

Farm Innovators of Jammu

A compendium of success stories



Sher-e-Kashmir
University of Agricultural Sciences & Technology of Jammu
Main Campus, Chatha-180009

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Farm Innovators of Jammu: A Compendium of Success Stories

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**Sher-e-Kashmir University of Agricultural Sciences and
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Foreword

Sher-e-Kashmir University of Agricultural Sciences and Technology (SKUAST) of Jammu was established in 1999 with the three basic mandates of research, teaching and extension to cater the needs of farming community of Jammu region. The first mandate of research is being carried out in the university laboratories, university farms and farmers' field. Secondly, teaching is performed for providing education in agriculture, veterinary sciences and other allied sciences to generate human capital for the support of the farming community. The third mandate of extension is being performed mainly by Krishi Vigyan Kendras (Farm Science Center) established in seven districts of Jammu Division under the administrative control of SKUAST-Jammu. The KVKs play an important role in dissemination of technologies developed by SKUAST-Jammu. Each KVK has team of scientists to cater the farmers' need regarding agriculture sector. More than 60 percent population of Union Territory (U.T.) of Jammu and Kashmir is directly or indirectly dependent upon farm related activities.



Prof. J.P. Sharma
Vice Chancellor
SKUAST-Jammu

In the present era, agriculture has become complex process and to increase farm income farmers diversify and intensify their enterprise with their innovations. To increase farmers' income, KVKs are providing specific trainings of different durations so that they can establish their own ventures for enhancing their family income. Moreover, farmers' technical competence is also improved through extension activities namely frontline demonstrations, on-farm trials, field days and awareness programmes about government programmes and schemes.

While documenting the accomplishments achieved by farmers from these programmes, success stories of the innovative farmers have been compiled in the form of booklet so that other farmers learn from their experiences. They perform these activities so nicely which becomes an example for fellow farmers. They have not only raised their income by their hard work but also encouraged the other colleagues to follow their footprints.

The exemplary work done by innovative farmers to reach in the upper step of rung is presented in this compendium. This will encourage the other farmers of the same area to adopt the various techniques for their enterprises and will be helpful in the horizontal spread of the work done by the KVKs of SKUAST, Jammu.

I congratulate Prof. Rakesh Nanda and his team for their efforts in compiling the compendium of success stories. This compilation is not the ultimate effort but shall remain continue in future.

Date: 14.09.2020
Place: Jammu

(J.P. Sharma)
Vice Chancellor

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Successful Entrepreneurial Journey of a Milk Producer Prosperous Dairy Farming through Crossbreeds

Name:	Sh. Kulbushan Khajuria S/o Lt. Sh Krishan Dutt Sharma
Address:	Village Sohanjana, Tehsil Mandal, District Jammu
Age	58 years
Mobile No.	9906142662
Enterprise Adopted	Animal Husbandry



Mr. Kulbushan Khajuria (58) is a resident of Sohanjana village, Tehsil Mandal, District Jammu of Union Territory of Jammu and Kashmir. He lost his father in his childhood and thus the responsibility of agriculture came to his shoulders as his elder brother was in government job. After completing his graduation in 1985, he applied for government job but failed.

The start of Journey

There was tough time for the family and for Kulbushan Khajuria to sustain. He was already looking after his ancestral occupation of agriculture after his father's death. Thus, the meagre income from traditional agriculture is not enough to meet both ends. Therefore, in 1988, he started small dairy farm with agriculture and start supplying 60 litres of milk per day to the market. But, he was not satisfied with the annual income he got from agriculture and dairy sector. So, he decided to do dairy farming on large scale and contacted Krishi Vigyan Kandra Jammu and Department of Animal Husbandry Jammu for technical advice. In 2013, he got an opportunity to visit Gujarat in the Vibrant Gujarat expo where he visited farms of different dairy entrepreneurs. In 2014, he visited Haryana and Punjab and got chance to interact with dairy farmers.

Getting motivation from dairy farmers of Gujarat, Punjab and Haryana and the sense of achievement propelled him to expand his existing dairy unit. He decided to practice dairy farming on large scale and establish dairy as an enterprise. Thus, in 2015, he created infrastructure from his own income sources and applied for a loan of Rs 35 lakh for purchase of crossbreed animals. He established dairy farm on one acre of land in the name of M/S Krishna Dairy Farm.

The present Scenario

He owns 60 healthy milch animals and an automated milk collection system, a well-maintained cattle shed and a feeding area. Currently, Krishna Dairy Farm has 48 Holstein Friesians (HF) Cows, nine Jersey cows, two Gir



cows, one Shahiwal cow and one Murrah Buffalo. At present, 50 percent of his dairy animals are in the lactating phase and producing 4.5 quintals of milk every day. For marketing of milk, he has established 3 sale counters in Jammu city at Talab Tillo, Shakti Nagar and Channi Himmit Jammu. He is generating a turnover of more than 60 lakhs per year from sale of milk, vermin compost and agricultural products with a net profit of Rs 20-25 lakhs per year. He is providing employment to 7 unemployed youths round the year and 10 persons are engaged for need based services as and when required for cutting of fodder. He is also producing and selling 400-500 q of vermin compost every year through sale counters. To minimise cost of milk production, he is preparing silage on his own farm every year. His visionary and leadership qualities made him a successful entrepreneur. The success of Mr. Khajuria can be gauged from repayment of loan of 30 in 5 years that he has taken from the bank at the time of expansion of dairy farm. He has a clear vision of his venture that helped him to turn the idea of establishing a dairy farm into reality by pooling of his personal resources and availing bank loan.

Economic and Social Achievements

- With enhancement in his social and economic conditions, he provided good education to both of his sons. He has created assets worth more than 2 crores other than agricultural land. His elder son did B.Tech. in computer engineering and younger son is working in Germany.
- Motivated his son to left his job in private concern at New Delhi where he was getting annual package of more than 4 lakhs to join family business of dairy farming.
- His elder son is going to establish commercial cattle feed mill/plant of 1-2 Ton/hour capacity by availing government scheme under which he will get 50 lakh loan having 50% subsidy with a ceiling of maximum subsidy of Rs. 17.5 lac. The unit will provide jobs to 8-10 persons on regular basis.
- Repayment of loan of 30 lakh taken at the time of expansion of dairy farm in the stipulated time limit helped him earn good reputation among the financial institutions and now they are coming to his farm gate for sanctioning of loan.
- Transformation from farmer to dairy entrepreneur. He is a now job creator instead of job seeker as providing jobs to others on his farm round the year.
- He was nominated as the member of state advisory board for development of kisans of Jammu and Kashmir.
- Remained President of Jammu Kashmir Agri Entrepreneurship Development Association (JKAEDA).
- Source of entrepreneurial inspiration for young generations and farmers of the area who are in constant touch with him to seek advises on dairy farming.



Hon'ble Vice Chancellor SKUAST-Jammu Prof. J.P. Sharma visited the dairy farm of Sh. Kulbushan Khajuria

Recognition and Awards

Mr. Khajuria's work has been acknowledged through several awards for his remarkable achievements

- Awarded "Progressive Farmer Award" during Northern Region Krishi Mela-2018.
- Got First Prize in Livestock Show (Holstein Friesian Bull Category) by SKUAST-Jammu during Kisan Mela 2018.
- Got First Prize in Best animal (Dairy Cattle Gir Cow) by SKUAST-Jammu during Kisan Mela 2018.
- Progressive Farmer Award during Kisan Mela held on the occasion of PMFBY organised by KVK Jammu in 2016.
- Awarded "Innovative Farmer Award" for IFS during KisanMela 2012 organised by SKUAST-Jammu.
- National Dairy Farmer Award in the field of dairying by Hon'ble Agriculture Minister, Government of India, New Delhi in 2011.
- Progressive Farmer Award in Krishi Vigyan Mela organised by IARI New Delhi in 2008.



Receiving Progressive Farmer Award” during Northern Region Krishi Mela-2018

Dignitaries Visit

His farm is visited by different dignitaries including Prof. J.P. Sharma, Hon’ble Vice Chancellor SKUAST Jammu, officers of Department of Animal Husbandry Jammu, Scientists of SKUAST Jammu and progressive farmers of the area.

Constraints Experienced

The journey of Sh. Kulbhushan Khajuria remained full of challenges and hardships. The major constraints reported by the farmer include availability of good quality animal breed in Jammu, lack of incentives by the banks to the dairy farmers and tedious loan process are some of the factors that discourage the farmers to adopt new venture. Moreover, high premium charges for insurance of animals, low amount of sum insured and slow response on the part of animal husbandry department created more problems.

Lessons for Fellow Farmers

Mr. Khajuria believes that starting a new venture involves a considerable amount of risk. Therefore, an entrepreneur needs to be courageous and able to evaluate and take risks, which is an essential part of being an entrepreneur. He believes that for successful dairy farming, availability of good quality semen is the most crucial thing. His message to fellow farmers is “working with passion, focussing on purity of breeds and breeding with good quality semen will lead to a successful dairy venture”.

Future Vision

- Establishment of commercial cattle feed mill/plant to provide customized and quality feed to the dairy farmers of the area at reasonable rates.
- Establishment of milk processing unit to prepare flavoured milk, curd, soya milk, cheese and bottling plant.
- Installation of Automatic vanding machine commonly called milk ATM machine to provide clean, hygienic and fresh milk to the clientele.
- Expansion of farm 60 to 100 crossbreeds with proper modern facilities for dairy animals.



Conclusion

This success story highlighted that the most crucial thing required for the success of a dairy farm is the availability of good quality semen. According to Mr. Khajuria, the selection of breed is of paramount importance for the success of a dairy farm. Poor quality breed produces less amount of milk having high cost of milk production. He advocated that the farmers should remain in regular touch with Sher-e-Kashmir University of Agricultural sciences and Technology of Jammu, Krishi Vigyan Kendra Jammu, and Department of animal husbandry Jammu for timely information regarding dairy farming and allied activities. He is a successful farmer in his village because he is always quick to implement new technologies suggested by research institutes.

Contributors

Dr Punit Choudhary, Dr Rakesh Sharma and Dr Prem Kumar, KVK Jammu

Successful Journey from Milk Collection to Owning a Dairy Farm Rural Entrepreneurship through Dairy Farming

Name:	Sh. Satpal Choudhary S/o Sh. Sakheya Ram
Address:	Village Bega, Tehsil Suchetgarh, District Jammu
Age	52 years
Mobile No.	9419614984
Enterprise Adopted	Dairy Farming



Sh. Satpal Choudhary (52) S/o Sh. Sakheya Ram is an inhabitant of Bega village situated near international Indo-Pak border Suchetgarh in the UT of Jammu and Kashmir. He possesses 4 acres of land and was performing routine business of cultivating cereal crops. But it was tough to withstand with scanty income from agriculture sector. So, he started collecting milk from villagers and sold it in the market with rational profit.

The start of Journey

He comprehended an idea of starting his own dairy on small scale so that he can make optimal use of human and farm resources available with him. He was self-motivated to start dairy farming as an income generating activity. Initially, he started dairy with 10 animals that he purchased from Hisar. But, with the passage of time, he found that it is better to sell some of the animals to create infrastructure for dairy farm. In 2005, he expanded his dairy venture on large scale and focussed on this sector as an enterprise. Its been 15 years since he is actively involved in dairy farming and his all efforts and know-how, he tries to take care of his animals. He got inspiration and motivation from fellow dairy farmers of the adjoining area. He has established dairy farm on two kanals of land in the name of M/S Choudhary Dairy farm.



A View of Choudhary Dairy Fram



The present Scenario

Currently, he has 40 animals which includes 16 Holstein Friesians (HF) cows, 7 Jersey cows, and 17 Murrah buffaloes. At present, 70 percent of cows and 80 percent of buffaloes are in lactating phase and 3.0 quintals of milk is produced at his farm. He is also collecting 0.50 q of milk from local farmers and sell it directly to outlets of Sai Milk products Pacca Danga Jammu. For supply of milk, he has purchased his own Mahindra jeep. His annual turnover from sale of milk and sale of animals is more than 60 lakhs per year with net earnings of Rs. 10-12 lakhs per year. He is providing employment to 3 unemployed youths round the year.

Economic and Social Achievements

- The successful running of dairy farm not only helped him to earn good income but he has good reputation among the farming community of his village and area.
- He has created assets worth more than 1 crore other than agricultural land.
- Provided good studies to his children's. His elder son serving in Indian army after completing his studies while younger son is studying in 12th standard. His only daughter is also pursuing her studies in college.
- Presently, he has good hold in the village and is Lamberdar of the village.
- Possess good house, dairy farm, Mahindra jeep, motor cycle and other gadgets to live a happy life.
- Never availed any loan from any commercial bank thus, has sound bank balance.
- Transformation from farmer to agri-preneur. He is now job creator instead of job seeker as providing jobs to others on his farm round the year.
- Role model for rural youth of the area and helped more than 20 rural youths of the nearby villages for adoption of dairy as a source of earning for family.
- Source of inspiration for farmers of the area and many more are in constant touch with him to seek advises on dairy farming.

Visit of Dignitaries to his farm

He is keen to learn new things and never misses an opportunity to interact with experts in the agriculture and animal husbandry fields whenever he meets them in the village or at their office. His farm is well appreciated by different agencies and many dignitaries visited his farm including Hon'ble Vice Chancellor Sher-e-Kashmir University of Agricultural sciences and Technology of Jammu, Director Animal Husbandry Department Jammu, Chief Animal Husbandry Officer Jammu, Scientists of SKUAST-Jammu.



Hon'ble Vice Chancellor SKUAST-Jammu Prof. J.P.Sharma visited the dairy farm of Sh. Satpal

Recognition and Awards

Getting awards and recognition for his/her work is always desired by everybody. Choudhary Satpal's work also got recognition and twice he got cash prizes of Rs. 3100 and Rs 5100, respectively from Hon'ble Chief Ministers at two different occasions at Satowali and Kotli, R.S. Pura in recognition of his outstanding work in dairy sector.

Constraints faced

- Lack of knowledge about feed and fodder
- Non-availability of good quality animal breed in Jammu and thus, have to be procured from other states.
- The sum insured for animals is too small.
- Lack of knowledge about government schemes and policies.
- Unstable and fluctuating milk price in local market not matching the production cost.



Future Vision

- His plan for the future is to buy more animals and to set up a commercial dairy farm.
- Expansion of farm from 40 to 60 milch animals with proper modern facilities for dairy animals.
- Installation of automated milk collection system on his farm.

Expectations from Government

The insurance policy for animals should be farmer friendly having low premium and the sum insured should be enhanced to Rs 80000/- at least as the market value of crossbred cows and high milk producing buffalos are more than 1.25 lakh. The experts from University and department of animal husbandry should make regular visits to the dairy farms for providing on the spot solutions to their problems.

Lessons for Other Farmers

He believes that to run a dairy farm in a successful way, one should have commitment, sincerity and capacity to work hard. He narrates farming to interest and passion rather than literacy and is fully confident that if one takes calculated risks, he/she will earn good profits definitely by increasing production and productivity.

Conclusion

The main factors that have contributed to his success are his interest and passion towards dairy farming. His plan for the future is to expand his dairy by adding 20 more milch animals. He believes dairying is remunerative when we take intelligent decisions. He has become a torchbearer and source of inspiration for the farming community to adopt dairy farming.


Contributors

Dr Punit Choudhary, Dr Sheetal Badyal and Dr Rakesh Sharma, KVK Jammu



Journey from a tail of job, jobless to entrepreneur by adopting Fish Farming

Traditional Agriculture to Fish-preneur

Name:	Sh. Kuldeep Verma S/o Sh Puran Chand	
Address:	Village Kotli Charakan Tehsil & District Jammu	
Age	34 years	
Mobile No.	9906282126	
Enterprise Adopted	Fish Farming	

Sh. Kuldeep Verma S/o Sh. Puran Chand is a resident of village Kotli Charakan, Jammu. The village Kotli Charakan is 6 km away from Bishnah and about 20km from Jammu city. The total land holding of Kuldeep's father is about 26 kanals and that too is fragmented. He adopted the fish farming and proved to his village (total population 5000, literacy rate 80%) that hard work and right selection of enterprise can bring great success in the life of young farmers. His story is inspiring and motivating for the people who have lost their jobs to become "Atamnirbhar".

Journey begins

After completing his matriculation in 1999, he did not pursue further studies and started preparing for military services as he was not good in studies. In 2000, he got selected for military services and he joined Indian army. But due to some unfortunate incidence, he has to leave the job in 2001 and he came back to his home. He was frustrated and wasted his 7 years up to year 2008 here and there. In 2008, he joined the job in a private factory at industrial zone, Bari Brahmana, Jammu. He was doing the job but he was not satisfied due to sense of insecurity, no promotion, less salary, delay in release of salary upto many months. So, he wanted to do something on his own but he doesn't have money with him. He put the proposal of making fish pond at his home but his father refused. It was difficult to convince them to shift from agriculture. The conditions thus were not encouraging and his family was pressing him hard for marriage.

The Startup/entrepreneur

In 2016, he got married and it was difficult for him to run the family comfortably. He again discussed about fish farming with his father and brothers to start but they again refused and asked him to live separately. Then, he discussed with his wife who supported his innovative idea and motivated him to achieve success as one has to take risks up to certain extent. He requested his parents to allow him to do fish farming on a piece of land measuring 3kanals and

used the money he received during wedding to dig the fish pond. He was not supported by his brothers but he was determined to adopt fish farming to escape from the price fluctuations of vegetables. He was aware of this fact that price of fish will never go down due to its demand in the Jammu and adjoining area. Thus, in 2017, he constructed the fish pond without availing any subsidy or loan from bank.

The Present Scenario

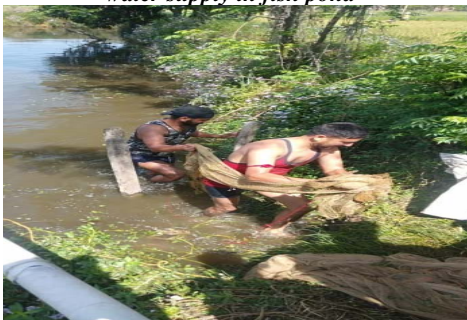
He has constructed a pond of 1000 m². In the initial years, the fish production was less ranging between 200-300 kg/year which was encouraging but not upto his satisfaction. Then, he contacted scientist of KVK SKUAST Jammu for technical details and scientific fish farming. KVK Jammu laid front line demonstration of fisheries at his field and briefed him with all the latest technologies and calendar of activities to follow. He followed all the instructions and achieved fish production of 400kg during the year 2020. He is earning a net profit of Rs. 59000 per year from sale of fishes. Other than this, he is rearing backyard poultry birds near the fish pond after getting advised from KVK Jammu regarding integrated farming system and excreta of birds will work as feed for fishes and it will reduce his production cost. He is having Sahiwal cow for milk and two dogs for watch during night. His activities are continuously captured and recorded to motivate other youths.



Perforated and elevated pipe for oxygenated water supply in fish pond



Learning to make fish feed from locally available feed ingredients



Netting in fish pond for observation



Backyard Poultry Farming



Awards and recognition

Although, he has not received any award or recognition from any agency, he believes that very shortly his work will get recognized by different institutions and awards and recognition will be in his way. Now local people, extension functionaries and other stakeholders has started recognizing his hard work and success.

Exposure Visits

Mr. Kuldeep has visited Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu, Krishi Vigyan Kendra, R.S. Pura, Jammu, Jammu & Kashmir government Fish Hatchery Gho Manasa and Department of Fisheries Canal road Jammu and have well versed exposure to fish farming at present.

Constraints experienced

The general constraints felt by him were that changing the attitude of people and family members towards fish business was difficult. Due to lack of knowledge about government schemes and policies, he could not get fish pond under government scheme in which he was very much interested. The major constraint expressed while execution of the venture was the lack of technical and scientific knowledge of fish farming which was acquired later on by him through trainings. The other constraint reported by the farmer that he faced during the fish farming was availability of quality fish seed of desired species in required quantity and fish feed.

Lessons for Other Farmers

He is totally convinced by his experience and try to convey fellow farmers that fish farming is quite profitable venture at least in case of Jammu and Kashmir where the demand of fish is very high and local fish supply is very little. People want fresh fish and ready to pay premium amount for it. There is no marketing restraint and buyers are at the doorstep. Moreover, you can ensure value addition of fish and earn double money. Many youth who are upset or saddened due to unemployment may join this sector and can earn handsome profit if have willingness to work hard. The government of India's Pradhan Mantri Matsya Sampada Yojana (PMMSY) will act as catalyst in providing rural youth an opportunity to join this sector and start their own business and become 'Atmnirbhar'.

Future Plans

To further augment his farm income, he is planning to expand his fish farm and has high expectations from the Government for financial assistance in the form subsidy. Moreover, he intended for value addition of fishes and got training and guidance from KVK Jammu. He acquired training as "Aquaculture worker" of 200hrs conducted by KVK Jammu and sponsored by Agriculture Skill



Council of India (ASCI). Very shortly, he is going to start his shop of fish cutlet and fish pakora. He will use his own fishes as input that will help to make his profit double to triple.

Conclusion

Although, Mr. Kuldeep Verma has started fish farming recently, he has put forth new range of income generation among the farmers of his village and nearby area. The farmers can earn their livelihood, improve their socio-economic status and can also mitigate their own nutritional problems along with climate change by adopting fish farming as an income generating enterprise. He is of the opinion that to become success entrepreneur, requires lot of courage and self-confidence. He has great expectations from SKUAST-Jammu for timely availability of good quality fish seeds in required quantity while he hoped that KVK Jammu will keep guiding and providing scientific knowledge in future also about new technologies of fish farming, processing and value addition.

Contributors

Dr Prem Kumar, Dr Ravneet and Dr Rakesh Sharma, KVK Jammu

Unemployed Youth to a Successful Craftsman Success story of unemployed farm youth

Name:	Sh. Shami Manyal S/o Sh Chaman Lal
Address:	Village Sangwali, Block & Tehsil Ghagwal, District Samba
Age	25 years
Mobile No.	9070708811
Enterprise Adopted	Bamboo crafting



Sh. Shami Manyal S/o Sh. Chaman Lal, resident of village Sangwali, Tehsil Ghagwal of district Samba is a successful craftsman. Three years back, he was an unemployed farm youth having secondary education as were most of the youths of the village. The village was having a population of 1600 with a sex ratio and literacy rate of 927 and 62% respectively.

The journey

The village although near to the national highway is an un-irrigated area (kandi), lacks irrigation facility and only one pond is available for many water needs. The conditions thus are not encouraging for farming community and this is quite disenchanting for the young generation. As the Manyal family has only 4 kanal of land with meager income resources. This frustration led Mr. Shami Manyal to look for some income generating sustainable avenues. Being a trainee at “**Sankalp se Siddhi**” programme being carried by Krishi Vigyan Kendra, Samba, he met Dr Sanjay Khajuria, a Subject Matter Specialist in Agroforestry, who suggested him to remain in contact as he has some good alternatives for him. The inhabitant of this village and nearby villages are well versed with Bamboo work as it is an indigenous locally available resource. Mr. Shami Manyal has also received three year handicraft training at handloom weaving training centre near his village.

The startup

The Startup was established in their house itself and till date they are working from there. No external labour was employed for the start up and Mr. Shami along with his younger brother does all the physical work. The material required was bamboo, which they procured by purchasing it from other farmers and from their own field also. The equipment purchased were manual iron cutters of varying sizes worth Rs. 5000/-. The other material required was permanent wood colour amounting to Rs. 5000.

The present scenario

From the start of the venture, when he was a simple craftsman, now he is making designer bamboo walls, chairs, bamboo antiques like boats, flowers etc.



This year the income generation has suffered a lot due to Covid-19 and he could earn only Rs. 36000. But now, some orders are pouring in and recently in the month of August 2020, he secured an order of around 50 chairs from a restaurant owner of Udhampur district worth Rs. 50000/-. Now, his younger brother is also helping him in managing the business. He has purchased a two-wheeler from his earnings and this helped him in moving across places in present covid-19 situation. He is also improving his living standards as he purchased a television.



Constraints experienced

Any enterprise or a program generally have three phases, the planning, execution and follow-up. The general constraints felt by the craftsman during planning was that although he has acquired enough skills for starting the venture but was not sure of its marketing along with lack of funds to start it. The main constraint expressed while execution of the venture was the lack of technical and scientific knowledge initially but the trained and experienced extension personnel of Krishi Vigyan Kendra, Samba, when responded well as he came in contact with them. In marketing, the main constraint expressed is lack of transportation facility. As the furniture made out of bamboo requires large vehicles for its transportation.



Lessons for other farmers

He is of firm opinion that more and more farmers and unemployed farm youth of his village should adopt this venture as it can make their village a model village for craftsmanship. So far, two persons from his village have adopted this and many enquire from him and visit him while on work. He expressed that may be one day he will be a proud mentor for all of these. He expressed that an additional income of Rs. 2 lakh is now being earned by the village as a whole by the craftwork.

Awards and recognition

So far, none of the agencies have recognized his hard work and thus no award and recognition is bestowed upon him, but he proudly says “I am being awarded everyday when someone sits on my hand made chairs rather than on plastic ones and when somebody’s house aesthetics enhances by my hand made wooden antique pieces”.

Exposure Visits

Mr. Manyal has once attended national workshop on bamboo at convention centre, Jammu being organized by DONEAR and north eastern council, GoI in 2019. The facilitation of his visit was made possible by the intervention of KVK Samba.


Conclusion

He is a self satisfied agripreneur now and wants to further accerlate his venture. For this, he has high expectation from the Government as he is planning for establishing a bamboo moulding plants for which he needs financial assistance on subsidy from Government. He is looking at SKUAST-Jammu for providing him quality planting material of bamboo while he expects KVK Samba to provide scientific knowledge, new buyers and more exposure visits particularly to North-Eastern states and bamboo workshops.

Contributors

Dr Sanjay Khajuria, Dr Vinod Gupta and Dr Lakshmi Kant Sharma

Income Enhancement through Poultry Farming Success Story of Poultry farmer

Name:	Sh. Ravi Singh S/o Sh Payar Singh	
Address:	Village Purani Kali, Block Nud District Samba	
Mobile No.	9697730035	
Enterprise adopted	Poultry Farming	

Ravi Singh S/o Sh. Payar Singh is 55 years old, and is a successful producer of Poultry. He owns 1 ha land at Purani Kali village of Nud block of Samba District which is around 12 km from Samba. He is also rearing cows. Water requirement of his farm is fulfilled through bore wells. By education, he is only matriculate but has grasped practical skills in his area of poultry farming. Out of 1 ha in 2019, he had reared poultry in 2 acres and on remaining land he had grown livestock as well as crop production. Despite his belief in lifelong learning, the academic standard passed by Ravi Singh is only upto high school. He had no formal training in poultry, except for knowledge passed onto him through informal talks with experts from Krishi Vigyan Kendra, Samba. He is doing poultry farming since 2017, when he was having 1 ha of land. Once he visited Maharashtra in 2017 and saw poultry birds was being sold by one of the vendors. He was surprised to see the different types of poultry. After enquiring, he came to know that it was poultry birds. After coming back he requested the Chief Animal Husbandry Officer, Samba for know how. He started growing poultry farming in 1 Acre of land and since then he has not looked back.

The Journey Start

Krishi Vigyan Kendra Samba has trained Ravi Singh, Gurdev Singh and Mohinder Singh. The focus of this study is a successful poultry producer in the Samba district of the Jammu & Kashmir Union Territory. But the main focus of KVK, Samba was on Ravi Singh. He has been producing poultry since 2017 but was unable to get the rewards from it. After coming in contact with KVK, Samba in 2019, he started reaping the rewards of becoming a poultry grower, supplying runners to the farmers of his area and informal markets. Farming has not come easy for him. However, through the assistance of Krishi Vigyan Kendra, Samba, he has managed to overcome many difficulties and is become as a successful commercial poultry farmer. His knowledge has also been broadened by frequent visits to KVK Samba. Currently, Ravi Singh receives assistance from various sources. An important aspect recognized by Ravi Singh is the value

of consultants who visit his farm to ensure that production isn't negatively affected by diseases. Farming requires continuous monitoring of all the activities on the farm, including the bird itself. According to him, fellow farmers in his area have been very helpful since he started farming. KVK Samba provided valuable assistance to him. Ravi Singh highlights marketing information that guides his marketing decisions, information on developments and participating in meetings.



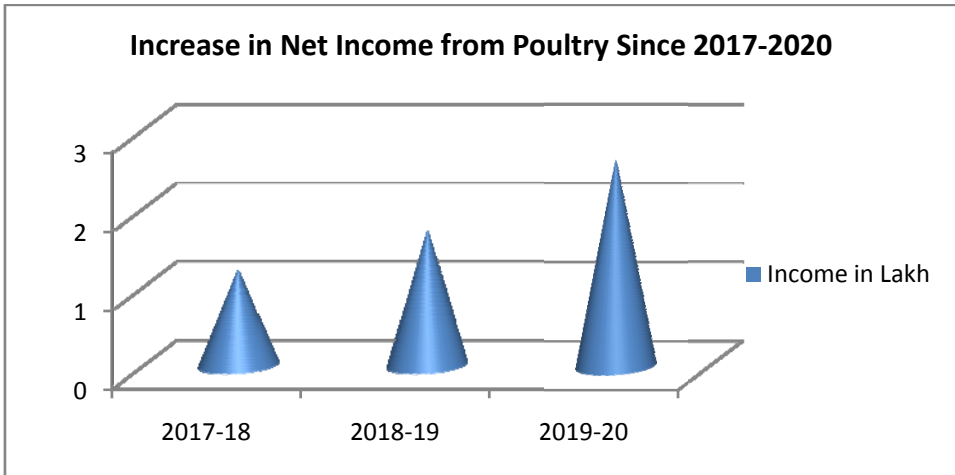
Present Scenario

After practicing for two years in poultry growing and realizing the potential of poultry growing, he took an initiative and became member of “**Poultry growers association**” in 2019. It is a self reliance society and Mr Ravi Singh is acting as member of this association. This association is working in Jammu province of Jammu & Kashmir state. In its membership, poultry farming has taken a momentum and farming community as well as consumers is aware of this commodity. At present it is having more than 1000 members associated with this association. Before intervention of Krishi Vigyan Kendra Samba, Ravi Singh mostly concentrated on the traditional poultry farming. Being a resident of remote area, he was not aware of the potential of poultry farming as an enterprise. Krishi Vigyan Kendra Samba has intervened in 2019 and shown them the potential of poultry growing and he was provided desired information of



poultry growing. He was also given proper orientation about market and marketing his produce in Samba, Jammu and other nearest mandies.

The speciality of Ravi Singh is poultry farming. In 2017-18, he reared 24000 birds in a year and earned a net profit of Rs, 120000/-. In 2018-2019, he reared 36000 birds in a year and earns a net profit of Rs. 170000/-. In 2019-20, he reared 46000 birds in a year and earn a net profit of Rs. 260000/-.



Marketing of poultry and poultry products

- For marketing of their produce, all of the farmers depends upon the agents. They are negotiating the rates with agents and then selling their produce to the diffident agent.
- Now they started procuring the poultry from other members of the association and selling the birds to the Srinagar Market at higher price.
- The other ways of their marketing, they sell their birds directly to retail chicken shops and Hotels of Samba and Jammu at higher price.

Awards and Recognitions

- Member of Poultry Growers Association.
- Member of the Poultry Grower Union.
- Got Best Broiler Murga Award from KVK, Samba during Mega Poultry Event in In 2020.

Main challenges

- High infrastructure costs in poultry farming serve as a barrier for entry of other people in its production.
- Distances to the main markets serve as a barrier to entry into the market and further reduce marketing margins.
- Timely availability of quality chicks, quality medicine, and quality feed as a major challenge in the poultry farming.



- Production is heavily dependent upon the use of quality chicks, quality feed and medicine and non-availability has a negative impact on profitability.
- Availability and reliability of labour is problematic due to social and cultural factors, social grants, illnesses and urbanization, and absorption by other sectors. Because of labour problem farmers are not coming forward to produce it.

Future plans

Since, labour is very costly now a days and looking into this constraint, they are promoting fully automatic poultry farming as it is less labour intensive. They are facing lot of problems in getting things done for logistic support and that's why he wants a single window system to solve all problems related to poultry farming.

Conclusion

This story tells the success of a commercial poultry grower who have successfully integrated into the main stream economy through production and marketing of poultry (meat and egg). This case study provides an insight of making farming as a business entity and inturn sufficing the need of the Samba, being dependent earlier on other states for broiler and egg production. The commercial producer of poultry is earning handsome profits not only by selling it for table purpose and as a processed product but also highlighting their societal commitments by channeling other farmers to act like business managers of their farms. The report highlights the lessons learned in the production, diversification, competitive and marketing strategies and how poultry grower designed his farming operation to maximize the annual income from farming. This success story will be helpful for upcoming poultry entrepreneurs.

Contributors

Dr Vinod Gupta, Dr Suraj Amrutkar and Dr Abhay Sinha



Achieved Prosperity through Crop Diversity Success story of Herbiculture farmer

Name:	Sh. Krishan Dutt S/o Sh. Baj Nath
Address:	Village Khadargal Tehsil Bari Brahmana, District Samba.
Age	72 years
Mobile No.	8715067232
Enterprise Adopted	Herbiculture



Farmers are always trying to increase their yield and income from crops. Whatever crop they might cultivate, the bottom line is to invariably get a good price from their produce. Farmers can increase their income either by intensifying the existing enterprises or can move towards diversification or successful market linkages to improve their economic levels. Sh. Krishan Dutt S/o Sh. Baj Nath R/o Village Khadargal Block Bari Brahmana was earlier practising traditional practice of cultivating cereal crops namely wheat and paddy with little of vegetables as subsistence type of farming. The income from these crops was not sufficient to supplement his family livelihood in a sustainable manner.

The Journey Start

He was searching for other means of income generation from land and resources available with him. In the meantime he came to know about the existence of Krishi Vigyan Kendra, Samba. Scientists of KVK, Samba motivated the farmer to adopt vegetable and flower cultivation to diversify the farming. While the men of his age are leading a retired life, 72 years old Sh. Krishan Dutt Ji of Khadargal village is still going strong as a farmer and has become an inspiration for youths and other farmers shying away from agriculture. He is doing agriculture from last 45 years but started the commercial cultivation of vegetables as well as flowers since 2017 after coming in contact with KVK, Samba and now reaping the net profit of 7.0 lakh per year after the sale of vegetables and flower. From the wheat and paddy system he was getting only Rs, 25,000/-year. He has the land holding of 152 kanal which is irrigated and he used most part of the land for vegetable and flower cultivation. He used to grow early season vegetables and marigold flowers around the year by adopting different varieties.

Present Scenario

During the year 2017-18 Sh. Krishan Dutt Ji came in KVK, Samba there he was advised to raise vegetables and flowers. KVK, Samba conducted various



training programme on different aspects of vegetable and flower cultivation. He was trained in the field about advanced nursery management technologies of vegetables and flowers like nursery bed and seed treatment, raised beds, pest and disease management, sowing, fertilization, harvesting grading and packing techniques. It was observed that plants at breeding stage are succulent, highly tender and vulnerable to a number of pests and diseases. The cost of hybrid seed also warrants production of quality seedling under protected conditions. Hence raising of nursery under poly tunnel conditions is very useful. Focussing on the same KVK has conducted the vocational training programme, farmer training programme, awareness programmes and also laid out front line demonstrations, On farm trails and various other extension activities like Kissanghosties, Field days. Sh. Krishan Dutt Ji showed their active participation in most of the programme without bothering about their age factors. KVK has provided the seeds of different vegetables during kharif and rabi season, seeds of marigold, organic insecticides under front line demonstration and on farm trail programme to Sh. Krishan Dutt. KVK, Samba also motivated him to participated in district/state level exhibitions.



He has motivated more than 30 farmers of the surrounding area and mobilized them for taking up entrepreneurship activities on floriculture and vegetable cultivation. Now 105 number of people are doing the job in his filed. He was felicitated in different farmer fairs organized by Department of Agriculture, functions organised by KVK for his significant contribution in the area of vegetable and floriculture production throughout the year.



Type of enterprise	Area	Expenditure	Income	Net Profit/Season
Vegetable and Flower cultivation	2 ha	Rs. 1,77,000/-	Rs. 5,50,000/-	Rs. 3,73,000/-

Social and Economic Achievements

Now he is a successful entrepreneur and became a role model for other farmers of the surrounding area.

- By adopting this venture he raised the standard of living of his family and purchased all the comforts of his life and construct a pacca house.
- Adoption of herbiculture venture improves the farmer income and satisfied him and his family with the increased income.
- Cultivation of vegetables and flowers help to maintain the health of soil rather than heavy feeder paddy and wheat. It requires less amount of fertilizer, irrigation when compared with paddy.
- These short duration crop of 3 or 4 months give more profit than the 7-8 months crop. No storage is required in this case, crop is sent to market after regular picking which gives more profit.

Awards and Recognitions


He was awarded by the Sher-e-Kashmir University of Agricultural Sciences and Technology (SKUAST) of Jammu as well as by Department of Agriculture on different occasions. He has proved his capacity in various forums and received appreciation for his produce by people everywhere. Thus the encouragement and motivation of KVK scientists broke all the barriers. His confidence level has also increased a lot. His story is source of inspiration and motivation to all the members of society.

Contributors

Dr Neerja Sharma, Dr, Vinod Gupta and Dr Saurav Gupta

Hard Work & Passion Led the Turmeric Revolution

Success story of Turmeric Farmer

Name:	Sh. Sh. Dunda Singh S/o Sh. Tej Ram	
Address:	Village Kathua Tehsil & District Kathua	
Age	64 years	
Mobile No.	8492892406	
Enterprise Adopted	Processing & Value Addition	

J&K is a Union Territory where the dominance of Wheat and Paddy cultivation is higher as compared to the other crops because it generates higher level of profit to the cultivators and generally, the farmers also prefer to invest in wheat and paddy farming because of the higher profit results. The Border village Sultanpur is located about 35 kms from District Headquarter Kathua and Haripur Saini, Mehrajpur, Kana Chack, Chann Lal Din are the neighboring villages. The village has a functional panchayat with it's headquarter at Chan Lal Din which is about 3 kms from the village. The village area is irrigated. Rice, wheat, Mustard, Gobhi Sarson, Toria were the main crops grown along with seasonal vegetables.

The Journey

This story is about a farmer who is different from others as he thought of initiating a change in the farming by starting the turmeric Revolution. Success is not achieved so easily, a person has to do hard work, face extremities and hardships and sometimes losses also occur in setting up of ventures. After facing all these adversaries and with the spirit of not giving up and moving forward in the same direction, helps him in achieving success. From the beginning, he was never satisfied with the conventional farming methods, because a farmer is not able to get the right worth of his crop grown from his hard work. Initially he started with the Vegetable cultivation, tissue culture potato cultivation, seed production of cereals under seed village programme. Then he experimented with turmeric cultivation on a small piece of land with the guidance of Krishi Vigyan Kendra, Kathua and Department of Agriculture, Kathua and apart from that he also started processing turmeric into turmeric powder without using any machinery. To gain more knowledge about production technology of turmeric cultivation he visited many Processing units established outside the State. He also gained Knowledge about turmeric cultivation from Monthly Magazine Changi Kheti of Punjab Agricultural University, Ludhiana initially.

The Start up

Dunda Singh a turmeric farmer from Sultanpur village in Kathua district



has three roles by profession- a farmer, an entrepreneur and a turmeric Cultivator. Today he is cultivating turmeric, processing it, marketing his product himself and selling it in the market; he is not dependent on the third person to sell his produce. He adopted the different path from rest of the farmer to make his own identity in the society.

He started cultivation of turmeric in the year 2006 with family support and yielded record production of 700 qts in the village Sultanpur but due to non-availability of market faced problem in selling the produce and discontinued the cultivation in the year 2008 and 2009. Again, in the year, 2013, he started the cultivation of turmeric in the area. Processing turmeric into turmeric powder manually was very hectic and backbreaking, so after the intervention of Department of Agriculture and Krishi Vigyan Kendra, Kathua he installed mechanized processing unit for turmeric powder production. For setting up of processing plant he got subsidy from Department of Agriculture under RKVY. Apart from turmeric processing he is also involved in processing of Garm Masala, Jeera Powder, Tea Masala and Dhania Powder.

The present scenario

For setting up of processing plant he purchased land (1 kanal 3 marlas) @ 1.5 lakhs per kanal with the initial investment of Rs. 7.00 lakhs for creation of infrastructure and 6.92 lakhs on machinery and established the Baba Deep Singh Spices Park with Brand Name BDS at village Kana Chak and registered his products with Food Safety Standard Authority of India (FSSAI) vide Registration No 11017210000050. There is handsome increase in the income after setting up of processing plant. By putting all these stepping stones together he started his own turmeric processing plant in 2014 and named it as Baba Deep Singh Spices Park and BDS Haldi is one of the most trusted brands of his processing plant. His family including wife, two sons, two Daughters in laws and maternal uncle plays a major role in all the activities related to the processing of turmeric such washing, boiling, polishing and grinding. He also has seasonal labours working for him in the processing plant and all the packaging, sealing and grinding work is done by the equal contribution of family members in his factory and home. All these steps taken by him has increased the production of raw turmeric from 60 Quintals to 110 Quintals today.

Lesson for other farmers

Apart from turmeric farming and processing it into powder, he is also helping other fellow farmers of his village by giving them the right guidelines for turmeric farming. Today, many farmers from the district Kathua as well as other districts of the Union Territory are associated with him and he gives free guidance to all of them. He helps other farmers by purchasing raw turmeric from them at right price. Apart of sowing turmeric in his own land, he also helps his other friends by sowing turmeric in their fields. To support all his work through



marketing and promotion, Krishi Vigyan Kendra, Kathua and other allied departments supports them by giving him space in different exhibitions, events and Kisan Melas. The Department of Horticulture, Kathua on the Directions of Worthy Deputy Commissioner, Kathua has provided the Sale Counter in Kathua city for selling of different products. This has led to increase in area under cultivation with assured buyback from Dunda Singh furthermore awareness towards new turmeric varieties with higher curcumin content has gained popularity among the farmers.

Constraints experienced

There shall be a provision of industrial subsidy on processing unit and also a provision of Unit from Govt. having large Capacity and dryer system. After setting up all the machinery System there is still some minor problems that he is facing. Out of all the problems, the major problem he is facing, that he is not having enough space for drying up the boiled raw turmeric is the one.

Awards and Recognition

If a farmer is interested in turmeric farming then he can also start with it easily. The total machinery cost invested by Dunda Singh in setting up the turmeric processing plant was 6.92 lakhs. He takes all the suggestions for training, varieties and different types of turmeric seed from Krishi Vigyan Kendra, Kathua and Department of Agriculture, Kathua. He also gets subsidy from Government for setting up of Baba Deep Singh Spices Park (BDS). For his revolutionary work and the different path he has achieved many awards and recognitions, some of them are listed below:

- Received Best Farmer award for Jammu Division from Director Agriculture under ATMA for the year 2010-11.
- Received Krishak Prerana Srot Award in North Zone Agriculture Fair-2011 at Dr Yashwant Singh Parmar University of Horticulture and Forestry, Nauni, Solan (HP) on 26th February, 2011.
- Received award in SKUAST-J Kissan Mela-2011 held at SKUAST-Jammu w.e.f. 23rd to 25th March, 2011.
- Received Innovative Farmer Award in SKUAST-J Kissan Mela-2012 held at SKUAST-Jammu w.e.f 19th to 20th March, 2012.
- Received Certificate of Honour in Vibrant Gujarat-2013 Global Agriculture Summit at Mahatma Mandir Gujarat on 10th September, 2013.
- Received Progressive Farmer Award at KVK, Kathua, on 2nd January, 2014 for his commendable and pioneer work on quality seed production and tissue culture in potato.
- Received appreciation award at Pusa Krishi Vigyan Mela March 10-12, 2015 at ICAR-IARI, New Delhi.
- Received Progressive Farmer Award under Pradhan Mantri Fasal Bima Yojna at KVK, R.S. Pura, Jammu on 12th September, 2016.

- Received Progressive Farmer Award under Pradhan Mantri Fasal Bima Yojna at KVK Kathua on 9th November, 2016.
- Received Innovative Farmer Award from SKUAST-Jammu during Kissan Mela held on 18th -19th March, 2016.
- Certificate of appreciation on the eve of 68th Republic Day on 26th January, 2017 from Deputy Commissioner, Kathua
- Received price for best Stall during Kissan Mela held on February 16-17, 2018 from SKUAST-Jammu.



Exposure Visit

He is actively participating in the different trainings/exposure visit organized by the different Departments. He also attended Training programme on Turmeric Processing w.e.f 2nd to 4th June, 2016 in Transfer of Technology Division ICAR- Central Institute of Post Harvest Technology, Ludhiana.

Conclusion

According to him, if a farmer wants to earn good profit from his farming and do something great from his harvested crops, then he has to eliminate the middle man. Farmer has to start processing his crops himself and sell it himself in the market. All these things need great effort, energy and enthusiasm. Otherwise, if the farmer feels ashamed of selling his produce himself directly in the market then he cannot earn the profit and will remain at the same level. Furthermore, if a farmer is interested in turmeric cultivation then he can refer the experts of SKUAST-Jammu or other successful turmeric farmers because experts can tell better about different varieties of the turmeric suitable for our area, types and preparation of land required and other plant production and protection technologies. His future plans for BDS Spices Park is to advance the packaging process by using hi-tech machines.

Contributors

Dr Brejesh Ajarwat, Dr Vishal Mahajan and Dr Anamika Jamwal

Harvesting Gold from Marigold A Success of Marigold Farmer

Name:	Sh. Shanti Kumar S/o Sh. Basant Raj
Address:	Village Gajothei, Block & Tehsil Bhalla, District Doda.
Age	45 years
Mobile No.	6005257915
Enterprise Adopted	Floriculture



Deliberations are most often held at many platforms as of how to increase the income of the farm families and make the agriculture more remunerative so as to retain our youth in the agriculture sector. Success stories of the remote farmers making efforts to raise their farm income most often goes unnoticed. These small holds have the potential to show us the path while we plan extension and developmental programmes for the farmers. The present success story is from a remote and far flung village which even lacks proper road connectivity but the innovative approach and adoption of supplementary enterprise by the small and marginal farmers of the village has dispelled the darkness and shown a ray of hope.

The Journey

Shanti Kumar S/o Sh. Basant Raj is a 45 years old farmer from village Gajothe, Block and Tehsil Bhalla District Doda of Jammu & Kashmir. Educated up to 10th standard, he has actively engaged in the farming for more than 30 years. He owns 12 Kanals of land of which 8 Kanals is irrigated and rest 4 kanal is rainfed. He owns a pacca house and has nuclear family. Village Gajothe is a far flung hilly village of District Doda which is poorly connected with road. It doesn't have metalled road. The village has a total population of 1991 persons of which 1032 are male and 959 are female. The literacy rate of the village is 52.99 percent and total area under cultivation in the village is 348 hectares. Village lies at a distance of about 10 Km from Bhalla and about 30 Km from the District Headquarters Doda. Majority of the people are engaged in agriculture. Apple, walnut and pear are the major fruits whereas, maize, paddy, oats, barley and mustard are the other major crops grown. The village also has significant area under vegetable cultivation. Over the last 8-10 years, the farmers of the village have shown their inclination towards diversification of their agriculture.

The start up

After having motivated by the success of the marigold cultivation of his elder brother, Shanti Kumar also decided to undertake marigold cultivation at his

farm in the year 2015. He obtained technical information from his elder brother and after the initial investment of Rs 15000/- under took marigold cultivation on 2 Kanals of his land. He raised nursery of hybrid yellow marigold at his farm and thereafter planted them in his 2 kanal of land and earned 0.48 lac as the net profit during that year. He went on increasing area under marigold year after year and also started to grow marigold in apple orchard.

The present scenario

Today, he is undertaking marigold cultivation on 5 Kanals of land. In addition to it, he is also undertaking apple-marigold intercropping in another 4 Kanals of his apple orchard. Every year, he invests Rs 0.5 lac in marigold cultivation for buying quality seeds, fertilizers etc. He is adopting the recommended package of practices for cultivation of the marigold crop. He most often consults the experts and other experienced farmers of the village especially his elder brother. He is earning Rs 2.8 lac as net profit from the sale of the marigold flowers. After picking the flowers are transported to Jammu city for sale. During COVID-19 crisis, initially he suffered some losses but later, due to non-transportation of the flowers from outside the state, the rate of marigold in Jammu market has risen and marigold farmers of Doda are making huge profits.





Constraints experienced

When he decided to undertake marigold cultivation at his farm in addition to crops, horticulture and animal husbandry, his family was doubtful of his success but they supported him and provided them full assistance during transplanting and plucking flowers. Non availability of quality marigold seed in the local market, high fluctuations in the market price, non-availability of local market, high cost of inputs especially seed and transportation related problems were reported to be the major constraints encountered by him in his endeavor.

Lessons for other farmers

Shanti Kumar always urges the other farmers undertaking traditional agriculture to adopt scientific agriculture with major emphasis on proper seed rate and line sowing. He also suggests them to undertake marigold cultivation in at least 1 kanal of their land as its cultivation has immense potential to supplement the income of small and marginal farmers. He tells, “I am also a small famers and my income before adopting marigold cultivation was quite low. Marigold crop has helped me to increase my farm income and I recommend small and marginal farmers of District Doda to adopt it.” Inspired by him, 12 farmers in the adjoining three villages have also started marigold cultivation.

Awards and recognition

He has been amply appreciated by KVK for his services to the farmers in promotion of marigold cultivation in the district. However, at state and national level, he is hopeful of getting recognition in the days to come. “I’m working for the promotion of marigold cultivation besides myself being a farmer. Bringing happiness in the families of the farmers of my District is the biggest reward for me, He says.

Exposure Visits

He has undergone one exposure visit organized by the department of Floriculture, Doda. Besides, he is an active farmer who most often participates in the programmes of the Departments of Floriculture, Horticulture, Agriculture and never misses the major extension activities of the KVK Doda.

Future Vision

He has plans to take 10 kanal of land on lease and expand the area under marigold cultivation. Moreover, he plans to purchase a vehicle after getting it financed from the bank for transportation of the marigold flowers from his village to Jammu. He says, “Our farmers face a lot of difficulties in the transportation of the flowers from here to Jammu and I am planning to overcome this constraint.” He expects from the government to set up a processing plant in the district for extraction of natural colour of the marigold so that in the absence of market, farmers may not suffer losses. He urges the floriculture Division of SKUAST Jammu to develop and popularize low cost, high yielding local hybrids of marigold for benefit of the farmers. Exposure visits of KVK are very helpful



in making farmers aware of the latest agricultural technologies and KVK should organize more number of exposure visits in farmers' interest.

Conclusion

Shanti Kumar has raised his farm income to the tune of Rs 1.8 lac through adoption of marigold cultivation at his farm. The marigold cultivation in District Doda is gaining momentum day by day and farmers like Shanti Kumar are playing a key role in the popularization of marigold in the District. The success of one marigold farmers has been getting replicated to the fields of other small and marginal farmers and providing spinal cord support to the farm families' economies.

Contributors

Dr Narinder Paul. Dr A.S. Charak and Dr G.N. Jha

Minting Money from Raising Nursery of Vegetable Crops Success Story of Onion Farmer

Name:	Mohammad Ashraf Zargar S/o Ahmadu Zargar
Address	Village Malothi, Block & Tehsil Bhalla, District Doda
Age	58 years
Mobile No.	9906395283
Enterprise adopted	Nursery Raising



Apple is the major fruit crop of District Doda and is grown in an area of 5914 hectares, which constitutes 32.58 percent of the total area under apple cultivation in Jammu Division. The space between apple trees in the apple orchards often remains unutilized as it is not recommended to grow any nutritive exhaustive crops in apple orchard. Mohammad Ashraf Zargar after attending a training programme on nursery raising made up his mind to add this enterprise in his existing Farming system for raising his income but the problem was that he had already allocated the area under different enterprises. An idea struck his mind and thought of the empty space in the apple orchards and made up his mind to start onion nursery on the 1 kanal area of the apple orchard.

The Journey

This is the story of a farmer who after attending a training on nursery raising brought 1 kanal of land under onion nursery and minted money and increased the cropping intensity of his land under apple crop. This is very interesting and inspiring story of Mohammad Ashraf Zargar S/o Ahmadu Zargar from village Malothi of Block and Tehsil Bhalla of District Doda of Jammu and Kashmir. Mr. Zargar is a 58 years old farmer educated up to middle standard but with his innovative ideas in agriculture sector, he is a popular personality in the area. Village Malothi is an uphill village having more than 62 percent of the people involved in primary as well as secondary agriculture. It is also pertinent that nearly 90 percent of the area under agriculture and allied crops is rainfed. Total population of the village is 577 with 280 males and 296 females. The literacy rate of the village is very high i.e. 96.20 percent. Mr. Zargar has a big family of 10 members and holds more than 40 years' experience in farming. He has 61 Kanals of land of which 30 kanal is his own and 31 kanal he has leased. Of the total land, 49 Kanals is irrigated whereas, 12 Kanals is rainfed. His land is not consolidated and is in three fragments even though not distantly located. Besides, he owns a pacca house. He has two cattle head and 5 sheep. He also owns a power tiller and a power sprayer.

The start up

After having decided to supplement his farm income by introducing the nursery raising enterprise, he raised hybrid onion nursery in 1 kanal of land in the apple orchard during the year 2016 with investment of Rs 18000. Generally, there is no activity in the apple orchard during the time when onion nursery is raised. So, he grew onion nursery and supplied it to the other farmers of the District from which he earned a net profit of Rs 56000/- Next year, he earned a net profit of Rs 62000/-. He also used these seedlings for raising onion crop at his own farm from which he earned Rs 80000/-.



The present scenario

After incorporation of hybrid onion nursery enterprise to his farming system, he is presently supplying, hybrid onion seedling to the farmers and himself growing hybrid onion. Through these, on an average he is adding Rs 1.5 lac annually to his farm income. He has got a good reputation of a reliable onion seedling supplier in the area.

Constraints experienced

He didn't encounter any major constraint except associated with the high cost of the hybrid onion seed, Besides, he also reported non-availability of



quality onion seed and other associated inputs, perishable nature of the seedlings once uprooted as the major constraints. As far as marketing is concerned, he uses local market and his personal 'links in selling the seedlings. Now farmers book these seedlings in advance from him.

Lessons for other farmers

He is of the opinion that land is limited so we should make best use of the available land for increasing the farm income. He often asks other farmers to produce the seedlings of only one vegetable as it can give them name and help in selling rather than undertaking mixed nursery. Encouraged by him three rural youths have started raising tomato, marigold and apple nurseries on his pattern of specialized nursery raising

Awards and recognition

His onion exhibits have received many prizes during the farmers' exhibitions and kissan melas being held by the Department of Agriculture and Krishi Vigyan Kendra Doda.

Exposure Visits

He has undergone one exposure visit organized by the department of Agriculture, Doda and one exposure visits conducted by the Krishi Vigyan Kendra, Doda. Besides, he holds opinion leadership not only in his village but also in the adjoining villages and guides the fellow farmers in adoption of scientific and proven agricultural technologies.

Future Vision

He plans to undertake the nursery of apple and walnut in 2 kanal of area for supplying quality planting material to the farmers of the District. Moreover, he is also interested to incorporate the principles of Integrated Farming System to his existing farming system in order to make it not only profitable but also sustainable.

Conclusion

Mohammad Ashraf Zargar has shown to the other farmers that options are unlimited in agriculture sector for raising farm income. It is upto us that how we can better encash them with prudence. "Adopting small enterprises along with what we are doing can definitely supplement our income", He says. He expects from the agriculture department to supply quality hybrid onion seed to the farmers of the District. Besides, he is hopeful of getting an area specific hybrid variety from the Division of Vegetable sciences, SKUAST Jammu. He asks KVK to organize more number of skill oriented training programmes for rural youth on nursery raising and management.

Contributors

Dr Narinder Paul, Dr A.S. Charak and Dr G.N. Jha



Small Scale Commercial Poultry Farming for Meat Production Success Story of Poultry Farmer

Name:	Sh. Ramesh Kumar S/o Sh Chuni Lal
Address:	Village Berreru, Block & Tehsil Bhalla, District Doda
Age	46 years
Mobile No.	7051459153
Enterprise adopted	Small scale poultry farming



Reliance on maize and paddy based traditional agricultural practices had yielded low farm income. Moreover, raising poultry farm was not a viable option in the areas where this case has been studied. It was perceived as an impracticable and difficult enterprise keeping in view the bone chilling temperature in the Bharderwah region during the winters. However, overcoming all shackles, a youth from the area set an exemplary achievement in the commercial poultry sector. This is the story of a young farmer who initiated poultry farming for raising his household income and not only got success but also motivated other unemployed youth to come forward and adopt poultry farming as a viable occupation.

The Journey

This is the success story of Sh. Ramesh Kumar S/o Sh. Chuni Lal of Village *Berreru* who initiated poultry farming in the village and motivated others also in the vocation. Village *Berreru* is situated in Tehsil Bhalla of District Doda of Jammu and Kashmir. The Village has total Population of 1058 of which 555 are male and 503 are female. With literacy rate of 66.92 percent, the village has significant number of people engaged in the agriculture sector. Conventionally, agriculture was generally Maize, Paddy Mustard Oats with major share in the vegetable cultivation. He owns 10 Kanal of irrigated land at the banks of rivulet which three fragments. Besides, he owns a pacca house and two cattle head. Over the last few years, the village has gained recognition in terms of vegetable production with involvement of modern and proved technologies at their fields. But the appetite for increasing the farm income always remained a major concern for all those engaged in the sector by adding the innovative ventures to their existing farming system. After attending a training programme on commercial poultry farming at KVK Doda, he decided to start the vocation on small scale during 2018.

The start up

The startup was established at one of its fragments which are situated nearby his home during the year 2018. He owned a cattle shed which he



renovated and converted it into a poultry farm of 1000 birds' capacity. Since then he is continuing with poultry without any break. He also obtained some information from other farmers in the adjoining village while setting up the startup. He started Broiler farming for Meat production for which there remains a huge demand for the chicken meat during winters. During the starting year, he invested Rs 27000 and started the venture. For the supply of day old chicks and poultry feed including starters and finishers, he has his contacts with suppliers at Jammu.

The present scenario

When he started the smallscale poultry farming for meat production, he added one more enterprise to his existing farming system. With the addition of this enterprise, presently he is earning on an average Rs 65,000 from the enterprise in 40 days which makes 3.5 lac during the year. He takes 6-8 lots of the broilers during a year. During the on-going COVID-19 crisis, he has made big profits as the supply of chicken from adjoining states was very less and the chicken produced locally, fetched more remunerative prices.

Constraints experienced

Initially, he was not supported by his family to start the poultry meat production but with his efforts, he was able to convince them. The high cost of day old chick and feed are reported to be the major constraints in the poultry industry. Moreover, less growth of the birds due to low outside temperature also hindered the vocation which he overcomes by making the heating arrangements. Besides, various diseases also put to risk his first few lots, but he did not lose his heart and with continuous determination, carried forward his mission. Poultry wing of Department of Animal Husbandry and consultation from the SKUAST Scientists further helped him to get rid of the constraints. The product is being sold locally and as such, he did not report any marketing problem.

Lessons for other farmers

He is of the firm opinion that any work if started with enthusiasm and zeal bears the fruits of success. In the present scenario, he call for not dependent only crop based farming but one must add various supplementary enterprises to the existing ones for raising the farm income and achieving the prime minister's dream of doubling the farmers income. Moreover, in context of the enterprise he adopted, he is of the opinion that sanitary practices are key to the success of poultry farming as it minimizes the incidence of diseases. One should give more emphasis on the time of feed and water to be given to the birds coupled with the control of diseases. If





you can keep the birds disease free, you can earn the profit. Inspired by his scientific approach and margins, two more youth in the village has come up and started the small scale poultry farming in the village. He is providing all technical support to the new entrants in the vocations by establishing their links with the suppliers and telling them the market structure and supply chain.

Awards and recognition

Ramesh Kumar has been an innovative farmer and is ready to learn the scientific agriculture to adopt new practices. Earlier, he had been awarded with Innovator Farmer Award -2017 from KVK Doda for adopting and popularizing innovations in vegetable growing, During SKUAST Jammu Annual Kissan Mela held at Chatha, he had been awarded Innovator Farmer Award by Hon'ble Vice Chancellor SKUAST Jammu and Minister for Animal Husbandry. Besides, he also won third prize for his exhibit of Knolkhol during kissan mela cum exhibition organized by the Department of Agriculture Doda. In addition to it, he has got appreciation and recognition from many Non-Governmental O organizations of the District.

Exposure Visits

He has undergone three exposure visit organized by the department of Agriculture, Doda and two exposure visits conducted by the Krishi Vigyan Kendra Doda. Besides, he is an active farmer who participates in the extension programmes of KVK and other departments of the District working for the welfare of the farming community.

Future Vision

He plans to expand the capacity of his poultry farm to 5000 birds in three phases, first to 2000 then to 4000 and finally to 5000 birds. When asked why in phases, he told, he will invest the savings from the vocation itself for expansion without taking the financial assistance from other source or from other enterprises adopted at his farm. Besides, he also wants from the department of animal husbandry to launch innovative programmes for small scale poultry farmers. He is happy that the government has now initiated providing Kissan Credit Cards Schemes assistance to the poultry farmers which he envisions will further help in the expansion of this vocation among rural youth.


Conclusion

Ramesh Kumar has proved that if one determines, even under the adverse conditions, success can be achieved. He has expectation from the government that for small scale poultry farmers government should provide subsidy on the purchase of chicks and feeds. Besides, he has expectation from SKUAST Jammu for establishing hatchery for production of good breed of chicks suited to the Bhaderwah conditions that can perform well in snow bound temperate areas

Contributors:

Dr Narinder Paul, Dr A.S. Charak, Dr G.N. Jha

Augmenting the Income through Diversified Farming Success Story of Progressive Farmer

Name:	Sh. Tilak Raj S/o Sh. Mansa Ram	
Address:	Village Sirah, Tehsil Katra, District Reasi	
Age	66 years	
Mobile No.	9419282705	
Enterprise Adopted	Diversified Farming	

Sh. Tilak Raj is a 66 years old progressive farmer of village Sirah which is 7.5 km away from famous religious place Katra in Reasi district of Jammu and Kashmir. His family comprises his wife and five children. He is having 5 acres of land. Total population of his village is 1450 with 68 per cent literacy rate. He is matriculate and his family comprises of 8 persons.

The Journey

Sirah village is about 7.5 km away from world famous religious place Katra in Reasi district of Jammu and Kashmir. This village is situated near the Shri Mata Vaishno Devi (SMVD) University and Super Speciality Narayana hospital. The major occupation of the people is agriculture but there is no source of irrigation and the village is totally rainfed. He is having 5 acres of land which is totally rainfed. Initially he was growing maize, wheat and few local varieties of vegetables as his forefathers were doing. He was using the traditional technologies in his fields and monkeys and boars were the great problems in his fields. All the agricultural produce was consumed by his family with very little surplus to sell. His farming system was deteriorating and he was unable to mitigate the basic needs of his family. With traditional technologies he was able to generate only Rs.81, 000/ha. In 2009-10 he initiated the scientific agriculture on a small scale. Right from this year he was stressing on diversified agriculture. He used local resources and started growing of maize, wheat, fruits and vegetables. Initially he got mediocre results and also got some failures especially in fruits and vegetables. He was lacking the scientific knowledge of mushroom cultivation. Then in 2010-11, he came in contact with the KVK scientists. KVK scientists started regularly visiting his farm and they scientifically guided him and motivated him to use new technologies at his farm. He has also developed a marketing channel to sell his produce. Scientific cultivation of cereals, fruits and vegetable changed his life. There is a great demand of his farm produce in Jammu region. Year by year he was generating more income.

Start Up

KVK in the form of farmer's trainings, vocational trainings, front line

demonstrations, farmer-scientists interaction, farmers' exposure visit, dissemination of production technologies through radio, TV, literature has led to increase in diversification in agriculture at Sh. Tilak Raj fields. Slowly but surely many more farmers of the area are becoming interested in diversification in agriculture. He followed the scientific guidelines provided by the KVK, Reasi scientists. The improved/hybrid varieties seeds of vegetables were provided by KVK, Reasi and the orchard planting material was provided from the Deptt. of Horticulture.



Present Status

Presently he is having reaper-cum-combine, rotavator, disc harrow, seed-cum-fertilizer drill, maize Sheller, two thrashers, two tractors and two trucks. He is also having 115 mango plants, 130 guava plants, 8 litchi plants, 60 banana plants, 35 citrus plants, 15 aonla plants and 7 pear plants. He is scientifically growing pulses, oilseeds, spices, lemon grass etc. at his farm. Lemon grass at his field has become centre of attraction in the area as it is helpful to fetching more



money for him. He is also having one gobar gas plants and one vermicompost unit. By the scientific diversified farming he is able to generate Rs.2.20 lakh income/ha.

Constraints Identified

Initially Sh. Tilak Raj faced problem because of lack of technical knowledge. Then he was technically supported by KVK, Reasi scientists. He was lacking quality seeds and other agro-inputs. He was lacking transportation and marketing facilities. Lack of processing facilities for lemon grass.



Lesson for other farmers

Sh. Tilak Raj has developed confidence in himself and have become a credible source of agricultural information. He has become a motivating factor for other farmers of his area and they have started to adopt the same technologies as used by him. A self-reliance and entrepreneurial spirit has been developed by him. Many farmers come to him for his opinion towards diversified farming. He has become a ray of hope for the other farmers of the area. He is gradually diverting the farmers of his area towards scientific diversified farming. Sh. Tilak Raj success in diversification in agriculture is inspiring the other farmers of his area in shifting the villagers towards diversification in agriculture for better economic returns. He is having good rapport with the KVK scientists and always participates in the training programmes and farmers' fairs conducted by the Krishi Vigyan Kendra, Reasi.

Awards and Recognitions



Sh. Tilak Raj was felicitated by the Ex-Governor of J&K, Sh. N.N. Vohra in a farmer fair organised by the Sher-e-Kashmir University of Agricultural Sciences and Technology, Jammu as an innovative farmer. He was also awarded as an Innovative Farmer Award by Hon'ble Union Min. of India, Dr Jatinder Singh during the

Kisan Mela held at KVK on 15 April, 2016, He also got Best Farmer award from former Min. of J&K, Sh. Ajay Nandaji during the prog. organised by the Deptt. of Agri., Reasi.



Exposure Visits: He has visited SKUAST-J many times. He has also visited many times KVK, Reasi. In 2020 he went for the national level tour organized by the National Board of Medicinal Plants and visited CIMAP-Lucknow and many other important institutions.

Conclusion: Sh. Tilak Raj has emerged a successful farmer of his area but wants to excel more. He expects financial support, processing facilities from Government. He expects new technologies and new varieties of fruits and vegetables from SKUAST-J. He wants more technical know from KVK, Reasi. He wants trainings on value addition in medicinal and aromatic plants. Efforts of Sh. Tilak Raj have given new shape to the diversification in agriculture. The quantity and quality of agricultural production have been increased by his efforts. His efforts are attracting the other farmers of this area also towards diversification in agriculture.

Contributors

Dr Banarsi Lal, Dr Sanjay Koushal and Dr Suja Nabi Qureshi

Scripting Success through Scientific Farming Success Story of Horticulture Farmer

Name:	Sh. Gurdev Singh S/o Sh. Chatter Singh
Address:	Village Bharakh, Block & Tehsil Pouni, District Reasi. 185203
Age	66 years
Mobile No.	9797564772
Enterprise Adopted	Fruits & Vegetables Cultivation



S. Gurdev Singh S/O S. Chatter Singh is a 66 years old progressive farmer of village Bharakh which is about 40 km away from Reasi town of Jammu and Kashmir. The population of his village is 4800 with 70 per cent of literacy rate. His educational qualification is up to matric. His family comprises of his wife, one daughter and one son.

The Journey

Village Bharakh is about 40 km away from Reasi town. The village is 100 per cent rain fed and it is very difficult for the farmers to increase their crops production. S. Gurdev Singh is having 1.5 hectares of land with meager income resources. Before 2012, he was growing maize, wheat, few medicinal and aromatic plants and few local varieties of vegetables. All his agricultural produce was almost consumed by his family with very small surplus. The traditional farming was not generating extra income for him. Then he came in contact with the KVK, Reasi scientists. A base line survey of village Bharakh was done by the KVK scientists and it was observed that majority of varieties of different crops including vegetables used by the farmers were traditional which their forefathers were using from years ago. There were no proper scientific agricultural technologies to be utilized by the villagers and production was very poor. The Krishi Vigyan Kendra, Reasi scientists along with the allied departments imparted awareness/ training programmes on “Commercial Vegetables/fruits growing” and introduced the improved and hybrid seeds of the vegetables by laying Front Line Demonstrations (FLDs). The training on beekeeping and MAP were also imparted by KVK, Reasi scientists.

The farmers including S. Gurdev Singh were also taken for the exposure visits at KVK, Reasi and SKUAST-J. It was intensively done to improve the vegetables/fruits production in the village so that the farmers can earn their livelihood and improve their socio-economic status and can also mitigate their own nutritional problems. The Krishi Vigyan Kendra Scientists were constantly



guiding the farmers for the scientific commercial vegetables/fruits growing and assessing and refining the new technologies suitable for the farmers of Bharakh village. 20 interested vegetable growers (including S. Gurdev Singh) were identified and hybrid /improved vegetables seeds were provided by the KVK scientists with technical guidelines. Farmers including S. Gurdev Singh were simultaneously guided for scientific beekeeping and MAP. They were also guided how to save their crops from insect-pests and diseases. They were constantly motivated how they can raise their socio-economic status by growing the vegetables/fruit crops. S. Gurdev Singh is having around 1.5 hectares of fertile land which is suitable for the vegetables/fruits growing. When he initiated the vegetables/fruits growing in his land, he was using the traditional technologies. The result was that the yield was very poor. He was not having assured source of irrigation. By using the local varieties he was able to earn only Rs.65, 700/ha annually.

Start Up

He established a bore well at his farm as irrigation was primarily needed for the commercial fruits and vegetables. He along with his wife started to grow the commercial vegetables and fruits without any labour from outside. He followed the scientific guidelines provided by the KVK, Reasi scientists. The improved/hybrid varieties seeds of vegetables were provided by KVK, Reasi and the orchard planting material was provided from the Deptt. of Horticulture.

Present Scenario

He used the improved/hybrid varieties of vegetables/fruits and he was able to earn Rs.1.32 lakh/ha annually from the same piece of land. With his income he purchased TV, refrigerator, cooler etc. His overall socio-economic status improved. His son educated up to graduation and he married his daughter with his farm income. A transformation happened in his life. Now S. Gurdev Singh is confident as his income has increased and he is feeling more secure by growing the vegetables/fruits under the guidance of KVK scientists. He also started some income from his beekeeping unit. He has started applying FYM and other organic inputs in his fields for organic vegetables/fruits. S. Gurdev Singh has established a vegetables/fruits/honey sale counter at his home.

Lesson for other farmers

Now S. Gurdev Singh has become a motivating factor for other farmers of his area and they have started to adopt the same technologies as used by him. A self-reliance and entrepreneurial spirit has been developed by him. Many farmers come to him for his opinion towards commercial fruits and vegetables cultivation. He has become a ray of hope for the other farmers of the area and has become a role model for other farmers of his area.



Awards and Recognition

S. Gurdev Singh has gained recognition by winning many exhibition awards farmers' fairs held at district and state level. He has exhibited some outstanding materials in different exhibitions conducted by the SKUAST-J and also by state department of agriculture/ horticulture. He has emerged as a progressive farmer of his area. With the increase in his income by the vegetables growing his respect and recognition has also been increased in the area. Keeping his performance in vegetables growing in view, he was awarded by Hon'ble Union Minister, Dr Jatinder Singh as an innovative farmer in the farmers fair organised by Krishi Vigyan Kendra, Reasi at its campus in 2016-17. He has got progressive farmer award from Hon'ble Ex-Min. of J&K, Sh. Ajay Nanda during the prog. organised by Deptt. of Agri., Reasi in 2017. He has also got 2nd Prize in the Fruit Show organised by Deptt. of Hort., Reasi in 2007. Got appreciation from Hon'ble VC of SKUAST-J, Prof. JP Sharma during his visit at KVK, Reasi in 2020. S.





Gurdev Singh is very eager to learn scientific vegetables/fruits growing. He is very hard working and have positive attitude towards agriculture.

Exposure Visits:

He has visited many times SKUAST-J and PAU-Ludhiana. He has also visited many times KVK, Reasi. In 2020 he went the national level tour organized by the National Board of Medicinal Plants and visited CIMAP-Lucknow and many other important institutions.

Conclusion:

S. Gurdev Singh has emerged a successful farmer of his area but wants to excel more. He expects financial support, processing facilities from Government. He expects new technologies and new varieties of fruits and vegetables from SKUAST-J. He wants more technical know from KVK, Reasi.

Contributors

Dr Banarsi Lal, Dr Lalit Upadhaya and Dr Suja Nabi Qureshi

Integrated Farming System Leads to Prosperity Success Story of Unemployed Youth

Name:	Sh Parveen Choudhary S/o Sh Desh Raj
Address:	Village Langer, Block & Tehsil Nowshera, District Rajouri
Age	35 years
Mobile No.	9906229452
Enterprise Adopted	Integrated Farming System



Mr. Parveen Kumar S/o Sh. Desh Raj, a resident of Village-Langer, Tehsil-Nowshera, District-Rajouri (J&K)- 185155 is a small farmer having a landholding of 1.5 hectare. Mr. Parveen Kumar is 35 years old, energetic, unemployed rural youth with a passion to do innovative work. His educational qualification is matriculation and has a farming experience of twelve years.

The Journey

Langer village is 58 Km from district head quarter and situated near actual line of control with a population of 1650 and literacy rate of 75 percent. The village cultivable comes under rainfed agriculture. There is no other source for rural youths to earn their livelihood.

Parveen Kumar was facing the problem of unemployment like other youths of the village. He came in contact of KVK Rajouri during awareness programme organized in his village in 2016-17. He apprised the scientists of KVK that he wants to start a subsidiary enterprise. KVK scientists advised him to establish Integrated Farming System at his farm by adding some more enterprises and refining the existing farming system. He was advised to adopt mushroom cultivation because mushroom had a great demand in the local market. He received 35 days Skill Development Training of Mushroom Growers at KVK Rajouri in 2018-19. Moreover, KVK helped him by providing trainings on scientific vegetable cultivation and dairy farming and conducting Front line Demonstrations at his farm on pulses and oilseeds.

Startup

He started Mushroom cultivation as a subsidiary enterprise in the year 2018-19 in a small room with 100 bags. His wife also helped him in day to day activities of Mushroom cultivation. In first year, he was satisfied with the enterprise and experienced cultivation to marketing of mushroom. In second year, he expanded his unit from 100 bags to 200 bags in a big room at his home. Now he is planning to construct a big shed for establishing his unit on large scale. He also replaced low milk yielding cattle with improved breeds which



enhanced milk production. Moreover, he introduced oil seeds and pulses in his cropping pattern after observing the impact of FLDs at his farm. He also started a back yard poultry (BYP) unit of 20 birds

Present Scenario

Initially, Parveen Kumar had adopted Maize –wheat cropping pattern. Introduction of oil seeds and pulses not only enhanced the farm income but also improved soil fertility. Being an innovative farmer, later he got training from KVK and Department of Agriculture and started scientific vegetable cultivation, which gave him additional income. Moreover, mushroom farming also became a source of family income of Mr. Parveen Kumar. Improved breeds of cattle enhanced the milk production which became the regular source of income. Mr. Parveen Kumar purchased a power tiller in 2016. He modified the cultivator of power tiller by changing the direction of its tines and made it suitable for weeding and interculture in maize. Now weeding of 1 ha area under maize crop can be done in 5 hours by modified power tiller. Mr. Parveen is now using this power tiller for custom hiring and earn income from it. He gave option for unemployed youth to adopt this innovation as a business. Back yard poultry unit also became a source of income as well as protein rich diet for the family.

Enterprise	Year of Start	Annual Income
Crops	–	25000
Vegetables	2016	50000
Dairy Unit	2016	84000
Mushroom Unit	2018	20000
Horticulture	2015	10000
Custom Hiring of farm machinery	2017	70000
Poultry (BYP Unit)	2018	15000
Total Income		274000

Constraints

Mr. Parveen Kumar is facing the problem of non-availability of good quality seeds of crops, vegetables and spawn of mushroom in the local market. For purchasing the seeds and spawn, he has to travel to Jammu. Irrigation is the major factor for harvesting a good produce. He also reported that Lack of irrigation facility is another constraint in harvesting a high yield.

Awards and Recognitions

Mr. Parveen Kumar got award of best Integrated Farming System Model of the district from Department of Agriculture.



Horizontal Extension

Mr. Parveen Kumar is not only innovative but also helping nature. He guides every farmer who visit his farm about integrated farming system. About 45 farmers have adopted scientific cultivation of vegetables and 15 farmers have been motivated to start mushroom cultivation. Moreover, 5 youths purchased power tillers and are lending it on custom hiring for maize hoeing after modifying it as per guidance of this farmer.

Exposure Visits

Mr. Parveen Kumar visited IARI, New Delhi during the exposure tour organized by KVK Rajouri in 2019-20. He also visited HAU, Hissar, IIVR, Baranasi during exposure tours organized by Department of Agriculture. He participated in the exposure visit to Kisan Mela at SKUAST-Jammu organized by Department of Horticulture.

Dignitaries Visit to Farm

Chief Agriculture Officer, Chief Horticulture Officer and various officers/officials visited his farm. Senior Scientist and Head and Scientist of KVK Rajouri also visited his farm. Moreover, exposure visits of farmers organized by Department of Agriculture and Horticulture visit at his farm every year. Two groups of trainees of KVK Rajouri stopover on his farm during their exposure visit.

Expectations

Mr. Parveen Kumar expects irrigation facility and availability of timely and good quality seeds and spawn from government. He also expect some help for establishing high tech mushroom shed and transportation facility for delivering vegetables and milk in the market. He wants technical knowhow, exposure visits and training from KVK Rajouri and SKUAST-Jammu.

Conclusion

Integrated farming system is a combination of different enterprises on a farm which provides employment and regular income throughout the year. Output of one enterprise can be used as input for other enterprise. Moreover, during lean period, subsidiary enterprises provide employment to whole family. Hence, IFS is a model which can double the income of the farmer.

Contributors

Dr Arvind Kumar Issar, Dr Suraj Kumar and Dr Parul Gupta

Successful farming through Integrated Pest Management Success Story of Vegetable Farmer

Name:	Sh. Chaman Lal S/o Sh. Bhagat Ram
Address:	Village Khabal Bhajwal, Block & Tehsil Sunder Bani, District Rajouri. 185153
Age	49 years
Mobile No.	8803296637
Enterprise Adopted	Vegetable Cultivation



Sh. Chaman Lal is a 49 years old progressive farmer of village Khabal Bhajwal of block and Tehsil Sunderbani, 2.5 km distant from the nearest market in the Rajouri district of Jammu and Kashmir. His family comprises of his wife and five other family members. He possesses 2.4 hectares (ha) of land, of which, 1.0 ha area is irrigated and 1.4 ha is unirrigated. The main occupation of the farmer is agriculture and vegetables. Maize, wheat and mustard are major crops cultivated by him. Total population of his village is 380 (male: 200, female: 180) with 85 per cent literacy rate. Sh. Chaman Lal is educated up to 10th standard (matriculate). He is involved in agriculture, horticulture and animal husbandry, though his main occupation is vegetable cultivation and marketing.

The Journey

Mr. Chaman is cultivating vegetable crops on one-hectare area other than *rabi* and *kharif* season crops namely wheat, maize and oilseed crops and was earning good income from his farm. But, a huge proportion of his hard-earned money was consumed for protecting the crops particularly vegetable crops from insect pest attack that not only reduces yields but lowering quality and increases production costs. Apart from causing direct damage, many of them also act as vectors for several viral diseases. There was economic loss to the tune of 20-25 per cent in vegetable crops. To minimize losses to insects and other pests, he was dependent upon pesticides and initially he used to apply multiple insecticide sprays on his field to overcome the problem of pests. The farmer was so fed up with the excessive use of pesticides that many thoughts were coming to his mind to change the cropping pattern. He did not have the knowledge regarding non-pesticide based pest management practices.

Start Up

In 2015-16, he came in contact with the KVK Rajouri and elaborated about the insect pest issue to them. The scientists of KVK told him about the existence

of safe and practical methods of pest control. They further advised him to use these methods in conjunction with pesticides as these are not alternatives to pesticide use. The scientists of KVK Rajouri demonstrated one such non pesticide based pest management practice on his field. The pheromone traps were erected in his field to demonstrate the farmer its benefits in lowering the economic losses due to insect pest attack and load of pesticides. Moreover, the technology was very simple, observable, cost effective and resultant benefits accrue to it was higher. The farmer was highly satisfied with the results as use of pheromone traps reduced his expenditure on insecticides/pesticides as well as labour charges for spraying insecticides.

Present Status

After getting motivation from Scientists at KVK Rajouri and Agriculture Production Department, Sh. Chaman Lal adopted pheromone traps to replace the conventional pesticides on his field. He is applying this innovation not only in vegetables crops but applying it for his cereals, pulses and fodder crops grown in *kharif* season namely maize, mash, cowpea, fodder, bajra and cherry as well as cereal and oilseed crops grown in rabi season such as wheat and mustard. Use of pheromone traps has increased his farm income by about 20-25 per cent as he has to spend less on purchase and application of insecticides and moreover, he is getting higher marketable yield. The impact of the technology can be gauged from the fact that many more farmers of the area have adopted pheromone traps after realizing the economic and environmental benefits of these physical traps instead of toxic chemicals. The farmer is now generating about Rs. 4 lakh net profit from vegetable cultivation annually from vegetable production with the expenditure on insecticides and traps being about Rs. 10,000/-.



Economic and Social achievements

- With enhancement in his economic conditions, he has purchased power tiller, brush cutter, installed drip irrigation system and constructed well for irrigation of vegetables and field crops.



- Established one gobar gas plant and one vermicompost unit on his farm.
- Possess a buffalo and two cows and scientifically growing pulses, oilseeds, spices, lemon grass etc. at his farm. Lemon grass at his field has become centre of attraction in the area as it is helpful to fetching more money for him.
- Earning Rs, 2.20 lakh income/ha from his farm by adopting diversified farming that include vegetables, cereals, pulses, oilseeds, animal rearing and vermicomposting.
- Transformation from farmer to entrepreneur. He is now job creator instead of job seeker as providing jobs to family members and others on his farm on seasonal basis.
- Source of information for farmers of the area who are in constant touch with him to seek advises on vegetable farming.
- Motivated 200 farmers of his village and adjoining area to adopt vegetable cultivation as enterprise.

Constraints Identified

The farmer had many hurdles which makes his journey cumbersome. The farmer was not technically sound regarding application of pesticides against different pests. KVK Rajouri guided him and suggested to use pheromone traps. After the technical support from KVK Rajouri, availability of good quality pesticides and pheromone traps was a major constraint faced by Sh. Chaman Lal. However, the problem of the farmer was addressed by KVK Rajouri and department of Agriculture jointly by making tie-up with the agency supplying pheromone traps at his doorstep. Moreover, regarding availability of the spurious pesticides in the market, he was advised to consult the technical experts of KVK before buying pesticides.

Lesson for other farmers

Sh. Chaman Lal become an example for other farmers of the area and more than 40 farmers have adopted pheromone traps after seeing his success. He suggested the farmers of the area to remain in touch with technical experts and seek their advice before making decision about pest control. He suggested that blanket application of pesticides is harmful as it eliminates the friendly pests also. He further advised that farmers should attend the training programmes and other extension events organised by the KVK and department of agriculture to upgrade their knowledge and skills to manage pests.

Awards and Recognition's

- He has developed good rapport with the KVK scientists and often participates in the training programmes and farmers' fairs conducted by the Krishi Vigyan Kendra, Rajouri as master trainer.
- Got Best Farmer Award from Directorate of Agriculture, Jammu in 2010-11.

- Sh. Chaman Lal has been awarded as Ambassador farmer by KVK Rajouri in 2015.
- Awarded cash prize of Rs 10000/- by ATMA Rajouri for as Vegetable Grower in 2017-18.
- A certificate of appreciation was awarded by KVK Rajouri in 2018 in recognition to his contribution in the field of Vegetable production.
- Cash prize of Rs. 10,000/- was awarded by the Agriculture Production Department, Govt. of Jammu and Kashmir in 2020.



Exposure Visits

- Attended five days training programme on “Vegetables Production through Good Agricultural Practices” during 26th February to 2nd March 2011 at Indian Institute of Vegetable Research, Varanasi.
- Attended Vibrant Gujarat Krishi Summit w.e.f 9-10th September, 2-13 held at Gandhinagar, Gujarat.
- Attended Kisan Melas organised by Sher-e-Kashmir University of agricultural Sciences and Technology of Jammu in 2017 and 2018.
- Participated in different programmes organized by KVK Rajouri namely farmers training programmes, Kisan Melas and Farmer scientist Interactions from time to time.
- Attended Kisan Mela organised by Indian Agricultural Research Institute New Delhi in 2015, 2016 and 2017.

Expectations from Government

He expects the basic facilities namely creation of irrigation facilities and upgradation of road connectivity for the farmers of the area from the Government of Jammu and Kashmir Union Territory. He



expects that Krishi Vigyan Kendra Rajouri and Sher-E-Kashmir University of agricultural Sciences and Technology of Jammu will disseminate latest technical



knowledge at their doorsteps from time to time to upgrade knowledge of the farmers.

Conclusion

Sh. Chaman Lal has set an example of a successful farmer amongst farming community of Rajouri district in particular and Jammu region in general. He has proved that farmers adopt technology if it is cost effective, simple and have relative advantage to the existing practice. Moreover, the success story of Sh. Chaman Lal opens the door for other farmers that one should not rely on chemical pesticides for pest control and adoption of non-pesticide pest management practices are result oriented and efficient also.

Contributors

Dr Suraj Kumar, Dr Vishal Sharma and Dr Rizwan Jeelani

Farm Innovators of Jammu

A compendium of success stories

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