

Farming the Cultivation: GDS & BDS

¹Shivanshu Garg, ²Pooja Nain and ³Himanshu Punetha

^{1,3}Department of Biochemistry, CBSH-GBPUA&T, Pantnagar, Uttarakhand

²Department of Soil Science, College of Agriculture, GBPUA&T, Pantnagar, Uttarakhand

ARTICLE ID: 19

Introduction

A successful implementation of research objectives although differing from subject to subject does involve the roots of shaping literature and practical work. Modestly, the Indian farmers have gone to the end of expertise that literary words reflect in their work of cultivating the crops. Managing a farm land is quite a kind of labor work, but when the collective effort of 18 years is seen with data suggesting cultivating 12 different kinds of crops, the reflection of scientific knowledge deepens within the mind of farmer. Not only an economic wealth is being generated, but the important part is how the problems of cultivation has been tackled down to a point where pest attacks, climate boundaries, irrigation providing potentials, pedological problems has been avoided to an excellent scale that handsome amount of 13 lakh INR is being generated on an average from last 18 years. The hard work, dedication towards farming and capability to utilize scientific knowledge collected from various sources independently has paved off the way for family of Shri Gopal Dutt Sharma (GDS), son & Shri Bhairav Dutt Sharma, father (BDS).

Images Gathered from House of Farmer



1. Capsicum disease free harvest 2. Family collecting harvest 3. Sh.GDS (left) & Sh. BDS (right)

Located in foothills of Uttarakhand, there is a small village named Babiaryi in Dhari Tehsil of Nainital District from where these two farmers wrote a successful story of cultivating crops in adverse conditions.

Table1: Crop Cultivar, Land and Income

S. No.	Crop Cultivar	Cultivated Land	Income (in lakhs/ annum)
1.	Pea	10,800	4.00
2.	Potato	6,480	1.50
3.	Cauliflower	25,920	1.20
4.	Capsicum	21,600	1.75
5.	Tomato	12,960	0.80
6.	Faba beans	21,600	0.60
	Total	99,360	9.85

(Source: data proofs of GDS of the year 2022)

Awareness & Approach

Both the farmers start their day by an early morning visit to their fields which are located distantly from one another as the cultivable land is on terrains. It takes 2 hours for them to visit and inspect problems. Then they start summarizing problems and writing on sheets. The time spent by them with crops is plenty and therefore they never miss the arising problems and getting in touch with scientific personnel in order to eradicate the problem. Key observations have been listed in Table2.

Table2: Symptom Information & Conclusion Drawn for Treatment

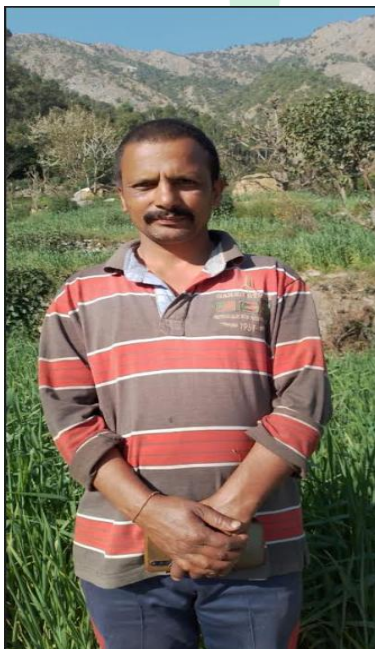
S. No.	Crop Symptom Investigated	Conclusion Drawn
1.	Curling of leaves in tomato	Viral disease arising from Tomato Yellow leaf curl virus
2.	Early pod fall off in Pea	Bacterial disease giving rise to Pod spots
3.	Shortening of bean length	Water scarcity
4.	Black necrotic spot of Cauliflower	Fungal disease noted & rectified
5.	Borers in potato	Insect Infestation observed
6.	Small leaves in Cauliflower	Soil salinity noticed

Table 2 comprises a wide range of observations done by farmers over a span of 15 years. After months of tiresome data collection and their accurate treatments resulted in a much better yield of crops. The whole family members including both their wives and children Lalita, Pankaj, Jyoti and Bhanu are involved in field work, from sowing to

harvesting, from irrigation to warding off the crop damaging mammals like Nilgai (the largest antelope of Asia) and bears. Several close encounters have taken place in past with these animals of the family members. One family of human beings is protecting their crops just like their children. This shows how much farmers are concerned towards their professionalism. Other than producing mentioned crops in table 1, the farmers grow wheat, bajra, onions, garlic, cucumber, bitter gourd, bottle gourd for their personal use. In other words, other than rice, they don't spend single penny on eatables.

Conclusion

The current data was collected during soil sampling survey of Uttarakhand during 2021-2022. The data sets were prepared in concern with both the farmers. The objective of this article is to draw the attention of all those people who are involved in farming practices and are currently facing problems. The work of GDS and BDS has shown that use of scientific temperament is not limited to scholastic education and awareness in field is a self learning practice to be practiced over the years in order to achieve results both in terms of social uplifting and economic wealth generation.



In his words, Sh. Gopal Dutt Sharma explained how his interest developed in crop cultivation. He said, "***Cultivation is also a kind of meditation but you have to keep your eyes open***". Moreover, he thanked almighty God by saying, "***His crops never went to extent of drought by virtue of time-to-time rainfall in that area***".

(In picture: Sh. Gopal Dutt Sharma)