Enriched Vermicompost Production for Revenue and Employment Generation: A Success Story of Farmer from Bundelkhand Region of Uttar Pradesh

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Introduction

Vermicompost is an organic fertilizer obtained from the earthworms by passing out the organic wastes through the digestive systems. The process of preparation of this organic fertilizer may be called as vermicomposting. Earthworms improve and restore soil fertility and boost up crop productivity by the use of their excretory products known as vermicast. Vermicast is popularly known as Black Gold because of rich in nutrients, growth promoting substances, beneficial soil microflora, having properties of inhibiting pathogenic microbes and synergistic relationship in plant rhizospheres. Vermicompost is becoming popular day by day as it provides quality products through major components of organic farming system.

Success story of Mr. Vigyan Shukla

Shri. Vigyan Shukla (42) who is agriculture graduate is from Aatara Tehsil, Banda district of Uttar Pradesh, India. He owns 8 acres of land and his main occupation is agriculture. He also owns a tractor and other important farm machinery and he always believe to do innovations in the field of agriculture so as to make agriculture a profitable enterprise. He came in contact with KVK Banda, Banda University of Agriculture and Technology, Banda in the year 2018 during Skill development training programme on the topic "Quality Vermicompost Production". Till then he has been cultivating traditional crops like wheat, paddy, chick pea and some vegetables on a usual basis and use chemical fertilizers and has 4 cows and 2 buffaloes.

KVK Intervention

After coming in contact with KVK Banda, Animal Science Scientist, he started his own Vermicompost unit. In the meantime he undertook training on Vermicompost production and the KVK Scientist provide him all the technical help on the following points-

1. Site selection for construction of vermipit
2. Species of earthworms to be used
3. Avoid using fresh cow dung
4. Maintain proper aeration
5. Optimum moisture level (50-60%) and temperature (25-32^{0}C)

Output and Outcome

He constructed 4 vermipit (Size 10X4X2 ft) and used desired species of earthworms. This was proven to be a successful venture with the first harvest after 3 months to be 210 kg from one vermipit. There after 920 Kg of Vermicompost were collected in three batches. Vermicomposting proves to be a profitable source of income where a net return of Rs 8800 and BC ratio of 2.04:1 was achieved. The farmers could sell the produce fetching them good price and at the same time they are able to use the compost for their crop cultivation.

Table1. Cost: Benefit Ratio of Vermicompost

Cost of Vermicompost production in 3 months (Rs.)	**Gross Income (Rs)**	**Net Income (Rs) per unit**	**B:C Ratio**
18000	**26800**	**8800**	**1:2.04**

By this case study it can be concluded that farmers like Mr. Vigyan Shukla who has adopted Vermicompost production, enhanced his livelihood status, improved soil health and consereved beneficial soil micro-organisms. He argued himself by his quality product which is demanded by nearby farmers, NGO's and various government organizations. Moreover, he is encouraging other interested farmers to prepare this multifunctional quality product on their own farms so that farming community can be benefitted.

Preparation of Vermicompost

Hands on training to Farmers and Students

Visit of Officials and other dignitaries