

Cost Benefit Analysis of  
Organically Produced Crops Grown in  
in Dehradun and Udham Singh Nagar

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Important Findings, Conclusions and Recommendations

**1. Intensity of conversion.** The intensity of organic cultivation is found to be low: the farmers covered by our study have converted only about 16% of their land to organic farming. This suggests that there is a large scope of expansion of organic basmati farming.

## **2. Cost-benefit of organic basmati cultivation**

- **Average cost of production: Rs. 8327/acre**
- Dehradun district: Rs. 10,347/acre
- Udham Singh Nagar: Rs. 6280/acre

The high cost of production in Dehradun is largely explained by the high cost of labour required to cultivate in this district.

- **Average yields: 7.68 quintal/acre**
- Dehradun: 8.46 quintal per acre
- Udham Singh Nagar: 6.91 quintal per acre
  
- **Average profits per acre: Rs. 6265/acre**
- Dehradun district: Rs. 5700 per acre
- Udham Singh Nagar district it was Rs. 6842 per acre

## **3. Comparison of profitability of organic and conventional basmati cultivation**

- Profits from organic cultivation are higher in both districts. It is especially profitable in Dehradun district.
- Dehradun district: organic profits are higher by Rs. 4243 per acre
- Udham Singh Nagar district: Organic profits are higher by Rs. 1377 per acre.

**4. Overall annual profitability of organic cultivation.** The difference between the profitability of organic and conventional is lower as the wheat grown by these farmers is not sold at premium. However, it is important to note that even when wheat is included in the calculations, organic farming remains more profitable than conventional.

## **5. Problems faced by organic farmers**

- Market related problems
  - 68% of farmers felt that market uncertainty was a major problem.
    - Lack of a local market.
    - Total dependence on a small number of buyers.
  - 64% felt that the price obtained for organic basmati rice was too low.
    - Price declined in recent years.
    - Premium not enough to compensate for loss of income from wheat.
  - Delays in procurement and payment.
    - Small farmers consider this to be very important.

- Pests and Diseases
  - 55% of the farmers reported pests and diseases to be an important problem.
    - Udham Singh Nagar district (70%). 15% crop lost. Use of chemical inputs more widespread, leading to resistance etc.
    - Dehradun district (40%)
  - Incidence of pest and disease attack more common in organic farming.
    - Organic: 183 incidences
    - Conventional: 107 incidences
    - Need to improve pest and disease control strategies.

#### **6. Factors which limit expansion of organic cultivation**

- Market related problems (65%).
- Low profitability (38%).
- Shortage of labour (32%).
- Limited availability of compost (29%).

#### **7. Farmers' experience with certification**

- Only 9% of farmers facing problems in documentation for certification
- In most cases documentation carried out by field officers
- 60% of farmers not aware of certification process
- More efforts needed to familiarize farmers with certification process.

#### **8. Who is best suited to run ICS**

- Organic Board: 40%
- Farmers' Federation: 20%
- Farmers: 14%
- Do not Know: 24%

#### **9. Need for assistance in future**

- Marketing (87%)
- Certification (82%)
- Access to biocontrol agents (60%)
- Training (62%)

#### **10. Who can help in future**

- Organic Board: 93%
- Farmers' Federation: 53%
- Private Companies: 16%
- NGOs: 13%

#### **11. Are farmers happy with the Board?**

- 94% of the farmers are happy with the programme.
- Reasons:
  - Low input cost
  - Improvement in soil condition
  - One time payment by the Board.

**Conclusions:**

- Organic cultivation of basmati rice is more profitable than the cultivation of rice using conventional methods.
- the overall profitability of organic farms is reduced by the decline in the yield of wheat.
- economics of organic farming will improve only when all the crops grown in the farm are sold at a premium.
- Organic farmers face a number of problems. The most important among these are: uncertainty about market size, delays in procurement and payment, only marginally higher profitability when all the crops (basmati and wheat in most cases) are taken into account, and a high incidence of pests.
- Although only 9% of farmers report facing problems in documentation for certification, a majority is not aware of certification process. More efforts are needed to familiarize farmers with certification process.
- A majority of farmers feel the need for assistance after the project is over. Most feel that the organic Board is best place to provide assistance.
- A very large proportion (94%) of farmers are happy with the programme. This is because of: Low input cost; Improvement in soil condition and One time payment by the Board.

**Recommendations**

- The markets for organic wheat (and other crops) need to be developed so that the overall profitability of organic farming is increased.
- Farmers should be shown that organic farming is more profitable than conventional farming. Presently, there is a misunderstanding among many farmers that the profitability of organic is lower than conventional farming.
- Farmers should be provided with better technical support to control pests and diseases. Presently, their ability to control some of the pests such as stem borer is very limited.
- Various biocontrol agents should be made available to farmers on credit. This can be done either by the Board or the Federations. If Federations are given this responsibility, they should be provided with funds for this purpose.
- The farmers' awareness of the certification process should be increased. Also, their capability to fill documents etc. necessary for the ICS programme should be enhanced.
- Communication between the Board, federations and farmers need to be improved. Farmers are most interested in market and price related matters. Especial care needs to be taken to ensure that farmers are kept informed of these matters
- The delays in procurement of paddy, after it has been harvested, need to be removed. Similarly, delays in making payment to the farmers needs to be reduced.