

Sustainable backyard poultry rearing and income enhancement in remote tribal areas in higher hills of Himachal Pradesh

Sh. Dheeraj Kumar belongs to “*Gaddi*” schedule tribe community of HP and is a resident of Supa village in Bharmour region (Chamba District) of Himachal Pradesh. The village is located in between Budhil and Ravi valleys at altitude of 2200 meters above MSL 80 KM to the south-east of Chamba. The area is having temperate climate and witnesses moderate to heavy snow falls in winter season. In year 2013, Dheeraj Kumar visited University during an exposure visit. During a lecture he interacted with staff of AICRP Poultry and mentioned that he is actively involved in various farm operation namely vegetable, crop and apple farming, and is also willing to undertake poultry



farming regularly. He further told that lack of good quality germplasm, feed availability and technical guidance was the major constraints due to which he was not able to continuously rear backyard poultry units, although he has reared one lot of backyard poultry distributed through state Animal Husbandry Department. According to him, many a times when

Housing and rearing system adopted is not available and also there was lack of institutional and government support in the area.

He was included as one of the beneficiary under TSP component and was supplied with 100 grower birds in October, 2013 along with feed and other inputs. Apart from this, he was given practical knowledge for maintaining birds under cold climatic conditions of region and preparation of supplementary feed with locally available grain. He remained in continuous touch with the project staff and many a times telephonically enquired about on various aspects of poultry management. Even after taking the stocks in almost at onset of winter, he was able to maintain birds during winters with good growth and sold surplus males during peak winter season at premium price in the region. By the end of March, 2014 surplus males were sold and female started laying. On subsequent feedback, it was revealed that he was pleased with the performance of stock. He was advised to rear next lot in the month of August, comparatively earlier than last year so that effect of cold stress can be countered and males were available for sale during winters. An increase in chick survival rate due to declined mortality was observed in second lot which in turn has led to increased profitability and more net income through selling of eggs and surplus birds. He

was also advised that in case of non-availability of chicks due to road shutdown or any other reason he can hatch-out the chicks from egg produced by using desi brooding hen available with him. Since, then Sh. Dheeraj Kumar continually involved in backyard poultry and was able to make little improvisation at his own. During a visit to his village, he showed that he was utilizing the fruit wastes and dry fruits from his orchards and vegetables left over from his farm. Also he has been incorporating the Azolla and quoted that it acts as a very good green supplement in winters when scavenging material is scanty. Every year, he procures one lot of chicks from AICRP centre, Palampur and now he is happy to take day old chicks since he has developed enough expertise to rear them even during winters. He also hatches few chicks at his own using desi broody hen whenever the need arises. He has expanded his poultry house and included the facility for proper ventilation and light as guided.

Currently, he is keeping around 120 layers of developed location specific variety “Himsamridhi” and is producing 60-65 eggs/ day (1500-1600 eggs/month). He is earning Rs.6000 to 7000 net income per month through sale of eggs and surplus poultry birds (@ Rs.500 to 700 per male



bird; Rs. 400 to 500 per hen (Rs. 10 per egg in winter and Rs. 7-8 in summer months). Up to March 2016, he had earned approx. Rs.50000 net income € Eggs from Himsamridhi birds at farmer's flock poultry birds. The farmer is now taking keen interest in poultry production and is quite satisfied with the progress of his stock. Now, he plans to construct a double storied poultry house having housing facility for 500 birds including separate brooding facility. Since no commercial farm exists in the region and there is high demand for poultry products and eggs during winters, he wants to exploit the available market and rear improved variety with good egg laying potential.

Backyard poultry farming as a source of supplementary farm income for a rural youth in Himachal

Sh. Amit Kumar is a young, educated youth belonging to scheduled tribe community and resident of a small village Jia lying in foothills of Dhauladhar mountains in Kangra valley of Himachal Pradesh. He is a progressive agriculturist involved in multifarious farming activities including rearing few desi birds for last some time. After acquaintance with staff of AICRP on Poultry Breeding, Palampur unit during a routine poultry farm visit, he expressed keen interest to include backyard poultry farming in his farming portfolio. During subsequent interactions, he disclosed that although he is interested to adopt backyard poultry farming on a regular basis but lack of good quality chicks and institutional support impeded his initiative in this direction. After regular interaction with AICRP staff, he was coopted as a field unit for evaluation of the new location specific poultry variety. Being of tribal community, it was decided to include him as beneficiary under TSP component of AICRP and provided input support along with chicks to start with the occupation in April, 2016.

Sh. Amit Kumar was extended technical advice from time to time including preventive measures against prevalent poultry diseases. The growth performance of the chicks was periodically monitored. Owing to his previous experience of village level poultry farming, mortality in his flock was very less (< 2%) during chick and growing phases. The egg laying in his flock started during September 2016, at 5-6 months of age. He sold male birds at 4-5 months of age after attaining marketable weight (1.6- 2.0 kg) at an attractive price of Rs. 500/ per male owing to their distinctive colored plumage. This earned him good income of about Rs 10000/ from sale of 20 cockerels. The egg production of female birds was around 10-12 eggs per day during peak production in winter months. During this period, he was able to sell eggs @ Rs.8-12 per egg making a total sale proceed of Rs 12000/- till date. At present, he is getting about 6-8 eggs daily giving him income of Rs. 60-70 per day. He practiced mixed system of scavenging with grain feeding for rearing birds at bare minimum input cost. He also practices supplementation with vitamins, minerals and calcium from time to time. A portion of eggs produced and cockerels were also consumed in the family to improve their nutritional quality. Realizing that the level of profit from small unit of 50 birds which he made, he has purchased another lot of 80 chicks during December, 2016 as replacement stock. Thus, with a small flock of around 50 birds, Sh. Amit Kumar earned handsome returns. This supported the fact that backyard poultry farming along with other agricultural activities can be an economically viable agricultural diversification for livelihood and income generation in hill farming system.



Fig. 1. Housing and rearing system



Fig 2. Amit Kumar receiving inputs under TSP