



Success Story of Dharmendra Singh: From Conventional Farming to Sustainable Agribusiness

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Dharmendra Singh, a progressive farmer from Hisar, strongly believes that Necessity is the mother of invention. For years, Dharmendra Singh was involved in the conventional rice-wheat cropping system, as it is ingrained in the agricultural habits of his family and other local farmers. The unsustainability of the conventional system and shrinking margins, however, led Dharmendra to take a relook at his farming practices. His participation in different *kisan melas* (farmer fairs) and workshops conducted by Chaudhary Charan Singh Haryana Agricultural University, CCS HAU gave him not only the exposure but also the package of practices necessary for diversification into vegetables. Besides integrated pest and nutrient management practices, Dharmendra rejuvenated his farm and diversified his income by initiating a business of producing and selling vegetable seedlings to other farmers. This is the story of how the journey of Dharmendra Singh into sustainable farming and agribusiness transformed the fortunes of the family farm and contributed toward the bigger objectives of environmental conservation, food security and farm profitability.

The Struggles of Conventional Farming

The Dharmendra Singh family had long involvement with rice and wheat cultivation. The continuous monoculture and heavy chemical fertilizer application, coupled with increased groundwater extraction for irrigation, drastically decreased the fertility of the soil and the local water table.

He felt that year after year, the yields were flat and the costs kept on going up. It was turning out to be an unsustainable situation-the quality of soil was deteriorating and despite using more water, fertilizers and pesticides, returns were not upto the mark. Besides these labour scarcity during peak work days caused delay in agricultural activities and increased costs. With the shrinking profitability of conventional farming along with the visible degradation of his land, Dharmendra Singh realized this could not go on any longer and there is an immediate need for change

A Turning Point: Exposure to Kisan Melas and CCS HAU Workshops

Dharmendra Singh continuously attended agricultural fairs-kisan melas-and workshops organised by CCS Haryana Agricultural University. These events were important in shaping his understanding of alternative agricultural practices that would reduce his production costs and restore health to his farm. Diversification, conservation of resources and sustainable methods were the keys to it. CCS HAU helped a lot in educating us about IPM & INM, crop diversification and vegetable farming.

The extension officers in the university introduced Dharmendra to integrated pest and nutrient management, a holistic approach for the management of soil health and control of pests in a manner so as to reduce dependence on synthetic chemicals. IPNM, done through

organic manures, crop rotations and bio-pesticides, advances low-input sustainable farming with increased yields.

These workshops also highlighted the increasing demand for fresh and quality vegetables in local markets. Given Haryana's proximity to large urban centres like Delhi, there was a respectable market for vegetable produce. This information became the seed for Dharmendra's future endeavours.

Transition to Vegetable Cultivation and Integrated pest & nutrient management

The insights encouraged Dharmendra to break the traditional rice-wheat cycle and start vegetable cultivation instead. Shifting to a new crop is not so easy because it entails some risks and investments. Dharmendra started cultivation of vegetables like tomato, brinjal, cucumber and leafy vegetables. He adopted the IP&NM practices such as use of neem oil, trap crops, sticky and light traps, biofertilizers etc, on his farm for improvement in soil health and enhancement in pest control with less dependence on chemical inputs. His switch to vegetables saved water. Vegetable crops require much lesser water than rice crops do and Dharmendra also put in a drip irrigation system to maximize water use efficiency(WUE).

Income Diversification: Vegetable Seedling Production and Selling

Over time, Dharmendra Singh saw another venture take shape: the production of vegetable seedlings and selling them to other farmers. Looking at the changing cultivation patterns of local farmers he started to produce healthy, disease-free seedling of high yielding varieties which many farmers were in dire need. Production of seedlings require less time, labour and investment but provide greater returns and diversify income sources as different types of vegetables are cultivated in different seasons throughout the year. His business quickly grew and he started to sell thousands of seedlings every season, adding income to his family. He took great care that the quality of seedling of should be maintained at its best, which was biggest reason of his flourishing agribusiness.



Benefits from the Shift

It was the decision of Dharmendra to turn to vegetable cultivation and develop the nursery business that turned his life around. Economically, his farm became more viable and resilient. The diversification into vegetables and seedlings ensured multiple sources of income for him, reducing dependence on one crop, besides mitigating risks arising out of market fluctuations or adverse weather conditions. Other massive gains have been environmental: reduced chemical use, water conservation and soil health maintenance make the farm much more viable for Dharmendra. This work contributes to the wider objectives of natural resource conservation and ecological balance.

Healthier produce is another important outcome for Dharmendra's shift. Through the use of IPNM and organic farming practices, he grows vegetables free from the residues of harmful chemicals, hence offering consumers healthier food options.

Looking Ahead

The case of Dharmendra Singh's transformation from a conventional rice-wheat farmer to a sustainable vegetable farmer and seedling producer in itself represents the alchemy effect brought in by knowledge and innovation into rural livelihoods. His inspiring story has motivated many other farmers in Hisar and surrounding districts to think differently about their farming practices and their sustainability and profitability.

"Farming is changing and we must change with it," Dharmendra wraps up. "I think that the future of farming lies in producing healthy food while conserving our resources. I am proud to have taken this route and hope to learn and grow more." The achievement of Dharmendra Singh was attained through tireless work and openness toward fresh ideas. His farm was transformed into a very successful one, serving as an example to the farmers throughout the region about new opportunities open beyond traditional farming. His story is illustrative of the representative roles that sustainable agriculture can play in transforming modern challenges.