

STATUS REPORT

ATTRACTING AND RETAINING YOUTH IN AGRICULTURE

ODISHA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY BHUBANESWAR

Introduction:

In India, over 58% of the rural households depend on agriculture as their principal means of livelihood. Till recent past, the focus in agriculture has been on increasing farm productivity. Today, the main concern has shifted from higher farm production to higher returns on their investments. However, agriculture in India is faced with multiple challenges for accelerating agricultural growth. These challenges may include low farm productivity, limited access to inputs and market, fragmentation of land, natural resource degradation, climate change, non-remunerative price and limited surplus for value addition.

In this agricultural scenario, the Centre for Study of Developing Societies, based in Delhi, found that given an option majority of farmers in the country would prefer to take up some other work. The survey of 5,000 farm households across 18 states says that 76% farmers would prefer to do some work other than farming and of this, 61% of these farmers would prefer to be employed in cities. Thus, there is a need to diversify agriculture and make it more remunerative to attract the rural youths, who are moving away from agriculture sector.

Youth are expected to play a vital role in the much-anticipated transformation of agriculture in India. According to national youth policy, persons in the age group of 15-35 are defined as young. At present, 35% of the total population is in the age group of 15-35 years, out of which 75% live in rural areas. Migration of rural youth to cities is around 45% in the country, and it is estimated that only about 5% of youth are engaged in agriculture. In developed countries, skilled workforce is in the range of 60% to 90% of the total workforce, whereas in India, the skilled workforce is as low as 5% (20-24 years age group).

There are challenges in empowering the youth to improve their skills and to remain in the agriculture as a source of livelihood in rural situation. Creation of successful economic models in the villages is crucial to catalyse and energize youth to become entrepreneurs in rural areas and guide others in their vicinity.

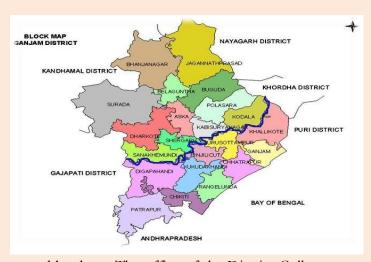
Creating interest and building confidence among rural youth in agriculture, is difficult but not impossible, as the available evidences of profitable agriculture have proved under varied situations. Retaining youth in agriculture, is therefore strongly linked to agriculture. There is a noticeable increase in the migration of rural youth to urban areas, in search of better livelihood opportunities due to the apparent differences in basic amenities, communication, health and education facilities between rural and urban areas.

Realizing the importance of rural youth in agricultural development especially from the point of view of food security of the country and to empower rural youth, the Indian Council of Agricultural Research (ICAR) has initiated a programme on "Attracting and Retaining Youth in Agriculture (ARYA) during 2015-16. Under this scheme, in Ganjam district, special efforts are being taken up to attract the rural youth under the age of 35 years in agriculture to provide income generating opportunities and engage them in agriculture.

Such a scheme had been taken up particularly in the wake of a majority of rural youth shunning agriculture and migrating to cities in search of menial jobs. The main intention of the scheme was to turn agriculture and allied sectors into attractive and profit-making proposition for the rural youth. Of course, the benefits of the scheme are not confined to rural youth alone as the country's food and nutritional security would be taken care of if vibrancy of farming sector is ensured by attracting youth and pressure on urban areas is reduced by checking migration.

Profile of Ganjam district:

Located on the boarder of Andhra Pradesh, Ganjam District came into existence on 1st April 1936. The district is named after the Old Township and European fort of Ganjam situated on the northern bank of river Rushikulya which was the head quarter of the District. The Ganjam area was a part of ancient Kalinga which was occupied by Ashok in 261 B.C. The period of 1757 was ruled by the French Commander Bussy. In 1759, the French ruler was



defeated by English and the District was annexed by them. The office of the District Collector was established in 1974. The District got separated from the Madras Presidency and formed the part of the newly created State of Odisha province with effect from 1.4.1936.

Ganjam District is on 19.4 to 20.17 degree North Latitude and 84.7 to 85.12 degree East Longitude. The district is broadly divided into two agro climatic zone viz. East & South Eastern Coastal Plain Zone & North Eastern Ghat Zone. The climate of Ganjam is characterized by an equable temperature round the year, particularly in the coastal regions. The District's cold season from November to February followed by hot season from March to May. The District experiences normal annual rainfall of 1440 mm.

The new district of Ganjam is constituted by 19 towns and 3652 villages, 475 panchayats spread over 22 CD blocks. It has 35.2 lakh population of which males constitute 50.05 percent and females 49.95 percent. The population growth rate during the last decade of the twentieth century is 1.6 annually. The area of the district is 8206 sq.km and population density is 430. Sex ratio (females per 1000 males) is 983. The district has 21.8 percent population enumerated in areas classified as urban. The major towns are Brahmapur Hinjilicut, Asika Bhanjanagar, Polasara,

The Scheduled Caste populations of the district constitute 19.5 percent & Scheduled Tribes account for 3.4 percent population of the district. Surada has the largest tribal groups in the district.

The district has 22 lakh literates of which 12 lakh are males and 9 lakh are females. The total literacy rate works out to be 71.09 percent, the male literacy rate being 81 percent and female rate 61 indicating substantial gender gap in literacy. In Ganjam district out of total population, 1,501,772 were engaged in work activities. 60% of workers describe their work as Main Work (Employment or Earning more than 6 Months) while 40% were involved in Marginal activity providing livelihood for less than 6 months. Out of 1,501,772 workers engaged in Main Work, 234,066 were cultivators (owner or co-owner) while 185,015 were Agricultural labourers.

The total population of the district belongs to about 6.4 lakh households in the rural and urban areas of the district. Thus the average household size is 5 per household. Drinking water is available in 99.6 percent of the villages and of this safe drinking water is 97.37 percent. Electric power supply is available in 77.41 percent of villages.. Of the total villages 75.71 percent have primary schools, 26.06 percent middle schools and 14.36 have secondary/senior secondary schools. Only 0.46 percent has colleges in the villages and 17 percent have medical facility. Post, telegraph and telephone facilities are available in 32.78 percent of villages. Bus services are available in 33.17 percent of villages. Paved approach road is existing in 41.36 percent of villages and 74.78 percent villages have mud approach roads.

Agriculture is a traditional occupation and the way of living of the inhabitants of the Ganjam District. The District is well known for its fertile soil and agricultural productivity. A large variety of crops are grown here like Paddy, Ground nut, Sugar cane, Oil seeds, Ragi, Greengram, Black gram, Pigeon pea etc. The cropping intensity is 184%.

Table1. District level data on agriculture, livestock and farming situation (2021-22)

Sl. No.	Item	Detailed description	
1.	Major Farming system/enterprise	Rice-Pulses-Dairy, Rice-Pulses-Goatery, Rice-Vegetable, Rice-Mushroom-Pisciculture, Mushroom, Rice-Vegetable-Pisciculture, Vegetable-	
2.	Agro-climatic Zone	N-E Ghat zone, E&S-E Coastal plain zone	
3.	Agro ecological situation	Rainfed Laterite Black Soil, medium rainfall and irrigated Alluvial, low rainfall and irrigated Laterite, moderate rainfall and irrigated	
4.	Soil type	Coastal Alluvial command and Rainfed	

		laterite , Black soil, Coastal Alluvial Saline		
5.	Productivity of major crops under cereals, pulses, oilseeds, vegetables, fruits and others	Paddy-23.86qt/ha. Maize-29.78qt/ha. Ragi-9.49qt/ha. Greengram-5.01qt/ha. Blackgram-4.88qt/ha. Pigeonpea-9.14qt/ha. Groundnut-18.54qt/ha. Sesame-3.98qt/ha. Sunflower-12.6qt/ha. Mustard-4.25qt/ha. Cotton-4.85qt/ha. Sweetpotato-97.68qt/ha. Potato-144qt/ha. Onion-87.07qt/ha.		
6.	Production of major livestock products like milk, egg, meat etc.	Milk – 116510 tons Animal meat – 8770 tons Poultry Meat – 7350 tons Fish - 70236.405 tons		

Krishi Vigyan Kendra (KVK), Ganjam-I was established under Orissa University of Agriculture and technology during 1985 in order to up lift the socio economic status of resource poor farming communities. At the district level, KVK is the only institute to demonstrate latest farm technologies in the farmers' field with the help of a multidisciplinary team of scientist. KVK play vital role in technological back stopping through mandatory activities like Front Line Demonstration, On Farm Trials and other extension activities.

Overall objectives of "ARYA" project:

• To attract and empower the youth in rural areas to take up various Agriculture, allied and service sector enterprises for sustainable income and gainful employment in selected districts.

• To enable the farm youth to establish network groups to take up resource and capital intensive activities like processing, value addition and marketing.

• To demonstrate functional linkage with different institutions and stakeholders for convergence of opportunities available under various schemes/program for sustainable development of youth

Specific objectives:

- More than 200 youths will be self employed after training and start-up incentives provided under ARYA programme.
- Figure Ganjam district will be self sufficient in seedling and saplings, poultry, fish seed and mushroom production during the project period with the youth power of district
- Integrate, composite and relay farming system for rural Youths for their livelihood in agriculture
- Sustainable agri-enterprises to cater market demand.

Year wise activity planned for entrepreneurship development

Enterprise	Year –I	Year –II	Year –III	Year –IV
Mushroom Production	Year round mushroom production	Spawn production at farmer's level	Minimal post harvest Processing (Cleaning, sorting, grading & packaging) Vermicomposting from used straw	 ♣ Up-scaling production, processing and value addition of mushroom and Vermicomposting ♣ Linkage with Line Dept. for infrastructure development
Poultry Production	Low-input technology (LIT) poultry for egg- meat production	 Production & Sale of Brooded chicks at farmer's level Low-input technology (LIT) poultry production/egg-meat production 	 Chick production (Incubation & hatching) Production & Sale of Brooded chicks at farmer's level 	brooding and hatchery unit
Nursery Raising	Seedling production of vegetables in nursery bed	Seedling production of vegetables in protray using Arka fermented coco pit	Seedling production of vegetables in protray and planting material production of fruit crops	 ♣ Seedling production of vegetables in portray, planting material of fruit crops and ornamental plants ♣ Linkage with Line Dept. for infrastructure development
Yearling	Composite	Fingerling production	Fish Yearling	♣ Yearling

production	pisiculture	production production	&	
		transport		
		♣ Linkage with Linkage wit	ine	
		Dept. fe	for	
		infrastructure	infrastructure	
		development		

Supports provided since inception of ARYA:

Four enterprises viz. Mushroom production, Poultry Production, Nursery raising and Fish fingerling and yearling production were selected for sustainable, attractive and remunerative agri-based job opportunities at village level for youth and thereby minimizing migration and developing agrientrepreneurship. Start-up incentives along with skill training were provided to the selected youths for developing a sustainable model of income generation. The following supports were provided in the four enterprises.

Mushroom production

- ✓ Knowledge and Skill based trainings and exposure visit to different units ICAR, SAUs institute, Farmer's units
- ✓ Start up incentives like sprayer, chaff cutter, weighing machine, polythene sheet, spawn, hygrometer, sealing machine etc.
- ✓ Low cost poly house for off season mushroom cultivation. Autoclave and laminar flow chamber for spawn production
- ✓ Linkage with Horticulture Dept for packaging unit, Vermi-compost unit establishment and marketing.

Poultry Production:

- ✓ Knowledge and Skill based trainings and exposure visit to different units ICAR, SAUs institute, Farmer's units
- ✓ Start-up incentive like chicks, feed, brooder, eecandler, chick tray and small egg hatcher cum incubator for semi-intensive backyard poultry unit, Brooding unit and small scale Hatchery unit establishment at farmer's level.
- ✓ Linkage with ARD Dept. for establishment of brooding and hatchery unit and its upscaling.

Nursery raising

- ✓ Knowledge and Skill based trainings and exposure visit to different units ICAR and SAUs institute
- ✓ Start up incentives like seed treating chemicals, rose cane, garden pipe, garden rake, hand sprayer(5 lit), trowel, cocopit, portray, Arka microbial consortium, decomposer
- ✓ Support for construction of insect proof tunnel with removable polythene for raising seedling
- ✓ Linkage with Horticulture Dept for packaging unit, Vermi-compost unit establishment and marketing.

Fish yearling Production

- ✓ Knowledge and Skill based trainings and exposure visit to different units ICAR and SAUs institute, farmer's field for practical application.
- ✓ Start up incentives like Fish fingerling, feed, plankton net, chemicals, net, oxygen cylinder and motor pump for yearling production and transport.
- ✓ Linkage with Fishery Dept for spawn unit establishment and biofloc cultivation of fish.

Component wise achievements for the year 2021-22:

Sl. No.	Particulars	Mushroom production	Nursery raising	Poultry production	Fish fingerling & Yearling production
1.	No. of youth trained	30	25	30	25
2.	No. of groups formed	2	2	2	2
3.	Exposure Visit Conducted	1	1	1	1
4.	No. of youth established their own units	27	17	18 (1 hatching unit)	17
5.	No. of youth running the unit sustainably	20	14	13	12
6.	Average size of the unit	400 Square mt.	48 Square mt.	500 to 4000 poultry 20,000 chicks	0.2 ha.

7.	Cost of production per unit	Rs. 2,12,000/- (paddy straw)/ Rs. 48,000/- (oyster)	Rs. 178752	Rs. 82,000(Poultry unit), Rs. 2,05,000 (hatching unit)	Rs. 33,500/ unit
8.	Sale value of the produce	Rs. 160/- (paddy straw) / Rs. 60/- (oyster)	Rs. 2- 5/vegetable seedling, Rs 5- 10/flower seedling, Rs. 20/fruit seedling	Rs. 150 - 200/kg meat, Rs 10/egg/bird, Rs 50 - 80/ chicks	Rs. 7/yearling Rs. 4/ Fingerling
9.	Net economic gains (Rs./unit/year)	Rs. 2,52,800 (paddy straw), Rs. 52,000(oyster)	Rs. 2,60,736	Rs. 1,12,000 (Poultry unit), Rs. 3,00,000 (Chick production and hatching unit)	Rs. 71,000/ unit/ year
10.	Employment generation	252.6 man days/ year/ unit	234.2 man days/ year/ unit	272.6 man days (Poultry unit) 750 man days (Hatching unit)	77. 08 man days/ year
11.	Whats'App group created	1	1	1	1

Success stories from different components:

Fishing success through 'ARYA': A case of KVK, Ganjam-I

Name & Contact details of Farmer: Mr. Sumanta Pradhan, At: Sodangi, Po. – Belaguntha, Block-Belaguntha, Dist: Ganjam

A brief description of the enterprise:

Fisheries and aquaculture is playing major role in multiplying farmers' incomes, enhancing livelihoods, creating gainful employment, providing nutritional security and contributing to export earnings in Odisha. In this context, timely supply of quality fish seed is crucial to the development of freshwater aquaculture in a district like Ganjam. Mr. Sumanta Pradhan aged around 29 years from Sodangi village of Belaguntha is a science graduate. Unlike others, after completion of his study, he could not be well established due to lack of any satisfied job. But he had not lost his hope. He tried his luck in agriculture; he was solely dependent on paddy culture despite having small ponds. As the income was not sufficient, he was in search of a new vocation and he came to KVK, Ganjam-I, for attending training on plant protection. During that training programme he came to know regarding "ARYA" project. After a joint verification of KVK scientists and Asst. Fisheries Officer, he was selected as a beneficiary under the said project.

Details of support provided under ARYA:

As part of the project, he received quality hatchery equipment, operational and promotional materials, training and technical assistance. He also received training in nursery management; quality fish spawn production and feed management etc. The training enabled him to become a successful hatchery owner.

Since implementing the techniques learned in training, Mr. Sumanta has seen his production and sales grow every year. As he is producing and selling fingerlings, yearlings which boosted his sales further.

Change in income due to ARYA project:

After getting support of ARYA project his annual income was enhanced from Rs. 2,80,000 per annum to Rs.8,30,000 per annum.

Coverage/ impact of training:

The training on technological advancements in the field of aquaculture, he has received from KVK has enabled him to cope up with less profit from available resources. He is able to successfully utilize the available resources with scientific strategies, he got from KVK, Ganjam-I through "ARYA" project. Using the profit, he has expanded his business. He has added 1 new pond for nursery.

Horizontal spread:

Mr. Sumanta attributes the growth of his business, which continues to attract new farmers, to his friendly approach, quality service and communication with other nursery managers. Demand for spawn in the block is high and continues to increase, meaning he has further opportunity to expand. He is also providing consultancy to the youths and farmers in the field of fish seed production.

Concluding assessment:

Through "ARYA" project the rural youths are identified for their skill development in entrepreneurial activities. The purpose is to establish economic models for youth in the villages so that youths get attracted in agriculture/ allied sector and overall rural situation is improved. Skill development of rural youths through ARYA is helping in additional employment opportunities in rural areas.









Farm woman exploring opportunities in blue economy through 'ARYA'

Name & Contact details of Farmer: Mrs. Rashmita Behera, At/Po.: Baragaon, Block- Aska, Dist: Ganjam

A brief description of the enterprise:

The demand of fish in Odisha is huge, since around 94% of 45 million populations in Odisha consume fish. However, the concern has been raised on the avail-ability of quality seeds for the development of aquaculture. Lack of quality fish seeds has resulted in low growth and high mortality of fishes in Ganjam. The availability of adequate quantity of fingerlings has also been a constraint due to non-availability of rear-ing space and lack of entrepreneurship for fingerling production. The impact of stocking fingerlings has been proved to be positive on improving the productivity in aquaculture.

Therefore, production of adequate quality and quantity of fingerlings/ yearling has been the priority of KVK. Mrs. Rashmita Behera hailed from the village Baragaon an educated and enthusiastic farm woman who came in contact with KVK for some technical suggestions for vegetable cultivation. Mrs. Behera was involved in vegetable and fish production. However the economic returns she was getting from her ventures were not satisfactory. So she asked the KVK scientists to include her under ARYA project, which she came to know during her visit to KVK. After the initial survey she was inducted as one of the beneficiaries under ARYA.

Details of support provided under ARYA:

She received skill training programmes on scientific advancements in fish fingerling and yearling production. Along with other trainees she was sent for exposure visits to premier institutes like ICAR-CIFA. She was supplied with hatchery equipments, customized consultancy as per her requirement. Apart from this she was also introduced to potential fish growers' network, who are in contact with KVK. Functional linkages were developed with line departments for convergence in future activities/ programmes.

Change in income due to ARYA project:

Prior to be included as a beneficiary under ARYA, her annual income was Rs.1,20,000 per annum whereas after getting support from ARYA, she could be able to earn Rs. 3,50,000 per annum.

Coverage/ impact of training:

Mrs. Behera demonstrated her culture practices to fellow villagers and encourages them to adopt scientific fish seed production instead of wasting time in unproductive way of life. She is doing hard work day by day to acquaint herself with the intricacies of scientific fish seed production to develop herself as famous fish seed producer in the locality and to increase productivity in order to generate more income. She is maintaining different species too in her farm to cater the local demand. A successful fish farmer like her is indeed an inspiration for the people of nearby villages to be self-employed instead of depending on government jobs alone which are hard to come by these days.

Horizontal spread:

As an accomplished businesswoman and fish farmer, Mrs. Behera is well respected by the local community. Now, she receives many social invites, offers to attend ATMA/ Fisheries dept. meetings. She continues to share her knowledge with many in the community, stating, "many neighboring farmwomen come to me for advice because of my technical knowledge and success."

Concluding assessment:

As a large number of people from various classes in urban areas have returned to villages due to lockdown, the time is opportune to woo them into farm or allied sectors by imparting skills through ARYA. KVK has involved scientific institutes as technology partner along with planned activities to be converged with line departments to instill confidence in youth that agriculture is still not only a profitable venture, but a respectable profession too.







Horticulture nursery through 'ARYA' for sustainable income generation

Name & Contact details of Farmer: Smt. Pooja Rout, At- Bhaliakhae, GP- Mudulipalli, Block-Bhanjanagar, Dist: Ganjam

A brief description of the enterprise:

The agriculture sector in Ganjam has been severely inhibited owing to different factors such as poor involvement of youth, unavailability of quality inputs, poor technological backstopping and extreme climate events. The poor involvement of youth in agriculture is due to less remuneration and more climatic vulnerabity in this sector. Despite all these an enthusiastic youth Smt. Pooja Rout, aged around 28 years from a small village Bhaliakhae under Bhanjanagar block, who was under matriculate and searching for any vocation came in contact with KVK, Ganjam-I for technological backstopping in order to get a livelihood option.

In 2019, she was selected as beneficiaries in nursery raising enterprise under ARYA programme. After being trained on nursery raising, he started producing seedling and planting material of horticultural crops in small scale in the year 2019-20.

Details of support provided under ARYA:

She actively participated training programme on nursery raising of horticultural crops conducted by KVK under ARYA programme. In the year 2020-21 she was provided with start-up incentives for nursery establishment like rose cane, garden pipe, trench hoe, hand sprayer, trowel, khurpi, cocopeat, portray etc. In the year 2021-22, she was provided with low cost poly-tunnel and tulu pump for strengthening the enterprise with proper guidance, by which Smt. Raut able to fetch good income from a small piece of land.

Change in income due to ARYA project:

In a village where agriculture hardly throws up surprises, Smt. Rout earned a net profit of Rs. 2,42,760 annually which is 32 % more than her previous year income. She has been using these improved nursery raising technologies for better return.

Coverage/ impact of training:

The training and technologies provided by KVK has equipped her to overcome emerging challenges correlated with unemployment of youths. Use of portray in seedling production minimized the risk of disease incidence and helped to transport the materials to customer in far away. Erection of low cost polytunnel helped to raise seedling in off season. She also learnt the skill of inoculation of Arka microbial consortium and decomposer in cocopeat, which enhanced the growth of seedling manifold.

Horizontal spread:

Besides on farm selling she has also started shipping planting materials to farmers in far away. Besides that, she is imparting skill training to fellow farmers. She has already inspired many farmers in his village and nearby villages too.

Concluding assessment:

Nursery raising is a profitable business and gaining importance. Use of portray, fermented cocopeat, walk in polytunnel will help nursery entrepreneurs to fetch good income. Her efforts made him a torch bearer for other unemployed youths in the district.







Saplings of livelihood: A success story of 'ARYA' farmer

Name and contacts of farmer: Sri Satyajit Kar, At-Gudiamba, Po -Malasapadar, Via-Jillundi, Ps-Bhanjanagar, Dist: Ganjam

A brief description of the enterprise:

Mr. Satyajit Kar, an ITI (Fitter) by education but unemployed belongs to a small village Gudiamba with lots of dreams in his eyes and a great deal of crisis came in contact with KVK, Ganjam-I in the year, 2019-20. He participated in skill training on nursery raising under ARYA programmes conducted by KVK. Finally he started his own small scale nursery and vermicompost unit by the technical guidance of KVK. Mr. Kar is producing different grafts, gootee, seedlings of different horticultural crops and vermicompost. He has achieved financial emancipation by selling these produce to the farmers.

Details of support provided under ARYA:

He was selected as one of the beneficiaries under the ARYA project of KVK. Apart from that he has successfully completed skill training on Vermicompost production under ASCI at KVK. He received all the relevant training along with technological backstopping for starting a small scale nursery. He was provided with a low cost poly tunnel along with nursery tools and implements like tulu pump, khurpi, trowel, garden rake, hand sprayer, pro-tray and cocopeat etc. under ARYA programme as start up incentives.

Change in income due to ARYA project:

Annually he is earning Rs. 2,80,000 from selling grafts, gootee, seedlings vermicompost and other vegetables. His current annual income is Rs. 1,10,000 higher than his previous income.

Coverage/ impact of training:

After different skill training on nursery raising he has been producing different planting materials of horticultural crops. He is also producing cucurbits seedling in portray and selling to farmers. Apart from that he has been practicing organic farming in his entire field under the guidance of KVK and using different types of liquid organic manures like Potmanure and Jivamruta. Along with this, he has been preparing different organic spray fluid by using ITK for plant protection. He has also provided employment to other youths through this venture.

Horizontal spread:

He is now acting as a trainer for different farmer in training programmes conducted by different organizations with special focus on grafting and gootee skill. Few more youths getting inspiration from Mr. Kar, have shown interest to set up small scale nursery in other blocks. Recently he was awarded as district level Progressive farmer by Department of Agriculture & Farmers welfare, Ganjam.

Concluding assessment:

For higher production, there is a need of quality planting material. There is a dearth of quality nursery in our district. These type of small scale nurseries can do wonder as far as making quality planting materials available to the farmers is concerned. Through these activities rural youths can secure a sustainable livelihood and also can generate employment in rural area reducing migration of youth to other states.











Sustaining livelihood through poultry farming: Success of 'ARYA' beneficiary

Name & Contact details of Farmer: Mr. Jitu Nahak, At: Sindhinuagan, Po. - Charimaili, Block-Aska, Dist: Ganjam

A brief description of the enterprise:

Jitu Nahak and his family were solely dependent upon the poultry farming which they were doing in a traditional way. Although they were rearing around 500 birds annually, profit was low owing to mortality, morbidity of the birds. They decided to opt for skill training and KVK, Ganjam – I addressed their problem by providing skill training under ARYA programme. After training and timely guidance by KVK, he up-scaled his poultry unit to a brooding and hatching unit. With the help of KVK attended further training at national institutes on brooding, hatching and parent stock management.

Details of support provided under ARYA:

The youth was provided with skill/ hands-on training on poultry farming with all the scientific aspects. Exposure visit to farm was made to poultry farms run by entrepreneurs apart from this skill training on brooding and hatchery management was provided to enable them for chick and brooded stock production. Starts up incentives were provided to the youths to enable to start the enterprise. Market and financial linkage was done to assist in up-scaling the enterprise

Change in income due to **ARYA** project:

Year 2017-18 (Before the initiation ARYA project): Rs.1,83,00 per anuum. Year 2022-23: 8,50,000 9,00,000/per annum

Coverage/ impact of training:

The training

Progress made

- ♣ Annual production of 5000 adult poultry birds, 50,000 chicks for sale
- ♣ Three number of poultry units
- ♣ Own hatchery unit of 6000 capacity
- ♣ Brooding unit of 5000 capacity
- ♣ Parent stock of elite birds
- ♣ Branding of his enterprise (MK Poultry & Hatchery, Aska)
- Own chick transport vehicle
- Own feed preparation unit
- ♣ Own office and outlet for booking and sale
- ♣ Own website and you tube channel (https://www.voutube.com/c/MKPoultry)
- 4 8 personnel employed for the units, 1 skilled person for hatchery operation employed
- Linkage with ARD dept has been made by KVK for establishment of 50,000 capacity hatchery unit.

and technologies provided by KVK under ARYA has equipped him to overcome emerging challenges correlated with volatile market. Scientific rearing reduced losses due to morbidity and mortality. Chick production and hatching of eggs increased new avenues for him in the local area

along with scope for expansion to nearby districts. Now he has established his marketing linkage to almost 20 districts of the state.

Horizontal spread:

Success of the youth has increased keenness among youths in the area for adapting poultry production. Many farmers are now in linkage with the youth for poultry farming and chick procurement. Moreover consultancy service is also being provided by the youth to poultry farmers.

Concluding assessment:

ARYA has provided the youth with an opportunity to venture in to a new arena of agriculture sector and also increased the risk taking capability. It also inspired other farmers not associated with ARYA to take poultry as an option for income. Linkage with Govt depts. and financing agencies are of pivotal importance for sustainability of the enterprise.









Journey of building better life through poultry farming: A success story of 'ARYA' beneficiary

Name & Contact details of Farmer: Mr. Basanta Sahu, At: Ekagharia, Po. – Alasuguma, Block-Jagannathprasad, Dist: Ganjam

A brief description of the enterprise:

Basanta Sahoo was an enthusiastic youth with zeal to learn and try new farming methods. His family was dependent upon agriculture, specifically sugarcane farming which fetched them an average profit for many years. He decided to venture the poultry farming which they were doing in a traditional way. Skill training by KVK, Ganjam - I was provided to address their problem under ARYA programme. After getting the training and regular guidance by KVK he established poultry unit for LIT birds and chicks. Along with other ARYA beneficiaries he has established a youth club and working coherently for production of chicks.

Details of support provided under ARYA:

The youth was provided with skill/ hands-on training on poultry farming with all the scientific aspects. Exposure visit was conducted for the beneficiary to poultry farms run by entrepreneurs. Skill training on brooding and hatchery management was given to enable them for chick and brooded stock production. Start-up incentives were provided to the youths to enable to start the enterprise. Market and financial linkage was done to assist in up-scaling the enterprise

Change in income due to **ARYA** project:

Year 2017-18 (Before the initiation ARYA project): Rs.75,000 /- per anuum Year 2022-23: Rs. 2,50,000 -3,00,000/- per annum

Coverage/ impact of training:

training and technologies provided by KVK under ARYA has equipped him with skill knowledge and zeal to

Progress made

- Annual production of 1000 colored Low input (LIT) adult poultry birds and 500 eggs for sale.
- ♣ Brooding unit of 500 capacity
- ♣ Branding of his enterprise (Maa Banei Poultry Farm, Ekagharia)
- 4 personnel employed for the units
- ♣ One poultry shed in linkage with ARD Dept.
- Linkage with ARD & other Depts. for up-scaling of the unit and IFS unit establishment
- 4 Youth group formation, Social and economical upliftment, Asset creation (Land, Pond, Car, household etc)

explore the new venture for his family. Scientific rearing reduced losses due to morbidity and mortality. Along with agriculture he adapted meat, egg and chick production which gave his farming a new direction towards IFS approach. His income increased by many fold by utilizing the leftover materials of agriculture as feed for poultry. In future he aims for production of green chicken and eggs.

Horizontal spread:

Along with other ARYA farmers of the area he has established a youth group for marketing of the chicks and other poultry products. The group is also providing support to the farmers of the area in poultry production. Many units has been established in nea by areas following his footsteps and many youths are now interested on being associated with KVK and ARYA project.

Concluding assessment

ARYA has provided the youth with an opportunity to venture in to a new arena of agriculture sector and also increased the risk taking capability. It also inspired other farmers not associated with ARYA to take poultry as an option for income. Linkage with Govt depts. and financing agencies are of pivotal importance for sustainability of the enterprise.









Celebrating financial independence through mushroom production

Name & Contact details of Farmwoman: Mrs. Santoshi Bisovi, At/po – Benakunda, Block-Bhanjanagar, Dist: Ganjam

A brief description of the enterprise:

Mushrooms are gradually becoming popular as they are rich in minerals, vitamins, very low on fat and sugar. They are good source of protein and contain many essential amino acids. It is also known to have medicinal value and certain varieties of mushrooms can inhibit growth at cancerous tumor. Leisure time can be utilized effectively by involving in mushroom cultivation enterprise. Mushroom production is labour and management intensive.

There is ample scope for mushroom industry to thrive successfully and can become a lucrative business for the unemployed rural youth, self-help groups, farm women who are in search of viable activities which are promising and giving good returns and an additional income source for the farmer. Mushroom cultivation can effectively utilize residues for production of protein rich food and plays crucial role in management of agro residues. Mushroom cultivation is an eco-friendly activity, as it utilizes the wastes from agriculture which are available in huge quantities in every corner of the state and in turn produces fruiting bodies with excellent nutritional and medicinal attributes.

Mrs. Santoshi Bisoyi, 34years young woman is involved in mushroom production from last two year. She resides at Benakunda village of Bhanjanagar Block in Ganjam district. Before starting mushroom cultivation, she was a typical house wife and always wanted do some income because her husband faced a severe accident and lost his job so it was very difficult to mitigate financial liabilities. Then she thought of doing something new independently. In mean time she came in contact with KVK, Ganjam-1 and interested to seek technical guidance for mushroom production through ARYA Scheme, and she was selected as a beneficiary for mushroom production enterprise.

Details of support provided under ARYA:

Mrs. Santoshi Bisovi participated skill development trainings, project formulation and marketing strategy for mushroom production to enrich knowledge and technical skills through lecture, interaction, learning by doing, and exposure visit to progressive farmers' fields and CTMRT Bhubaneswar. She was provided inputs like mushroom spawn, sprayer, chaff cutter, weighing machiene, palythene and hygrometer as start-up incentive from ARYA to start her venture. She was also linked with Department of Horticulture, Odisha for subsidy. Marketing linkage was developed for up-scaling the enterprise.

Change in income due to ARYA project:

After getting training from KrishiVigyan Kendra, Ganjam-1, she established her mushroom production unit named as Ratneswari mushroom farm nearby in her residence. Now annually she is earning 2.7 paddy straw and oyster mushroom in eight month which is Rs.80,000 more than previous year. She can able to engage two nos. of women in her farm.

Coverage/ impact of training:

The trainings and technologies provided by KVK has enriched her knowledge to face challenges in relating with low yield during summer and diseases and mould attacks in mushroom production. Adoption of different scientific managements and use of different high yielding strains of mushroom she can increase the yield. She also learnt different technologies pertaining to value addition and vermicomposting which enhancing her income.

Horizontal Spread:

Apart from cultivation she is planning to do a mushroom spawn unit. She started to impart trainings to different SHG's members. After getting training from her, 5-6 members started producing mushroom in a small scale. She has already inspired many farmers inher village and nearby villages too. Now she is a role model other resource poor farm women

Concluding Assessment

Mushroom cultivation is a remunerative enterprise for rural youths, farm women and others. Now it is becoming important venture. Use of better quality substrates, spawn and scientific management practices she can able to generate income.







'ARYA' farmer spawning success through mushroom farming

Name & Contact details of Farmer: Mr. Aswini Parida, At/po – Dimiripalli, Block- Bellaguntha, Dist: Ganjam

A brief description of the enterprise:

Aswini Parida is a dynamic and energetic small farmer. He is the only earning member of his family. He mainly depends upon agriculture for his livelihood. But he has an interest in Mushroom farming since long ago. That is why he himself started a mushroom farming inhis backyard. However, with no professional training, he could not yield the products successfully he faced many problems like low yield, diseases and competitor mould attacks etc. So, he established contact with KVK Ganjam-1, at Bhanjanagar to learn scientific mushroom cultivation Keeping in view the interest of Mr. Parida, KVK has decided to involve him under ARYA project.

Details of support provided under ARYA:

Mr. Parida was given skill and hands-on trainings on mushroom cultivation practices, project formulation and marketing strategy for mushroom production. He enriched his knowledge and technical skills through lecture, interaction, learning by doing, and exposure visit to progressive farmers' fields and CTMRT, OUAT, Bhubaneswar. He was provided inputs like mushroom spawn, sprayer, chaff cutter, weighing machine, polythene and hygrometer, Vermi-bed, sealing machine as start-up incentive from ARYA scheme to start his enterprise. KVK Ganjam-l has linked him with Department of Horticulture, Odisha and bank for subsidy and loan.

Change in income due to ARYA project:

After getting training and technical guidance from Krishi Vigyan Kendra, Ganjam-1, he established mushroom production unit at his village. He laid 30 beds every day. He used to get 20 kg per day. After spending all expenses he used to earn nearly 1,200 every day. Now annually he is earning Rs. 2,80,000 from mushroom which is sufficient to maintain family liabilities. His enterprise is also providing employment two nos. of youths beside his family.

Coverage/impact of training:

The trainings and technologies provided by KVK has enriched her knowledge to face challenges in relating with low yield during summer, diseases and mould attacks, marketing constraints in mushroom production. Adoption of different scientific management practices and use of different high yielding strains of mushroom he can increase the production. He also learnt different technologies pertaining to value addition and vermi-composting which enhancing his income. In future he is planning to start a mushroom spawn unit

Horizontal Spread:

Now he is becoming master trainer and started to impart trainings to other farmers in his block. After getting training from him, some farmers have started mushroom unit for their livelihood. He turned out to be a good consultant for other new mushroom farmers.

Concluding Assessment:

He has a great interest in mushroom farming as it requires very less land and investment, moreover there is a lot of demand for mushroom both by domestic and commercial customers.



