03618	0.01551	0.05169
	Sundargarh-I	242	0.03670	0.01195	0.04865
	Sundargarh-II	53	0.00778	0.00784	0.01562
	Nicobar	95	0.01163	0.00877	0.02040
Sub-total		**1181**	**0.21734**	**0.10729**	**0.32463**
2021-22	Gajapati	237	0.03991	0.01481	0.05472
	Kandhamal	258	0.03829	0.01711	0.0554
	Malkangiri	246	0.03952	0.01230	0.05182
	Mayurbhanj-I	241	0.04271	0.01604	0.05875
	Mayurbhanj-II	132	0.02730	0.01523	0.04253
	Nabarangapur	210	0.04075	0.01278	0.05353
	Rayagada	238	0.03814	0.01440	0.05254
	Sundargarh-I	121	0.02009	0.00841	0.0285
	Sundargarh-II	47	0.00603	0.00527	0.0113
	Nicobar	73	0.01242	0.00722	0.01964
Sub-total		**1803**	**0.30516**	**0.12357**	**0.42873**
2022-23	Gajapati	122	0.03030	0.01120	0.04150
	Kandhamal	57	0.00750	0.0100	0.01750
	Malkangiri	131	0.02952	0.01530	0.04482
	Mayurbhanj-I	101	0.02199	0.01541	0.03740
	Mayurbhanj-II	94	0.01412	0.01589	0.03001
	Nabarangapur	128	0.03582	0.01041	0.04623
	Rayagada	145	0.03836	0.01208	0.05044
	Sundargarh-I	132	0.03270	0.01484	0.04754
	Sundargarh-II	125	0.01411	0.01700	0.03111
	Nicobar	26	0.0032	0.00195	0.00515
Sub-total		**1061**	**0.22762**	**0.12408**	**0.35170**
Total		**8392**	**2.00532**	**0.95885**	**2.96417**




5.1.6 Seed production

The KVKs of this zone dealt with TSP/STC not only guided the farmers to produce various crop seeds at farmers' field but also they produced quality seeds in the KVK campuses. Those quality seeds were supplied to the farmers in their respective districts either free of cost or sometimes with nominal cost. The details of seed production by the KVKs and number of benefitted farmers in different years during the period have been given in the table.

Table: Details of seed production by the KVKs and benefitted farmers during the year 2017-18 to 2022-23

Year	Name of KVK	Name of seed(s) produced	Quantity (qt)	No. of farmers (Lakh)
2017-18	Kandhamal	Mustard	2.10	0.00200
		Niger	4.20	
		Turmeric	140.0	
	Malkangiri	Rice (*MTU-1001*) FS	52.60	0.02182
		Sesamum (*Uma*)	2.00	
	Mayurbhanj-I	Rice	490.0	0.03210

Year	Name of KVK	Name of seed(s) produced	Quantity (qt)	No. of farmers (Lakh)
	Mayurbhanj-II	*Pratikhya*	31.40	0.00122
		Tejaswini	11.00	
		Lalata	8.60	
		DRR-42	5.20	
	Nabarangapur	Rice	52.20	0.00143
		Black gram	8.00	
	Rayagada	Rice	131.6	0.00178
		Pigeon pea	3.30	
		Sunhemp	1.00	
	Sundargarh-I	Rice	39.40	0.00232
Sub-total			***982.60***	***0.06267***
2018-19	Kandhamal	Mustard	7.00	0.0041
		Niger	2.10	
		Turmeric	112.00	
	Malkangiri	Rice (*MTU-1001*) FS	75.00	0.0035
	Mayurbhanj-I	Rice	406.40	0.0039
	Mayurbhanj-II	*Pratikhya*	76.00	0.00465
		Naveen	23.00	
		Pigeon pea (*PGR 176*)	0.80	
		Toria (*Anuradha*)	1.50	
		Sweet corn (*Sugar 75*)	1.30	
		Maize (*P-3401*)	8.00	
		Dhaincha (local)	0.80	
	Nabarangapur	Rice	52.30	0.00189
		Arhar	14.80	
	Rayagada	Rice	109.60	0.00237
	Sundargarh-I	Rice	26.50	0.00168
Sub-total			***917.10***	***0.02209***
2019-20	Kandhamal	Mustard	4.90	0.0075
		Niger	3.20	
		Turmeric	221.00	
	Malkangiri	Rice (*MTU-1001*) FS	22.00	0.00165
	Mayurbhanj-I	Rice	452.80	0.00345
	Mayurbhanj-II	*Pratikhya*	45.00	0.00322
		Manaswani	22.30	
		Pigeonp pea (*Maruti*)	0.28	
		Toria (*Anuradha*)	0.60	
		Sweet corn (*Sugar 75*)	1.40	

Year	Name of KVK	Name of seed(s) produced	Quantity (qt)	No. of farmers (Lakh)
		Maize (*VNR*)	8.00	
		Dhaincha (local)	0.32	
	Nabarangapur	Rice	35.20	0.00185
		Arhar	6.00	
		Niger	5.00	
	Rayagada	Rice	52.80	0.00116
	Sundargarh-I	Rice	24.20	0.00122
Sub-total			***905.00***	***0.02005***
2020-21	Kandhamal	Mustard	8.70	0.00329
		Niger	6.30	
		Turmeric	137.50	
	Malkangiri	Rice (*MTU-1001*) FS	106.00	0.00127
		Green gram (*IPM 02-14*)	2.20	
	Mayurbhanj-I	Rice	604.00	0.00415
	Mayurbhanj-II	*Pratikhya*	122.40	0.00238
	Nabarangapur	Rice	52.80	0.00235
		Niger	6.20	
	Rayagada	Rice	95.80	0.0033
		Ragi	2.60	
		Pigeon pea	6.50	
	Sundargarh-I	Rice	42.00	0.00125
	Sundargarh-II	Ragi (*Arjuna*)	14.10	0.00016
Sub-total			***1207.1***	***0.01815***
2021-22	Kandhamal	Mustard	9.98	0.0072
		Niger	2.20	
		Turmeric	213.00	
		Rice	26.25	
	Malkangiri	Rice (*MTU-1001*)	95.00	0.00325
		Green gram (*IPM 02-14*)	5.40	
	Mayurbhanj-I	Rice	567.00	0.00398
	Mayurbhanj-II	*Pratikhya*	108.00	0.00402
		Maize (*Kalinga Raj*)	12.84	
	Nabarangapur	Rice	47.40	0.00142
		Niger	1.50	
	Rayagada	Rice	175.00	0.00153
		Ragi	2.76	
		Pigeon pea	3.50	
		Green gram	2.32	

Year	Name of KVK	Name of seed(s) produced	Quantity (qt)	No. of farmers (Lakh)
	Sundargarh-I	Rice	53.00	0.00172
	Sundargarh-II	Mustard (*Pusa Mustard 28*)	4.50	0.00012
Sub-total			***1329.65***	***0.02324***
2022-23	Kandhamal	Turmeric	187.75	0.00191
		Niger	4.46	
		Toria	5.30	
	Malkangiri	Rice	97.00	0.00162
		Green gram	2.00	
		Sesame	2.50	
	Mayurbhanj-I	Rice	756.00	0.00525
	Mayurbhanj-II	Rice	107.00	0.00134
	Nabarangapur	Rice	79.00	0.00543
		Ragi	12.80	
		Niger	3.47	
	Rayagada	Paddy (*MTU 1172*)	166.60	0.00757
		Paddy (*Bina dhan-17*)	84.80	
		Ragi (*Arjuna*)	1.34	
		Pigeon pea (*LRG-52*)	3.50	
		Black gram (*OBG 33*)	4.00	
		Green gram (*Virat*)	7.00	
	Sundargarh-I	Paddy (*Pratikshya*)	78.60	0.00123
Sub-total			***1603.12***	***0.02435***
Total			***6944.57***	***0.37602***

5.1.7 Planting materials production

The TSP/STC KVKs under ICAR-ATARI Kolkata produced various types of quality planting materials at their campuses for distribution among the tribal farmers mostly at free of cost and sometimes with nominal charges. The details of planting materials production and number of benefitted farmers in different years are presented in the following table.

Table: Details of planting materials production by the KVKs during the year 2017-18 to 2022-23

Year	Name of KVK	Name of planting materials	No. of planting materials produced (in lakh)	No. of farmers benefitted (in lakh)
2017-18	Gajapati	Vegetable seedlings	0.27380	0.00572
		Mango	0.00200	
		Papaya	0.01120	
	Kandhamal	Cauliflower	0.10000	0.00621
		Cabbage	0.54000	
		Tomato	0.10400	
	Malkangiri	Tomato (*Arka Rashyak*)	0.02000	0.00134
		Brinjal (*Blue Star*)	0.04000	
		Chilli (*Surya Mukhi*)	0.04000	
		Papaya (*Red Lady*)	0.02000	
	Mayurbhanj-I	Vegetable seedlings	0.55700	0.00376
	Mayurbhanj-II	Brinjal	0.0100	0.00353
		Tomato	0.01500	
		Cabbage	0.0100	
		Chilli	0.05500	
		Cauliflower	0.01200	
		Broccoli	0.01200	
		Papaya	0.02000	
		Capcicum	0.00200	
	Nabarangapur	Hyb. vegetables	0.23310	0.00525
		Papaya	0.04500	
		Drumstick	0.03130	
	Rayagada	Papaya	0.01500	0.00412
		Drumstick	0.01200	
		Brinjal	0.02810	
		Tomato	0.03500	
		Onion	0.04371	
		Chilli	0.02700	
	Sundargarh-I	Tomato	0.08000	0.00277
		Brinjal	0.07000	
		Chilli	0.15000	
		Cabbage	0.02000	
		Cauliflower	0.02000	
		Capsicum	0.02000	

Year	Name of KVK	Name of planting materials	No. of planting materials produced (in lakh)	No. of farmers benefitted (in lakh)
		Onion	0.20000	
		Papaya	0.05000	
		Drumstick	0.05000	
Sub-total			***2.97421***	***0.03270***
2018-19	Gajapati	Vegetable seedlings	0.85370	0.00658
		Papaya	0.00020	
	Kandhamal	Cauliflower	0.10000	0.00623
		Cabbage	0.20000	
		Tomato	0.02000	
		Drumstick	0.04500	
		Papaya	0.00300	
		Brinjal	0.01000	
	Malkangiri	Tomato (*Arka Rakshak*)	0.00900	0.00159
		Brinjal (*Blue Star*)	0.00230	
		Chilli (*Bullet*)	0.01200	
		Papaya (*Red Lady*)	0.00100	
		Drumstick (*PKM-1*)	0.00100	
	Mayurbhanj-I	Vegetable seedlings	0.82000	0.00727
	Mayurbhanj-II	Brinjal	0.14700	0.00432
		Tomato	0.16260	
		Cabbage	0.07380	
		Chilli	0.07340	
		Cauli flower	0.02000	
		Brocolii	0.00500	
		Papaya	0.00500	
		Capcicum	0.01071	
	Nabarangapur	Hyb. vegetables	0.20000	0.00197
		Papaya	0.03700	
		Drumstick	0.02500	
	Rayagada	Papaya	0.01000	0.00120
		Drumstick	0.00500	
		Marigold	0.20000	
	Sundargarh-I	Tomato	0.09700	0.00614
		Brinjal	0.07820	
		Chilli	0.16600	
		Cabbage	0.03120	
		Cauliflower	0.03110	
		Broccoli	0.01020	
		Capsicum	0.01100	
		Onion	0.20850	

Year	Name of KVK	Name of planting materials	No. of planting materials produced (in lakh)	No. of farmers benefitted (in lakh)
		Papaya	0.02860	
		Banana	0.00100	
		Drumstick	0.02900	
		Maul sari (Bakula)	0.10000	
		Marigold	0.01000	
Sub-total			***3.85351***	***0.03530***
2019-20	Gajapati	Vegetable seedlings	0.74450	0.00307
		Mango	0.00200	
		Litchi	0.00100	
		Papaya	0.00270	
	Kandhamal	Cauliflower	0.14320	0.00759
		Cabbage	0.40000	
		Tomato	0.01390	
		Chilli	0.00730	
		Drumstick	0.04850	
		Papaya	0.04740	
		Brinjal	0.05060	
	Malkangiri	Tomato (*Arka Rakshak*)	0.02000	0.003
		Brinjal (*Blue Star*)	0.01000	
		Chilli (*Pusa Jwala*)	0.02000	
		Papaya (*Red Lady*)	0.01420	
		Drumstick (*PKM-1*)	0.00430	
		Capsicum (*California Wonder*)	0.0050	
	Mayurbhanj-I	Vegetable seedlings	0.68050	0.0054
	Mayurbhanj-II	Brinjal	0.11000	0.00257
		Tomato	0.11820	
		Cabbage	0.04000	
		Chilli	0.02000	
		Cauli flower	0.02202	
		Papaya	0.01000	
		Capcicum	0.09900	
	Nabarangapur	Hyb. vegetables	0.09000	0.00105
		Papaya	0.03700	
		Drumstick	0.02400	
	Rayagada	Marigold seedling	0.12000	0.00123
		Papaya	0.01000	
		Drumstick	0.01000	
		Brinjal	0.02900	
		Tomato	0.03900	

Year	Name of KVK	Name of planting materials	No. of planting materials produced (in lakh)	No. of farmers benefitted (in lakh)
		Chilli	0.02700	
		Cauliflower	0.01200	
		Cabbage	0.01900	
	Sundargarh-I	Tomato	0.04500	0.00846
		Brinjal	0.04200	
		Chilli	0.06100	
		Cabbage	0.03250	
		Cauliflower	0.03010	
		Color cauliflower	0.00500	
		Red cabbage	0.00650	
		Chinese cabbage	0.00420	
		Broccoli	0.02050	
		Cherry tomato	0.02000	
		Capsicum	0.01050	
		Color capsicum	0.00200	
		Onion	0.02850	
		Papaya	0.02860	
		Banana	0.00250	
		Drumstick	0.02200	
		Maul sari (*Bakula*)	0.04000	
		Marigold	0.01550	
		African marigold	0.01000	
		Mango	0.00500	
		Guava	0.01200	
		Apple Ber	0.00210	
		Anla	0.0020	
		Stone apple	0.0020	
		Debdaru	0.00150	
Sub-total			***3.50232***	***0.03237***
2020-21	Gajapati	Vegetable seedlings	3.64150	0.0115
		Mango	0.00690	
		Papaya	0.00090	
	Kandhamal	Cauliflower	0.05200	0.00325
		Cabbage	0.06300	
		Tomato	0.02200	
		Chilli	0.02700	
		Drumstick	0.00420	
		Papaya	0.06150	
		Brinjal	0.00800	

Year	Name of KVK	Name of planting materials	No. of planting materials produced (in lakh)	No. of farmers benefitted (in lakh)
	Malkangiri	Tomato (*Laxmi*)	0.01000	0.00425
		Brinjal (*Blue Star*)	0.01000	
		Chilli (*Pusa Jwala*)	0.01600	
		Papaya (*Pusa Nanha*)	0.04440	
		Drumstick (*Dwarf Moringa*)	0.03180	
	Mayurbhanj-I	Vegetable seedlings	2.10810	0.01810
	Mayurbhanj-II	Brinjal	0.14000	0.00241
		Tomato	0.26000	
		Cabbage	0.07500	
		Chilli	0.03000	
		Cauliflower	0.10500	
		Papaya	0.02150	
		Capcicum	0.01400	
	Nabarangapur	Hyb. vegetables	0.21500	0.00335
		Papaya	0.03500	
		Drumstick	0.02000	
	Rayagada	*PKM-1, Odishi*	0.03200	0.00328
		K. Lime	0.01300	
		Red Lady	0.0300	
		Ganesh	0.00250	
		OP	0.15000	
		Marble, Amazing	0.01200	
		Champ	0.01000	
		Arka Rakshak and *Arka Samrat*	0.05000	
		BSS-1030	0.07900	
		Hungama	0.07500	
		Arka Mohini	0.00300	
	Sundargarh-I	Tomato	0.09050	0.00981
		Brinjal	0.08020	
		Chilli	0.18600	
		Cabbage	0.03120	
		Cauliflower	0.04550	
		Color cauliflower	0.00700	
		Red cabbage	0.00720	
		Chinese cabbage	0.00500	
		Broccoli	0.03500	
		Cherryt tomato	0.04200	
		Capsicum	0.03400	
		Color capsicum	0.00250	

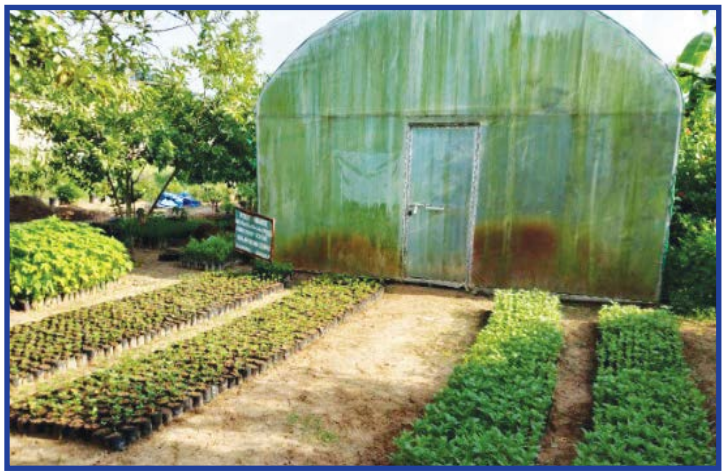
Year	Name of KVK	Name of planting materials	No. of planting materials produced (in lakh)	No. of farmers benefitted (in lakh)
		Onion	0.24050	
		Papaya	0.03060	
		Banana	0.00400	
		Drumstick	0.04500	
		Maul sari (Bakula)	0.02000	
	Nicobar	Marigold	0.01980	0.00020
		African marigold	0.01580	
		Calendula	0.01800	
		Aster	0.01540	
		Zinnia	0.01490	
		Salvia	0.01570	
		Dalia	0.01370	
		Dianthus	0.01200	
		Gerbera	0.00500	
		Mango	0.00550	
		Guava	0.00750	
		Anla	0.00250	
		Stone apple	0.00140	
		Debdaru	0.00250	
		CARI Brinjal 1 & 2	0.0020	
Sub-total			***8.53720***	***0.05615***
2021-22	Gajapati	Vegetable seedlings	1.77340	0.00304
		Mango	0.00294	
		Litchi	0.00150	
		Papaya	0.02330	
	Kandhamal	Papaya	0.09690	0.00421
		Cauliflower	0.01300	
		Cabbage	0.04730	
		Tomato	0.02590	
		Chilli	0.00560	
		Drumstick	0.00520	
		Papaya	0.02710	
	Malkangiri	Brinjal	0.01200	0.00432
		Tomato (*Arka Rakshak*)	0.01500	
		Brinjal (*Blue Star*)	0.01500	
		Chilli (*Pusa Jwala*)	0.01500	
		Papaya (*Pusa Nanha*)	0.01500	
	Mayurbhanj-I	Vegetable seedlings	1.983500	0.01054
	Mayurbhanj-II	Vegetable seedlings	0.248200	0.00402
		Brinjal	0.32000	

Year	Name of KVK	Name of planting materials	No. of planting materials produced (in lakh)	No. of farmers benefitted (in lakh)
		Tomato	0.06000	
		Cabbage	0.15600	
		Chilli	0.22450	
		Cauliflower	0.01050	
		Papaya	0.02000	
	Nabarangapur	Capcicum	0.50600	0.00385
		Hyb. vegetables	0.04000	
		Papaya	0.03000	
	Rayagada	Cauliflower	0.00800	0.00283
		Cabbage	0.01100	
		Tomato	0.03700	
		Brinjal	0.04940	
		Chilli	0.06400	
		Onion	0.02400	
		Others (Drumstick)	0.01860	
		Capsicum	0.00500	
		Mango	0.00300	
		Lime	0.00560	
		Papaya	0.02330	
		Banana	0.00450	
		Ornamental plants (Marigold)	0.0420	
		Medicinal and Aromatic plants	0.00050	
	Sundargarh-I	Tomato	0.12050	0.00562
		Brinjal	0.08500	
		Chilli	0.17050	
		Cabbage	0.03508	
		Cauliflower	0.05510	
		Color cauliflower	0.01000	
		Red cabbage	0.01200	
		Chinese cabbage	0.01100	
		Broccoli	0.04520	
		Cherry tomato	0.04600	
		Capsicum	0.04000	
		Color capsicum	0.00350	
		Onion	0.03260	
		Papaya	0.03570	
		Banana	0.00550	
		Drumstick	0.03500	
		Maul sari (Bakula)	0.02000	
		Marigold	0.02560	

Year	Name of KVK	Name of planting materials	No. of planting materials produced (in lakh)	No. of farmers benefitted (in lakh)
		African marigold	0.01800	
		Calendula	0.02090	
		Aster	0.02500	
		Zinnia	0.024100	
		Salvia	0.01800	
		Dalia	0.01500	
		Dianthus	0.01560	
		Gerbera	0.00590	
		Mango	0.00500	
		Guava	0.00600	
		Anla	0.00220	
		Stone apple	0.00210	
		Debdaru	0.00230	
	Nicobar	*CARI Brinjal 1 & 2*	0.00280	0.00092
		Arka Samrat, Rakshak & Abhed F1	0.00260	
		Arka Harita F1	0.00150	
		Arka Surya and *Prabhat*	0.00160	
Sub-total			***6.94562***	***0.03935***
2022-23	Gajapati	Tomato	0.14620	0.00935
		Brinjal	0.12070	
		Chilli	0.07490	
		Cauliflower	0.02060	
		Knolkhol	0.00300	
		Cabbage	0.01810	
		Onion	0.65570	
		Broccoli	0.00300	
		Capsicum	0.00123	
		Marigold	0.00950	
		Mango	0.00910	
		Papaya	0.01730	
		Litchi	0.00220	
		Drumstick	0.01350	
	Kandhamal	Tomato, brinjal, chilli, cabbage, cauliflower	1.18200	0.00982
		Papaya, drumstick, banana	0.05000	
	Malkangiri	Papaya	0.01200	0.00300
		Drumstick	0.02600	
		Tomato	0.02500	
		Chilli	0.00100	
		Brinjal	0.001500	

Year	Name of KVK	Name of planting materials	No. of planting materials produced (in lakh)	No. of farmers benefitted (in lakh)
	Mayurbhanj-I	Rooted vegetable seedlings	1.92300	0.08785
		Papaya	0.07600	
	Mayurbhanj-II	Brinjal	0.31350	0. 00334
		Tomato	0.12700	
		Cabbage	0.10600	
		Cauliflower	0.09600	
		Chili	0.14000	
		Capsicum	0.03000	
		Papaya	0.01330	
		Drumstick	0.00250	
		Marigold	0.30200	
	Nabarangapur	Cauliflower	0.15000	0.00757
		Cabbage	0.15000	
		Tomato	0.15000	
		Brinjal	0.15000	
		Chilli	0.15000	
		Papaya	0.01500	
		Banana	0.00060	
		Drumstick	0.01000	
		Marigold	0.15000	
	Rayagada	Cauliflower	0.14500	0.00685
		Cabbage	0.02850	
		Tomato	0.08400	
		Brinjal	0.08190	
		Chilli	0.02350	
		Onion	0.25100	
		Others (Drumstick)	0.03200	
		Capsicum	0.00540	
		Broccoli	0.04050	
		Red cabbage	0.00500	
		Mango	0.00300	
		Papaya	0.02200	
		Others (Rose apple)	0.00050	
		Ornamental plants (Marigold)	0.06600	
	Sundargarh-I	Cauliflower	0.05000	0.00768
		Cabbage	0.05000	
		Tomato	0.05000	
		Brinjal	0.05000	
		Chilli	0.05000	
		Onion	0.05000	

Year	Name of KVK	Name of planting materials	No. of planting materials produced (in lakh)	No. of farmers benefitted (in lakh)
		Others	0.05000	
		Mango	0.05000	
		Guava	0.05000	
		Lime	0.05000	
		Papaya	0.05000	
		Banana	0.05000	
		Medicinal and Aromatic plants	0.00160	
		Plantation	0.05500	
	Nicobar	*CARI Brinjal 1 & 2*	0.00390	0.00298
		Arka Samrat, Rakshak and *Abhed F1*	0.00250	
		Arka Surya & *Prabhat*	0.00350	
		Arka Meghna	0.00260	
		CARI SP-1 & 2	0.00200	
		PKM-1	0.00200	
Sub-total			***7.90883***	***0.04725***
Total			***33.72169***	***0.24312***












5.1.8 Livestock breeds/strains and fish fingerlings production

Livestock breeds/strains and fish fingerlings production were also the part of different activities of KVK particularly where manpower was available with KVKs. Those produces were generally distributed by the KVKs among the tribal farmers mostly at free of cost and sometimes, those were sold with minimum prices. The details of livestock breeds/strains and fish fingerlings produced by different KVKs and number of benefitted farmers in different years are shown in the table below.

Table: Details of livestock strains and fish fingerlings production by the KVKs during the year 2017-18 to 2022-23

Year	Name of KVK	Type of livestock strains and fish fingerlings	Number (in lakh) of livestock strains and fish fingerlings	No. of benefitted farmers (in lakh)
2017-18	Mayurbhanj-I	Poultry chicks of 21 days old *(Rainbow Rooster, Kadaknath* and *RIR)*	0.03311	0.00400
	Mayurbhanj-II	Poultry (*Rainbow Rooster*)	0.01750	0.00130
	Rayagada	Fish fingerlings (Rohu, Mrigal and Catla)	0.11433	0.00021
	Sundargarh-I	Poultry (*Kadaknath*)	0.01000	0.00132
Sub-total			***0.17494***	***0.00683***
2018-19	Kandhamal	Poultry (*Kadaknath and Kalinga Brown*)	0.00167	0.00008
	Malkangiri	Poultry (*Vanaaraja*)	0.03160	0.00222
		Poultry (*Kadaknath*)	0.01229	
	Mayurbhanj-I	Poultry chicks of 21 days old (*Rainbow Rooster*)	0.08230	0.00430
		Large White Yorkshire pig	0.00120	
	Mayurbhanj-II	Poultry (*Rainbow Roster*)	0.04670	0.00230
	Rayagada	Poultry (*Vanraja*)	0.00184	0.00010
	Sundargarh-I	Poultry (*Vanraja, Rainbow Rooster, Kaveri* and *White Leghorn*)	0.02980	0.00160
Sub-total			***0.20740***	***0.01060***
2019-20	Kandhamal	Poultry (*Kadaknath and Kalinga Brown*)	0.01913	0.00095
	Malkangiri	Poultry (*Vanaaraja*)	0.02000	0.00450
		Poultry (*Kadaknath*)	0.01000	
	Mayurbhanj-I	Poultry chicks of 21 days old (*Rainbow Rooster*)	0.06100	0.00480
	Mayurbhanj-II	Poultry (*Rainbow Roster*)	0.02943	0.00180
	Rayagada	Fish (Rohu, Mrigal and Catla)	0.28000	0.00050
	Sundargarh-I	Poultry (*Vanraja, Rainbow Rooster, Kaveri, White Leghorn, and Kadaknath*)	0.01222	0.00125
Sub-total			***0.43178***	***0.01380***

Year	Name of KVK	Type of livestock strains and fish fingerlings	Number (in lakh) of livestock strains and fish fingerlings	No. of benefitted farmers (in lakh)
2020-21	Kandhamal	Poultry (*Kadaknath and Kalinga Brown*)	0.01200	0.00060
	Malkangiri	Poultry (*Vanaraja*)	0.02000	0.00321
		Poultry (*Kadaknath*)	0.02000	
		IMC (Rohu, Mrigal and Catla)	0.48030	
	Mayurbhanj-I	Poultry chicks of 21 days old (*Rainbow Rooster*)	0.03240	0.00640
	Mayurbhanj-II	Poultry (*Rainbow Rooster*)	0.02080	0.00180
	Rayagada	Poultry (*Vanraja*)	0.00600	0.00150
		Fish (Rohu, Mrigal and Catla)	0.11000	
	Sundargarh-I	Poultry (*Vanraja, Rainbow Rooster* and *Kadaknath*)	0.00879	0.00090
Sub-total			***0.71029***	***0.01441***
2021-22	Kandhamal	Poultry (*Kadaknath and Kalinga Brown*)	0.00100	0.00010
	Malkangiri	Poultry (*Kadaknath*)	0.00500	0.00280
		Poultry (*Sonali*)	0.00350	
		IMC (Rohu, Mrigal and Catla)	0.20000	
	Mayurbhanj-I	Poultry chicks of 21 days old (*Rainbow Rooster*)	0.02290	0.00210
	Mayurbhanj-II	Poultry (*Rainbow Rooster*)	0.01200	0.00120
	Rayagada	Fish (Rohu, Catla and Mrigal)	0.04129	0.00045
	Sundargarh-I	Poultry (*Vanraja, Rainbow Roster, Kaveri* and *White Leghorn*)	0.01010	0.00120
Sub-total			***0.29579***	***0.00785***
2022-23	Kandhamal	Poultry (*Kadaknath, Kalinga Brown* and *Sonali*)	0.00330	0.00084
	Malkangiri	Poultry	0.01500	0.00150
		IMC (Rohu, Catla and Mrigal)	0.75000	
	Mayurbhanj-I	Poultry chicks of 21 days old (*Rainbow Rooster*)	0.05500	0.00490
	Mayurbhanj-II	Poultry (*Rainbow Rooster, RIR and Vanaraja*)	0.01800	0.00150
	Rayagada	Poultry (*Vanraja*)	0.00800	0.00060
	Sundargarh-I	Poultry (*Vanraja and Kadaknath*)	0.00987	0.00100
		IMC (Rohu, Mrigal and Catla)	0.50000	
Sub-total			***1.35917***	***0.01034***
Total			***3.17937***	***0.06383***





5.1.9 Soil and water sample testing

Like other KVKs, scientists of TSP KVKs of this zone were also engaged in analyzing soil and water samples of tribal farmers to let the farmers know about the status of their soil and water used for agricultural production. They were also guided for soil test-based fertilizer use to reduce the cost of production and to reduce the cost of unnecessary use of different fertilizers. The total number of soil and water tested by the KVKs and number of benefitted farmers in different years are presented below.

Table: Details of soil and water sample tested by the KVKs during the year 2017-18 to 2022-23

Year	Name of KVK	Number of soil and water samples tested (in lakh)		No. of benefitted farmers (in lakh)
		Soil	Water	
2017-18	Gajapati	0.00351	0	0.00817
	Kandhamal	0.00497	0	0.01472
	Malkangiri	0.00394	0	0.00950
	Mayurbhanj-I	0.00176	0	0.00453
	Mayurbhanj-II	0.00568	0	0.01507
	Nabarangapur	0.00462	0	0.01260
	Rayagada	0.00355	0	0.01120
	Sundargarh-I	0.00227	0	0.00952
	Sundargarh-II	0.00343	0	0.00828
	Nicobar	0.00054	0	0.00344
Sub-total		***0.03427***	***0***	***0.09703***
2018-19	Gajapati	0.00478	0	0.01054
	Kandhamal	0.01258	0	0.02322
	Malkangiri	0.00657	0	0.01475
	Mayurbhanj-I	0.00260	0.00020	0.00630

Year	Name of KVK	Number of soil and water samples tested (in lakh)		No. of benefitted farmers (in lakh)
		Soil	Water	
	Mayurbhanj-II	0.00466	0	0.01073
	Nabarangapur	0.01092	0	0.02532
	Rayagada	0.00794	0	0.01941
	Sundargarh-I	0.00673	0	0.01747
	Sundargarh-II	0.00585	0	0.01150
	Nicobar	0.00029	0	0.00115
Sub-total		***0.06292***	***0.00020***	***0.14039***
2019-20	Gajapati	0.00175	0	0.00512
	Kandhamal	0.00831	0	0.02131
	Malkangiri	0.00426	0	0.01523
	Mayurbhanj-I	0.00150	0.00050	0.00158
	Mayurbhanj-II	0.00120	0	0.00284
	Nabarangapur	0.00378	0	0.01230
	Rayagada	0.00302	0	0.00824
	Sundargarh-I	0.00240	0	0.00372
	Sundargarh-II	0.00369	0	0.00875
	Nicobar	0.00008	0	0.00025
Sub-total		***0.02999***	***0.00050***	***0.07934***
2020-21	Gajapati	0.00188	0	0.00675
	Kandhamal	0.00754	0	0.01683
	Malkangiri	0.00432	0	0.01801
	Mayurbhanj-I	0.00109	0.00125	0.00327
	Mayurbhanj-II	0.00127	0	0.00294
	Nabarangapur	0.00365	0	0.00918
	Rayagada	0.00386	0	0.01025
	Sundargarh-I	0.00278	0	0.00532
	Sundargarh-II	0.00329	0	0.00750
	Nicobar	0.00010	0	0.00010
Sub-total		***0.02978***	***0.00125***	***0.08050***
2021-22	Gajapati	0.00160	0	0.00492
	Kandhamal	0.00890	0	0.02154
	Malkangiri	0.00456	0	0.01206

Year	Name of KVK	Number of soil and water samples tested (in lakh)		No. of benefitted farmers (in lakh)
		Soil	Water	
	Mayurbhanj-I	0.00197	0	0.00398
	Mayurbhanj-II	0.00178	0	0.00405
	Nabarangapur	0.00372	0	0.00950
	Rayagada	0.00356	0	0.00924
	Sundargarh-I	0.00238	0	0.00871
	Sundargarh-II	0.00243	0	0.00715
	Nicobar	0.00010	0	0.00092
Sub-total		***0.03100***	***0***	***0.08207***
2022-23	Gajapati	0.00167	0	0.00454
	Kandhamal	0.00350	0	0.01220
	Malkangiri	0.00300	0	0.01270
	Mayurbhanj-I	0.00215	0.00005	0.00563
	Mayurbhanj-II	0.00260	0	0.00441
	Nabarangapur	0.01200	0	0.03110
	Rayagada	0.00414	0	0.01480
	Sundargarh-I	0.00310	0	0.00578
	Sundargarh-II	0.00380	0	0.00896
Sub-total		***0.03596***	***0.00005***	***0.10012***
Total		***0.22392***	***0.00200***	***0.57945***





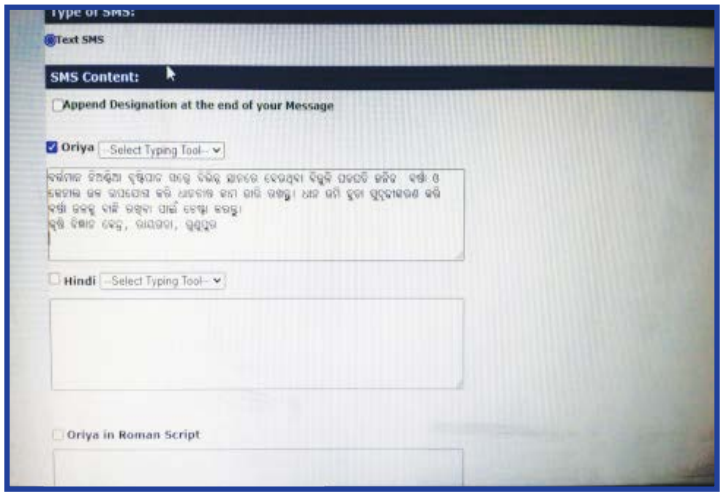

5.1.10 Agro-advisories provided to the farmers

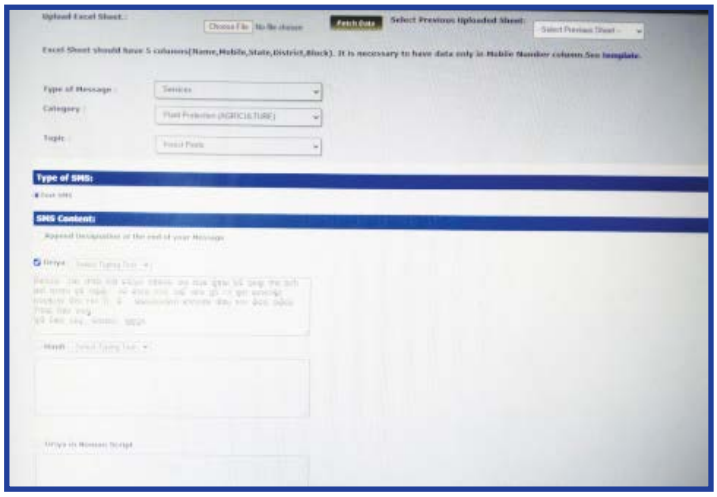
Tribal farmers were provided with various types of agro-advisorories related to weather forecast, sowing time of different crops, field and horticultural crop production, livestock and fish production, insect and pest controls in crops, livestock/fish diseases, harvesting of crops, market rate of different commodities, marketing of various agri-produces and so on. The total number of advisories and benefitted farmers from messages sent by the KVKs of this zone in different years are shown in the table as under.

Table: Details of mobile agro-advisory services provided to the farmers by TSP/STC KVKs during the year 2017-18 to 2022-23

Year	Name of KVK	Number of agro-advisories sent to the farmers	No. of benefitted farmers (in lakh)
2017-18	Gajapati	96	0.43900
	Kandhamal	37	0.33634
	Malkangiri	47	0.23270
	Mayurbhanj-I	70	0.19820
	Mayurbhanj-II	42	0.35630
	Nabarangapur	35	0.22450
	Rayagada	63	0.29200
	Sundargarh-I	42	0.61000
	Sundargarh-II	52	0.59690
	Nicobar	50	0.02075
Sub-total		***534***	***3.30669***
2018-19	Gajapati	96	0.95926
	Kandhamal	40	0.98717
	Malkangiri	48	0.96891
	Mayurbhanj-I	60	0.54542
	Mayurbhanj-II	44	0.62351
	Nabarangapur	60	0.97407
	Rayagada	66	0.89945
	Sundargarh-I	48	0.97212
	Sundargarh-II	54	1.24570
	Nicobar	50	0.04453
Sub-total		***566***	***8.22014***
2019-20	Gajapati	86	0.46234
	Kandhamal	38	0.59960
	Malkangiri	50	0.42563
	Mayurbhanj-I	36	0.54280
	Mayurbhanj-II	41	0.86920
	Nabarangapur	40	0.48975
	Rayagada	48	0.46783
	Sundargarh-I	40	0.97700

Year	Name of KVK	Number of agro-advisories sent to the farmers	No. of benefitted farmers (in lakh)
	Sundargarh-II	54	0.94300
	Gajapati	50	0.01791
	Sub-total	***483***	***5.79506***
2020-21	Gajapati	74	1.09051
	Kandhamal	44	1.12964
	Malkangiri	56	1.24978
	Mayurbhanj-I	54	1.27628
	Mayurbhanj-II	40	1.42416
	Nabarangapur	64	0.96553
	Rayagada	48	1.22494
	Sundargarh-I	42	0.99217
	Sundargarh-II	56	1.21455
	Gajapati	50	0.07994
	Sub-total	***528***	***10.64750***
2021-22	Gajapati	68	1.54242
	Kandhamal	48	1.62984
	Malkangiri	76	1.83398
	Mayurbhanj-I	66	1.12850
	Mayurbhanj-II	44	1.28950
	Nabarangapur	66	1.55460
	Rayagada	56	1.70400
	Sundargarh-I	32	1.54750
	Sundargarh-II	40	1.40544
	Gajapati	50	0.09782
	Sub-total	***546***	***13.73360***
2022-23	Gajapati	49	1.44230
	Kandhamal	42	1.52820
	Malkangiri	27	1.52860
	Mayurbhanj-I	54	1.17854
	Mayurbhanj-II	31	1.14830
	Nabarangapur	48	1.42320
	Rayagada	48	1.58194
	Sundargarh-I	24	1.31926
	Sundargarh-II	40	1.38380
	Gajapati	50	0.06786
	Sub-total	***413***	***12.60200***
	Total	***3070***	***54.30499***





5.1.11 Other special programmes organized/conducted

During the year 2017-18 to 2022-23, TSP/STC KVKs of this zone organized/conducted various special programmes throughout the year for the benefit of tribal farmers. Some of the important programmes, total number of programmes including benefitted farmers have been presented in the following table.

Table: Details of others special programmes conducted by the KVKs during 2017-18 to 2022-23

Year	Name of some special programmes organized/ conducted by the TSP/STC KVKs	Number of special programmes organized/conducted	Total no. of farmers attended/ benefitted from the programmes (in Lakh)
2017-18	❖ *'Sankalp Se Siddhi'* programme, ❖ An awareness- cum -cleanness drive ❖ *'World Food Day 2017'* ❖ *'Mahila Kisan Diwas'* ❖ *'Women in Agriculture Day'* ❖ *'Agricultural Education Day'* ❖ *'Jai Kisan Jai Vigyan'* ❖ *'World Soil Day'* etc.	268	0.30820

Year	Name of some special programmes organized/ conducted by the TSP/STC KVKs	Number of special programmes organized/conducted	Total no. of farmers attended/ benefitted from the programmes (in Lakh)
2018-19	❖ *'Kisan Diwas'* ❖ Interaction of Hon'ble PM with SHGs groups & women groups ❖ Interaction of Hon'ble PM with farmers ❖ *'World Food Day 2018'* ❖ *'Mahila Kisan Diwas'* ❖ *'Women in Agriculture Day'* ❖ *'Agricultural Education Day'* ❖ *'Jai Kisan Jai Vigyan'* ❖ *'World Soil Day'* ❖ *'Swachha Bharat'* etc.	362	0.39895
2019-20	❖ Celebration of 150th Birth Anniversary of Mahatma Gandhi, ❖ *'Tree Plantation Program'* ❖ *'National Animal Disease Control'* Programme for FMD and brucellosis and Artificial Insemination ❖ *'World Food Day'* ❖ *'Mahila Kisan Diwas'* ❖ *'Women in Agriculture Day'* ❖ *'Agricultural Education Day'* ❖ *'Jai Kisan Jai Vigyan'* ❖ *'World Soil Day'* ❖ Training to Pump Technician etc.	266	0.25208
2020-21	❖ *'Swachhta Pakhwada'* ❖ Dealers Training programme ❖ Scientific Bee Keeping Training programme ❖ Honourable PM's interaction with farmer programme ❖ *'Poshan Maah'* programme ❖ Certificate course for dealers on pesticides programme ❖ Vermicompost Training programme for women self-help group ❖ PKVY programme	557	0.19495
2021-22	❖ *'World Food Day'* programme ❖ *'Women in Agriculture Day'* ❖ *'Agricultural Education Day'* ❖ *'Jai Kisan Jai Vigyan'* ❖ *'World Soil Day'* ❖ *'World Water Day'* ❖ *'National Girl Child Day'* ❖ Live telecast programme of Hon'ble PM on Natural Farming- Pre-Vibrant Gujarat Summit 2021, Anand ❖ *'International Women Day'*	495	0.40427

Year	Name of some special programmes organized/ conducted by the TSP/STC KVKs	Number of special programmes organized/conducted	Total no. of farmers attended/ benefitted from the programmes (in Lakh)
2022-23	❖ *'ICAR Foundation Day'* celebration ❖ *'Swachta Activity'* ❖ *'Input Dealers Training'* programme ❖ Farmer-Scientist interaction programme (ATMA) ❖ *'E-Farmers Fair'* ❖ *'Vigilance Awareness Week'* ❖ Web-casting programme of PM KISAN ❖ *'National Unity Day'* ❖ *'Millet Food Festival'* etc.	492	0.40701
Total		***2440***	***1.96546***









NIMAL HEALTH CAMP






MAHILA KISAN DIWAS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5.2 Physical outcome

The physical outcomes in terms of change in family income, family consumption, availability of agricultural implements/ tools per tribal household, number of tribal farmers upgraded with knowledge and skills, increase availability of seeds etc. resulted from conducting various activities in the identified tribal dominated districts of this zone during the year 2017-18 to 2022-23 have been presented in the following table.

Table: Details of physical outcome under TSP /STC in different KVKs during the year 2017-18 to 2022-23

Year	Name of KVK	Change in family income (%)	Change in family consumption level (%)	Change in availability of agricultural implements/ tools (no. per household)	Number of technologies identified after assessment	Upgraded skills and knowledge of farmers (in lakh)	Oriented extension personnel in frontier areas of agricultural technology (in lakh)	Increased availability of quality seed (q)	Increased availability of quality planting material (in lakh)	Increased availability of live-stock strains and fingerlings (in lakh)	Testing of soil & water samples for balance fertilizer use (in lakh)
2017-18	Gajapati	10	22	5	1	0.01324	0.00221	0.00	1.37758	0.01210	0.00234
	Kandhamal	22	19	5	2	0.01476	0.00164	181.53	2.25000	0.02340	0.00602
	Malkangiri	25	18	5	1	0.01534	0.00206	152.00	0.06500	0.01120	0.00649
	Mayurbhanj-I	25	21	6	1	0.01355	0.00174	450.00	2.54448	0.06753	0.00153
	Mayurbhanj-II	22	20	7	1	0.01575	0.00244	66.20	0.10060	0.02258	0.00303
	Nabarangapur	28	20	4	1	0.01975	0.00260	68.20	0.19000	0.02314	0.00312
	Rayagada	21	18	3	2	0.02168	0.00358	109.00	0.30685	0.08745	0.00335
	Sundargarh-I	21	18	5	1	0.02075	0.00335	67.90	0.43500	0.07856	0.00320
	Sundargarh-II	20	25	5	1	0.01812	0.00217	0.00	0.00000	0.12450	0.00231
	Nicobar	18	10	4	1	0.00578	0.00185	0.01	0.00100	0.00243	0.00590
Sub-total		***212***	***191***	***49***	***12***	***0.15872***	***0.02364***	***1094.84***	***7.27051***	***0.45289***	***0.03729***
Average		***21.2***	***19.1***	***4.9***	***-***	***-***	***-***	***-***	***-***	***-***	***-***
2018-19	Gajapati	14	15	1	0	0.02124	0.00021	0.00.00	0.50400	0.00000	0.00478
	Kandhamal	20	14	1	1	0.02412	0.00047	86.10	0.37800	0.00050	0.01058
	Malkangiri	25	21	2	1	0.01785	0.00008	42.00	0.17400	0.04561	0.00657
	Mayurbhanj-I	22	17	2	1	0.01908	0.00049	319.80	0.57000	0.07898	0.00260
	Mayurbhanj-II	19	18	2	0	0.01808	0.00092	102.40	0.56000	0.05286	0.00466
	Nabarangapur	21	21	3	0	0.02325	0.00080	47.00	0.46000	0.00000	0.01035
	Rayagada	19	22	3	1	0.02478	0.00063	64.00	0.31400	0.00000	0.00794
	Sundargarh-I	15	20	3	1	0.02143	0.00067	26.50	0.89000	0.02945	0.00689
	Sundargarh-II	20	19	2	0	0.02087	0.00023	0.00	0.00000	0.00000	0.00585
	Nicobar	15	20	1	0	0.00671	0.00008	0.01	0.00000	0.00000	0.00290
Sub-total		***190***	***187***	***20***	***5***	***0.19741***	***0.00458***	***687.81***	***3.85000***	***0.20740***	***0.06312***
Average		***19***	***18.7***	***2***	***-***	***-***	***-***	***-***	***-***	***-***	***-***

Year	Name of KVK	Change in family income (%)	Change in family consumption level (%)	Change in availability of agricultural implements/ tools (no. per household)	Number of technologies identified after assessment	Upgraded skills and knowledge of farmers (in lakh)	Oriented extension personnel in frontier areas of agricultural technology (in lakh)	Increased availability of quality seed (q)	Increased availability of quality planting material (in lakh)	Increased availability of live-stock strains and fingerlings (in lakh)	Testing of soil & water samples for balance fertilizer use (in lakh)
2019-20	Gajapati	15	15	2	1	0.01667	0.00020	0.00	0.75118	0.00000	0.00194
	Kandhamal	25	13	1	2	0.02321	0.00059	258.00	0.86800	0.08116	0.0082
	Malkangiri	24	27	4	1	0.02108	0.00089	55.00	0.05500	0.02000	0.00426
	Mayurbhanj-I	30	27	6	1	0.00792	0.00022	478.40	0.34069	0.06100	0.002
	Mayurbhanj-II	18	12	4	1	0.01531	0.00035	98.60	0.41820	0.01882	0.0012
	Nabarangapur	30	29	6	1	0.02147	0.00112	56.29	0.21100	0.00000	0.00378
	Rayagada	20	23	3	2	0.03082	0.00078	67.00	0.23150	0.30100	0.00344
	Sundargarh-I	17	24	4	1	0.01973	0.00123	39.00	0.79000	0.01000	0.0024
	Sundargarh-II	21	26	0	1	0.02050	0.00079	0.00	0.00000	0.00000	0.00352
	Nicobar	10	10	1	1	0.00408	0.00028	0.01	0.00000	0.00000	0.00008
Sub-total		***210***	***206***	***31***	***12***	***0.18079***	***0.00645***	***1052.30***	***3.66557***	***0.49198***	***0.03082***
Average		***21.0***	***20.6***	***3.1***	***-***	***-***	***-***	***-***	***-***	***-***	***-***
2020-21	Gajapati	17	17	3	1	0.01028	0.00091	0.00	1.41950	0.00000	0.00475
	Kandhamal	23	18	1	2	0.01452	0.00045	245.64	0.62965	0.01200	0.00527
	Malkangiri	21	25	4	1	0.01515	0.00046	189.4	0.32300	0.51100	0.00185
	Mayurbhanj-I	19	20	5	1	0.01195	0.00074	575.00	1.70812	0.03050	0.00314
	Mayurbhanj-II	25	22	5	1	0.01147	0.00027	172.40	0.96550	0.02180	0.00297
	Nabarangapur	21	25	4	1	0.01125	0.00102	118.30	0.87035	0.00000	0.00440
	Rayagada	19	23	4	2	0.01446	0.00082	231.00	0.82100	0.12600	0.00250
	Sundargarh-I	21	25	4	2	0.00639	0.00078	178.00	1.86000	0.00899	0.00470
	Sundargarh-II	23	26	1	1	0.01430	0.00089	0.00	0.00000	0.00000	0.00134
	Nicobar	15	10	3	1	0.00195	0.00027	0.00	0.00450	0.00000	0.00010
Sub-total		***204***	***211***	***34***	***13***	***0.11172***	***0.00661***	***1709.74***	***8.60162***	***0.71029***	***0.03102***
Average		***20.4***	***21.1***	***3.4***	***-***	***-***	***-***	***-***	***-***	***-***	***-***
2021-22	Gajapati	17	20	4	4	0.01120	0.00050	0.00	1.48976	0.00000	0.00160
	Kandhamal	33	18	3	4	0.01614	0.00096	286.00	0.64621	0.00100	0.00890
	Malkangiri	23	28	5	3	0.01459	0.00056	178.20	0.06527	0.20826	0.00456
	Mayurbhanj-I	27	23	4	7	0.01862	0.00096	673.00	2.29350	0.03390	0.00197
	Mayurbhanj-II	15	20	5	4	0.01735	0.00192	123.00	0.91470	0.01200	0.00178
	Nabarangapur	30	32	5	6	0.01875	0.00200	80.90	0.96000	0.00000	0.00372

Year	Name of KVK	Change in family income (%)	Change in family consumption level (%)	Change in availability of agricultural implements/ tools (no. per household)	Number of technologies identified after assessment	Upgraded skills and knowledge of farmers (in lakh)	Oriented extension personnel in frontier areas of agricultural technology (in lakh)	Increased availability of quality seed (q)	Increased availability of quality planting material (in lakh)	Increased availability of live-stock strains and fingerlings (in lakh)	Testing of soil & water samples for balance fertilizer use (in lakh)
	Rayagada	19	24	4	2	0.01956	0.00086	245.00	0.19500	0.04129	0.00356
	Sundargarh-I	20	27	5	7	0.01930	0.00096	92.06	0.91000	0.01010	0.00238
	Sundargarh-II	20	31	2	3	0.01227	0.00105	0.00	0.00000	0.00000	0.00243
	Nicobar	16	10	4	3	0.00462	0.00023	0.01	0.08450	0.00000	0.00010
Sub-total		***220***	***233***	***41***	***43***	***0.15240***	***0.01000***	***1678.17***	***7.55894***	***0.30655***	***0.03100***
Average		***22***	***23.3***	***4.1***	-	-	-	-	-	-	-
2022-23	Gajapati	23	23	5	3	0.01265	0.00044	0	1.89484	0.00000	0.00220
	Kandhamal	21	25	3	3	0.01396	0.0030	271.08	2.10000	0.00330	0.00390
	Malkangiri	23	28	5	3	0.01378	0.00108	154.26	0.98620	0.76500	0.00375
	Mayurbhanj-I	30	34	5	3	0.01043	0.00157	959.15	2.23400	0.05500	0.00276
	Mayurbhanj-II	30	36	5	2	0.01027	0.00189	196.30	1.07050	0.01800	0.00026
	Nabarangapur	21	20	4	4	0.01525	0.00112	261.12	1.28704	0.00000	0.01460
	Rayagada	21	16	5	4	0.01732	0.00146	267.24	0.38011	0.00800	0.00340
	Sundargarh-I	19	21	4	4	0.01312	0.00110	148.00	0.68100	0.50987	0.00422
	Sundargarh-II	19	21	3	4	0.01587	0.00123	0.00	0.00000	0.00000	0.00382
	Nicobar	15	16	3	2	0.00965	0.00014	0.00015	0.01640	0.00000	0.00000
Sub-total		***222***	***240***	***42***	***32***	***0.13230***	***0.01303***	***2257.15***	***10.65009***	***1.35917***	***0.03891***
Average		***22.2***	***24***	***4.2***	-	-	-	-	-	-	-
Total		***1258***	***1268***	***217***	***117***	***0.93334***	***0.06431***	***8480.01***	***41.5967***	***3.52828***	***0.23216***
Overall average		***20.97***	***21.13***	***3.62***	-	-	-	-	-	-	-

CHAPTER 6

TECHNOLOGIES SCALED-UP

The potential technologies which were successfully demonstrated by the KVKs were scaled up with the help of state line departments and other organizations for their wider adoption of the farmers in the districts. The KVK-wise details of those scaled up technologies done by the KVKs under TSP/STC during the period from 2017-18 to 2022-23 have been shown in the table below.

Table: Details of scaled-up technologies demonstrated by the KVKs under TSP/STC during 2017-18 to 2022-2023

Name of state/UT	Name of KVK	Name/title of technology scaled up	Brief about technology	Area covered in the district (in ha)	Unit established in the district (No.)	Total no. of farmers involved
Odisha	Gajapati	Introducing maize var. *'Kalinga Raj'*	Maize var. *'Kalinga Raj'* is medium duration, suitable for *kharif* upland situation with potential yield of 79.5 q/ha. The var. is resistant to common rust, moderately resistant to MLB and TLB	300	-	750
		Popularizing improved ragi variety *'Arjuna'* in *kharif*	Ragi var. *'Arjuna (OEB-526)'*, is 126 days duration, moderately resistant to leaf blast, finger blast and brown seed disease. It has high yield (20 q/ha) potential	700	-	2500
		Popularization of on octagonal hand maize sheller	Octagonal in shape and mild steel body with four tapered cutting fins	400	-	1000
	Kandhamal	INM and IPM technology in garden pea	High yielding variety garden pea *'GS-10'*, FYM 5 t/ha, seed rate 50 kg/ha, seed treatment with rhizobium 20 g/kg of seed, spacing 30 x 10 cm, application of biofertilizers @ 12 kg/ha (Azotobacter + Azospirillum + PSB: 4+4+4= 12 kg/ha), application of boron @ 1kg/ha at the time of sowing, application of 75 % of recommended dose of N:P2O5:K2O as per soil test results and need based application of plant protection chemicals	1200	-	9600
		INM and IPM technology in cabbage	Hybrid cabbage variety *'Hare Krishna'*, seed rate – 0.3 kg/ha, FYM 5 t/ha , spacing (60 x 45) cm, seed treatment with vitavax power @ 2 gm /kg seed, application of biofertilizers @ 12 kg/ha (Azotobacter + Azospirillum + PSB: 4+4+4= 12 kg/ha), soil application of boron @ 1 kg/ha at the time of sowing, application of 75 % of recommended dose of N:P2O5:K2O as per soil test results and need based application of plant protection chemicals	950	-	6650
		INM and IPM technology in cauliflower	Hybrid cauliflower variety *'Poornima'*, seed rate- 0.3 kg/ha, FYM 5 t/ha , spacing (60 x 45) cm, seed treatment with vitavax power @ 2 gm /kg seed, application of biofertilizers @ 12 kg/ha (Azotobacter + Azospirillum + PSB: 4+4+4= 12 kg/ha), soil application of boron @ 1 kg/ha at the time of sowing, application of 75 % of recommended dose of N:P2O5:K2O as per soil test results and need based application of plant protection chemicals	1020	-	9180
		Cultivation of paddy straw and oyster mushroom	Technologies of paddy straw mushroom spawn production during *kharif* and oyster mushroom spawn production during *rabi* were popularized among farmers	-	100	510
		Popularizing different improved poultry breed	Improved breed like *'Kaberi'*, *'Sonali'*, *'Kadaknath'*, *'Vanaraja'* etc. have been popularized in the district	-	7000	2000

Name of state/UT	Name of KVK	Name/title of technology scaled up	Brief about technology	Area covered in the district (in ha)	Unit established in the district (No.)	Total no. of farmers involved
	Malkangiri	Popularizing backyard poultry	Poultry breeds like *'Kadaknath'* and *'Sonali'* were popularized under backyard poultry farming 20 birds per unit		1000	500
		Drudgery reduction through using small implements	Improved sickle, rake, khurpi, okra pluckier, maize sheller, spray machine, spade, crow bar etc. were distributed		250	250
		Popularizing mushroom farming	Cultivation of oyster mushroom var. *P sajarcaju*		300	300
		Use of micro nutrient management in oil seed crops (sesame and sunflower)	Use of sulphur in oilseed crops like sesame variety *'Smarak'* and Sun flower variety *'Kaveri'*	100	-	106
	Mayurbhanj-I	Popularizing poultry rearing	Popularized the rearing of *'Rainbow Rooster', 'Kadaknath', 'Aseel'* and *'Vezaguda'* poultry birds under backyard rearing	-	624	600
		Popularizing mushroom cultivation	Popularized scientific mushroom cultivation- i) Paddy straw mushroom production by using mushroom spawn var. *Volvariella volvaceae.* Bundled paddy straw substrate (3 layers) with normal practice (soaking of 7 kg straw in water for 10-12 hrs, bed preparation with addition of spawn and pulse powder 3%); ii) Oyster mushroom production by using mushroom spawn var. *Pleurotus sajor-caju,* bundled paddy straw substrate (3 layers) with normal practice (soaking of 2 kg straw (1.5-2" in water for 10-12 hrs, oyster mushroom bag preparation with addition of spawn and boiled wheat-3%)	-	540	540
		Hybrid gyno-dioecious papaya based nutritional gardening in backward condition under TSP programme	Gyno-dioecious papaya var. *'Red lady'* in backyard condition to alleviate nutritional deficiency (mostly vit. A) common in tribal villages of Mayurbhanj	591	-	1120
		Community-based nursery raising	Engagement of migrant's labours for their sustainable livelihood through group approach through providing 200 micron UV stabilized polythene sheet	-	522	522
	Mayurbhanj-II	Scientific rearing of poultry birds under free-range system	Rearing of poultry breed *'Rainbow Rooster', 'Kadaknath', 'Aseel', 'Palishree'* and *'Vezaguda'* after vaccination and scientific feeding	-	859	800
		Mushroom cultivation for nutritional security	Cultivation of paddy straw mushroom (*Volvareilla volvaceae*) and oyster mushroom (*Pleurotus sajor-caju* and P. *Florida, Hypsizygus ulmarius)* with scientific management practices	-	538	500
		Hybrid maize production through improved package and practices	Hybrid maize variety *'Kalinga Raj (OMH 14-27)'* production through INM and IPM technologies	215	-	514
		Mechanized DSR	Line sowing of rice after pre monsoon in well prepared seed bed by seed cum fertilizer drill followed by following herbicide protocols	945	-	1120

Name of state/UT	Name of KVK	Name/title of technology scaled up	Brief about technology	Area covered in the district (in ha)	Unit established in the district (No.)	Total no. of farmers involved
		Papaya based vegetable farming	Popularizing vegetable production in papaya field with INM technologies	225	-	562
		Mechanized sowing of maize	Line sowing of maize by tractor drawn seed cum fertilizer drill	570	-	1425
		Value addition of finger millet	Preparation of value added products from millet (50%) + 50% maida such as laddu, kurkure, biscuit, muduku etc		556	1570
		Management fall armyworm in maize	Applying *Beauveria bassiana* @ 400 gm/acre. Apply 1.5% Chloropyrifos dust thickly in the field bund for avoiding migrating from one field to another field	1400	-	2750
		Packages of practices of mustard cultivation	Scientific cultivation of improved variety mustard through-i) Spraying of Azadirachtin 0.15 % and Acephate + Fenvalerate 0.028 % to control aphids, ii) Line sowing by seed cum fertilizer drill and iii) STBF application	750	-	1840
		Nutritional garden for improving nutritional security of farm family	Nutritional garden with protein vitamins & iron rich vegetables and fruits with consumers preference, trellis structure with pp rope for raising cucurbit, protray for raising seedlings in small quantity, and cement ring tank for vermi composting	-	780	780
	Nabarangpur	Popularization of finger millet var. *'Arjun (OEB526)'*	Popularized OUAT developed high yielding finger millet variety *'Arjun (OEB526)'* with the help of district Agril. Department, Nabarangpur. The variety was incorporated in the 'Odisha Millet Mission Programme' in all 10 blocks of Nabarangpur district	300	-	700
		Scientific oyster mushroom cultivation	Popularized scientific cultivation practices of oyster mushroom	-	512	1575
	Rayagada	Introduction of sweet corn var. *'Sugar-75'*	Sweet corn was introduced with following package of practices- Spacing: 60 x 25 cm, fertilizer dose of NPK:80:40:40 kg/ ha, seed rate: 6 kg/ ha	264	-	512
		Introducing *'Vanaraja'* poultry under backyard system	*'Vanaraja'* was introduced with following management practices- 21 days old birds, timely vaccination and supplementary feeding and birds become upto 2.6 kg within 8 months	-	616	616
		Introducing hybrid sunflower var. *'PAC 334'*	Cultivation of hybrid sunflower var. *'PAC 334'* with spacing of 60 x 30 cm, fertilizer dose- 80:80:60 kg NPK/ha, foliar spraying of Boron @ 1kg/ha and need based PP chemicals	343	-	660
		Popularization of finger millet var. *'Arjun (OEB526)'*	Popularized finger millet var. *'Arjun (OEB526)' against* var. *'Bada Mandia'*	218	-	568
		Integrated weed management in cotton	Application of Pendimethalin @ 1.0 Kg a.i./ ha as pre-emergence with Qiizalofop-p-ethyle @ 50g a.i./ ha and one hand weeding at 45 DAS	428	-	710
		Introduction of intercropping of cotton in pigeon pea with 8:2 ratio	Popularized the intercropping of cotton with pigeon pea with 8:2 ratio	1225	-	2130
		Introduction of drought tolerant rice varieties in rain-fed uplands	Drought tolerant var. *'Swarna Shreya'* was introduced against existing var. *'Sahabhagi Dhan'*. in rainfed uplands	387	-	932
		Introduction of medium duration rice var. *'Hasanta'* for BPH tolerance	Variety *'Hasanta'* was introduced against farmers existing var. *'Pratikshya'*	254	-	620

Name of state/UT	Name of KVK	Name/title of technology scaled up	Brief about technology	Area covered in the district (in ha)	Unit established in the district (No.)	Total no. of farmers involved
		Introduction of pigeon pea var. *'PRG-176'* in rainfed upland	Drought and pod borer pest tolerant var.*'PRG-176'* was inintroduced	412	-	810
		Management of tea mosquito bug in cashew	Application of Lambda cyhalothrin @ 2 ml/lt. at new flushing stage, Malathion @ 2 ml/lt. at flowering and Profenophos @ 2 ml/lt. at fruiting stage	342	-	822
		Introduction of ragi thresher-cum-pearler	A ragi thresher cum pearler has been developed for simultaneous threshing and pearling operation of harvested and dried ragi fingers. The output of the machine was 80-85 kg/h with 92% threshing efficiency. This machine can be operated by 1.0 hp electric motor and threshing and cleaning efficiency of this equipment were 90-93% and 90-92%, respectively	314	-	805
		Scientific paddy straw mushroom cultivation	Scientific (soaking substrate in lime water, cultivation in bundles, covering polythene till completion of mycelium, adequate watering and proper bed dimension) cultivation of paddy straw mushroom	-	612	612
		Management of fall armyworm	Dusting 1.5% D Chlorpyriphos in bund @ 25 kg/ha just after germination, need based spraying of Chloropyriphos + Cypermethrin @ 2 ml/ lit and Chlorantraniliprole 18.5% SC @ 0.4 ml/ lit, alternately at 10 days interval	480	-	864
		Introduction of oyster mushroom (*P. pulmonarius)* cultivation during winter	Introduced oyster mushroom cultivation (Biological efficiency > 20-30 days, crop cycle 45-60 days, soft in texture & appreciable taste & flavour and farmers and accepted for high biological efficiency and more yield)	-	583	583
		Pod borer management in pigeon pea	Maize as border crop, pheromone traps & helilure @ 20 nos./ha, spraying of Azadiractin 0.15% @ 1.5 l/ha at 50% flowering followed by Flubendiamide 48SC @ 200ml/ha (2ml/5 litre water) at pod formation stage and Bt @ 1kg/ ha (2 g/litre) at 15 days intervals	386	-	640
	Sundargarh-I	Application of Zinc and Boron in transplanted rice	STBF + Basal application of $ZnSo_4$ (21% Zn) @ 25kg/ha + Foliar application of Boron (20%) @ 1.5g/lt at flowering stage	500	-	1200
		Effect of short duration technology videos on technology adoption	Prepared short duration (1.5-2.0 minutes) videos on different technologies of selected commodities and the same were sent through *Whatsapp* of identified farmers for its adoption	-	1000	2500
		Introduction of milky mushroom cultivation for income generation (*Calocybe indica*)	Milky mushroom (*Calocybe indica*) was introduced	-	500	500
		Popularizing paddy straw mushroom	Popularized paddy straw mushroom	-	8000	8000
		Introduction of honey bee rearing	Scientific beekeeping with *Apis-cerana indica* introduced	-	500	500
		Popularized vermicomposting	Vermicomposting was popularized	-	1000	1000
		Iron toxicity management in rice	Iron toxicity in rice was managed with application of 25 kg $ZnSo_4$/ha and top dressing of MOP@ 30 kg/ha after drainage of water	530	-	1600

Name of state/UT	Name of KVK	Name/title of technology scaled up	Brief about technology	Area covered in the district (in ha)	Unit established in the district (No.)	Total no. of farmers involved
		Nutritional garden for nutritional security of farm families	Nutritional garden with Protein, Vitamin & iron rich vegetables and fruits	-	650	650
		Popularizing oyster mushroom *(Hyspizygus ulmarius)*	Scientific oyster mushroom *(Hyspizygus ulmarius) cultivation* (straw cutting 2-3 inches, soaking in 2% $CaCo_3$ for 6 hrs straining with moisture 65%, Spawn-150 gm) cultivation was popularized	-	550	550
		Introduced scientific rearing of coloured poultry birds under backyard system	Rearing of coloured poultry bird under backyard system with proper vaccination was introduced.	-	600	600
		Introduction of drought tolerant rice variety *'Swarna Shreya'*	Line transplanting of drought tolerant rice var. *'Swarna Shreya'* with RDF (60:30:30 Kg/ha) and application of post emergence herbicide Bispyribac sodium (200 ml/ha) for controlling weed	600	-	1650
		Preparing ragi biscuits for nutritional security	Ragi biscuit preparation was introduced for nutritional security	-	500	500
	Sundargarh-II	Introduction of garden pea cultivation	Garden pea variety 'KSP-*110*' were introduced; seed treated with Carbendazim; sown in spacing 50 x 20 cm; NPK applied @ 50:75:50 kg/ha	80	-	370
		Popularized nutritional garden	Trellis structure with Plastic rope for raising cucurbits, protray/ low-cost poly tunnel for raising seedlings in small quantity + vermi bed for composting. Growing of vegetables round the year covering leafy vegetables, Solanaceous vegetables, roots and tubers, cucurbits suiting to consumption pattern + two papaya plants, one lemon, one drumstick and two banana and floriculture in bunds	-	650	650
		Scientific backyard poultry rearing	Rearing of poultry bird i.e. *'Kadaknath'*, *'Saurangi'* and *'Assel'* under backyard free range system with vaccination and healthcare	-	300	300
		Paddy straw and oyster mushroom cultivation	Popularization of paddy straw and oyster mushroom cultivation following scientific methods	-	330	330
		Introduction of hybrid maize (*'Kalinga Raj'*)	Introduced OUAT developed hybrid variety *'Kalinga Raj'* with spacing 60 x 25 cm, NPK 120:60:60 and weed management by application of Atrazine	50	-	250
A & N Islands	Nicobar	Popularizing vegetable cultivation	Round the year vegetable (Okra, brinjal, and cowpea) cultivation was popularized	10	-	20
		Popularizing scientific pig rearing	Scientific pig rearing was popularized among Island farmers		30	20
		Popularizing integrated farming system	Horticulture-based integrated pig and poultry farming were popularized	7	-	12

CHAPTER 7

SELECTED SUCCESS STORIES

The KVKs of this zone guided the tribal farmers to establish their agri-business and documented the success cases of many tribal farmers during the period under report which are described as under.

Gajapati KVK

Farm innovator becomes an opinion leader

Name	:	**Sri Rama Badamundi**
Address	:	**Village- Alama, G.P.- Subalada, Block- R. Udayagiri, District- Gajapati, Odisha**
Land holding	:	**6 Acre**
Contact no.	:	**09439160795 (M)**

Sri Rama Badamundi is a progressive farmer who has 6 acre farm land where he used to grow maize in 2 acre (rainfed unbunded upland), rice in 2 acre (rainfed medium land) in *kharif* season and vegetable during *rabi* season. With the intervention of KVK scientists, he adopted intercropping of maize + cowpea (2:2) at 30 x 90 cm (plant to plant- 30 cm) spacing and gained profit as compared to sole cropping of maize. As per the advice of the scientist, he used hybrid maize variety *PAC 740* and a bushy type YMV resistant cowpea variety *Kashi Kanchan* for intercropping. He followed seed treatments in cowpea with *Rhizobium* culture and using *Azotobacter* and *PSB* in vegetables. He applied fertilizers on the basis of soil test results as per recommendations given by KVK scientists. The integrated nutrient (INM) and pest management (IPM) practices were also practiced in rice which increased his income. The income from vegetables was raised due to INM in offseason cauliflower and *rabi* knolkhol. He cultivated high value vegetable crops like broccoli, carrot, radish, tomato and garden pea. Sri Badamundi also encouraged his fellow farmers to follow the above technologies and practices.

Not only that, Sri Badamundi has designed a three tyne cycle weeder which is being used for weeding, hoeing and hedging operation in the vegetable fields. The implement works 3 times better than manual labour with a capacity of 180-200 m^2 per hour in comparison to human capacity of 50-60 m^2 per hour, and the cost of operation is only Rs.1250/-. His innovation has

been appreciated at the district as well as state level. He was recognized by ICAR-ATARI Kolkata and felicitated in the Farm Innovators' Meet at ATARI Kolkata during the year 2018-19. Farmers of his village and nearby villages are also procuring his designed weeder and are using in their field operations.

Table: Economics of farming, spread of technologies and social impact

Enterprise	*Gross cost (in Rs.)*	*Gross return (in Rs.)*	*Net return (in Rs.)*	*B:C Ratio*
Before intervention				
Rice	24000	41600	17600	1.73
Maize	26250	45000	18750	1.71
Mango	17500	37500	20000	2.14
Total	**67750**	**124100**	**56350**	
After intervention				
Rice	27600	60800	33200	2.20
Maize + Cowpea	25800	64000	38200	2.48
Mango	22125	52500	30375	2.37
Vegetables	27470	80000	52530	2.91
Total	**102995**	**257300**	**154305**	

Enterprise	*Horizontal spread*		*Vertical spread*		*Overall impact**
	Area covered (ac or ha) /no. of livestock unit or no. of livestock	*No. of farmers*	*Area covered (ac or ha) / no. of livestock unit or no. of livestock*	*No. of farmers*	
Before intervention					
Rice	3 ha	14	7 ha	38	3
Maize	5 ha	23	10 ha	46	4
Mango	11 ha	54	17 ha	67	3
After intervention					
Rice	17 ha	54	24 ha	76	4
Maize+Cowpea	28 ha	96	34 ha	178	5
Mango	21 ha	83	37 ha	157	4
Vegetables	19 ha	134	31 ha	192	4

**1-5 scale; 1= Lowest and 5= Highest*

He has been recognized as an innovative and progressive farmer among his fellow farmers. His interview was telecasted in Doordarshan's Kristi Darshan programme which created more popularity among the farming community of nearby villages. He also encourages his farmer friends to follow soil test-based fertilizer application and use of organic manures in agricultural farming. The farmers of nearby villages have been influenced by his technology adoption.

High value vegetable cultivation as a source of additional agricultural income

Name	:	**Sri Iswar Raita**
Address	:	**Village- Kankadaguda,G.P.- Sabarpalli, Block- R. Udayagiri, District- Gajapati, Odisha**
Land holding	:	**4 Acre**
Contact no.	:	**08480305782 (M)**

Sri Iswar Raita, a small farmer of Kankadaguda village, was heading a five-member family. He had 4 acre land in which he usually cultivated maize in 2 acre, rice in 2 acre during *kharif* season. He also had 4 dairy cows. He used to cultivate maize wherein the seed and all other critical inputs were supplied by Sahukar of his village from which he could earn very low profit. Due to lack of knowledge and guidance, he was unable to utilize the perennial water source nearby his fields during *rabi* season. He came in contact with the scientists of Gajapati KVK. During one training programme in the year 2016-17 at the KVK, he was identified as a very hard working and adoptive farmer. After sincere advice, technical guidance and motivation from the KVK scientists, he procured hybrid maize seed and other inputs from his own and adopted improved package of practices, soil test-based fertilizer application in rice and maize, used micronutrients in maize, adopted pest management practices in rice and saved other input costs out of it. He procured a pair of cattle and one pump set from the saved money which he utilized in vegetable cultivation during *rabi* season in half acre land.

During different OFT and FLD programmes, he was provided with two honey bee boxes and high value vegetable (broccoli, cauliflower, tomato, brinjal and onion) seedlings. He had regular contact with the KVK, attended different meetings including farmer-scientist interaction and the scientists used to visit his farm frequently.

Table: Economics of farming, spread of technologies and social impact

Enterprise	Gross cost (in Rs.)	Gross return (in Rs.)	Net return (in Rs.)	B: C Ratio
Before intervention				
Rice	36000	47600	11600	1.32
Maize	29600	51000	21400	1.72
Desi cow	24000	31200	7200	1.30
Total	**89600**	**129800**	**40200**	
After intervention				
Rice	17000	35100	18100	2.06
Maize + Garden pea	25800	64000	38200	2.48
Vegetables	84000	192000	108000	2.29
Dairy cow	32400	43200	10800	1.33
Total	**159200**	**334300**	**175100**	

Enterprise	Horizontal spread		Vertical spread		Overall impact*
	Area covered (ac or ha) /no. of livestock unit or no. of livestock	No. of farmers	Area covered (ac or ha) / no. of livestock unit or no. of livestock	No. of farmers	
Before intervention					
Rice	3 ha	14	7 ha	29	2
Maize	5 ha	23	14 ha	71	3
Cow	2 in no.	12	2 in no.	16	3
After intervention					
Rice	19 ha	76	34 ha	119	5
Maize + Garden pea	31 ha	95	48 ha	137	5
Vegetables	17 ha	123	39 ha	182	4
Cow	3 in no.	34	3 in no.	41	4

**1-5 scale; 1= Lowest and 5= Highest*

As a small tribal farmer, he becomes a role model for all the other farmers of Kanakadaguda and nearby villages of R. Udayagiri block. He was also a member of SAC of Gajapati KVK during 2016-17 to 2018-19. Now, he increased the area up-to 1 acre for vegetable cultivation throughout the year and is planning to buy a tractor for agricultural operations.

Kandhamal KVK

Nutritional security through backward poultry rearing and mushroom cultivation

Name : **Mrs. Bhaktimala Nayak**

Address : **Village-Guduripadi, P.O.-Kanbagiri, Block- G.Udayagiri, District- Kandhamal, Odisha**

Land holding : **2.5 Acre**

Contact no. : **08280804452 (M)**

Mrs. Bhaktimala Nayak, W/O- Shri Samson Nayak of village Guduripadi, district- Kandhamal, Odisha, is a progressive lady with a zeal to do something substantial to benefit her family and society. As her husband had a marginal land holding, it

became very difficult for them to earn their livelihood from the existing resources. They had a very harsh life with lots of grief and hunger. Mrs. Nayak approached Krishi Vigyan Kendra Kandhamal and attended the trainings of oyster mushroom cultivation and backyard poultry rearing with high yielding colour breeds during September, 2019. Then, she started mushroom cultivation in her house as per the guidance and support from the scientists of KVK and supplied with the required number of spawn bottles from KVK Kandhamal under TSP project. Inspired by the initial success with encouraging support from her husband, she constructed a low-cost mushroom production unit at the cost of Rs. 30000/- which was attached to her house and started producing mushroom regularly. She also made a small night shelter for 100 birds at the cost of Rs. 10000/- and started backyard poultry rearing. To begin with the poultry brooding unit, KVK provided her 100 numbers of 21-day-old *Vanaraja*, *Kadaknath* and *Kalinga* brown poultry chicks under TSP project.

Based on her experience, she started offering hands-on training to other farm women in groups and to the youths to disseminate the technologies. Inspired by her success, many farm women from the nearby areas started approaching KVK Kandhamal during COVID-19 lockdown period for starting those small income generating enterprises at their backyards for sustenance and managing the livelihood. Due to her initial effort, many mushroom growers have come up in G. Udayagiri block and for which there was no scarcity of mushroom during the winter season.

Table: Economics of farming, spread of technologies and social impact

Enterprise	Gross cost (in Rs.)	Gross return (in Rs.)	Net return (in Rs.)	B: C Ratio
Before intervention				
Rice	12000	33600	21600	1.8
Total	**12000**	**33600**	**21600**	
After intervention				
Rice	15000	42000	27000	1.8
Poultry	20000	72000	52000	2.6
Oyster mushroom	40800	220800	180000	4.4
Total	**75800**	**334800**	**259000**	

Enterprise	Horizontal spread		Vertical spread		Overall impact*
	Area covered (ac or ha) /no. of livestock unit or no. of livestock	No. of farmers	Area covered (ac or ha) / no. of livestock unit or no. of livestock	No. of farmers	
Before intervention					
Rice	110 ha	120	8.57 ha	120	4
After intervention					
Paddy	215 ha	312	10.7 ha	312	5
Poultry	78 ha	21	78 ha	21	4
Oyster mushroom	102 ha	10	100 ha	10	5

**1-5 scale; 1= Lowest and 5= Highest*

N.B.: Sale rate paddy @ 1400/qtl, Sale rate of oyster mushroom @ Rs. 115/- per kg, Cost of poultry chicks @ Rs. 400/- per chick.

Mrs. Nayak could able to put around 1600 bags of oyster mushroom during October to March and produced a total of 19.20 q mushroom during 2020-21. The produce could earn her a total net profit of Rs. 180000/- within 6 months. She sold all the produces from home in retail mode. She started producing dry mushroom in case of excess production and during distress sale. During summer months, owing to the reduction in yield of oyster mushroom, she put more effort on backyard poultry rearing by which she could earn an additional income of Rs. 52000/- from 200 numbers of poultry birds. In total, Mrs. Nayak earns around Rs. 232000/- per annum without having any land resources from two above enterprises.

Off season vegetable cultivation as an alternate source of livelihood improvement

Name	:	**Mr. Janardan Pradhan**
Address	:	**Village- Penala, Block- Tikabali,**
		District- Kandhamal, Odisha
Land holding	:	**5 Acre**
Contact no.	:	**09692968823 / 0876392589 (M)**

During COVID-19 pandemic, one 28 years old tribal youth, Sri Janardan Pradhan, the brother of three, belongs to Penala village of Kandhamal district, returned home from Kerala with lots of despair, grief and hunger. He had no idea of his future as

his family was having marginal land holding with no background of modern agricultural practices. He had only 0.4 ha rainfed medium land for paddy cultivation and 0.4 ha irrigated upland on which his family was cultivating various vegetables like tomato, brinjal and cucurbits following traditional practices. They could earn an annual income of Rs. 50000/- from their existing land and bound to sustain miserably. He heard the name of KVK Kandhamal from somebody. When the scientists of KVK Kandhamal were surveying his village in search of some young, energetic and enthusiastic farmers for involving in different activities under tribal sub plan project. Under TSP project, KVK included Mr. Pradhan as a beneficiary for conducting the activity of off-season chilli cultivation during *kharif* 2020. He was advised to conduct the demonstration which included, use of highly pungent HYV chilli var. *Suryamukhi* with tolerance to wilt & thrips, application of vermicompost @ 5 q/ha, soil test-based fertilizer and micronutrient application and application of VAM @ 20 kg/ha and bio-consortia @ 12 kg/ha and following need-based plant protection measures. All the critical inputs were provided from the project fund and fields were regularly monitored by the KVK scientists. The demonstration started during July 2nd fortnight by raising nurseries, the 1st picking was done after 70 DAT and continued for as long as 4 months with a total of 11 pickings.

After completion of the crop period, it was found that Mr. Pradhan could able to harvest a total of 64.4 q green chilli from his 0.4 ha land which accounted to a yield of about 161.2 q/ha with reduced disease and pest incidence. He got a higher price of Rs. 5000/- per q due to more market demand in the peak season as well as the high pungency character of the variety. He got a net profit of Rs. 211000/- from his 0.4 ha land which was around 65% more than the traditional practice followed by other farmers in his village.

Table: Economics of farming, spread of technologies and social impact

Enterprise	*Gross cost (in Rs.)*	*Gross return (in Rs.)*	*Net return (in Rs.)*	*B: C Ratio*
Before intervention				
Rice	3200	8960	5760	1.8
Tomato	14004	36325	22321	1.6
Brinjal	12643	34562	21919	1.73
Total	**29847**	**79847**	**50000**	
After intervention				
Rice	4000	11200	7200	1.8
Chilli	62546	273746	211000	3.37
Total	**66546**	**284946**	**218200**	

Enterprise	Horizontal spread		Vertical spread		Overall impact*
	Area covered (ac or ha) /no. of livestock unit or no. of livestock	No. of farmers	Area covered (ac or ha) / no. of livestock unit or no. of livestock	No. of farmers	
Before intervention					
Rice	121 ha	25	8.57 ha	25	4
Tomato	321 ha	45	250.40 ha	45	4
Brinjal	250 ha	39	258.60 ha	39	4
After intervention					
Rice	185 ha	32	10.60 ha	32	4
Chilli	398 ha	52	136.10 ha	52	5

**1-5 scale; 1= Lowest and 5= Highest*

The outcome of the demonstration has motivated the other nearby farmers to adopt chilli cultivation with recommended package of practices during off-season period to fetch more and more net profit. Mr. Pradhan's success was recognized by many leading farmers, Govt. officials and other NGOs during the crop period and he got lots of confidence. From this success, Mr. Pradhan could able to purchase one motorbike for easy transporting of his produce and an android mobile set. He could able to engage 2 labourers for 4 months in his farm and renovated his dilapidated house. Now, he has become a source of inspirations for other farmers in the nearby villages and other farmers also following chilli cultivation.

Malkangiri KVK

Tribal youth becomes pioneer farmer in the district

Name : **Mr. Prakash Chandra Durka**

Address : **Village- Korkonda,**
District-Malkangiri, Odisha

Land holding : **6 Acre**

Contact no. : **09777104108 (M)**

Mr. P. C. Durka is a very young, energetic and hardworking tribal youth from Korkonda Village, District- Malkangiri, Odisha who belonged to 6 acres parental upland irrigated land in South Eastern Ghat Zone for agricultural production. He had keen interest in agriculture from his childhood and used to help his father in different agri-operations. In their land, with his parents, he used to cultivate rice and groundnut under conventional methods. From which they could earn an annual profit of Rs. 1.76 lakh which was not satisfactory. Mr. Prakash was searching for the new available technologies for agriculture and approached scientists of KVK Malkangiri. As per advice of scientists, he attended various skill development training programmes at the KVK on scientific management of rice, groundnut, sweet corn, water melon and many others. He diversified his total land for all the above crops in place of only two crops in a year. Finally, he requested KVK Malkangiri to demonstrate those crops in his field along with new available package of practices. Accordingly, KVK demonstrated '*Kalinga dhan-1203*', '*Kalinga dhan-1205*', '*Mandakini*', '*CR Dhan-202*', disease resistant variety of groundnut and sweet corn var. '*VL Sweet Corn-1*' and '*Pusa Sweet Corn-1*' in his fields. It resulted increase in his annual profit of about Rs. 3.2 lakh which was substantially higher than his earlier annual income.

Table: Economics of farming, spread of technologies and social impact

Enterprise	Gross cost (in Rs.)	Gross return (in Rs.)	Net return (in Rs.)	B: C Ratio
Before intervention				
Rice	70000	122472	52472	1.74
Groundnut	176000	300000	124000	1.70
Total	**246000**	**422472**	**176472**	
After intervention				
Rice	70000	147852	77852	2.11
Groundnut	192500	342500	150000	1.77
Sweet corn	38000	85000	47000	2.23
Water melon	42300	85000	42700	2.0
Total	**342800**	**660352**	**317552**	

Enterprise	*Horizontal spread*		*Vertical spread*		*Overall impact**
	Acre or hectare covered/no. of livestock unit or no. of livestock	*No. of farmers*	*Acre or hectare covered/ no. of livestock unit or no. of livestock*	*No. of farmers*	
Before intervention					
Paddy	100 ha	20	3.8 ha	05	4
Groundnut	70 ha	40	7.5 ha	10	3
After intervention					
Rice	170 ha	32	20 ha	12	4
Groundnut	150 ha	60	45 ha	20	4
Sweet corn	50 ha	25	04	10	5
Water melon	30 ha	22	14	20	4

**1-5 scale; 1= Lowest and 5= Highest*

His hard work and curiosity in agriculture made him a *'Role Model'* in the village. Now, he has become one famous youth tribal farmer in the district and is helping other farmers to start agri-business. People from his village and from the adjacent villages are being convinced with his farming and are taking his advice time to time.

Mayurbhanj-I KVK

Integrated farming: An approach to boost up farmers family income

Name	:	**Mr. Radhanath Singh**
Address	:	**Village-Salbani, GP-Rangamatia, Block- Shayamakhunta, District-Mayurbhanj, Odisha**
Land holding	:	**6 Acre**
Contact no.	:	**09437855455 (M)**

The integrated farming system (IFS) approach introduces a change in the farming techniques for maximum production in the cropping pattern and takes care of optimal utilization of resources. The farm wastes are better recycled for productive purposes in the integrated system. The KVK plays active role in propagating the technologies, which were developed by different institutes with the help of line departments, among the farmers in the district. Among those farmers, Mr. Radhanath Singh, is a well-educated progressive and successful farmer from Salbani village of Mayurbhanj district, was very interested in developing IFS in his agricultural land. Seeing his enthusiasm in IFS, scientists of Mayurbhanj-I were visiting time to time to his farms to provide disease diagnostic services. Sometimes, Animal Husbandry and Fisheries department of the state were involved for the services. The KVK trained him for integrated insect pest, disease and nutrient management of different agricultural and horticultural crops. Mr. Singh was also enriched with knowledge on scientific fish management through state Fisheries department. He started cultivating papaya var. '*Red Lady*' which was supplied by the KVK. Mr. Singh started IFS near his residence with 2 fish ponds, 150 desi poultry birds, 8 milking cows and 6 acres crop field including horticulture. After adopting IFS, he is able to earn Rs 2.75 lakh to 3.5 lakh per annum from his land.

Table: Economics of farming, spread of technologies and social impact

Enterprise	*Gross cost (in Rs.)*	*Gross return (in Rs.)*	*Net return (in Rs.)*	*B: C Ratio*
Before intervention				
Rice	105000	146000	51000	1.39
Total	**105000**	**146000**	**51000**	
After intervention				
Maize	60000	102000	42000	1.70
Papaya	120000	250000	130000	2.08
Dairy	225000	350000	125000	1.56
Pisciculture	55000	125000	70000	2.27
Total	**460000**	**827000**	**367000**	

Enterprise	Horizontal spread		Vertical spread		Overall impact*
	Acre or hectare covered/no. of livestock unit or no. of livestock	No. of farmers	Acre or hectare covered/ no. of livestock unit or no. of livestock	No. of farmers	
Before intervention					
Rice	160 ha	32	5.25 ha	32	3
After intervention					
Maize	154 ha	45	10.50 ha	45	4
Papaya	143 ha	36	8.63 ha	36	5
Dairy	09	6	2	6	5
Pisciculture	15	8	3	8	5

**1-5 scale; 1= Lowest and 5= Highest*

The IFS provides him a sustainable income throughout the year for his family and he has improved his socio-economic status. He has been instrumental in facilitating exposure visit of farmers to his farm and he is famous as *'Role Model'* among his fellow farmers especially to the rural youths. Mr. Singh helped 12 farmers in adopting IFS which raised the productivity and income of farmers by several folds and thus, boosted their morale. He is providing spawn, fry and fingerlings for IMC to different farmers and is encouraging them for IFS. He is also providing chicks and raw materials for poultry sheds to the tribal farmers with the collaboration of Integrated Tribal Development Agency (ITDA). Integrated farming system has become a profitable venture if managed it scientifically and its adoption reduces the cost of external inputs and raises the productivity and profitability of the farm with a scope of earning additional income through value added products from milk and vegetables.

Tribal woman farmer achieved self-sufficiency through agri-enterprises

Name : **Mrs. Sonali Soren**

Address : **Village- Raikanjharan, GP- Betna, Block- Baripada, District-Mayurbhanj, Odisha**

Land holding : **3 Acre**

Contact no. : **09437252582 (M)**

Mrs. Sonali Soren is a hard-working tribal woman who proved herself as a successful agri-farmers in Mayurbhanj district of Odisha. She had 3 acres of land where she used to cultivate rice under traditional methods. The production was not sufficient enough to fill the stomach of her family members. She came in contact with the KVK scientists, discussed her problems with them and was motivated by the scientists. The scientists suggested her to take trainings for scientific farming. In some portion of her land was converted to mango orchard, other parts for hybrid maize, vegetables and mushroom production along with backyard poultry rearing. After converging with line departments, benefits were given from line departments for various Govt. schemes. Simultaneously, at the KVK, she was trained for hybrid maize cultivation, mushroom production, backyard poultry and adoption of intercropping in orchards.

Table: Economics of farming, spread of technologies and social impact

Enterprise	Gross cost (in Rs.)	Gross return (in Rs.)	Net return (in Rs.)	B: C Ratio
Before intervention				
Rice	36000	52000	16000	1.44
Total	**36000**	**52000**	**16000**	
After intervention				
Maize	30500	49000	18500	1.61
Mango	65000	145000	80000	2.23
Mushroom	36000	93000	57000	2.58
Poultry	18000	45000	27000	2.50
Vegetables	125000	282000	157000	2.26
Total	**274500**	**614000**	**339500**	

Enterprise	Horizontal spread		Vertical spread		Overall impact*
	Acre or hectare covered/no. of livestock unit or no. of livestock	No. of farmers	Acre or hectare covered/ no. of livestock unit or no. of livestock	No. of farmers	
Before intervention					
Rice	181 ha	38	7.40 ha	38	3
After intervention					
Maize	114 ha	45	6.50 ha	45	4
Mango	69 ha	36	8.63 ha	36	4
Mushroom	89	31	04	31	5
Poultry	105	42	09	42	5
Vegetables	165 ha	54	10.2 ha	54	5

**1-5 scale; 1= Lowest and 5= Highest*

Now, Mrs. Soren is producing hybrid maize, paddy straw mushroom, different types of vegetables during *kharif* and *rabi* season and poultry eggs and meat which resulted her to generate annual profit of Rs. 339500/-. She has not only increased her annual income but also improved her social status in the district. She is guiding many tribal farmers in the district and has become master trainer in horticultural crop production and mushroom cultivation. Other tribal women farmers get inspiration from her to start their agri-business in the area.

Mayurbhanj-II KVK

Jawan to Kisan: The tribal farmer proved- where there is a will, there is a way

Name	:	**Sri Debananda Pingua**
Address	:	**Village- Askipali, Block- Sukruli,**
		District-Mayurbhanj, Odisha
Land holding	:	**16 Acre**
Contact no.	:	**07077853587 (M)**

A retired army officer having strong determination become a successful farmer and now, he is leading a comfortable retirement life. He had 16 acres parental land in which he used to cultivate rice in the first year and got very less profit. Then, he approached KVK Mayurbhanj-II, Jashipur. As per advice of scientists of KVK, he participated in various skill training

programmes at the KVK on ICM, IPM and farm mechanization. The KVK started to provide technology on IPM, ICM and farm mechanization and convinced him to convert his uplands for maize cultivation. Accordingly, he started to cultivate rice in 12 acres and maize in 4 acres. He acquired knowledge and skill to use seed-cum-fertilizer drill machine in various crops including DSR. He also used power weeder-cum-ridger in maize, followed management practices of maize and mustard with insect/pest management through TSP programme of KVK. After that, he procured multi-crop seed-cum-fertilizer drill machine, power weeder-cum-ridger, rotavator, tractor, power tiller, axial flow thresher etc. and started a custom hiring centre from his own. In *rabi* season, he started cultivating wheat in 6 acres of land. Now, his annual net income is around Rs. 6.6 lakh and generated employment of 7 to 8 man-days throughout the year.

Table: Economics of farming, spread of technologies and social impact

Enterprise	*Gross cost (in Rs.)*	*Gross return (in Rs.)*	*Net return (in Rs.)*	*B: C Ratio*
Before intervention				
Rice	84790	220000	135210	1:62
Vegetables	110122	302000	191878	1:57
Poultry/ goatery	40500	90000	49500	1:81
Total	**235412**	**612000**	**376588**	
After intervention				
Rice/maize/wheat/mustard/sunflower	186744	470000	283256	1:65
Vegetables and fruits	214562	480000	265438	1:80
Poultry/goatery	176144	2,90,000	113856	2:54
Total	**577450**	**1240000**	**662550**	

Enterprise	*Horizontal spread*		*Vertical spread*		*Overall impact**
	Area covered (ac or ha) /no. of livestock unit or no. of livestock	*No. of farmers*	*Area covered (ac or ha) / no. of livestock unit or no. of livestock*	*No. of farmers*	
Before intervention					
Rice	93 ha	122	9.6 ha	122	4
Vegetables	121 ha	63	89.7 ha	63	4
Poultry/goatery	12 nos.	38	5 nos.	38	3
After intervention					
Rice/maize/wheat/ mustard/sunflower	143 ha	122	16.8 ha	122	4
Vegetables and fruits	204 ha	63	126 ha.	63	4
Poultry/goatery	25 nos.	38	13 nos.	38	4

**1-5 scale; 1= Lowest and 5= Highest*

Recently, with the assistance of ITDA, he cultivated maize in 70 acres by taking lease through participatory methods. He adopted DSR technology in 20 acres. Due to the adoption of DSR technology, he was able to reduce the cost of cultivation in rice and got more profit. By converting uplands from rice to maize and through mechanization, he fetched higher income from the same land. The initiative taken by Mr. Pingua has proved that tribals of the district can become successful entrepreneurs in agriculture. After his success in cultivation practices, hundreds of farmers of his village and nearby villages started cultivation of hybrid maize during *kharif* and mustard during *rabi*.

Integrated farming: Curiosity in farming leads to sustainability in livelihood

Name	:	**Sri Bhakta Bandhu Chattar**
Address	:	**Village- Tilusahi, Block- Raruan,**
		District-Mayurbhanj, Odisha
Land holding	:	**20 Acre**
Contact no.	:	**07894221700 (M)**

Coming from an ordinary tribal family Sri Bhakta Bandhu Chattar has become a successful farmer because of his curiosity in agricultural farming. With 20 acres of land, he used to cultivate rice following traditional methods but was not satisfied with his the then earnings. One day a team of scientists from KVK Mayurbhanj-II visited his village. He was the first person to

welcome them and expressed his keen interest in scientific farming. He enquired about improved practices in agriculture, horticulture and livestock. Then, he came to know about integrated farming and decided to adopt that. He participated in various skill training programmes of KVK related to INM, IPM, IWM and backyard poultry rearing. After that, he started to cultivate rice in 8 acre and maize in 4.5 acre in *kharif* and 6 acre of mustard and 2 acres of wheat in *rabi* season. He acquired knowledge and training in poultry management and started backyard poultry rearing which gave him additional income for sustainability. He followed scientific management practices of vegetable cultivation which was provided to him through TSP programme of KVK. At present, he is growing vegetables in 3.5 acres. His annual net income comes around Rs. 4.8 lakh which was substantially higher than his earlier income from agriculture. Not only that he generated employment for 5 to 8 man-days in a year.

Table: Economics of farming spread of technologies and social impact

Enterprise	Gross cost (in Rs.)	Gross return (in Rs.)	Net return (in Rs.)	B: C Ratio
Before intervention				
Rice	64599	187564	122965	1.52
Vegetables	91164	211077	119913	1.76
Total	**115763**	**398641**	**242878**	
After intervention				
Rice/Maize/Wheat/Mustard	115145	291000	175855	1.65
Vegetables	183889	404326	265438	2.19
Poultry	38452	84750	46298	1.83
Total	**337486**	**780076**	**487591**	

Enterprise	Horizontal spread		Vertical spread		Overall impact*
	Area covered (ac or ha) /no. of livestock unit or no. of livestock	No. of farmers	Area covered (ac or ha) / no. of livestock unit or no. of livestock	No. of farmers	
Before intervention					
Rice	65 ha	87	6.26 ha	87	4
Vegetables	223 ha	78	78.9 ha	78	4
After intervention					
Rice/Maize/Wheat/Mustard	118 ha	87	14.5 ha	87	4
Vegetables	325 ha	63	226 ha	78	4
Poultry	16 nos.	33	9 nos.	33	4

**1-5 scale; 1= Lowest and 5= Highest*

He got training on scientific goat farming from the KVK recently and is going to start goatery. Mr. Chattar has established himself as successful farmer and has become a role model for other tribal farmers in the locality. After his success in cultivation practices, more than 150 farmers of his village and nearby villages ere cultivating rice, vegetables, maize etc. throughout the year.

Nabarangpur KVK

Tribal farmer changed his income and social recognition through agri-farming

Name	:	**Shri Dambarudhar Nayak**
Address	:	**Village- Bhamini, Block- Umerkote,**
		District- Nabarangpur , Odisha
Land holding	:	**22 Acre**
Contact no.	:	**08984731856 (M)**

Shri Nayak from Bhamini village of Nabarangpur was associated with agricultural farming with his 22 acres of land following conventional methods. Rice and maize were the main crops and among vegetables, brinjal was selected by him. Out of his 22 acres land, he could utilize maximum 14 acres, remaining was unutilized. From 14 acres, he could earn around 3 lakh annually. The scientists of KVK Nabarangpur were searching the farmers who had sufficient agricultural land for conducting various demonstrations under TSP programme. He was contacted by the KVK. The KVK scientists visited his fields and explored the farming situations. He had rainfed medium land where he followed rice/maize-maize/vegetables-vegetable cropping system and also had 2 bore wells for winter and summer vegetables cultivation. After thorough discussion with him, scientists suggested him to include more vegetable crops like tomato, cauliflower in his cropping system and also to start new enterprise i.e. fishery after renovation of unutilized water body so that total land can be utilized for the agricultural production. Accordingly, Sri Dambarudha Nayak was provided with trainings on vermitechnology, INM, IPM, IDM on major field crops and mushroom cultivation in a phased manner. Apart from that, he was supplied with, small agri-implements, quality vegetable seedlings, plastic mulching sheet etc. by the KVK Nabarangpur. It resulted substantial increase in his annual profit which recorded more than Rs. 9 lakh.

Mr. Nayak is very enthusiastic farmer who uses to visit KVK Nabarangpur very often and he is being guided by the KVK for technical support time to time. Others farmers from his village and surrounding villages are frequently visiting his farm and are being motivated by him for agricultural farming. Through scientific farming, not only he has increased his income, but also gained social recognition in his area.

Table: Economics of farming spread of technologies and social impact

Enterprise	*Gross cost (in Rs.)*	*Gross return (in Rs.)*	*Net return (in Rs.)*	*B: C Ratio*
Before intervention				
Rice (8 acre)	88000	204000	116000	1.32
Maize (5 acre)	60000	170000	110000	1.83
Brinjal (1 acre)	40000	120000	80000	2.0
Total	**188000**	**494000**	**306000**	
After intervention				
Rice (10 acre)	130000	361000	231000	1.78
Maize (6 acre)	90000	288000	198000	2.2
Brinjal (2 acre)	50000	192000	142000	2.84
Tomato (2 acre)	50000	168000	118000	2.36
Cauliflower (1 acre)	30000	104000	74000	2.47
Fishery (1 acre)	55000	225000	170000	3.09
Total	**405000**	**1338000**	**933000**	

Enterprise	*Horizontal spread*		*Vertical spread*		*Overall impact**
	Area covered (ac or ha) /no. of livestock unit or no. of livestock	*No. of farmers*	*Area covered (ac or ha) / no. of livestock unit or no. of livestock*	*No. of farmers*	
Before intervention					
Rice	159 ha	34	20 ha	20	3
Maize	212 ha	29	130 ha	34	4
Brinjal	140 ha	22	45 ha	32	4
After intervention					
Rice	207 ha	51	21.50 ha	24	4
Maize	245 ha	44	48 ha	20	
Brinjal	75 ha	18	55 ha	29	4
Tomato	67 ha	20	40 ha	15	5
Cauliflower	50 ha	15	32 ha	14	4
Fishery	5 ha	18	7 ha	10	5

**1-5 scale; 1= Lowest and 5= Highest*

Agri-farming: A boon to the tribal farmers for increasing livelihood income

Name	:	**Shri Miri Bhatra**
Address	:	**Village- Managuda , Block- Jharigaon , District- Nabarangpur , Odisha**
Land holding	:	**13 Acre**
Contact no.	:	**09556659487 (M)**

Shri Miri Bhattra is a hard-working tribal farmer of Managuda village of Nabarangpur, Odisha. agriculture was the main source of his family income. He was cultivating rice, maize and brinjal in 9 acres area. Although he had 12 acres of cultivable land, 1 acre of pond and 2 nos. of borewell. He was not getting anything from his pond and other 3 acres land. His annual earning was around 2.2 lakh. When KVK team visited their adopted village Managuda, Shri Bhatra showed his interest in improved technologies for agricultural farming. The KVK team suggested him for other vegetables cultivation in his fields with judicious use of two borewells and also for seasonal fish farming in his existing pond after renovation. Then, he was imparted training on INM, IDM, IPM, organic farming, mushroom cultivation etc. The quality planting materials along with good quality hybrid seeds and other necessary inputs were provided him. Fertilizers were used after soil testing. Other related technical guidance and support were also provided to him from the KVK time to time. He used to visit KVK demo units and farm frequently for consulting scientists of KVK Nabarangpur. After adopting new technologies and scientific farming, he used total 13 acres land which gave him a net profit of Rs. 6.78 lakh in one year.

Table: Economics of farming spread of technologies and social impact

Enterprise	*Gross cost (in Rs.)*	*Gross return (in Rs.)*	*Net return (in Rs.)*	*B: C Ratio*
Before intervention				
Rice (4 acre)	48000	108000	60000	1.25
Maize (4 acre)	48000	144000	96000	2.00
Brinjal (1 acre)	35000	96000	61000	1.74
Total	**131000**	**348000**	**217000**	
After intervention				
Rice (4 acre)	60000	159600	99600	1.66
Maize (4 acre)	62000	208000	146000	2.35
Brinjal (2 acre)	81000	240000	159000	1.96
Tomato (1 acre)	35000	96000	61000	1.74
Cabbage (1 acre)	30000	100000	70000	2.33
Fishery (1 acre)	52000	195000	143000	2.75
Total	**320000**	**998600**	**678600**	

Enterprise	Horizontal spread		Vertical spread		Overall impact*
	Area covered (ac or ha) /no. of livestock unit or no. of livestock	No. of farmers	Area covered (ac or ha) / no. of livestock unit or no. of livestock	No. of farmers	
Before intervention					
Rice	210 ha	41	107 ha	50	4
Maize	102 ha	20	125 ha	47	4
Brinjal	105 ha	23	100 ha	75	3
After intervention					
Rice	365 ha	62	375 ha	78	4
Maize	275 ha	55	121 ha	55	4
Brinjal	220 ha	58	60 ha	36	5
Tomato	80 ha	43	35 ha	30	4
Cabbage	44 ha	19	45 ha	31	3
Fishery	7 ha	24	5.5 ha	12	4

**1-5 scale; 1= Lowest and 5= Highest*

Recently, he has planned to start mushroom unit. Not only he is devoting much time for improving his farm, but also is helping other farmers for use of new technologies in the field of agricultural production and to start new business. Farmers from different blocks of Nabarangpur district used to visit his farm, getting inspired and are giving more respect for his knowledge and helping attitude.

Rayagada KVK

A journey of tribal youth towards prosperity through mushroom cultivation

Name	:	**Mr. Pitabas Sabar**
Address	:	**Village- Bhalerikudia, GP- Bagsola, Block- Gunupur, District- Rayagada, Odisha**
Land holding	:	**5 Acre**
Contact no.	:	**09778366873 (M)**

Mr. Pitabas Sabar, 32 years old youth, had 5 acres land and was cultivating mainly rice, ragi, pigeon pea, black gram, green gram and sunflower to maintain his family. He participated in skill development training programme on improved method of mushroom production during February-March, 2018-19 at the KVK. The training helped Mr. Sabar acquiring knowledge and

skill required on various aspects of mushroom cultivation like preparation of mushroom bed, selection of different improved species of mushroom, production technology and value addition from mushroom. Mr. Sabar started cultivating paddy straw mushroom and oyster mushroom throughout the year along with other crops as mentioned earlier. The trainings provided by Krishi Vigyan Kendra, Rayagada helped him to adopt scientific method of mushroom cultivation in commercial scale, to select improved mushroom species, to control disease and to produce various value added product from mushroom. Now, he is growing paddy straw mushroom round the year except winter season as winter season is suitable for oyster mushroom cultivation.

Table: Economics of farming, spread of technologies and social impact

Enterprise	*Gross cost (in Rs.)*	*Gross return (in Rs.)*	*Net return (in Rs.)*	*B: C Ratio*
Before intervention				
Rice	15995	26460	10465	1.65
Pigeon pea	8055	16625	8570	2.06
Total	**24050**	**43085**	**19035**	
After intervention				
Rice	22400	39228	16828	1.75
Mushroom	15000	56000	41000	3.73
Total	**37400**	**95228**	**57828**	

Enterprise	*Horizontal spread*		*Vertical spread*		*Overall impact**
	Area covered (ac or ha) /no. of livestock unit or no. of livestock	*No. of farmers*	*Area covered (ac or ha) / no. of livestock unit or no. of livestock*	*No. of farmers*	
Before intervention					
Rice	2.4 ha	12	5.8 ha	16	3
Pigeon pea	1.2 ha	8	4.3 ha	25	2
After intervention					
Rice	41 ha	48	54 ha	62	4
Mushroom	24 ha	74	28 ha	51	4

**1-5 scale; 1= Lowest and 5= Highest*



Mr. Sabar has now cultivating mushroom in commercial scale. Through following scientific methods, he is getting very good yield. Other farmers of his neighbouring villages are being encouraged from him. Now, he is confident enough to produce mushroom throughout the year with different value added products. There are more than 100 farmers including different SHGs who are following the improved method of mushroom production for their livelihood security. Mr. Sabar has become a role model for other tribal farmers for mushroom cultivation. Not only that, he is serving as a master trainer and source of motivation for other farmer, rural youth and SHG members. He is also sharing his valuable ideas and experience with others and providing extension services to the interested mushroom growers.

High value vegetable cultivation changed livelihood income

Name	:	**Mr. Rajendra Kumar Nimalu**
Address	:	**Village- Pradhaniguda, Block- Gunupur, District- Rayagada, Odisha**
Land holding	:	**4.5 Acre**
Contact no.	:	**09437263404 (M)**

Mr. Rajendra Kumar Nimalu, aged about 38 years, had 4.5 acres land who was cultivating rice, cotton, arhar, maize and vegetables in *kharif* and *rabi* season. Mr. Nimalu and other farmers of Pradhaniguda were growing vegetables and maize conventionally. In spite of his full efforts in agricultural farm operations, he could not get good production. Thus, he was surviving with minimum profit from his farming. Then, he contacted KVK Rayagada to solve his problems. He was advised by the KVK scientists to take part in a skill development training programme on high value vegetable crops during the month of December-January, 2019. He attended the programme at KVK which helped Mr. Sabar in acquiring scientific knowledge, skilled and improved package of practices on different aspect of high value vegetables e.g. capsicum, broccoli, spine gourd, pointed gourd, carrot, French bean, brinjal, cabbage, tomato, chilli, bitter gourd, okra, chilli, cucumber etc. cultivation in different seasons.


The KVK provided him good quality high yielding quality vegetable seedlings for more yield and income. Frontline demonstrations on high value vegetables were also conducted in his fields. He used solar pump set for irrigation purpose to reduce input cost. In vegetables, he is practising trellis method for better yield and for management of different diseases. Not only that, line sowing, soil test-based fertilizer use, use of FYM and other micronutrients were among different interventions implemented at his farm. Now, Mr. Nimalu is cultivating vegetables in 3.0 acres land. He is using neem based plant protection chemicals for disease and pest control, neem coated urea, bio-fertilizer which are good for environment and also for reducing the cost of cultivation.

Table: Economics of farming, spread of technologies and social impact

Enterprise	*Gross cost (in Rs.)*	*Gross return (in Rs.)*	*Net return (in Rs.)*	*B: C Ratio*
Before intervention				
Rice	18800	27195	8395	1.44
Cotton	17400	27792	10392	1.59
Total	**36200**	**54987**	**18787**	
After intervention				
Vegetables	81500	152900	71400	1.88
Sweet corn	14000	38000	24000	2.71
Total	**95500**	**190900**	**95400**	

Enterprise	*Horizontal spread*		*Vertical spread*		*Overall impact**
	Area covered (ac or ha) /no. of livestock unit or no. of livestock	*No. of farmers*	*Area covered (ac or ha) / no. of livestock unit or no. of livestock*	*No. of farmers*	
Before intervention					
Rice	15 ha	21	21 ha	25	3
Cotton	9 ha	11	12 ha	18	3
After intervention					
Vegetables	5 ha	18	17 ha	39	4
Sweet corn	8 ha	22	23	47	5

**1-5 scale; 1= Lowest and 5= Highest*

Earlier, Mr. Nimalu could generate a net income of about Rs. 18000/- annually which was increased nearly one lakh per year after following scientific agriculture. Recently, he constructed shed net house for growing different types of vegetable seedlings and planting materials. For the first time, Mr. Nimalu introduced sweet corn in his village for commercial cultivation after getting training from KVK. The KVK scientists are continuously visiting his fields for diagnosis of crop diseases. His socio-economic status has been improved within 2-3 years. As scientific methods gave good yield and better return, other farmers of his village and neighbouring villages were convinced to grow the vegetables scientifically. Mr. Nimalu has become a brand for growing high value vegetables in his village.

Sundargarh-I KVK

Farm of a tribal woman becomes source of enterprises

Name	:	**Smt. Ketaki Kalo**
Address	:	**Village- Phuldhudi, Block- Tangarpali,**
		District- Sundargarh, Odisha
Land holding	:	**6 Acre**
Contact no.	:	**08018356874 (M)**

Smt. Ketaki Kalo, a 39 years tribal farm women, was engaged in household activities. She had keen interest in agriculture as she passed higher secondary with science stream before her marriage. In addition to her residential area, she had 6 acres crop fields where she was engaged with rice/vegetables production and dairy/poultry farming. Her annual earning was around 1.10 lakh. For the first time, she attended one skill development training programme on mushroom cultivation at the KVK. After she came in contact with the scientists of KVK Sundargarh-I, narrated the problems of her farming and requested the scientists to intervene and to provide her recent technologies for rice and vegetable cultivation, dairy/poultry/goat farming. Accordingly, the KVK scientists suggested her to get trainings for scientific dairy/poultry/goat rearing, and also for mushroom cultivation. KVK linked her with Horticulture Department of Govt of Odisha for establishing mushroom. More often she regularly visits KVK and updates herself with new knowledge regularly with the help of scientists. Gradually, Smt. Kalo was trained with brooding and feeding management in chicks, paddy straw and bottom mushroom cultivation including spawn production and value-added products, nutritional garden, balance feeding in dairy cows, formulation of low-cost ration for cow and poultry using local feed ingredients and many more.



She was very much convinced with the modern agricultural production for more profit. In her unutilized one acre land, she started cultivating mushroom along with vegetable cultivation and seedling raising. In remaining lands, she introduced moong, potato, new vegetables and continued vermicomposting, poultry, diary and goatery. Thus, she was able to earn about 5.03 lakh in one year. Recently, she is going to start apiary and other related income related business.



Table: Economics of farming, spread of technologies and social impact

Enterprise	*Gross cost (in Rs.)*	*Gross return (in Rs.)*	*Net return (in Rs.)*	*B: C Ratio*
Before intervention				
Rice (4 ac)	27200	54000	26800	1.98
Vegetables (1 ac)	52800	124800	72000	2.36
Dairy (2 no.)	4500	11100	6600	2.46
Poultry (20 no.)	1500	5000	3500	3.33
Total	**86000**	**194900**	**108900**	
After intervention				
Rice (6 ac)	72000	159120	87120	2.21
Moong (1.0 ac)	9000	20000	11000	2.22
Potato (0.5 ac)	5100	12000	6900	2.35
Vegetables (0.4 ac)	22700	62000	39300	2.73
Cow (2 no.)	12900	32800	19900	2.54
Poultry (10 no.)	1200	3500	2300	2.91
Goatery (2 no.) + 2 kids	6200	16000	9800	2.58
Paddy straw mushroom (1200 bed)	75600	234000	158400	3.09
Oyster mushroom (100 beds)	4500	15000	10500	3.33
Vermicomposting (2 tanks and 1 bag)	72000	230000	158000	3.19
Total	**281200**	**784420**	**503220**	

Enterprise	Horizontal spread		Vertical spread		Overall impact*
	Area covered (ac or ha) /no. of livestock unit or no. of livestock	No. of farmers	Area covered (ac or ha) / no. of livestock unit or no. of livestock	No. of farmers	
Before intervention					
Rice	7 ac	4	9 ha	12	2
Vegetables	3 ac	4	7 ha	10	3
Dairy	5 unit (15 no.)	5	2 unit (6 no.)	2	2
Poultry	5 unit (100 no.)	5	2 unit (30 no.)	2	2
After intervention					
Rice	30 ac	25	42 ac	54	4
Moong	12 ac	16	18 ac	25	3
Potato	18 ac	29	31 ac	42	3
Vegetables	12 ac	46	21	37	5
Cow	10 unit	10	14 unit	14	3
Poultry	25 unit	25	36 unit	26	4
Paddy straw Mushroom	75000 beds	70	30000 beds	97	5
Oyster mushroom	7500 bags	70	3400 bags	45	5
Vermicomposting	120 inits	35	354	328	5

**1-5 scale; 1= Lowest and 5= Highest*




She has engaged three regular workers in her farm and she is ably supported by her husband and son who regularly market their produce in the weekly markets throughout the year. Now, she has been established herself as a beacon of hope among the tribal women in the district and has become a source of inspiration. Not only that, she is motivating SHG members and is working as a resource person for different trainings. Her established units have also become an attraction for other departments as a model unit. She is also providing technical guidance to others for scientific farming. As a result, many farmers have started their business for livelihood income.



Tribal farmer becomes entrepreneur through adopting integrated farming system

Name	:	**Shri Biren Oram**
Address	:	**Village- Gurabasa, Block- Sadar, District- Sundargarh, Odisha**
Land holding	:	**4 Acre**
Contact no.	:	**06372560053/ 09556101929 (M)**

Shri Biren Oram, a tribal hard working farmer of Sundargarh, had 4 acres land (in upland- 2.8 acre and in lowland- 1.2 acre) and used to grow traditional non-descript local rice varieties in 3 acres along with round the year cultivation of vegetables, rearing of poultry and desi cows in remaining 1 acre land. As his village was adjacent to Sundargarh city, he had opportunity to sell his surplus produce from his farm which was a source of additional income. Shri Oram used to get annual profit around Rs. 1.23 lakh from his farm.

However, after seeing the demand in the market and good market rate, he was inspired for scientific vegetable cultivation. He visited various demo units of KVK Sundargarh-I for more information and decided to start off-season vegetable cultivation and other income generating enterprises like mushroom and apiary. He was trained with rice cultivation, mushroom cultivation, apiary, off-season vegetable cultivation, poultry and dairy farming at the KVK in due course of time. That enabled him to get a net annual income of Rs. 4.98 lakh which was substantially higher than his earlier income from the same land.

Table: Economics of farming, spread of technologies and social impact

Enterprise	Gross cost (in Rs.)	Gross return (in Rs.)	Net return (in Rs.)	B: C Ratio
Before intervention				
Rice (3 ac)	26300	48700	22400	1.85
Vegetables (1 ac)	57600	114000	86400	1.9
Poultry (7-10 no.)	700	1900	1200	2.28
Dairy cow (4 no.)	9800	22400	12600	1.5
Total	**113800**	**209400**	**122600**	
After intervention				
Rice (3 ac)	37000	80560	42560	2.17
Vegetables (1 ac)	97600	304000	206400	3.11
Mushroom (Paddy straw mushroom-800 beds) and (Oyster mushroom- 200 beds)	48000 and 10000	144000 and 30000	72000 20000	3.0 3.0
Vermicomposting - 2 tanks	2600	8000	4500	3.0
Honey production (3 boxes)	4500	9000	4500	2.0
Poultry- 20 no.	1000	3000	2000	3.0
Dairy cow- 12 no.	140300	286800	146400	2.0
Total		**865360**	**498360**	

Enterprise	Horizontal spread		Vertical spread		Overall impact*
	Area covered (ac or ha) /no. of livestock unit or no. of livestock	No. of farmers	Area covered (ac or ha) / no. of livestock unit or no. of livestock	No. of farmers	
Before intervention					
Rice	12 ac	20	27 ac	36	4
Vegetables	29 ac	52	42 ac	64	4
Poultry (5-10 no.)	10 units	10	25 units	21	4
Cow (1-2 no.)	5 units	6	15 units	18	4
After intervention					
Rice	170 ac	310	180 ac	231	3
Vegetables	54 ac	100	71 ac	145	3
Mushroom (paddy straw and oyster mushroom)	1500 and 600 bed	12 and 26	2300 and 900 bed	56	3
Vermicompost- 2 tanks	5	5	19 units	14	4
Honey production- 3 bee boxes	8 units	2	12 units	9	4
Poultry (5-20 no.)	25	27	28 units	31	5
Dairy cow (2-5 no.)	9 units	9	10 units	10	4

**1-5 scale; 1= Lowest and 5= Highest*

Inspired by his success in IFS, many farmers in his village and other surrounding villages have started their farming and fetching very good profit. He has become a model farmer in the area. Not only Shri Oram has increased his income but also gained his social recognition.

Sundargarh-II KVK

Crop diversification enhances income of tribal farmers

Name : **Mr. Zabrius Tirkey**

Address : **Village- Guduguda, Block- Nuagaon, District- Sundargarh, Odisha**

Land holding : **2.5 Acre**

Contact no. : **09668427366 (M)**

Mr. Tirkey was engaged in agriculture with 2.5 acres land which was situated in red black soil under medium rainfall area at North Western Plateau Zone. With all efforts, he could earn about Rs. 33000/- annually from rice, maize, tomato and poultry rearing following conventional practices. The income was not sufficient for his family. Then, he approached KVK Sundargarh-II and discussed the problems with KVK scientists. Scientists visited his farm and suggested him for cultivating drought tolerant high yielding rice *cv. 'Sahabhagi'* in place of their local upland rice varieties, diversifying crops of upland rice partially with high yielding early fruiting cowpea *cv. 'Kashi Kanchan'*, cultivating triple resistant tomato hybrid *'Arka Rakshyak'* with staking practices, cultivating paddy straw and oyster mushroom, rearing of improved poultry breed *'Aseel'* with proper feeding and housing management practices, INM/IPM practices etc. The KVK trained him for different agricultural, horticultural and livestock practices through different programmes. He also attended meetings, demonstrations field days on regular basis.

Table: Economics of farming, spread of technologies and social impact

Enterprise	*Gross cost (in Rs.)*	*Gross return (in Rs.)*	*Net return (in Rs.)*	*B:C Ratio*
Before intervention				
Rice	14450	21600	7150	1.49
Maize	3200	7000	3800	2.18
Tomato	13000	30000	17000	2.30
Poultry	1500	3400	1900	2.26
Nutri-garden	2800	6000	3200	2.14
Total	**34950**	**68000**	**33050**	
After intervention				
Rice (*'Sahabhagi'*)	16900	29400	12500	1.74
Maize	4900	11700	6800	2.38
Cowpea (*'Kashi Kanchan'*)	7400	19800	12400	2.67
Tomato (*'Arka Rakshyak'*)	16900	44100	27200	2.60
Poultry (*'Aseel'*)	3300	10150	6850	3.07
Mushroom	1800	4000	2200	2.22
Nutri-garden with hybrid varieties seeds	3850	10000	6150	2.60
Total	**55050**	**129150**	**74100**	

Enterprise	Horizontal spread		Vertical spread		Overall impact*
	Area covered (ac or ha) /no. of livestock unit or no. of livestock	No. of farmers	Area covered (ac or ha) / no. of livestock unit or no. of livestock	No. of farmers	
Before intervention					
Rice	4	20	7	36	3
Maize	2	11	5	27	2
Tomato	2	15	4	32	3
Poultry	20 nos	4	35 no.	8	3
Nutri-garden	10 unit	10	17 unit	17	2
After intervention					
Rice	18	68	23	74	4
Maize	7	28	16	59	4
Cowpea	5	27	17	62	5
Tomato	8	31	14	51	4
Poultry	50 no.	11	120 no.	23	4
Mushroom	40 beds	6	140 beds	19	4
Nutri-garden with hybrid varieties seeds	25 unit	25	64 unit	64	4

**1-5 scale; 1= Lowest and 5= Highest*

With improved varieties seeds and adopting scientific agricultural practices Mr. Zabrius Tirkey increased his annual income to the tune of about Rs. 74000/-. Not only that, now, he is guiding many farmers from his village and even from surrounding villages for diversifying agriculture. He has become a *'Role Model'* for other farmers in the district.

Scientific agri-farming: An alternate to improve livelihood income of tribal farmers

Name : **Mrs. Margaret Tirkey**

Address : **Village- Lungei, Block- Lathikata,**
District- Sundargarh, Odisha

Land holding : **3.5 Acre**

Contact no. : **08895273582 (M)**

Mrs. Margaret Tirkey from Lungei village had keen interest in agricultural farming since her childhood. After marriage, she used to help her husband for farming. With 3.5 acres land, they used to cultivate rice, mustard, vegetables and used to rear poultry under backyard system. Their annual profit was recorded as around Rs. 43000/-. One day, she approached KVK for scientific agricultural practices. Accordingly, she was trained from the KVK for INM/IPM/IDM practices of rice, mustard and other crops, for replacing some part of rice into hybrid pumpkin, for cultivating mushroom, for practicing kitchen garden with new variety seeds, for rearing good quality poultry birds in backyard and many others through providing trainings/meetings.

Table: Economics of farming, spread of technologies and social impact

Enterprise	*Gross cost (in Rs.)*	*Gross return (in Rs.)*	*Net return (in Rs.)*	*B:C Ratio*
Before intervention				
Rice	19650	35400	15750	1.80
Mustard	3400	8100	4700	2.38
Bottle gourd	10700	27000	16300	2.52
Poultry	1800	4400	2600	2.44
Nutri-garden with HYV seeds	2400	6000	3600	2.50
Total	**37950**	**80900**	**42950**	
After intervention				
Rice	22790	48440	25650	2.12
Mustard	5400	14300	7200	2.64
Bottle gourd (*'Anokhi'*)	13600	38400	24800	2.82
Pumpkin (*'Mahy-1'*)	6250	20250	14000	3.24
Poultry (*'Aseel'*)	4200	11800	7600	2.80
Mushroom	1700	4000	2300	2.35
Nutri-garden with HYV seeds	3500	10000	6500	2.85
Total	**58040**	**146090**	**88050**	

Enterprise	Horizontal spread		Vertical spread		Overall impact*
	Area covered (ac or ha) /no. of livestock unit or no. of livestock	No. of farmers	Area covered (ac or ha) / no. of livestock unit or no. of livestock	No. of farmers	
Before intervention					
Rice	5	19	14	48	2
Mustard	4	22	8	43	3
Bottle gourd	4	30	10	64	3
Poultry	40	6	85	14	3
Nutritional Garden	12	12	40	40	2
After intervention					
Rice	23	70	61	153	4
Mustard	14	52	29	94	4
Bottle gourd (*'Anokhi'*)	12	47	27	90	5
Pumpkin (*'Mahy-1'*)	7	38	16	75	5
Poultry (*'Aseel'*)	90	14	178	26	4
Mushroom	20	4	130	23	5
Nutri-garden with HYV seeds	27	27	60	60	4

**1-5 scale; 1= Lowest and 5= Highest*

Her annual income from the same land was increased almost double i.e. Rs. 88000/- after using HYV seeds, diversifying agriculture and scientific farming. After her success, she formed one SHG, named '*Gulab*' and now, is working as President of the SHG. She established herself as a successful women agri-farmer in the area. Now, she is providing guidance to other tribal farmers for profitable farming. Really, she has become a source of inspiration for others in the district.

Nicobar KVK

Story of a role model of Nicobarese tribal farmer

Name : **Shri Patrick Jeremiah**

Address : **Turhato Tuhet, Village- Tapoiming, Car Nicobar, District- Nicobar, Andaman & Nicobar**

Land holding : **3.5 Acre**

Contact no. : **09476037913 (M)**

The Nicobarese normally practiced cultivation of tubers, fruits, few vegetables under *Tuhet* Farming system for their subsistence. The mainlanders and even local tribal people were solely dependent on imported conventional vegetables from other islands and mainland India. Shri Patrick Jeremiah, a class nine pass tribal farmer of Car Nicobar, had 3.5 acre cultivable land where he was practising *tuhet* farming till 2015 with his 6 family members. But, it was not sufficient for his family. Though a self-motivated hard worker who was keen to take up new initiatives for profitable agriculture, he was lacking technical and scientific know-how about agriculture and allied activities. The KVK Nicobar guided him through providing technological interventions and he started diversified organic vegetable farming in 1205 m^2 area by clearing a portion of his hitherto 20000 m^2 fallow land. By seeing the profit, he expanded his net sown area to 4550 m^2 (1.124 acre) by bringing 23% of hitherto fallow land under cultivation with constant support and guidance from the ICAR-KVK Nicobar. The ICAR-KVK, Nicobar and ICAR-CIARI, Port Blair have provided several trainings, demonstrations and hand holdings for adopting scientific technological interventions. He visited Car Nicobar as well as ICAR-CIARI, Port Blair and many mainland institutes to increase his exposure. The KVK Nicobar provided critical inputs viz. seeds, bio-fertilizers, organic pesticides, farm implements, irrigation ponds, piglets, chicks etc.



Now, he is cultivating 15 types of vegetables viz. pumpkin, bottle gourd, ivy gourd, bitter gourd, snake gourd, ridge gourd, cucumber, brinjal, chillies, bhendi, amaranthus, Malabar spinach (poi), spinach, radish and cow pea and is selling the same to the local consumers at reasonable price and is earning good income. He was able to earn a gross income of Rs. 550249/- and net income of Rs. 461249/- per annum.

Table: Economics of farming, spread of technologies and social impact

Enterprise	*Gross cost (in Rs.)*	*Gross return (in Rs.)*	*Net return (in Rs.)*	*B:C Ratio*
Before intervention				
Solonaceae / Malvaceae	30000	89900	59900	2.00
Cucurbitaceae	1000	3325	2325	2.33
Leafy vegetables	100	336	236	2.36
Tuber crops	7000	25704	20704	2.96
Total	**38100**	**119265**	**83165**	**2.18**
After intervention				
Solonaceae / Malvaceae	78000	365400	305400	3.92
Cucurbitaceae	15000	54435	39435	2.63
Leafy vegetables	5000	17350	14350	2.87
Leguminous	26000	78750	73750	2.84
Tuber crops	11000	34314	28314	2.57
Total	**135000**	**550249**	**461249**	**3.42**

Enterprise	*Horizontal spread*		*Vertical spread*		*Overall impact**
	Area covered (ac or ha) /no. of livestock unit or no. of livestock	*No. of farmers*	*Area covered (ac or ha) / no. of livestock unit or no. of livestock*	*No. of farmers*	
Before intervention					
Solonaceae / Malvaceae	1 ha	8	1.5 ha	16	3
Cucurbitaceae	1.5 ha	18	2 ha	29	3
Leafy vegetables	0.5 ha	7	1 ha	18	2
Tuber crops	3 ha	30	6 ha	35	4
After intervention					
Solonaceae / Malvaceae	3 ha	20	6 ha	38	4
Cucurbitaceae	5 ha	29	8 ha	46	4
Leafy vegetables	1 ha	20	2 ha	24	3
Leguminous	2 ha	15	3 ha	26	3
Tuber crops	7 ha	41	12 ha	51	3

**1-5 scale; 1= Lowest and 5= Highest*

The KVK Nicobar and other departments of Nicobar district are getting his services as resource person in local tribal language to gain the confidence and interest of local tribal for maximum horizontal spread of vegetable cultivation in Car Nicobar Island. By seeing and believing, several tribal farmers have started commercial organic vegetable cultivation in their fallow land. This has helped mainly the mainlanders who worked at Car Nicobar during the COVID-19 lockdown period, in a great way by making sure continuous supply of vegetables (for survival) locally in the Island. This has also helped the tribal farmers to earn a decent livelihood.

He has become a role model of tribal farmers and the KVK is using him as a resource person to promote vegetable cultivation among Nicobari tribal farmers in Nicobar Islands. During PM Kisan Samman Nidhi programme, Hon'ble Prime Minister Shri. Narendra Modi Ji interacted with him through video conferencing which was broadcasted live on National television on 14th May, 2021. His interview was broadcasted by AIR, Port Blair and he won several awards from A&N Administration and ICAR-CIARI, Port Blair. Organic vegetable cultivation adopted by Shri. Patrick had contributed in a small but significant way in supply / availability of organic fresh vegetables locally leading to improvement of his socio-economic status and livelihood security. By seeing and believing, several tribal farmers are approaching KVK for guidance and critical inputs (which are being provided through TSP/STC). By ensuring ready availability of critical inputs locally and continuous technical support, vegetable cultivation may ensure livelihood and nutritional security of substantial number of Nicobarese tribal farmers in these isolated remote Islands.

Tribal women empowerment through organic vegetable cultivation in Nicobar Island

Name	:	**Smt. Felicia**
Address	:	**Tikup Tuhet, Village- Tamaloo,, Car Nicobar, District- Nicobar, Andaman & Nicobar**
Land holding	:	**0.8 Acre**
Contact no.	:	**09476052900 (M)**

Generally, the dietary habits of Nicobarese of Car Nicobar mainly comprises of non-vegetarian dishes with very few traditional vegetables available in limited quantity. Thus, to provide necessary additional nutrient supplements, vegetables in their food habit were felt very much essential for their good health. Keeping in view of the need to meet the nutritional requirements of tribal people, introduction of vegetables in their traditional gardens and encouraging consumption was considered essential. Therefore, new vegetable crops and varieties were introduced in gardens.

The success story is about Smti. Felicia, W/o Shri. Leslie who lives in Tikup Tuhet of Tamaloo village, Car Nicobar and she was only looking after the household works with her family comprised of three members. Apart from household works, she

used to help her husband in his coconut copra making business. She was maintaining a small kitchen garden area of 400 m^2 in which she had cultivated a single crop in traditional method and the harvest used to be just sufficient only to the needs of her home. But, after coming in contact with ICAR-KVK Nicobar, she got motivated and interested in developing her 400 m^2 areas into a multiple production system. Through KVK, she learned about the advantages of improved technologies and took keen interest in converting her small land area into a multiple production system. Through trainings, demonstrations, handholding, exposure visits etc. provided by ICAR-KVK, Nicobar, Smt. Felicia has grown in confidence thereby, gained the knowledge and skill of each and every aspect of vegetable cultivation. She started cultivating Cowpea, Brinjal, Amaranthus, Bottle Gourd, Pumpkin, Okra, Papaya, Banana, Snake Gourd, Soursoap, Custard Apple, Acid Lime, Pineapple and Indian Spinach in her garden and harvested them at appropriate stage by judging maturity after taking advisories from the KVK personnel. The surplus fruits and vegetables after home consumption were sold by her in Head Quarter market at Car Nicobar to shopkeepers and villagers through which she earned money.

Table: Economics of farming, spread of technologies and social impact

Enterprise	*Gross cost (in Rs.)*	*Gross return (in Rs.)*	*Net return (in Rs.)*	*B:C Ratio*
Before intervention				
Okra	7500	18000	14000	1.87
Brinjal	8000	24000	16000	2.00
Plantation	1000	3000	2000	2.00
Total	**16500**	**45000**	**32000**	
After intervention				
Okra	16000	64000	52000	3.25
Brinjal	20000	72000	58000	2.90
Bottle gourd	7000	24000	18000	2.57
Plantation	8000	24000	16000	2.00
Total	**51000**	**184000**	**144000**	

Enterprise	*Horizontal spread*		*Vertical spread*		*Overall impact**
	Area covered (ac or ha) /no. of livestock unit or no. of livestock	*No. of farmers*	*Area covered (ac or ha) / no. of livestock unit or no. of livestock*	*No. of farmers*	
Before intervention					
Okra	0.5 ha	6	1.5 ha	19	3
Brinjal	1.0 ha	11	2.5 ha	30	3
Tuber	3 ha	24	7 ha	38	4
After intervention					
Okra	3ha	14	4 ha	21	4
Brinjal	3 ha	21	6 ha	33	4
Cucurbits	4 ha	34	8 ha	40	3
Legume vegetable	1.5 ha	12	2.0 ha	22	3

**1-5 scale; 1= Lowest and 5= Highest*

The new farming system has made her self-sufficient in fruits and vegetable in a sustainable manner and earned her

additional livelihood option. By selling the excess home garden produce, she earned approximately Rs. 144000/- per annum which made her self -reliant and confident. With her own income, she purchased new dresses to her children and met other demands of herself and her family. Now, she has been able to purchase a scooty for dropping her children to school. She felt empowered through the income generation which increased her self-confidence.



Seeing her enthusiasm, the KVK Nicobar has chosen her land as a model for developing scientific vegetable and local fruit cultivation by using her past experience. Since 2018, she is in constant touch with the KVKs for getting latest technologies of organic cultivation. She is guiding other tribal women in Nicobar Islands and became a role model for them. By seeing her success, many other Nicobari women came forward to adopt the technology in their own unused garden area.









CHAPTER 8

DETAILS OF AWARDS/ RECOGNITIONS

Tribal farmers showed keen interest in adopting agriculture related new technologies to increase production in the concerned districts from their existing land. Tribal progressive farmers played important role in providing training to other fellow farmers and sometimes, they acted as resource person of various activities in the district. During the period of report, many tribal farmers were felicitated with different awards and recognitions from different platforms/ organizations for their significant contribution. That attracted the whole tribal community especially the young and women tribals for selecting agriculture as business in the coming days. The details awards/ recognitions received by the farmers are presented in the following table.

Table: Details of awards/ recognitions received by the farmers during the period 2017-18 to 2022-23

Name of KVK	*Name of the awardee farmer*	*Name of the award/ recognition*	*Year*	*Conferring authority*	*Purpose*	*Type of award/ recognition (Certificate/Memento/ Cash amount)*
Gajapati	Sri Uma Sankar Sahu	Best Farmer Award	2017	OUAT, Bhubaneswar during Foundation Day 2017	Significant contribution in agriculture	Certificate with memento
	Sri Iswar Raita	Best Farmer Award	2019	OUAT, Bhubaneswar during Foundation Day 2019	Significant contribution in agriculture	Certificate with memento
Malkangiri	Sri. Paritosh Biswas	Best Farmer Award in state	2020	Dr. Arun Sahoo, State Agriculture Minister during OUAT Foundation Day 2020	Pond based IFS with income of Rs. 8.0 lakh/year	Certificate with memento
Mayurbhanj-I	Mrs. Solani Soren	Best Farmer Award	2016	OUAT, Bhubaneswar during Foundation Day 2016	Developed crop based integrated farming system	Certificate with memento
	Mr. Birakishore Mohanta	Best Farmer Award	2019	OUAT, Bhubaneswar during Foundation Day 20169	Remarkable achievement in vegetable production	Certificate with memento
	Mr. Pradeep Kumar Tripathy	Best Agri-Entrepreneurs Award	2020	OUAT, Bhubaneswar during Foundation Day 2016	Remarkable achievement in fish seed production and seedling rearing	Certificate with memento
	Mrs. Usha Rani Naik	Best Farmer Award	2021	OUAT, Bhubaneswar during Foundation Day 2021	Remarkable achievement in value addition of *Sabai* products	Certificate with memento
	Mrs. Pratima Parida	Best Women Farmer award	2021	ICAR, New Delhi	Contribution towards promotion of non- timber forest produce	Certificate with memento
	Sri Akshya Kumar Sahu	Best Hatchery-Costal States	2018	NFDB, Hyderabad	Best hatchery among the coastal states of India	Certificate with memento
	Sri Akshya Kumar Sahu	Best Farmer Award	2018	OUAT, Bhubaneswar during Foundation Day 2018	Significant contribution in agriculture	Certificate with memento
Mayurbhanj-II	Mr. Debananda Pingua	Best Farmer Award	2020	OUAT, Bhubaneswar during Foundation Day 2020	Contribution towards integrated farming system development	Certificate with memento

Name of KVK	Name of the awardee farmer	Name of the award/ recognition	Year	Conferring authority	Purpose	Type of award/ recognition (Certificate/Memento/ Cash amount)
Rayagada	Shri Anusai Sabar	Best Farmer Award	2017	OUAT, Bhubaneswar during Foundation Day 2017	Significant contribution in agriculture	Certificate with memento
	Shri Narayana Sabar	Best Farmer Award	2018	OUAT, Bhubaneswar during Foundation Day 2018	Significant contribution in agriculture	Certificate with memento
	Shri Pitabas Sabar	Best Farmer Award	2019	OUAT, Bhubaneswar during Foundation Day 2019	Significant contribution in agriculture	Certificate with memento
	Shri Balaram Gomango	Best Farmer Award	2020	OUAT, Bhubaneswar during Foundation Day 2020	Significant contribution in agriculture	Certificate with memento
	Shri Kulampir Sabar	Best Farmer Award	2021	OUAT, Bhubaneswar during Foundation Day 2021	Significant contribution in agriculture	Certificate with memento
Sundargarh-I	Shri Bhaktabandhu Naik	Best Young Tribal Farmer	2017	OUAT, Bhubaneswar during Foundation Day 2017	Significant contribution in agriculture	Certificate with memento
	Mr. Susanta Ku Naik	Best Innovative Farmer	2018	CIFA, Bhubaneswar	Innovative farmer	Certificate with memento
	Mr. Kamal Sagar Kullu	Young Tribal Innovative Farmer	2019-20	Farm Innovators Meet, NASC, Delhi	Innovative farmer	Certificate with memento
	Mr. Manoj Kumar Mahakul	Best Organic Grower	2019	OUAT, Bhubaneswar during Foundation Day 2019	Organic grower	Certificate with memento
	Mrs. Nibedita Sinha	Women Entrepreneur in Vermicomposting	2021	District Administration	International Women's Day 2021	Certificate with memento
	Mrs. Sasmita Naik	Women Entrepreneur in Mushroom	2021	District Administration	International Women's Day 2021	Certificate with memento
	Mrs. Mithila Munda	Women Entrepreneur in Backyard Poultry Rearing	2021	District Administration	International Women's Day 2021	Certificate with memento
	Ms. Padmini Oram	Best Agricultural Worker	2021-22	District Administration	International Women's Day 2021	Certificate with memento
Sundargarh-II	Sri Ramesh Ch. Patnaik	Innovative Farmer Award	2018	CIFA, Bhubaneswar	Organic mushroom production	Certificate with memento
	Sri Ramesh Ch. Patnaik	Best Farmer Award	2018	Bihar Agriculture University, Sabour, Bhagalpur, Bihar	Organic mushroom production	Certificate with memento
	Sri Yogesh Patel	Innovative Farmer Award	2019	OUAT, Bhubaneswar during Foundation Day 2019	Organic approach for sustainable horticulture	Certificate with memento
	Sri Victor Bodra	Best progressive Farmer Award	2021	OUAT, Bhubaneswar during Foundation Day 2021	Improvement of income and employment through banana cultivation	Certificate with memento

Name of KVK	Name of the awardee farmer	Name of the award/ recognition	Year	Conferring authority	Purpose	Type of award/ recognition (Certificate/Memento/ Cash amount)
Nicobar	Smti. Martha Lawrance	Best Farmer Award	2017	ICAR-CIARI, Port Blair (*Kisan Mela*)	Adoption of new technologies in agricultural farming	Certificate with memento
	Shri. Crispin John	Best Farmer Award	2018	ICAR-CIARI, Port Blair (RAF)	Adoption of new technologies in agricultural farming	Certificate with memento
	Smti. Norah John	Best Farmer Award	2018	ICAR-CIARI, Port Blair	For conserving wild betel vine	Certificate with memento
	Nicobari Community	Community Breed Conservation Award	2017	NBAGR, Karnal	For conserving the precious *'Nicobari'* pig breed	Certificate with memento
	Shri. Patrick Jeremiah	Best Farmer Award	2020	A & N Administration	Scientific IFS model	Certificate with memento


Pratima Parida


Usha Rani Naik










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CHAPTER 9

PUBLICATIONS

The KVKs of tribal dominated districts under this zone have published quality research papers, technical/popular articles, leaflets/folders/pamphlets/manuals, book chapters etc. on their mandated activities during the year 2017-18 to 2022-23. Not only that, scientists from those KVKs participated in various national and international conferences/symposia/workshops etc. to present research papers and published abstracts/full papers in compendium but also prepared news items on various aspects for press and media at both local and national level. Radio talk, bites for news channel and others were also the parts of their routine activities. The list of those publications by the KVKs have been presented under different heads/subheads below.

A) Research paper

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- *'Amruta bahanda chasa (in Odia)'*, published by KVK Mayurbhanj-I
- *'Baigyanika paddhati o krushi kaushala dwara amba chasa (in Odia)'*, published by KVK Gajapati
- *'Baigyanika padhatire piaja chasa (in Odia)'*, Published by KVK Gajapati
- *'Baigyanika padhatire pijuli chasa o tara roga poka Niyantrana (in Odia)'*, published by KVK Gajapati
- *'Baigyanika pranalire biri chasa (in Odia)'*, published by KVK Gajapati
- *'Baigyanika pranalire china badam chasa (in Odia)'*, published by KVK Gajapati
- *'Baigyanika pranalire kadali chasa o tara roga poka niyantrana (in Odia)'*, published by KVK Gajapati
- *'Baigyanika pranalire khamba alu chasa (in Odia)'*, published by KVK Mayurbhanj-I
- *'Baigyanika pranalire muga chasa (in Odia)'*, published by KVK Gajapati
- *'Baigyanika pranalire rasi chasa (in Odia)'*, published by KVK Gajapati

- *'Baingyanik padhhatire biri chasa (in Odia)'*, published by KVK Nabarangpur
- *'Baingyanik padhhatire china badam chasa (in Odia)'*, published by KVK Nabarangpur
- *'Baunsa chasa (in Odia)'*, published by KVK Sundargarh-II
- *'Bihan bishodhan (Odia)'*, published by KVK Sundargarh-II
- *'Bio-floc'*, published by KVK Mayurbhanj-I
- *'Broccoli chasa (in Odia)'*, published by KVK Gajapati
- *'Bunda jalasechanare chasi ra unnati (in Odia)'*, published by KVK Gajapati
- *'Buta chasa (in Odia)'*, published by KVK Sundargarh-II
- *'Chatu Chasa (in Odia)'*, published by KVK Mayurbhanj-II
- *'Chemical control of BPH in paddy'*. published by KVK Rayagada
- *'Dhana pare buta chasa (in Odia)'*, published by KVK Mayurbhanj-I
- *'Dhana phasalare roga pok niyantrana (in Odia)'*, published by KVK Nabarangpur
- *'Dhana re matia gundi pokara parichalana (in Odia)'*, published by KVK Nabarangpur
- *'Dhanara roga o poka parichalana (in Odia)'*, published by KVK Gajapati
- *'Dhingiri chhatu chasa (in Odia)'*, published by KVK Nabarangpur
- *'Different pumps and its selection with energy conservation guideline'*, published by KVK Mayurbhanj-II
- *'Dragon fruit chasa (in Odia)'*, published by KVK Sundargarh-II
- *'Fall army worm'*, published by KVK Sundargarh-I
- *'Fish preservation and value addition'*, published by KVK Sundargarh-I
- *'Gramina mahilankara atma niyukti pain pala chhatu chasa (in Odia)'*, published by KVK Rayagada
- *'ICT application in agriculture (in Odia)'*, published by KVK Mayurbhanj-I
- *'Importance of soil testing'*, published by KVK Sundargarh-I
- *'Integrated pest management in pulses & oilseeds'*, published by KVK Sundargarh-I
- *'Jia khata utpadana (in Odia)'*, published by KVK Nabarangpur
- *'Kanda mula chasa (in Odia)'*, published by KVK Sundargarh-II
- *'Kanhiki kariba mati pariksha (in Odia)'*, published by KVK Nabarangpur
- *'Kitanasaka ra nirapada byabahar (in Odia)'*, published by KVK Nabarangpur
- *'Kolatha chasa (in Odia)'*, published by KVK Sundargarh-II
- *'Mandia ra mulyajukta padartha (in Odia)'*, published by KVK Mayurbhanj-I
- *'Manual for agriculture extension provider'*, published by KVK Sundargarh-I
- *'Mechanical descaling of fish'*, published by KVK Sundargarh-I

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- *'Mushroom cultivation'*, published by KVK Kandhamal
- '*Mushroom preservation and value addition'*, published by KVK Sundargarh-I
- *'Nutritional garden for nutritional security'*, published by KVK Sundargarh-I
- *'Paddy straw and oyster mushroom (in Odia')'*, published by KVK Sundargarh-I
- *'Pala chhatu chasa (in Odia)'*, published by KVK Nabarangpur
- *'Pala o dhingiri chhatu chasa (in Odia)'*, published by KVK Gajapati
- *'Panni parivar tali ghera parichalan (in Odia)'*, published by KVK Sundargarh-II
- *'Phala gachha lagaiebe kipari (in Odia)'*, published by KVK Sundargarh-I
- *'Pijuli chasa (in Odia)'*, published by KVK Sundargarh-II
- *'Poshana bagicha (in Odia)'*, published by KVK Rayagada
- *'PPV & FRA (in Odia)'*, published by KVK Rayagada
- *'Prakrutik krushi (in Odia)'*, published by KVK Nabarangpur
- *'Production technology of greengram'*, published by KVK Gajapati
- *'Production technology of groundnut'*, published by KVK Gajapati
- *'Production technology of sesame'*, published by KVK Gajapati
- *'Rice transplanter and its use (in Odia)'*, published by KVK Mayurbhanj-II
- *'Saghan krushi pain mritika pariksha (in Odia)'*, published by KVK Nabarangpur
- *'Samannwita rogapoka parichala, dhana (in Odia)'*, published by KVK Gajapati
- *'Samanwita pranali re fall army worm poka ra parichalana (in Odia)'*, published by KVK Gajapati
- *'Sankar jaitya bilati baigana chasa(in Odia)'*, published by KVK Mayurbhanj-I
- *'Scientific method of mustard cultivation'*, published by KVK Mayurbhanj-II
- *'Sita diniya chhatu chasa dhingiri chhutu (in Odia)'*, published by KVK Rayagada
- *'Sorisha chas (in Odia)'*, Published by KVK Mayurbhanj-II
- *'Unnat pranalire biri chasa (in Odia)'*, published by KVK Nabarangpur
- *'Unnat pranalire chinabadam bihan utpadan (in Odia)'*, published by KVK Nabarangpur
- *'Unnata pranalire gendu phuala chasa (in Odia)'*, published by KVK Nabarangpur
- *'Unnata pranalire genduphula chasa (in Odia)'*, published by KVK Gajapati
- *'Unnata pranalire palachhatu chasa (in Odia)'*, published by KVK Nabarangpur
- *'Unnatapranali re chinabadam chasa (in Odia)'*, published by KVK Mayurbhanj-I
- *'Use of diesel engine and its maintenance (in Odia)'*, published by KVK Mayurbhanj-II

- *'Vermicompost production'*, published by KVK Rayagada
- *'Vermicomposting and vermiculture production'*, published by KVK Sundargarh-I
- *'Prosperity through organic vegetable cultivation in Car Nicobar'*. published by ICAR-CIARI, Port Blair
- *'Success story of women empowerment through organic vegetable culture in Car Nicobar'*, published by ICAR-CIARI, Port Blair

D) Book/book chapter

Kumar A, Ghosh, A, Mondal, D, Ghosh, R and Bandopadhay P. 2022. Conservation agriculture for enhancing resource use efficiency and sustainability. In Book: Conservation agriculture technologies, Biotech books, New Delhi, pp: 143-156. (KVK Sundargarh-I).

Majumder D, Akhter J, Mandal A, Roy R, Mondal D, Bhatt R and Hossain A. 2021. Precision input management for minimizing and recycling of agricultural waste. In: Input use efficiency for food and environmental security, pp. 567-603. (KVK Sundargarh-I).

Pattnaik S. 2019. Horticulture for Rural Development. Published by Kalyani Publishers**.** New Delhi (KVK Mayurbhanj-I).

E) Electronic media

i) Audio cassette

- *'Backyard poultry rearing in Santali language'*, published by KVK Mayurbhanj-I
- *'Papaya cultivation in Santali language'*, published by KVK Mayurbhanj-I
- *'Soil health and its management'*, published by KVK Mayurbhanj-I

ii) Video cassette

- *'Dadanaru krushi udyogi'*, published by Mayurbhanj-I
- *'False smut in paddy'*, published by Mayurbhanj-I
- *'Mushroom cultivation'*, published by Mayurbhanj-I
- *'Patramoda pokar daman'*, published by Mayurbhanj-I
- *'Rouging technique in paddy seed production'*, published by Mayurbhanj-I
- *'Save water save life in Odia language'*, published by Mayurbhanj-I
- *'Say no to single use plastic'*, published by Mayurbhanj-I
- 'Success story of successful entrepreneur', published by Mayurbhanj-I
- *'Value added product of sabai'*, published by Mayurbhanj-I

iii) CD/DVD

- *'Empowerment of WSHGs through vermicomposting (CD/DVD)'*, published by Sundargarh-I
- *'Success story on mushroom production (CD/DVD)'*, published by Sundargarh-I
- *'Scientific method of greengram Cultivation (CD/DVD)'*, published by Sundargarh-I
- *'Vermicompost, IFS, honey bee, mushroom (success story)'*, published by Sundargarh-I

F) Abstract presented/published at national/international seminars/symposia/ conference

Choudhuri N C, Ram N, Singh L B, George Z, Nanda B K, Bommayasamy, Pandey V K, Nayak H and Kundu A. 2018. Amelioration of heat stress in poultry through improved shelter in NICRA adopted villages. In: IPSACON-2018 held at ICAR-CIARI, Port Blair, 15th-17th November, 2018, pp: 215.

Choudhuri N C, Ram N, Singh L B, George Z, Nanda B K, Bommayasamy, Pandey V .K, Nayak H and Kundu A. 2018. Backyard poultry production using disease resistant improved *Nicobari* fowl at NICRA adopted villages. In: IPSACON-2018 held at ICAR-CIARI, Port Blair, 15th -17th November, 2018, pp: 8.

George Z, Kundu A, Nagesh R, Singh L B, Sujatha T, Pandey S K, Choudhuri N C, Singh S K. 2018. Assessment of awareness level among the Nicobarese and reasons for decline in population of *Nicobari* fowl in Car Nicobar. In: IPSACON-ICAR-CIARI, Port Blair, 15th -17th November, 2018, pp: 18.

George Z, Singh S K., Kundu A, Nagesh R, Singh L B, Sunder J, Sujatha T,, Pandey S K, Choudhuri N C and Bhattacharya D. 2018. Evaluation of efficacy of herbal eye drop in treating conjunctivitis in poultry at Nicobar, PHB-24. In: IPSACON-2018 held at ICAR-CIARI, Port Blair, 15th-17th November, 2018.

Pamia J, Panda A A, Panda S K and Mishra R. 2018. Mycoplasmal pneumonia in goats. In: National symposium on recent advances in veterinary pathology and disease diagnosis for sustainable livestock and poultry production, 22-24 Oct., 2018, SDAU, Gujarat.

Pandey S K, George Z, Singh S K, Swarnam T P, Velmurgan A and Ram N. 2018. Introduction and adaptation of maize poultry feed in Nicobar Islands, India. In: IPSACON-2018 held at ICAR-CIARI, Port Blair, 15th -17th November, 2018, pp: 24.

Pandey S K, George Z, Singh S K, Swarnam T P and Ram N. 2018. Role of backyard poultry in integrated farming system for food and nutritional security of tribal farmers in Nicobar Islands, India. In IPSACON-2018 held at ICAR-CIARI, Port Blair, 15th to17th November, 2018, pp: 24.

Ram N, Singh L B, Choudhuri N C, George Z, Pandey V K and Nayak H. 2018. Poultry litter for green farming in Andaman and Nicobar Islands. In: IPSACON-2018 held at ICAR-CIARI, Port Blair, 15th -17th November, 2018, pp: 216.

Varadan R J, Zamir S K, Jerard B A, Kashinath B L, Singh L B, Pandey S K, Srivastava A and Kundu A. 2018. Backyard poultry: A viable adaptation strategy for the vulnerable island ecosystem. In: IPSACON-2018 held at ICAR-CIARI, Port Blair, 15th-17th November, 2018.

G) Radio talk

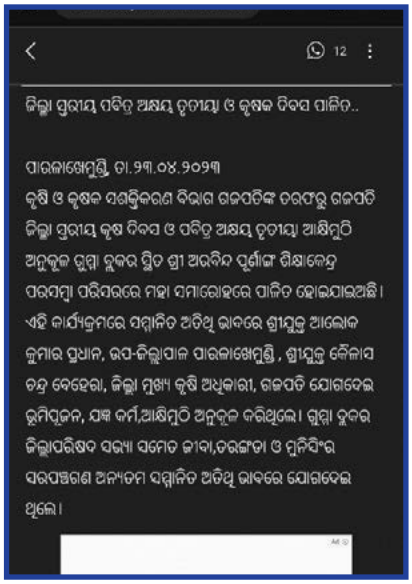
- George Z. 2020. Advisory on *'Dairy Farmers of the Islands'* broadcasted on 22nd May, 2020 in *Kisanvani Programme* of AIR, Port Blair.
- George Z. 2020. Talk on *'Aajivika ke Liye Teressa Bakriyan (in Hindi)'* broadcasted on 26th August, 2020 (recorded 04th August, 2020 at 11:15 am) in *Kisanvani Programme* of AIR, Port Blair.
- Pandey S K. 2020. Advisory on *'Farmers of Car Nicobar'* broadcasted on 23rd May, 2020 in *Kisanvani Programme* of AIR, Port Blair.
- Pandey S K. 2020. Advisory on *'Kharif preparation for farmers of Campbell Bay'* broadcasted on 21st May, 2020 in *Kisanvani Programme* of AIR, Port Blair.
- Pandey S K. 2020. Talk on *'Sabziyon ki Kaasht mein Kampost (in Hindi)'* broadcasted on 28th August, 2020 (recorded 04th August, 2020 at 12:15 pm) in *Kisanvani Programme* of AIR, Port Blair.

CHAPTER 10

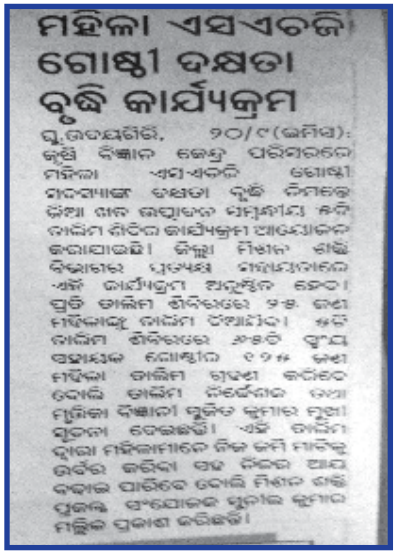
MEDIA COVERAGE

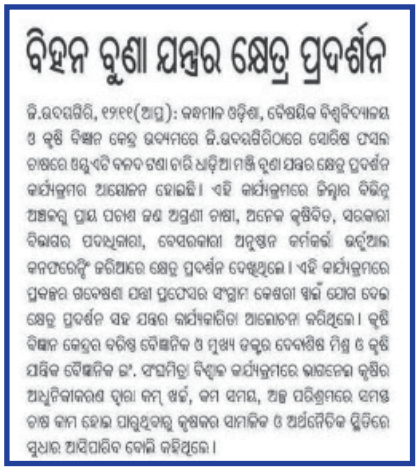
The different activities in the form of training, exposure visit, field day, OFTs, FLDs, farmers' meet, SAC meetings, monitoring field visits, kisan mela, kisan gosthi etc. conducted by the TSP/STC KVKs in their respective districts either on-campus and off-campus were also published by the local and national press and media for the benefit of public. Some important media coverages by the KVKs of this zone during the period of report have been shown as under.

Gajapati KVK



Kandhamal KVK





କୃଷି ଯାନ୍ତ୍ରିକ ଓ ପ୍ରାକୃତିକ କୃଷି କୁ ନେଇ ସଚେତନତା ଅଭିଯାନ ଅନୁଷ୍ଠିତ

ଚି. ଉଦୟଗିରି, (ଖବର):କନ୍ଧମାଳ ଜିଲ୍ଲା ଚି.ଉଦୟଗିରି କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର ଠାରେ ଆଜି ଏକ ଦିନିକିଆ ସଚେତନତା କାର୍ଯ୍ୟକ୍ରମ ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି । ଏହି କାର୍ଯ୍ୟକ୍ରମରେ ଜିଲ୍ଲାର ୪ଟି ବ୍ଲକ ଯଥା ଟିକାବାଲି, ଚି ଉଦୟଗିରି, ରାଇକିଆ, ଏବଂ କ. ନୂଆଗାଁ ବ୍ଲକ ର ପାଞ୍ଚ ପଞ୍ଚ ୨୫୦ରୁ ଉର୍ଦ୍ଧ ଉତ୍ତର ପୁରୁଷ ଏବଂ ମହିଳା କୃଷକ ମାନେ ଯୋଗ ଦେଇଥିଲେ । କୃଷି ଶିଳ୍ପିନିକ ମାନେ ମଧ୍ୟ ଉପସ୍ଥିତ ରହି କୃଷକ ମାନଙ୍କୁ ସଚେତନତା ସଚେତନ କରାଯାଇଛି ! ଏହି-ସଚେତନତା କାର୍ଯ୍ୟକ୍ରମରେ ପଫେସର ଅଜୟ ବାସ, କଲେଜ ଅଫ ଏଗ୍ରିକୋଲଚର ଇଂଜିନିୟରିଙ୍ଗ, ଡ଼ୁଡ଼ୁର ନାରୟଣ ବାର, ବରିଷ୍ଠ ବୈଜ୍ଞାନିକ ଓ ମୁଖ୍ୟ କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର କନ୍ଧମାଳ,ଡ଼ଃ ଜ୍ଞାନରଞ୍ଜନ ବାସ ସରକାର ଙ୍କ ଯୋଜନା କଣ ସବୁ ରହିଛି, ଚାଷୀ କିପରି ତାର ସବସିଡି ପାଇବ, କେଉଁ ଚାଷ ପାଇଁ କେତେ ସବସିଡି ରହିଛି, ଏବଂ ଭବିଷ୍ୟତ ଥିବା ବିଭିନ୍ନ କୃଷି ଅଧିକାରି ଙ୍କ ସହିତ କିପରି ଯୋଗାଯୋଗ କରି, ଚାଷୀ କିପରି ତାର ଅଧିକ ଲାଭ ପାଇ ପାରିବ, ଏବଂ ବହନ ସହିତ ଆବଶ୍ୟକ ଉପକରଣ କିପରି ସୁବିଧା ରେ ପାଇପାରିବେ ସେ ଉପରେ ଚାଷୀ ମାନଙ୍କୁ ସଚେତନ କରାଯାଇଛି ! ଏହି-ସଚେତନତା କାର୍ଯ୍ୟକ୍ରମରେ ପଫେସର ଅଜୟ ବାସ, କଲେଜ ଅଫ ଏଗ୍ରିକୋଲଚର ଇଂଜିନିୟରିଙ୍ଗ, ଡ଼ୁଡ଼ୁର ନାରୟଣ ବାର, ବରିଷ୍ଠ ବୈଜ୍ଞାନିକ ଓ ମୁଖ୍ୟ କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର କନ୍ଧମାଳ,ଡ଼ଃ ଜ୍ଞାନରଞ୍ଜନ ବାସ ଏବଂ ଆର. ଏ.ଆର.ଟି. ଟି.ଏସ. ଜି ଉଦୟଗିରି, ଡ଼ଃ ପ୍ରତିତ କୁମର ମୁଖି, ମୃତ୍ତିକା ବୈଜ୍ଞାନିକ କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର କନ୍ଧମାଳ, ଡ଼ଃ ସିଦ୍ଧାର୍ଥ କର, ଉଦ୍ୟାନ ବୈଜ୍ଞାନିକ କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର କନ୍ଧମାଳ, ଡ଼ଃ ସୌଦାମିନୀ ସ୍ୱାଇଁ,ଫଳ ବିଜ୍ଞାନୀ, ଓ. ୟୁ.ଏ ଟି. ଭୁବନେଶ୍ୱର,ଶ୍ରୀପାଲି ପ୍ରଧାନ, କ୍ଷେତ୍ର ବୈଜ୍ଞାନିକ, ମସ ସୁମୁତ୍ର ହେମ୍ବ୍ରମ,କାର୍ଯ୍ୟକ୍ରମ ପରିଚାଳିକା ଗୃହ ବିଜ୍ଞାନୀ, ଶ୍ରୀ ଜ୍ୟୋତି ରଞ୍ଜନ ପ୍ରଧାନ, ସହକାରୀ କୃଷି ଅଧିକାରୀ ଚି. ଉଦୟଗିରି ପ୍ରଗାତି ପ୍ରଧାନ, ସହକାରୀ ଉଦ୍ୟାନ ଅଧିକାରୀ ଚି. ଉଦୟଗିରି, ଏବଂ ଡ଼ଃ ସୁବ୍ରତ ବେହେରା ପୃଷ୍ଠାଅଞ୍ଚଳ କୃଷି ପୁଭବାଣୀ ପ୍ରମୁଖ ଉପସ୍ଥିତ ଥିଲେ ।

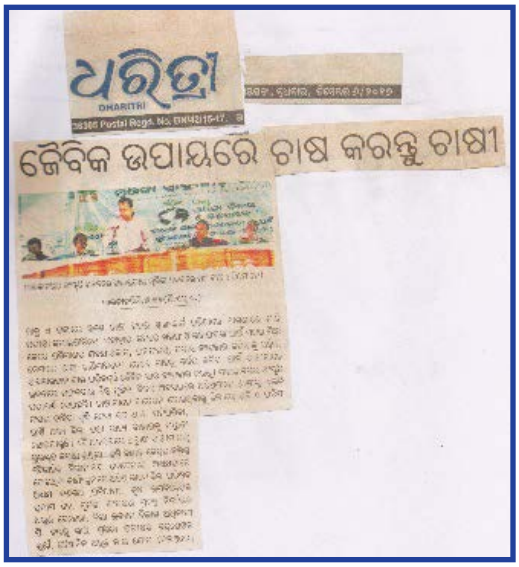
କୃଷି ତାଲିମ ଓ କୁକୁଡ଼ା ଚିଆଁ ବଣ୍ଟନ

Malkangiri KVK

ମାଲ୍ୟବନ୍ତିକା
The Malyabantika

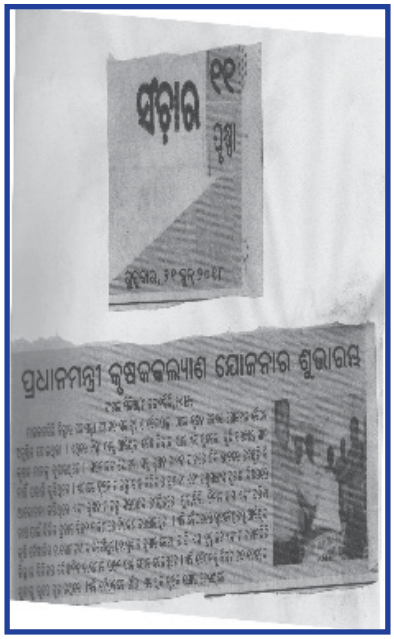
ଧରିତ୍ରୀ

୪ରୁ କୃଷକ କଲ୍ୟାଣ ଅଭିଯାନ ଯୋଜନା



ଧରିତ୍ରୀ

ଜୈବିକ ଉପାୟରେ ଚାଷ କରନ୍ତୁ ଚାଷୀ



ପ୍ରଧାନମନ୍ତ୍ରୀ କୃଷକକଲ୍ୟାଣ ଯୋଜନାର ଶୁଭାରମ୍ଭ

ଔଷଧୀୟ ବୃକ୍ଷ ସମ୍ପର୍କରେ କୃଷକଙ୍କୁ ତାଲିମ

Mayurbhanj-I KVK


କୃଷିଜୀବୀ ମହିଳା ଦିବସ ପାଳିତ


ଅପରାହ୍ନ
THE APARAHNA
କୃଷିଜୀବୀ ମହିଳା ଦିବସ ପାଳିତ ଓ ଚାରା ବଂଟନ


ବାରିପଦାରେ ବିଶ୍ୱ ମୃତ୍ତିକା ଦିବସ


ଜିଲ୍ଲାସ୍ତରୀୟ ବିଶ୍ୱ ମୃତ୍ତିକା ଦିବସ ପାଳିତ
ଚାଷୀଙ୍କୁ ମୃତ୍ତିକା ସ୍ୱାସ୍ଥ୍ୟକାର୍ଡ ବଣ୍ଟନ


ଜିଲ୍ଲାସ୍ତରୀୟ ବିଶ୍ୱ ମୃତ୍ତିକା ଦିବସ ପାଳିତ
ମୃତ୍ତିକା ସଂରକ୍ଷଣ ପାଇଁ ଆହ୍ୱାନ


ସକାଳ
THE SAKALA
ମହୁମାଛି ପାଳନ ସଚେତନତା ପ୍ରଶିକ୍ଷଣ ଶିବିର


ରବିବାର ୧୭ ଅକ୍ଟୋବର ୨୦୨୧
କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର ପକ୍ଷରୁ ବିଶ୍ୱ ଖାଦ୍ୟ ଦିବସ

Mayurbhanj-II KVK


ଜୟ କିଷାନ, ଜୟ ବିଜ୍ଞାନ ସପ୍ତାହ
ଯଶିପୁର କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର
SAMBAD
ସମ୍ବାଦ


ପ୍ରଗତିବାଦୀ
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ଆଦିବାସୀଙ୍କ ଜୀବିକାରେ ସହାୟକ ହେବ

Nabarangpur KVK

Rayagada KVK

ପୋଷକ ଶସ୍ୟ ବର୍ଷ ଆଲୋଚନାଚକ୍ର

ନଡ଼ିଆ ଚାଷ ସମ୍ବନ୍ଧୀୟ ତାଲିମ ଶିବିର

କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର ପକ୍ଷରୁ ମହିଳାମାନଙ୍କୁ କୃଷି ଯନ୍ତ୍ରପାତି ବଣ୍ଟନ

'ଶ୍ରମଜୀବୀ ମହିଳାଙ୍କ ଶ୍ରମ ଲାଘବ ଏହାର ମୁଖ୍ୟ ଉଦ୍ଦେଶ୍ୟ'

କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର ଗୁଣପୁର ପରିସରରେ ଜିଲ୍ଲା ସ୍ତରୀୟ କୃଷକ ମେଳା ଅନୁଷ୍ଠିତ

କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ରରେ ଗରିବ କଲ୍ୟାଣ ସମ୍ମିଳନୀ

ଆଜି କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର ରାୟଗଡା, ଗୁଣପୁର ପରିସରରେ ଗରିବ କଲ୍ୟାଣ ସମ୍ମିଳନୀ କାର୍ଯ୍ୟକ୍ରମ ଅନୁଷ୍ଠିତ

ଜିଲାସ୍ତରୀୟ କୃଷକ ମେଳା

ଜନତା NEWS

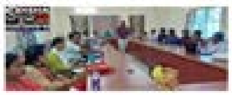
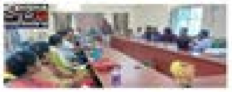
ଜିଲ୍ଲା ସ୍ତରୀୟ କୃଷକ ମେଳା ଓ ପ୍ରଦର୍ଶନୀ ଅନୁଷ୍ଠିତ

ଭାରତୀୟ କୃଷି ଅନୁସନ୍ଧାନ ପରିଷଦ ର ୯୪ ତମ ସ୍ଥାପନା ଦିବସ ଓ ପୁରସ୍କାର ବିତରଣ ସମାରୋହ ଅନୁଷ୍ଠିତ

ଗୁଣପୁର ୧୬/୦୭/୨୦୨୨ କଳିଙ୍ଗ ଜ୍ୟୋତି(ବିରଞ୍ଚି ପ୍ରସାଦ ଶତପଥୀ) : ଆଜି ଗୁଣପୁର କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର ଠାରେ ରାମନାଗୁଡା , ଗୁଡ଼ାରୀ , ପଦ୍ମପୁର ଓ ଗୁଣପୁରର ଶତାଧିକ ଚାଷୀଙ୍କୁ ନେଇ ଭାରତୀୟ କୃଷି ଅନୁସନ୍ଧାନ ପରିଷଦର ୯୪ ତମ ସ୍ଥାପନା ଦିବସ ପାଳିତ ହୋଇଯାଇଛି । କୃଷକ ମାନେ ଦେଶର ମେରୁଦଣ୍ଡ କହିଲେ ଅତ୍ୟୁକ୍ତି ହେବ ନାହିଁ । ତେଣୁ କୃଷି ବା କୃଷକର ଆୟ ବୃଦ୍ଧି କରିବାର ପ୍ରୟାସ ଜାରି ରହିଛି । ଆଜିର ଏହି କାର୍ଯ୍ୟକ୍ରମରେ ଚାଷୀ ମାନେ ଅନଲାଇନ ମାଧ୍ୟମରେ କେନ୍ଦ୍ର କୃଷିମନ୍ତ୍ରୀଙ୍କ ସହ ବିଧାୟକଙ୍କ କୃଷି ସମ୍ବନ୍ଧରେ ଆଲୋଚନା କରିଥିଲେ ଓ କୃଷି କ୍ଷେତ୍ରରେ ସଫଳତା ହାସଲ କରିଥିବା ଚାଷୀ ମାନଙ୍କ କୃଷି ମନ୍ତ୍ରୀ ପୁରସ୍କାର ପ୍ରଦାନ କରୁଥିବା ଅନଲାଇନ ମାଧ୍ୟମରେ ଦେଖିଥିଲେ । ବିଶେଷ କରି ଜୈବିକ କୃଷି ଓ ସମନ୍ୱିତ କୃଷି ଉପରେ ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ ଆଲୋଚନା ହୋଇଥିଲା । କିପରି ସମନ୍ୱିତ କୃଷି ଦ୍ୱାରା ଚାଷି ନିଜର ଆୟ ବୃଦ୍ଧିତ କରିପାରିବ ସେ ସମ୍ପର୍କରେ ବୈଜ୍ଞାନିକ ମାନେ ଚାଷିମାନଙ୍କ ମାର୍ଗଦର୍ଶନ କରିଥିଲେ । ଭିନ୍ନ ଭିନ୍ନ ବ୍ଲକର ଚାଷୀ ମାନେ ଚାଷ କ୍ଷେତ୍ରରେ ନିଜର ସଫଳତା , ଅନୁଭୂତି ଓ ସମସ୍ୟା ଯାହା ଚାଷ କ୍ଷେତ୍ରରେ ସେମାନେ ସାମନା କରୁଛନ୍ତି ତାହା ପରସ୍ପର ମଧ୍ୟରେ ଆଲୋଚନା କରିଥିଲେ । ଉକ୍ତ କାର୍ଯ୍ୟକ୍ରମରେ କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ରର ବରିଷ୍ଠ ବୈଜ୍ଞାନିକ ତଥା ମୁଖ୍ୟ ରାଜିବ ଦୃଷ୍ଟ ଚାଷର ବିଭିନ୍ନ କୌଶଳ ଶିକ୍ଷା ଦେଇଥିଲେ ଏବଂ ପରିମଳ ତରାଇ , ହିମାଦ୍ରି ବାଗ , ଦୃର୍ଷ ସାଟିକା ବେହେରା ପ୍ରମୁଖ ସହଯୋଗ କରିଥିଲେ । ଚାଷୀ ମାନେ ଆଗାମୀ ଦିନରେ ଏପରି କାର୍ଯ୍ୟକ୍ରମ କରି କୃଷି ସମ୍ବନ୍ଧୀୟ ଆଲୋଚନା କରିବାକୁ ଅନୁରୋଧ କରିବା ସହ କୃଷି ସମ୍ବନ୍ଧୀୟ ବିଭିନ୍ନ କୌଶଳ ଶିକ୍ଷା ଲାଭ କରିଥିବାରୁ ମଞ୍ଜରିନ ଅଧିକାରୀ ମାନଙ୍କ ଧନ୍ୟବାଦ ଅର୍ପଣ କରିଥିଲେ ।

ରିପୋର୍ଟ : ବିରଞ୍ଚି ପ୍ରସାଦ ଶତପଥୀ।

ଗୁଣପୁର, (୯/୧) : ରାୟଗଡ଼ା ଜିଲ୍ଲା ବିଭିନ୍ନ ପନିପରିବା, ଡାଲି ଜାତୀୟ ଓ ତୈଳବୀଜ ଫସଲ ଉତ୍ପାଦନରେ ଅଗ୍ରଣୀ ଭୂମିକା ଗ୍ରହଣ କରିଛି ।

କପା ଓ ଧାନ ଫସଲକୁ ଛାଡି ଜିଲ୍ଲାର ବିଭିନ୍ନ ଅଞ୍ଚଳରେ ଡାଲି ଜାତୀୟ ଓ ତୈଳବୀଜ ଫସଲ ବହୁଳ ଭାବରେ ଚାଷ କରାଯାଇଥାଏ । ବିଶେଷ କରି ରବି ଋତୁ ଡାଲି ଜାତୀୟ ଫସଲ ଉତ୍ପାଦନ ପାଇଁ ଉପଯୁକ୍ତ ସମୟ । ସେହି ଉପଲକ୍ଷେ କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର ତରଫରୁ ଡାଲି ଜାତୀୟ ଓ ତୈଳବୀଜ ଫସଲରେ ସମନ୍ବିତ ଉପାୟରେ ରୋଗ ପୋକ ପରିଚାଳନା ନିମନ୍ତେ ଏକ ତାଲିମ ଶିବିର ଆୟୋଜନ କରାଯାଇଥିଲା । ଏହି ତାଲିମ ଶିବିରରେ ବିଶେଷ ଭାବରେ କୃଷି କର୍ମଚାରୀ ଯଥା, ଗ୍ରାମ ସେବକ (ଭି ଏ ଡବ୍ଲୁ) , କୃଷି ଅଭିଦର୍ଶକ(ଏ ଓ), ଏ ଟି ଏମ୍ ମାନଙ୍କ ପାଇଁ ଉଦ୍ଦିଷ୍ଟ ଥିଲା ।

ଏହି ତାଲିମ ଶିବିରରେ ପଦ୍ମପୁର, ଗୁଡ଼ାରୀ, ରାମନାଗୁଡା ଓ ଗୁଣପୁର ବ୍ଲକର ପ୍ରାୟ ୨୦ ଜଣ କୃଷି କର୍ମଚାରୀ ଯୋଗ ଦେଇଥିଲେ । ଏହି କର୍ମଚାରୀ ମାନଙ୍କ ଦିଗଦର୍ଶନ ଦ୍ବାରା ଚାଷୀ ମାନେ କିପରି ଉପକୃତ ହୋଇପାରିବେ, ଏହି ତାଲିମ ଶିବିର ର ମୁଖ୍ୟ ଉଦ୍ଦେଶ୍ୟ ଥିଲା । ଏହି ତାଲିମ ଶିବିରରେ କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ରର ବରିଷ୍ଠ ବୈଜ୍ଞାନିକ ରାଜିବ ଟୁଡୁ ସ୍ୱାଗତ ଭାଷଣ ଦେଇ ଡାଲିଜାତୀୟ ଫସଲ ଓ ତୈଳବୀଜ ଫସଲର ଉପକାରିତା ଓ ସମନ୍ବିତ ଉପାୟରେ

ରିପୋର୍ଟ : ବିରଞ୍ଚି ପ୍ରସାଦ ଶତପଥୀ

ଗୁଣପୁର, (୭/୧) : ଆଜି ଗୁଣପୁର ସ୍ଥିତ କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ରରେ ରାୟଗଡ଼ା ଜିଲ୍ଲାର ବିଭିନ୍ନ ବ୍ଲକର ଚାଷୀ ମାନଙ୍କୁ ନେଇ ଛତୁ ମଞ୍ଜି ଉତ୍ପାଦନ ତାଲିମ ଶିବିର ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି ।


ରାୟଗଡ଼ା ଜିଲ୍ଲା ପନିପରିବା ଉତ୍ପାଦନରେ ଅଗ୍ରଣୀ ଥିଲେ ମଧ୍ୟ ଅପପୁଷ୍ଟି ଓ ବେକାରୀ ସମସ୍ୟା ଗ୍ରାମାଞ୍ଚଳର ପିଛା ଛାଡୁନି । ଏହି ସମସ୍ୟାର ସମାଧାନ ପାଇଁ ବିଭିନ୍ନ ପ୍ରକାର ଉଦ୍ୟାନ ଭିତ୍ତିକ ଓ ଧନାତ୍ମକ କାର୍ଯ୍ୟକ୍ରମ ଜାରି ରହିଛି । ସେଥିମଧ୍ୟରୁ ଛତୁଚାଷ ଅନ୍ୟତମ । ରାୟଗଡ଼ା ଜିଲ୍ଲା ଛତୁଚାଷ ପାଇଁ ବେଶ ଉପଯୋଗି ହୋଇଥିବାରୁ , ଛତୁ ମଞ୍ଜି ଉତ୍ପାଦନ ତାଲିମ ଶିବିର ଆବଶ୍ୟକତା ରହିଛି । ତେଣୁ ଛତୁଚାଷର ପ୍ରଚାର ପ୍ରସାର ପାଇଁ କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର ଦ୍ବାରା ଅନେକ ପ୍ରଶିକ୍ଷଣ ଓ କ୍ଷେତ୍ର ପ୍ରଦର୍ଶନ କରାଯାଉଛି । ପ୍ରତ୍ୟେକ ଫସଲ ଉତ୍ପାଦନ ପାଇଁ ଉତ୍ତମ ମାନର ବିହନର ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ ଭୂମିକା ରହିଛି । ଛତୁ ଚାଷ କ୍ଷେତ୍ରରେ ମଧ୍ୟ ବିହନ ବା ସ୍ପନର ଭୂମିକା ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ । ଯଦିଓ କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର ଦ୍ବାରା ଚାଷୀ ମାନଙ୍କୁ ଉତ୍ତମ ମାନର ଛତୁ ମଞ୍ଜି ଯୋଗାଇ ଦିଆଯାଉଛି, ତଥାପି ଛତୁମଞ୍ଜିର ଆବଶ୍ୟକତା ରହିଛି ।

ରିପୋର୍ଟ : ବିରଞ୍ଚି ପ୍ରସାଦ ଶତପଥୀ

ଗୁଣପୁର, (୫/୧୨) : ଆଜି ଗୁଣପୁର କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର ପରିସରରେ ମାଟି ମା'ର ସୁରକ୍ଷା ପାଇଁ ମହା ଆଡ଼ମ୍ବରରେ ପାଳିତ ହୋଇଯାଇଛି ବିଶ୍ୱ ମୃତ୍ତିକା ଦିବସ ।


କଥାରେ ଅଛି " ମାଟିର ସୁରକ୍ଷା ଜୀବନ ରକ୍ଷା" । ପୃଥିବୀର ସମସ୍ତ ଜୀବଜଗତ ମାଟିକୁ ଆଧାର କରି ଜୀବିକା ନିର୍ବାହ କରୁଥିବା ବେଳେ ଆଜି ସେହି ମାଟି ମା'ର ଅବସ୍ଥା ସଙ୍କଟାପନ୍ନ । ଯାହା ଫଳରେ ଜୀବଜଗତ ସୁରକ୍ଷା ଉପରେ ପ୍ରଶ୍ନବାଚୀ ସୃଷ୍ଟି ହୋଇଛି । ତେଣୁ ମାଟିର ସୁରକ୍ଷା ପାଇଁ ଆଜି ବିଶ୍ୱ ସ୍ତରରେ ମୃତ୍ତିକା ଦିବସ ପାଳନ କରାଯାଉଛି । ଆଜିର ଏହି କାର୍ଯ୍ୟକ୍ରମରେ ମୁଖ୍ୟ ଅତିଥିଭାବେ କୃଷି ଜିଲ୍ଲା ଅଧିକାରୀ, ଗୁଣପୁର ଶ୍ରୀ ବିଷ୍ଣୁ ପ୍ରସାଦ ସାହୁ ଯୋଗଦେଇ ଜମିର ଉର୍ବରତା ବୃଦ୍ଧି ନେଇ ଜୈବିକ ସାର ପ୍ରୟୋଗ ସହ ମୃତ୍ତିକା ପରିକ୍ଷା କରି ଆବଶ୍ୟକ ପରିମାଣର ସୁଷମ ସାର ଓ କିଟ ନାଶକ ପ୍ରୟୋଗ କରିବାକୁ ପରାମର୍ଶ ଦେଇଥିଲେ ।

ଗୁଣପୁର କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ରର ବୈଜ୍ଞାନିକ ବିନୋଦ ଚନ୍ଦ୍ର ବେହେରା ମୃତ୍ତିକା ସୁରକ୍ଷା, ଏହାର ସୁପରିଚାଳନା ଓ ମୃତ୍ତିକା ଦିବସ ପାଳନର ତାତ୍ପର୍ଯ୍ୟ ସମ୍ପର୍କରେ ଆଲୋଚନା କରିଥିଲେ । ସହକାରୀ ଉଦ୍ୟାନ ଅଧିକାରୀ ସତ୍ୟବ୍ରତ ସାହୁ ଯୋଗଦେଇ କୃଷି ଉତ୍ପାଦନ ବୃଦ୍ଧି ପାଇଁ ମୃତ୍ତିକାର ଉର୍ବରତା ବୃଦ୍ଧି ଓ ଆବଶ୍ୟକୀୟ ପଦକ୍ଷେପ

ରିପୋର୍ଟ : ବିରଞ୍ଚି ପ୍ରସାଦ ଶତପଥୀ

ଗୁଣପୁର, (୨୪/୧୧) : କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର ଗୁଣପୁର ରେ ମହୁଚାଷ କରି ଚାଷୀ ଙ୍କୁ ଆତ୍ମନିର୍ଭରଶୀଳ ହେବାର ସୁଯୋଗ । ଆଦିମ କାଳରୁ ମହୁମାଛି ଜୀବ ଜଗତକୁ ସନ୍ତୁଳିତ କରି ରଖିବାରେ ମୁଖ୍ୟ ଭୂମିକା ନିର୍ବାହ କରିଆସିଛି ।


ଆଜି ମଣିଷ ଓ ଜୀବଜଗତର ଏହି ଉପକାରୀ ବନ୍ଧୁଟି ସଙ୍କଟରେ । ତେଣୁ ଆମର କର୍ତ୍ତବ୍ୟ ଏହି ନିରିହ ବନ୍ଧୁଟିର ପ୍ରଜାତିକୁ ବଞ୍ଚାଇ ରଖିବା । ରାୟଗଡ଼ା ଜିଲ୍ଲା ସମ୍ପୁର୍ଣ୍ଣ ଭାବେ ଜଙ୍ଗଲିଆ ଅଞ୍ଚଳ ହୋଇଥିବାରୁ ମହୁଚାଷ କରି ଚାଷୀ ଆତ୍ମନିର୍ଭରଶୀଳ ହେବାର ସୁଯୋଗ ରହିଛି । ସରକାର ମଧ୍ୟ ମହୁ ଚାଷକୁ ଗୁରୁତ୍ୱ ଦେବା ଏକ ସ୍ୱାଗତଯୋଗ୍ୟ ପଦକ୍ଷେପ । ଆତ୍ମା ସହାୟତାରେ କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର ଗୁଣପୁର ର ତତ୍ତ୍ୱାବଧାନରେ ରାୟଗଡ଼ା ଜିଲ୍ଲାର ୧୫ ଜଣ ଚାଷୀଙ୍କୁ ମହୁ ଚାଷରେ ପାରଦର୍ଶୀତା ଲାଭକରିବାର ସୁଯୋଗ ମିଳିଛି । ଚାଷୀ ମାନେ ମହୁ ଚାଷର ପଦ୍ଧତି, ରୋଗ ପୋକ, ମହୁ ଉତ୍ପାଦନ, ପରିବେଶ ପରିଚାଳନା, ମହୁବାକ୍ସର ଯତ୍ନ, ଦଳ ବିଭାଜନ ଏପରି ବିଭିନ୍ନ ବିଷୟରେ ଜ୍ଞାନ ଅର୍ଜନ କରିବା ସହ ମହୁ ଚାଷୀଙ୍କ କ୍ଷେତକୁ ଯାଇ ମହୁ ବକ୍ସ ରୁ ମହୁ ବାହାର କରିବାର ପ୍ରଶିକ୍ଷଣ ନେଇଥିଲେ ।

ରିପୋର୍ଟ : ବିରଞ୍ଚି ପ୍ରସାଦ ଶତପଥୀ

ଗୁଣପୁର, (୧୭/୯) : ଆଜି ରାୟଗଡ଼ା ଜିଲ୍ଲା ର ଗୁଣପୁର କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର ପରିସରରେ ପୋଷଣ ଅଭିଯାନ ଓ ବୃକ୍ଷ ରୋପଣ କାର୍ଯ୍ୟକ୍ରମ କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର ଗୁଣପୁର ଓ IFFCO ରାୟଗଡ଼ା ର ମିଳିତ ସହଯୋଗରେ ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି ।


ଉକ୍ତ କାର୍ଯ୍ୟକ୍ରମରେ IFFCO ର ଫିଲ୍ଡ ଅଫିସର ତାପସ ରଞ୍ଜନ ସାହୁ ଓ ଅନ୍ୟ କ୍ଷେତ୍ର କର୍ମଚାରୀ ମାନେ ଯୋଗ ଦେଇଥିଲେ । ଜିଲ୍ଲା ସ୍ତରୀୟ କୃଷି ଓ ଉଦ୍ୟାନ କୃଷି ବିଭାଗ ର ଅଧିକାରୀଙ୍କ ସମେତ ରାୟଗଡ଼ା ଜିଲ୍ଲା ର ବିଭିନ୍ନ ଗ୍ରାମରୁ ୧୦୦ ରୁ ଊର୍ଦ୍ଧ୍ୱ ଚାଷୀ ଯୋଗ ଦେଇଥିଲେ । ଗୁଣପୁର କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର ର ବୈଜ୍ଞାନିକ ବିନୋଦ ଚନ୍ଦ୍ର ବେହେରା ସ୍ୱାଗତ ଭାଷଣ ଦେବା ସହିତ ପୋଷଣ ଅଭିଯାନ ର ଆଭିମୁଖ୍ୟ ଓ ବୃକ୍ଷ ରୋପଣ ଉପରେ ଆଲୋକପାତ କରିଥିଲେ ।

IFFCO ର ଫିଲ୍ଡ ଅଫିସର ତାପସ ରଞ୍ଜନ ସାହୁ ପୋଷକ ତତ୍ତ୍ୱ, ବୃକ୍ଷ ରୋପଣ, ବିଭିନ୍ନ ଫସଲରେ ଅଣୁସାର ର ଆବଶ୍ୟକତା, ନାନୋ ଫର୍ଟିଲାଇଜର ର ବ୍ୟବହାର ଉପରେ ଗୁରୁତ୍ୱାରୋପ କରିଥିଲେ । ଉପସ୍ଥିତ କୃଷି ଓ ଉଦ୍ୟାନ କୃଷି ଅଧିକାରୀ, କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର ର ବୈଜ୍ଞାନିକ ବୃନ୍ଦ ଜୈବିକ ଚାଷ ପଦ୍ଧତି, ପାକଶାଳା ବଗିଚା, ସନ୍ତୁଳିତ ଖାଦ୍ୟ, ମାଣ୍ଡିଆ ଓ ଅନ୍ୟାନ୍ୟ ମିଲେଟ ଜାତୀୟ ଚାଷ, କୁପୋଷଣ ଦୂରିକରଣ ଉପରେ ସବିଶେଷ ଆଲୋଚନା କରିଥିଲେ ।

ରିପୋର୍ଟ : ବିରଞ୍ଚି ପ୍ରସାଦ ଶତପଥୀ

ରାୟଗଡ଼ା, (୨୨/୧୧) : ରାୟଗଡ଼ା ଜିଲ୍ଲା ଗୁଣପୁର ସ୍ଥିତ କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର ଓ ପ୍ରକଳ୍ପ ନିର୍ଦ୍ଦେଶକ, ଆତ୍ମା ରାୟଗଡ଼ା ର ମିଳିତ ସହାୟତାରେ ବୈଜ୍ଞାନିକ ପଦ୍ଧତିରେ ମହୁଚାଷ ଉପରେ ୭ ଦିନିଆ ଆବାସିକ କୌଶଳ ବିକାଶ ତାଲିମ ଶିବିର ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି ।


ଉକ୍ତ କାର୍ଯ୍ୟକ୍ରମକୁ ରାମଚନ୍ଦ୍ର ଦାଶ ମୁଖ୍ୟ ଜିଲ୍ଲା କୃଷି ଅଧିକାରୀ ତଥା ପ୍ରକଳ୍ପ ନିର୍ଦ୍ଦେଶକ ଆତ୍ମା ରାୟଗଡ଼ା ଆନୁଷ୍ଠାନିକ ଭାବେ ଉଦଘାଟନ କରି ପ୍ରଶିକ୍ଷାର୍ଥୀ ମାନଙ୍କୁ ବୈଜ୍ଞାନିକ ପଦ୍ଧତିରେ ମହୁଚାଷ କରି ଆୟ ବଢ଼ାଇବା ସହ ନିଜ ଜୀବନ ଧାରଣ ମାନରେ ଉନ୍ନତି ଆଣିବା ପାଇଁ ପରାମର୍ଶ ଦେଇଥିଲେ । କେନ୍ଦ୍ରର ବରିଷ୍ଠ ବୈଜ୍ଞାନିକ ରାଜିବ ଟୁଡୁ ମହୁଚାଷକୁ କିପରି ଏକ ଲାଭଦାୟକ ଚାଷରେ ପରିଣତ କରିହେବ ଓ କେଉଁ ପ୍ରଜାତିର ମହୁମାଛି ପାଳନ କଲେ ଅଧିକ ମହୁ ଅମଳ ହେବା ସହିତ ବିଶେଷ ଲାଭବାନ ହୋଇପାରିବେ ସେ ବିଷୟରେ ସୂଚନା ପ୍ରଦାନ କରିଥିଲେ ।

ସମ୍ବାଦ

ପ୍ରଧାନମନ୍ତ୍ରୀ କିଷାନ ସମ୍ମାନ ସମ୍ମିଳନୀ

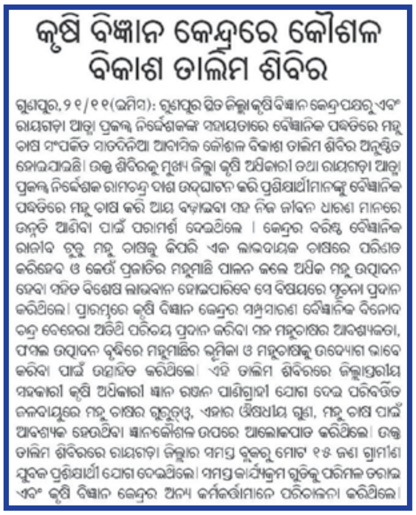
କୃଷକ ମେଳା ଅନୁଷ୍ଠିତ

କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର ପକ୍ଷରୁ ସ୍ୱଚ୍ଛ ଭାରତ ଅଭିଯାନ

କୃଷକ ଓ କୃଷିଜିବୀ ମହିଳାଙ୍କ ପାଇଁ ତାଲିମ ଶିବିର

ଜିଲ୍ଲାସ୍ତରୀୟ ଗବେଷଣା-ସଂପ୍ରସାରଣ ସମନ୍ୱୟ ବୈଠକ

୯୫ ତମ ଭାରତୀୟ କୃଷି ଏବଂ ଅନୁସନ୍ଧାନ ପରିଷଦର ସ୍ଥାପନା ଦିବସ ପାଳନ



କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ରରେ କୌଶଳ ବିକାଶ ତାଲିମ ଶିବିର

ସମ୍ବାଦ

ପୁଷ୍ଟିଶସ୍ୟ ଖାଦ୍ୟ ପ୍ରଦର୍ଶନୀ, ମା' ପାର୍ବତୀ ଏସ୍‌ଏଚ୍‌ଜି ପ୍ରଥମ

RAYAGADA MALKANGIRI NABARANGAPUR Edition

ସମ୍ବାଦ

କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର ପକ୍ଷରୁ ମହିଳାଙ୍କୁ କୃଷି ଯନ୍ତ୍ରପାତି ବଣ୍ଟନ

Sundargarh-I KVK

ଧରିତ୍ରୀ

World Soil Day

5 December 2017

ବିଶ୍ୱ ମୃତ୍ତିକା ଦିବସ

ଧରିତ୍ରୀ

କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ରରେ କୃଷି ଶିକ୍ଷା ଦିବସ ପାଳିତ

କୃଷିଜୀବୀ ମହିଳା ଦିବସ ପାଳିତ

ଧରିତ୍ରୀ

ସମ୍ବଲପୁର, ସୁବୁବାର, ଡିସେମ୍ବର ୨୦/୨୦୧୮

କୃଷିବିଜ୍ଞାନ କେନ୍ଦ୍ରରେ ବୈଜ୍ଞାନିକ ଉପଦେଷ୍ଟା ମଣ୍ଡଳୀ ବୈଠକ

ସୁନ୍ଦରଗଡ଼ରେ ଜିଲାସ୍ତରୀୟଅନ୍ତର୍ଜାତୀୟମହିଳା ଦିବସ

ଜିଲାସ୍ତରୀୟ ଅନ୍ତର୍ଜାତୀୟ ମହିଳା ଦିବସ

ସମାଜ
The Samaja

କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ରରେ ମହିଳା କିଷାନ ଦିବସ

ଧରିତ୍ରୀ

ଜିଲାସ୍ତରୀୟ ମହିଳା କିଷାନ ଦିବସ

ସମ୍ବାଦ

କୃଷି ବିଜ୍ଞାନକେନ୍ଦ୍ରରେ ବିଶ୍ୱ ଖାଦ୍ୟ ଦିବସ

ସମ୍ବାଦ

ଜିଲ୍ଲାସ୍ତରୀୟ କିସାନ ମହିଳା ଦିବସ

କୃଷିବିଜ୍ଞାନ କେନ୍ଦ୍ରରେ ରବି କୃଷକ ମେଳା

ବିଶ୍ୱ ଖାଦ୍ୟ ଦିବସ ପାଳିତ

ଜିଲାସ୍ତରୀୟବିଶ୍ୱ ମତ୍ସ୍ୟ ଦିବସ

ମାଛ ପୋଖରୀର ଖାଦ୍ୟସାର ପରିଚାଳନା ତାଲିମ

ଜିଲ୍ଲାସ୍ତରୀୟ ଗୋ ସମ୍ବର୍ଦ୍ଧନା ଉତ୍ସବ

ଉନ୍ନତମାନର ଚାଷ ପାଇଁ କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ରର ଭୂମିକା ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ

କିରେଇ କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ରରେ ରବି କୃଷକ ମେଳା-୨୦୨୦

ଏୟୁଏଟି ପ୍ରତିଷ୍ଠା ଦିବସରେ ସୁନ୍ଦରଗଡ଼ ଚାଷୀ ମନୋଜ ସମ୍ମାନିତ

ପୋଷଣ ବଗିଚାର ଆବଶ୍ୟକତା ଉପରେ ଗୁରୁତ୍ୱ

କୃଷିବିଜ୍ଞାନ କେନ୍ଦ୍ରରେ
ପୋଷଣ ଅଭିଯାନ କାର୍ଯ୍ୟକ୍ରମ

କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ରରେ ପୋଷଣ ଅଭିଯାନ

ବିଶ୍ୱ ମୃତ୍ତିକା ଦିବସ 2023 ଉପଲକ୍ଷେ ବାର୍ତ୍ତା

କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର, ସୁନ୍ଦରଗଡ଼-1 (କିରେଇ)
ଓଡ଼ିଶା କୃଷି ଓ ବୈଷୟିକ ବିଶ୍ୱବିଦ୍ୟାଳୟ, ବୁବନେଶ୍ୱର

କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ରରେ କର୍ମଶାଳା

ସମ୍ବାଦ

ମାଟିଆଗୁଣ୍ଡି ପୋକ ନିୟନ୍ତ୍ରଣ ତାଲିମ

किसान मेला में वर्षा जल संचयन और प्रबंधन की दी गयी जानकारी

कृषि उपकरणों की जानकारी लेते किसान.

- किरेई में लगे मेले में 300 से अधिक किसान हुए शामिल

प्रतिनिधि, सुंदरगढ़

प्रभात खबर Sat, 12 November 2022 https://epaper.prabhatkhabar.com/

କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ରରେ ଜିଲ୍ଲାସ୍ତରୀୟ ଚାଷୀ ମେଳା

ପୁଷ୍ଟି ଶସ୍ୟ ଦୋକାନ ଉଦ୍‌ଘାଟିତ

'ସୁସ୍ଥ ଜୀବନ ପାଇଁ ସ୍ୱଦେଶୀ ପୁଷ୍ଟିଶସ୍ୟ ଖାଦ୍ୟ ଅପରିହାର୍ଯ୍ୟ'

କୃଷକ ସମ୍ମାନ ଦିବସ ଓ ଜାତୀୟ ଛତୁ ଦିବସ ପାଳିତ

ଜୀବନଜୀବିକା ପାଇଁ ଚାଷକୁ ଆପଣେଇବା ଉପରେ ଗୁରୁତ୍ୱାରୋପ

କୃଷକ ସମ୍ମାନ ଦିବସ ପାଳିତ

କୃଷକ ସମ୍ମାନ ଓ ଜାତୀୟ ଛତୁ ଦିବସ ପାଳିତ

କିଷାନ ସମ୍ମାନ ସମ୍ମିଳନୀ ଅନୁଷ୍ଠିତ

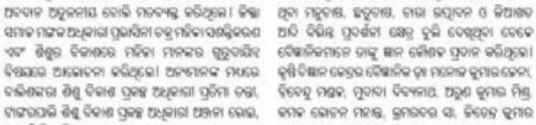
'ଏଫ୍‌ପିଓ'ର ଗଠନ ଓ ବିକାଶ ଲାଗି ପ୍ରଧାନମନ୍ତ୍ରୀଙ୍କ ଆହ୍ୱାନ

କିଷାନ ସମ୍ମାନ ସମ୍ମିଳନୀ ସିଧା ପ୍ରସାରଣ

ଆଭାସିରେ କିଷାନ ସମ୍ମାନ କାର୍ଯ୍ୟକ୍ରମ ଦେଖିଲେ ଚାଷୀ

ରାଷ୍ଟ୍ରୀୟ ମହିଳା କିଷାନ ଦିବସ

ରାଷ୍ଟ୍ରୀୟ ମହିଳା କିଷାନ ଦିବସ ପାଳିତ



'କୃଷିକ୍ଷେତ୍ରରେ ମହିଳାଙ୍କ ଅବଦାନର ମୂଲ୍ୟାୟନ ହେଉ'

ସମସ୍ୟା ସମାଧାନକୁ ଗୁରୁତ୍ୱ

ଦେବଗଡ଼ ଜିଲା ଯୋଜନା କମିଟି ବୈଠକ

ବୈଜ୍ଞାନିକ ଉପଦେଷ୍ଟା ମଣ୍ଡଳୀ ବୈଠକ

କୃଷିବିଜ୍ଞାନ କେନ୍ଦ୍ରର ବୈଜ୍ଞାନିକ ଉପଦେଷ୍ଟା ମଣ୍ଡଳୀ ବୈଠକ

ଦକ୍ଷତା ବୃଦ୍ଧି ତାଲିମ ଶିବିର ଉଦ୍‌ଯାପିତ

ମୂଲ୍ୟଯୁକ୍ତ ଉତ୍ପାଦ ଦକ୍ଷତା ବୃଦ୍ଧିକୁ ଗୁରୁତ୍ୱ

ଜିଆଖତ ଓ ଚାଷ ସମ୍ପର୍କିତ ତାଲିମ ଶିବିର

ସମ୍ବାଦ

କୃଷିବିଜ୍ଞାନ କେନ୍ଦ୍ରରେ ଜିଆଚାଷ ଦକ୍ଷତା ବୃଦ୍ଧି ତାଲିମ

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କୃଷିବିଜ୍ଞାନ କେନ୍ଦ୍ରର ଜାତୀୟ ସ୍ୱଚ୍ଛତା ଅଭିଯାନ

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କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର ପକ୍ଷରୁ ଜାତୀୟ ସ୍ୱଚ୍ଛତା ଅଭିଯାନ

କୃଷିବିଜ୍ଞାନ କେନ୍ଦ୍ରର ଜାତୀୟ ସ୍ୱଚ୍ଛତା ଅଭିଯାନ

ଦୁର୍ନୀତି ନିବାରଣ ସଚେତନତା ସପ୍ତାହ

ଖାଦ୍ୟାଭାବ, ଅପଚୟ, ଅପମିଶ୍ରଣ ସଚେତନତା

'ସୂକ୍ଷ୍ମ ଖାଦ୍ୟର ଅଭାବ ଓ ଅଜ୍ଞାନତା ହିଁ ଅପପୁଷ୍ଟିର କାରଣ'

ବିଶ୍ୱ ଖାଦ୍ୟ ଦିବସ ପାଳିତ

ଜିଲ୍ଲାସ୍ତରୀୟ ବିଶ୍ୱ ମତ୍ସ୍ୟ ଦିବସ ପାଳିତ

ଗ୍ରାମାଞ୍ଚଳ ମହିଳାଙ୍କୁ ସ୍ୱାବଲମ୍ବୀ ଲାଗି ମହୁଚାଷ ଉପରେ ତାଲିମ

ପାଣିପାଗ ସହିଷ୍ଣୁ ୩୫ଟି ଫସଲ ସମ୍ପର୍କିତ ଜଲେ ପ୍ରଧାନମନ୍ତ୍ରୀ

କୃଷିବିଜ୍ଞାନ କେନ୍ଦ୍ରରେ ସଚେତନତା

କୃଷିବିଜ୍ଞାନ କେନ୍ଦ୍ରରେ ପେଟ୍ରୋଲିୟମ ସଂରକ୍ଷଣ କୃଷି କମର୍ଶାଳ।

ପେଟ୍ରୋଲିୟମ ସଂରକ୍ଷଣ କୃଷି କର୍ମଶାଳା

ଫୁଲଝୁଡ଼ିରେ ଖାଦ୍ୟ ଓ ପୋଷଣ ସଂପର୍କିତ ଆଲୋଚନାଚକ୍ର

କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର ଦ୍ୱାରା ଖାଦ୍ୟ ଓ ପୋଷଣ ଶୀର୍ଷକ ଆଲୋଚନାଚକ୍ର

ମହୁଚାଷ ଚାଷୀଙ୍କୁ ପ୍ରୋତ୍ସାହନ ଦିଆଯିବ

ମହୁମାଛି ପାଳନ ସଂପର୍କିତ ଦୌଣସନ ବିକାଶ ତାଲିମ ଶିବିର

କିରେଇ କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ରରେ ପୋଷଣ ବାଟିକା କାର୍ଯ୍ୟକ୍ରମ

ପାଣିପାଗ ଅନୁକୂଳ ଫସଲ ଉପରେ ଗୁରୁତ୍ୱ

ଆଜିକାଲି

ପାଣିପାଗ ସହିଷ୍ଣୁ ୩୫ଟି ଫସଲ ସମ୍ପର୍କିତ ଜଲେ ପ୍ରଧାନମନ୍ତ୍ରୀ

କୃଷିବିଜ୍ଞାନ କେନ୍ଦ୍ରରେ ସଚେତନତା

କିଞ୍ଜିର୍ମା କଲେଜରେ ରେଡ୍‌କ୍ରସ୍ ସମିତିର

ମହୁଚାଷ ଓ ଚାଷୀଙ୍କୁ ପ୍ରୋତ୍ସାହନ ଦିଆଯିବ

ମହୁମାଛି ପାଳନ ସଂପର୍କିତ କୌଶଳ ବିକାଶ ତାଲିମ ଶିବିର

ପ୍ରାକୃତିକ କୃଷି ସମ୍ପର୍କିତ ସଚେତନତା ଓ ତାଲିମ

ସମ୍ବାଦ

ପ୍ରାକୃତିକ କୃଷି ଉପରେ ସଚେତନତା ଓ ତାଲିମ

କେନ୍ଦୁଡିହିରେ ପ୍ରାକୃତିକ କୃଷି ସଂପର୍କିତ ସଚେତନତା କାର୍ଯ୍ୟକ୍ରମ

ପ୍ରାକୃତିକ କୃଷି ସମ୍ପର୍କିତ ସଚେତନତା ଓ ତାଲିମ

ଦୁଇଦିନିଆ କୃଷକ ଦକ୍ଷତା ବୃଦ୍ଧି ତାଲିମ

ମହୁମାଛି ଚାଷ କୌଶଳ ବିକାଶ ତାଲିମ ଶିବିର

କୃଷି ବିଜ୍ଞାନକେନ୍ଦ୍ରରେ ପୋଷଣ ବାଟିକା ଅଭିଯାନ

କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ରରେ ପୋଷଣ ବାଟିକା ଓ ବୃକ୍ଷରୋପଣ ମହାଭିଯାନ

କୃଷିବିଜ୍ଞାନ କେନ୍ଦ୍ରରେ ପେଟ୍ରୋଲିୟମ ସଂରକ୍ଷଣ କୃଷି କମର୍ଶାଳ

ପେଟ୍ରୋଲିୟମ ସଂରକ୍ଷଣ କୃଷି କର୍ମଶାଳା

ମାର୍ଚ୍ଚ ସୁଦ୍ଧା କୃଷି ବିଭାଗ ମୂଳ ପଦବୀ ପୂରଣ ହେବ

ଜାନୁଆରୀ ୧୫ ସୁଦ୍ଧା ଅର୍ଥ ବିଭାଗର ଅନୁମୋଦନ ପାଇଁ ପଠାଯିବ


ସକାଳ
ପ୍ରଥମ ଜନ୍ମ ବାର୍ଷିକୀ
ବିଶେଷାଙ୍କ


ଧରିତ୍ରୀ
ରାଜ୍ୟ ୪
କୃଷି ଶିକ୍ଷା ଦିବସ ପାଳିତ


ଧରିତ୍ରୀ
୨୦ ଚାଷୀଙ୍କୁ ମୃତ୍ତିକା ସ୍ୱାସ୍ଥ୍ୟକାର୍ଡ ପ୍ରଦାନ
ମୃତ୍ତିକା ଦିବସ ପାଳିତ


ମାର୍ଚ୍ଚ ସୁଦ୍ଧା କୃଷି ବିଭାଗ ମୂଳ ପଦବୀ ପୂରଣ ହେବ


ଫୁଲଧୁଡ଼ିରେ ଖାଦ୍ୟ ଓ ପୋଷଣ ସଂପର୍କିତ ଆଲୋଚନାଚକ୍ର
TRAINING-CUM-SEMINAR
on
Food and Nutrition for Farmers


କୃଷି ବିଜ୍ଞାନ କେନ୍ଦ୍ର ଦ୍ୱାରା ଖାଦ୍ୟ ଓ ପୋଷଣ ଶୀର୍ଷକ ଆଲୋଚନାଚକ୍ର


ମହୁଚାଷ ଓ ଚାଷୀଙ୍କୁ ପ୍ରୋତ୍ସାହନ ଦିଆଯିବ
ମହୁମାଛି ପାଳନ ସଂପର୍କିତ କୌଶଳ ବିକାଶ ତାଲିମ ଶିବିର


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ପାଣିପାଗ ସହିଷ୍ଣୁ ୩୫ଟି ଫସଲ ସମର୍ପିତ କଲେ ପ୍ରଧାନମନ୍ତ୍ରୀ

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ପେଟ୍ରୋଲିୟମ ସଂରକ୍ଷଣ କୃଷି କର୍ମଶାଳା

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ଚାଷୀଙ୍କ ଉନ୍ନତି ନିମନ୍ତେ ପଦକ୍ଷେପ


ଛତୁ ଚାଷର ଅଭିବୃଦ୍ଧି ପାଇଁ ଦକ୍ଷତା ମୂଳକ ତାଲିମ


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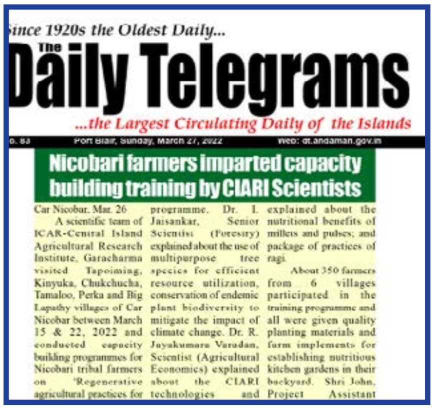
Sundargarh-II KVK

Nicobar KVK

ANDAMAN SHEEKHA
True Mirror of Andaman and Nicobar Islands

Training Programme cum Exposure Visit on Agriculture and Allied Sectors for the Tribal Captains and Progressive Farmers of Nicobar Islands conducts at ICAR-CIARI under STC

Port Blair, Oct 06: ICAR-Central Island Agricultural Research Institute and KVK, South Andaman conducted a training programme cum exposure visit on agriculture and allied sectors for the tribal captains and progressive farmers of Nicobar Islands under the Scheduled Tribe Component (STC)at ICAR-CIARI, Port Blair during 22-09-2023 to 02-10-2023. During the inaugural programme, Dr.A.K. Singh, Chairman, RAC and Ex-DDG (NRM), ICAR, New Delhi appreciated the efforts of ICAR-CIARI to conduct such a programme benefiting the tribal farmers of Nicobar Islands and insisted the tribal captains and progressive farmers to reap maximum benefit out of the programme. In his address, Dr. Eaknath B. Chakurkar, Director, ICAR-CIARI urged the participants to actively take part in the training programme so as to adopt the technologies developed by the institute benefiting the tribal farming communities of the remote islands. He also appealed to the participants to adopt the suitable techniques and develop branding of the agricultural products so as to improve the livelihood of tribal farmers. Altogether, 14 members of tribal captains and progressive farmers from Chowra, Katchal, Kamorta, Teressa, Nancowry and Great Nicobar attended the training programme covering various aspects of agriculture, horticulture, animal husbandry and fisheries sectors. The



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The Daily Telegrams
...the Largest Circulating Daily of the Islands
Port Blair, Sunday, March 27, 2022 Web: dt.andaman.gov.in

Nicobari farmers imparted capacity building training by CIARI Scientists

Car Nicobar, Mar. 26

A scientific team of ICAR-Central Island Agricultural Research Institute, Garacharma visited Tapoiming, Kinyuka, Chukchucha, Tamaloo, Perka and Big Lapathy villages of Car Nicobar between March 15 & 22, 2022 and conducted capacity building programmes for Nicobari tribal farmers on 'Regenerative agricultural practices for ... programme. Dr. I. Jaisankar, Senior Scientist (Forestry) explained about the use of multipurpose tree species for efficient resource utilization, conservation of endemic plant biodiversity to mitigate the impact of climate change. Dr. R. Jayakumara Varadan, Scientist (Agricultural Economics) explained about the CIARI technologies and ... explained about the nutritional benefits of millets and pulses; and package of practices of ragi.

About 350 farmers from 6 villages participated in the training programme and all were given quality planting materials and farm implements for establishing nutritious kitchen gardens in their backyard. Shri John, Project Assistant

The Daily Telegrams
...the Largest Circulating Daily of the Islands
306 Port Blair, Sunday, November 12, 2023 Web: dt.andaman.gov.in

Capacity building on agricultural practices for Nicobari farmers organized by ICAR-CIARI

Port Blair, Nov. 11

A scientific team of ICAR-Central Island Agricultural Research Institute, Garacharma visited Perka, Tapoiming and Chukchucha villages of Car Nicobar between Oct.30 & Nov.5,2023 and conducted capacity building programmes for Nicobari tribal farmers on 'Climate resilient Agricultural Practices for Island based Cropping System'. During the programme, Dr. I. Jaisankar, Senior ... species for efficient resource utilization, conservation of endemic plant biodiversity to mitigate the impact of climate change, scientific tuber crops cultivation, tuber crops based farming system, CIARI technologies and organic waste management. Dr. Santosh Kumar, Senior Scientist & Head, KVK, Nicobar explained about the package of practices of potential vegetable crops for a nutritious kitchen garden and its ... series of awareness-cum-training programme. All were given farm implements such as crow bar, pick axe, spade, axe and PVC coated wired mesh for strengthening the farm. Besides, the livestock farmers were given de-worming medicines and vitamin tonic for health and management of the farm animals. As part of the demonstration, two Dweep-vertigrow technology were established at two

THE ECHO OF INDIA

Capacity building on agricultural practices for Nicobari farmers by ICAR-CIARI

The Daily Telegrams
...the Largest Circulating Daily of the Islands
257 Port Blair, Friday, September 23, 2022 Web: dt.andaman.gov.in

Farmers of Tapoiming village, Car Nicobar sensitized on Agricultural Technologies

Car Nicobar, Sept. 22

ICAR-Central Island Agricultural Research Institute, Port Blair, KVK Nicobar along with ICAR-Indian Institute of Wheat & Barley Research, Karnal conducted an awareness programme at Tapoiming village, Car Nicobar under Scheduled Tribe (Contd. on last page)

Component yesterday. Speaking on the occasion, the chief guest, Shri Simon William (2nd Headman) appreciated the efforts of the ICAR Institutes in conducting such fruitful programme benefitting the tribal farmers of the Nicobar area and further requested for imparting many more programmes in the agriculture and allied field.

Shri Kishore (4th Headman) who was the guest of honour exhorted the participants to take the maximum benefits from visiting scientific teams of ICAR. A technical session was also held. A total of 76 farmers attended the programme. The scientific team also visited different technological intervention plots of KVK , a press release from CIARI said.

Daily Telegrams
...the Largest Circulating Daily of the Islands
336 Port Blair, Tuesday, December 07, 2021 Web: dt.andaman.gov.in

Training on value-added fishery products conducted at ICAR-CIARI

Port Blair, Dec. 6

ICAR-Central Island Agricultural Research Institute, Port Blair conducted a training programme on the value-added fishery products for the Nicobarese traditional community from Dec. 1 to 3 at the ... generation and economic benefits and sensitized ... development of different value-added fishery

Workshop on Improvement and Conservation of Native Poultry At Tribal Farming Community, Campbell Bay and Car Nicobar by ICAR-Central Island Agricultural Research Institute, Port Blair

ANDAMAN SHEEKHA
TRUE MIRROR OF ANDAMAN AND NICOBAR ISLANDS

CIARI Scientists impart agricultural technologies, regenerative agricultural practices to Nicobari farmers at Carnic

PORT BLAIR, MARCH 25/--/ A scientific team of ICAR-Central Island Agricultural Research Institute, Garacharma visited Tapoiming, Kinyuka, Chukchucha, Tamaloo, Perka and Big Lapathy villages of Car Nicobar between 15th and 22nd March 2022 and conducted capacity building programmes for Nicobari tribal farmers on "Regenerative agricultural practices for Island based Cropping System" and "Agricultural technologies for enhancing the income and nutritional security of tribals". During the programme, Dr. I. Jaisankar, Senior Scientist (Forestry) explained about the use of multipurpose tree species for efficient resource utilization, conservation of

CHAPTER 11

LESSONS LEARNT

The development of scheduled tribes in our country has become one of the main focuses of Government since independence. Due to the traditional life styles, remoteness of habitations, dispersed central focal points, population and displacement of tribes, it becomes challenging to achieve desired targets of development. The Central Government through involving different Ministries and State Governments prepared various comprehensive plans and implemented those plans from time to time. Tribal Sub Plan or Scheduled Tribe Component was among those plans which was specially developed to cater the basic needs and upliftment of tribal livelihood. As per guidance of the Ministry of Tribal Affairs, Government of India, Indian Council of Agricultural Research under the Ministry of Agriculture and Farmers' Welfare implemented the plan through its Krishi Vigyan Kendras at district level. The districts having more than 50% tribal population were selected as target areas.

Thus, under this zone, 7 districts (9 KVKs) from Odisha state and one district from A & N Islands were identified for implementing the programme. The fund sanctioned from the Tribal Ministry was routed through ICAR, ATARI, Host Organization of KVKs and ultimately, reached to the KVKs. This fund is being used for organizing and conducting various activities like asset creation, OFTs, FLDs, trainings, extension activities, seed and planting materials production, livestock breeds/strains and fish fingerlings production, soil and water testing, sending agro-advisories and conducting other specials programmes decided from time to time by the Ministries.

During the period from 2017-18 to 2022-23, scientists and staff of all 10 concerned KVKs of this zone worked inexorably in properly implementing the scheme at ground level. The excitedness of the tribal farmers towards adoption of new agricultural technologies was very appreciable. In spite of limited resources and manpower at the KVKs under ICAR-ATARI Kolkata, the way KVK personnel engaged themselves in the activities and organized various need-based capacity building training and other programmes both on-campus and off-campus is simply remarkable and unparallel. However, while implementing, like every development programme, this programme also had a mixture of some sweet and sour memories or experiences which are being shared in the following for future considerations. Because, sweet memories always give us inspirations whereas from bitter experiences, we should learn or take lesson. Therefore, it is very essential to properly address those lacunae at every level from planning upto the implementing institutions while preparing the *modus operandi* of such type of mega scheme.

Benefits of the scheme

- Capacity building trainings and awareness programmes helped the tribal farmers in realizing the potential needs for improving their skills and scientific know-hows which resulted increase of agricultural production. Hands-on-training was found to be beneficial in adopting new enterprises by the tribal farmers.
- Assets creation in the form of agricultural implements and tools had very good impact among the tribal farmers which facilitated them in performing various agri-operations. The role and responsibility of Government in this aspect should be appreciated.
- Large scale demonstrations, showcasing improved varieties/breeds/strains and latest technological innovations available for the farmers created tremendous impact in agricultural production in the district/state.
- Increase of income through higher production attracted tribal farmers to engage in agriculture i.e. crop, horticulture, livestock and fish production. It also improved their family nutritional security.
- The progressive tribal farmers were recognized by various organizations/institutes for their contribution in agriculture and have been awarded with certificates, prizes and sometimes, with token amounts. It definitely uplifted their socio-economic status.
- The established tribal farmers became the source of inspiration for other fellow farmers. Sometimes, they were invited as resource person by the KVKs which had very good impact on quick dissemination of new technologies related to agriculture.

- Gradually, tribal farmers were acquainted with using mobile, Apps and other digital platforms to get various agro-advisories provided by the KVKs from time to time.
- Natural farming/ organic farming/ traditional farming gained momentum in tribal areas due to some inherent/ inbuilt factors present in those areas.
- Existing Indigenous Technical Knowledges (ITKs) in the remote tribal districts being used for various agriculture and animal husbandry practices proved promising and therefore, warrant their suitable validation and documentation for further promotion.

Problems faced during implementation of scheme along with suggestions for future

- It was very difficult to cover all the blocks in a district within the present limited scientific and technical manpower available at the KVKs for timely organizing some of the programmes. The KVKs faced the difficulty to cover all the targeted activities in all villages within limited time span. There might have been the provision for appointing additional manpower in the form of either Senior Research Fellow or Data Entry Operator or Young Professional or Field Assistant for such type of scheme.
- Non-availability of sufficient fund under Capital and General Head for each KVK to carry out various field activities.
- Availability of fund in time was a problem in conducting activities and procuring materials for the programme. Timely release of funds not only will help to meet the timely payment of bills but also will help in implementation of the programme smoothly.
- High cost of agricultural implements/tools caused problems in procuring bulk items within the stipulated budget of KVKs.
- Procuring implements and tools following Govt rule was another problem under field conditions. Purchase procedure should be made easy.
- Being the remote villages, internet facilities were very poor. At that juncture, it was a herculean task for the KVKs to contact and to conduct some programmes on time. Most cases, tribals were not capable of purchasing smart phones due to their financial constraints. Use of advance technology was not possible in such cases.
- While implementing scheme, the convergence with other departments in the district was missing. A systemic, holistic and integrated approach in executing programmes through convergence mode by involving all stakeholders definitely helped the farmers to take agriculture to a new height.
- Early marriage of tribal youth might have forced them to engage with other non-agricultural activities.
- It was very difficult to change the mindset of tribal farmers from their regular activities as agricultural labourer towards adoption of agricultural farming with new technologies, practices and inputs.
- Lack of participation in community activities affected their choice in taking agriculture as enterprise. Creating awareness and motivating tribal youth may help them to participate.
- Financial instability and small land holding of tribal family resulted unwillingness to engage in agriculture. Proper counselling may change their attitude.
- The tribals were not concerned about the judicious use of their leisure hours.
- Routine follow up of different activities conducted by the KVKs was lacking due to heavy engagement in other non-mandated activities. Regular monitoring and feedback can improve the situation.
- Transportation and communication facilities also created problems in successful implementation of the programme.

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