

## **STRENGTHENING OUTREACH TO FARMERS NCUI INITIATIVES**



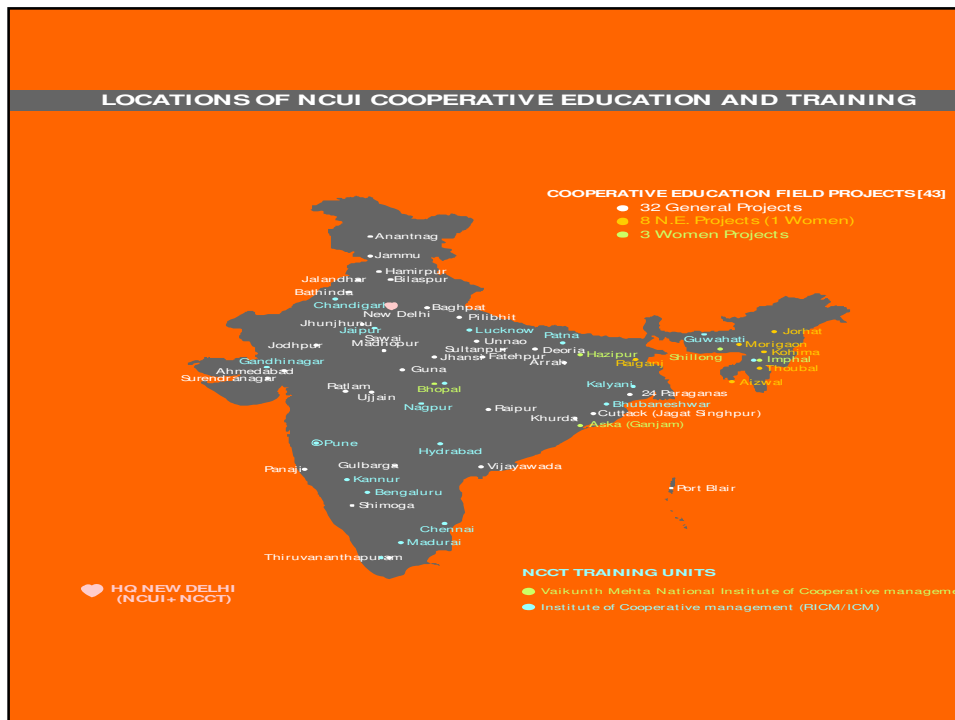
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## **AGRICULTURE EDUCATIONAL ACTIVITIES FOR FARM AND FARMERS DEVELOPMENT CONDUCTED BY FGI OF NCUI PROJECTS**

1. Maintenance of soil fertility.
2. Soil Conservation & Water Resource Management
3. Providing innovative knowledge and skill for cultivation practices of crop production.
4. Providing skill training for seed treatment and testing of seed.
5. Management of Plant Protection of Crops.
6. Training Programmes on scientific Grain Storage & Proper Marketing.
6. Post harvesting technology and value addition programmes.
7. Training Programmes on Animal Husbandry & Allied Activities.
8. Crop Demonstration of different crops.
9. Awareness camp for Environment protection.
10. Extension Services for agriculture development.

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## TWO TYPE PROGRAMMES

**A. Special Pilot Project**

**B. General Training and Educational Programmes**

## **A. SPECIAL PILOT PROJECT**

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# **Special Pilot Project**

## **SCIENTIFIC MUSHROOM CULTIVATION – PILOT PROJECT AT BILASPUR, HIMACHAL PRADESH**

### **Main Objective of the Current Micro Project**

- ❖ To provide a economic activity in mushroom cultivation to the farmers through adoption of appropriate technology, utilization of waste resources and linking it with suitable market for remunerative returns.

## WHY WAS MUSHROOM PROJECT TAKEN UP?

### Reasons:

1. Cultivation of Mushroom is relatively simple and can be homestead project.
2. Agro-climatic condition in the project area is conducive.
3. Mushroom farming is a highly remunerative enterprise with quick return in a very short period.
4. Small land holdings by local people.
5. In the project area, plenty of raw material is available, which will make mushroom cultivation economically viable.
6. Near by project area, a very good potential domestic market exists where fresh mushroom can be sold at very remunerative price.
7. Majority population who are vegetarians nearby prefers mushroom to non-veg. items.
8. Sustainability of the cultivation.
9. More important that year 2014 has been declared as International year of family farming by UNO and mushroom cultivation by farmer s is a small family farming entrepreneurship.

## IMPORTANCE OF MUSHROOM IN HEALTH AND NUTRITION

1. Mushroom also called white vegetables or 'boneless vegetarian meat' contains ample amounts of proteins ,vitamins and fibres .
2. Source for Vitamin D
3. Medicine for Cancer and Diabetes
4. Rich in Protein and Carbohydrates
5. Rich in Vitamins and Minerals
6. Medicine for weight loss
7. Mushrooms, along with vegetables, reduce the risk of heart disease

## Training programme for beneficiaries.

7 Days Training of mushroom cultivation technology was organized at the mushroom training centre of the Himachal Pradesh Horticulture Deptt. training centre at Chambaghat Solan.

1. Scientific Management of Mushroom growing.
2. History, nutrition and medicinal value of mushroom.
3. Cultivation of white button mushroom, Oyster mushroom, Milky mushroom and Paddy straw mushroom.
4. Compost preparation by short and long method.
5. Construction of appropriate mushroom houses.
6. Farm design of commercial button mushroom.
7. Construction of low cost mushroom houses.
8. Insects, pests of mushroom and its control
9. Diseases of mushroom and its control.
10. Diseases of mushroom and its control.
11. Mixing of Mushroom spawn with substrate
12. Bedding process of Mushroom
13. Casing and Pinning
14. Harvesting, Grading, Packing and Transportation of mushroom.
15. Preparation of mushroom products and their uses.
16. Recycle of spent compost and its uses .
17. Study Visit to the compost unit ,museum and spawn lab. of Directorate of Mushroom Research was also organized .
18. Study Visit to a local private mushroom farm was also organized for practical training.

## Training of beneficiaries



## MARKETING SYSTEM OF MUSHROOM PROJECT

- Survey of near by market has been done and found that majority population who are vegetarian prefer mushroom to Non- Veg. items. There is a very good potential domestic market at near by towns like Bilaspur, Barmana, Ghagus, Nanhole, Ghumarwin, Berthin and Bhager exists where fresh mushroom can be sold at very remunerative price. The Fresh mushroom are also sent to the Chandigarh market .

## BUSINESS ECONOMICS OF MUSHROOM CULTIVATION

- Business economics of mushroom cultivation of 100 bags is as under :-

- **Investment :**

1. Cost of seed & compost & transportation = 8000/-
  2. Cost of insecticide and other material = 1000/-
  3. Cost of packing material & marketing = 1000/-
- Total = 10000/-

- **Output :**

One bag of compost produce 3 Kg of mushroom  
 100 bags of mushroom produce 300 Kg of mushroom.  
 Selling price of 1 Kg mushroom = Rs. 100/-  
 Earning from 300 Kg of mushroom = Rs.30000/-  
 Net profit to the farmer = 30000 – 10000 = Rs. 20000/-

Therefore on the cultivation of 100 bags of mushroom a farmer will earn  
**Rs. 20000/- net profit in 3 months.**

## **B. General Training and Educational Programmes**

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## **MAINTENANCE OF SOIL FERTILITY**

- (a) Soil Testing
- (b) Soil Reclamation – Acidic and Alkalic
- (c) Use of Organics – Conducting training and providing financial support for :
  - (i) FYM (Farm Yard Manure)
  - (ii) PSN Compost (Phosphorus Soluble Nutrients)
  - (iii) Vermi Compost
  - (iv) Green Manure
  - (v) Mixing of crop residues in soil.
  - (vi) Bio-fertilizer
- (d) Integrated Nutrient management.



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## Farmers awareness / training programmes

**NCUI's initiative to create interest among farmers for quality compost production and provide financial support for making compost pit.**



Farmer seen preparing and filling compost pit

**Use of Gypsum to take care of soil health as well as soil reclamation for Alkali soil and lime for acidic soil.**



**Farmers were educated about importance of green manuring**



**Nutrient Deficiency Symptoms on crops—educating farmers about these**



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## Conducting Training Programmes on preparation and importance of vermi compost and bio-fertilizer



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## Awareness programme on impact of Green Manuring

- Green manuring (Dhaincha, Sunnhemp, Green gram) lead to average yield enhancement of about 15 % in succeeding Paddy / Maize / Wheat crops.
- Saving of about 5 – 10% of N application.



## Awareness programme for environment protection

- Suggest farmers to mix crop residues in soil and avoid residues burning.
- Motivate farmers for plantation on unproductive land.



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## Awareness programme Integrated Nutrient Management

- ON FARM production of organic manure by PSN Compost.
- Crop Residue Management.
- Green Manuring, Bio fertilisers
- Supply of fertilisers including secondary & micro nutrients.
- Need based application of 100% water soluble fertilisers
- Focus beyond major crops (wheat, Rice, Sugarcane & Cotton) viz. Pulses, Oilseeds, Horticultural crops, fodder crops, Spices, Plantations etc.
- Crop diversification / crop rotation.
- Farming systems approach like Animal Husbandry, Bee keeping, Pisciculture, Poultry.



## SOIL CONSERVATION & WATER RESOURCE MANAGEMENT

- Control method of wind & water erosion.
- Water Shed Management

### PROVIDING INNOVATIVE KNOWLEDGE AND SKILL FOR CULTIVATION PRACTICES OF CROP PRODUCTION.

- Use of bio-fertilizer
- Seed treatment by fungicide.
- Solar treatment etc.



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## MANAGEMENT OF PLANT PROTECTION OF CROPS

Training Programme of :

- Use of bio-pesticide.
- Integrated Pest Management.
- Cultural Practices.

### TRAINING PROGRAMME ON SCIENTIFIC GRAIN STORAGE & PROPER MARKETING

- Solar Treatment of grain.
- Use of EDB (Ethylene Dibromide) ampoule.
- Use of Chemical insecticides etc.

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## POST HARVESTING TECHNOLOGY AND VALUE ADDITION PROGRAMMES.

Fruit Preservation – training on preparation of :

- (a) Jam & Jelly
- (b) Pickles
- (c) Juice
- (d) Spices Powder & Packing
- (e) Making of Dalia, Baddy, Papad, Chips etc.



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## Training Programme on Animal Husbandry & Allied Activities

- Proper Feeding of animal – balance feeding including minerals
- Breeding
- Care of animal
- Integrated farming for livelihood.



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## CROP DEMONSTRATION OF DIFFERENT CROPS

- Improved varieties and balance fertilizer and other scientific practices.



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## EXTENSION ACTIVITIES

- Formation of Farmers Club.
- Organizing Farmers Day.
- Organizing Farmers tour at Agricultural Research Station, Agricultural Universities and Agricultural Fair.
- Farmers Meeting on different subjects.
- Village level, block level and district level farmers meetings.
- Participating in local fairs for consultancy to farmers.



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Thanks

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