National Programme for Organic Production (NPOP) 2024

Handbook for Training Purpose

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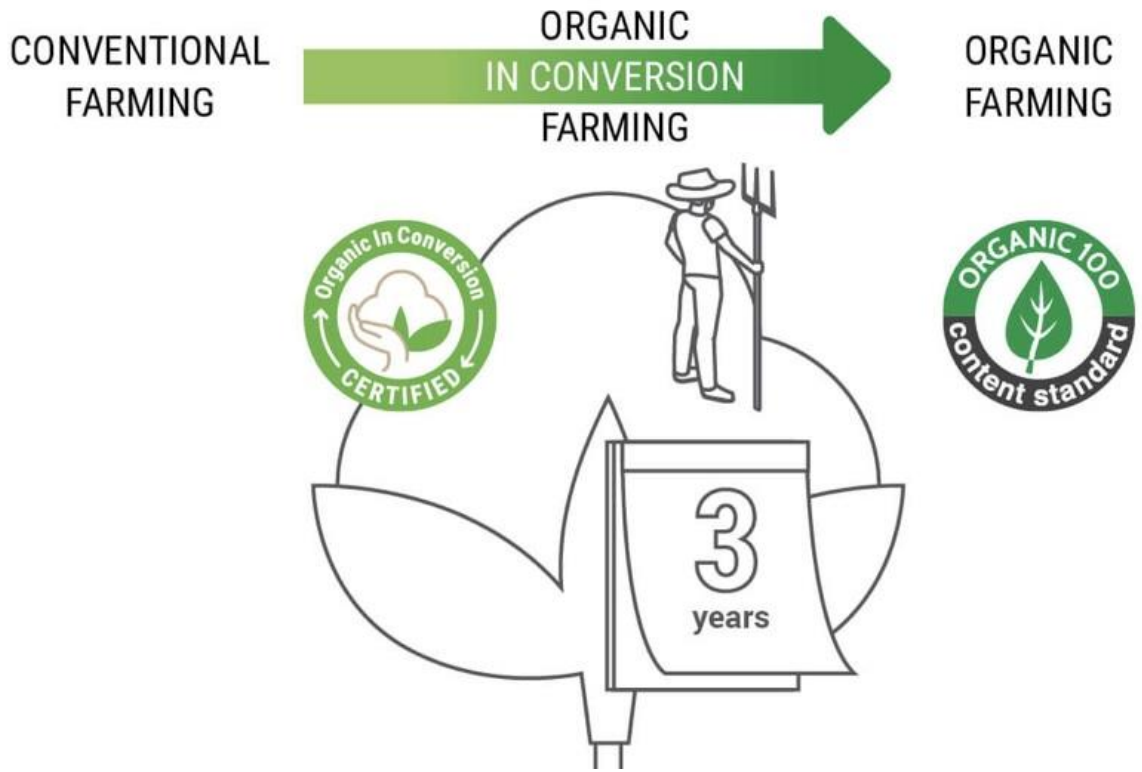
3.1.1. Crop Production Plan

_Describe in detail the following points:

- **Main crop/ intercrop/ season wise**
- **Processes and practices**
- **Inputs used – composition- frequency – application rate – Source of commercial availability**
- **Source of organic planting materials**
- **Monitoring practices and procedures**
- **Type of physical barriers established to prevent contamination from conventional farm, split and parallel operations.**
- **Record keeping system implemented to comply with requirements.**
- **CB to be informed of any change in the plan**

3.1.2. Conversion Requirements



- **The establishment of an organic farming system requires an interim period –called as conversion period. All the organic activities are started during this period.**
- **Operator must have clear updated plan covering all organic standards requirements.**
- **The standard requirements must be met during the conversion period and from the start of the conversion period.**
- **conversion starts from the date of CB's first inspection.**
- **Despite the above requirements, a full conversion period may not be required if conditions in 3.1.4 is met.**

3.1.3. Duration of Conversion Period

- **In the case of annual and biennial crops, plant products produced can be certified organic after completing 2 years of organic management.**
- **In the case of perennial plants, the products can be certified as organic after completing 3 years of organic management.**
- **The CB may decide extension/reduction of the conversion period depending upon the past status/ use of the land and environment conditions.**

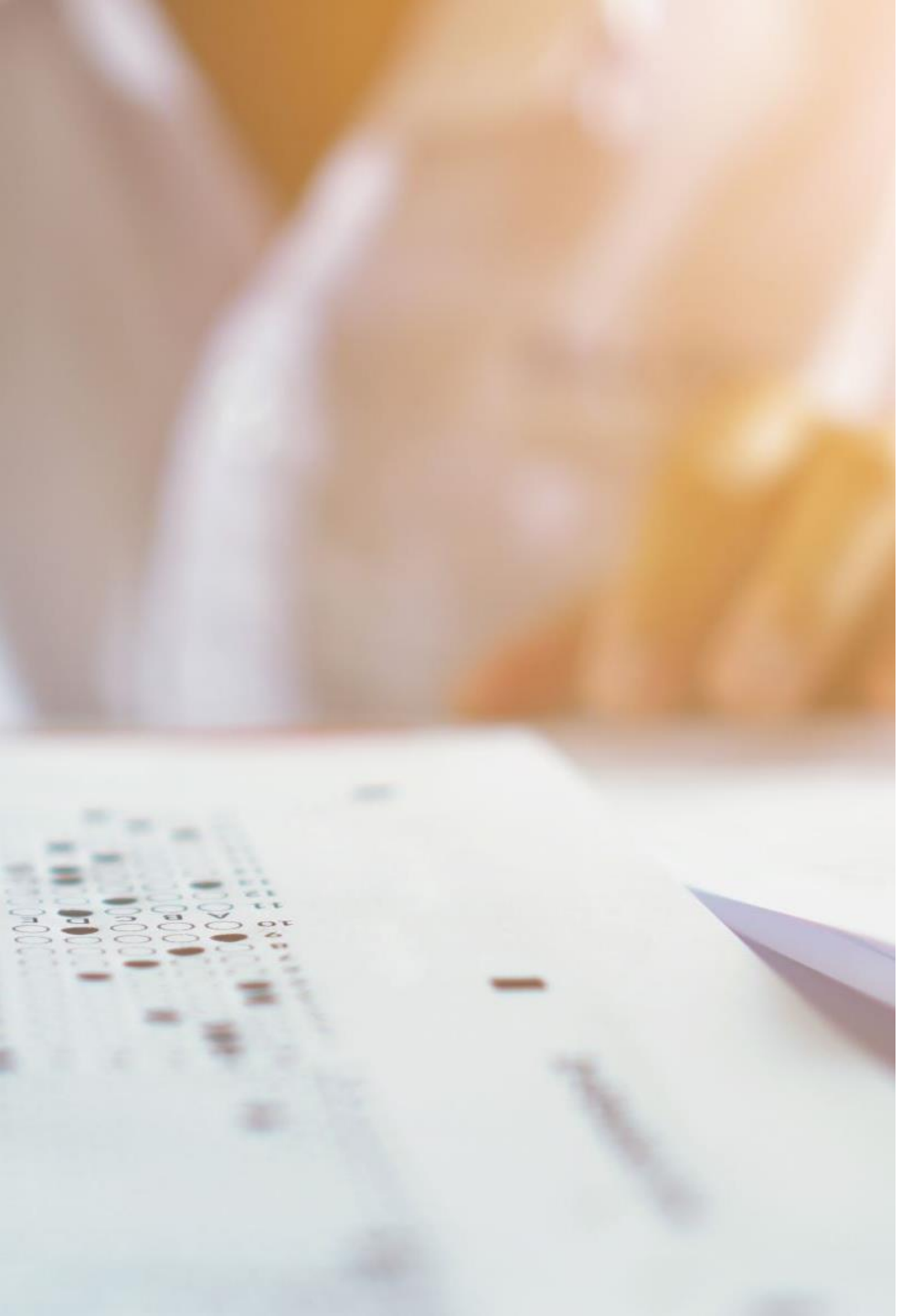
3.1.4. Derogation of Conversion Period-1

- Previous period may be considered as up to full conversion period for the annual as well as perennial crops, as an exception wherein documentary proof is available that the following requirements have been met for a continuous period of minimum 3 years or more.

A. Requirements: The derogation of conversion period may be allowed for any one of the following categories of cases.

i. The land has been certified under the PGS for a continuous period of 3 years immediately preceding the period for which recognition as conversion period has been sought.

ii. The land is in the hilly areas of Himalayan States/ UTs viz., J&K, Ladakh, HP, UK and NE and the said hilly area has been notified by the State/ UTs as natural which has not been treated with products or substances which are not permitted for use in organic production as prescribed under the NPOP for a minimum continuous period of 3 years.



3.1.4. Derogation of Conversion Period-2

A. Documentary evidence: Applicants must enclose:

I. Proof of land certified under the PGS certification (-Submission of valid PGS certificate- -Verification of PGS certificate for validity and status and any sanctions)

II. <u>Land located in the hilly region of Himalayan states/ UTs</u>

a) copy of the Govt. notification- notifying as natural – not treated with unallowed substances under NPOP for a minimum period of 3 years.

b) A map with geo-coordinates depicting the land for which reduction in conversion is sought

c) Verification by the CB-Based on the documentary evidence –(conduct physical verification of the localities of the land - Verify the records of the operator for cultivation practices followed (-conduct detailed risk analysis from fields of each member of the group- -prepare a detailed report and detailed justification and submit to APEDA -final decision will be taken by the NAB sub committee.

3.1.5. Organic products in-conversion should not be sold as ‘organic’.

- **These products can be sold as “Produce of Organic Agriculture in-conversion” with below mentioned conditions:**

  a. **Plant reproductive materials where the requirements prescribed under these standards have been met for at least 12 months.**
  b. **Food and Feed products of plant origin with only single ingredient – produced under organic management for 12 months before harvest – fully complied with NPOP Standards.**
  c. **These products must not be labelled as organic and India Organic Logo shall not be used.**

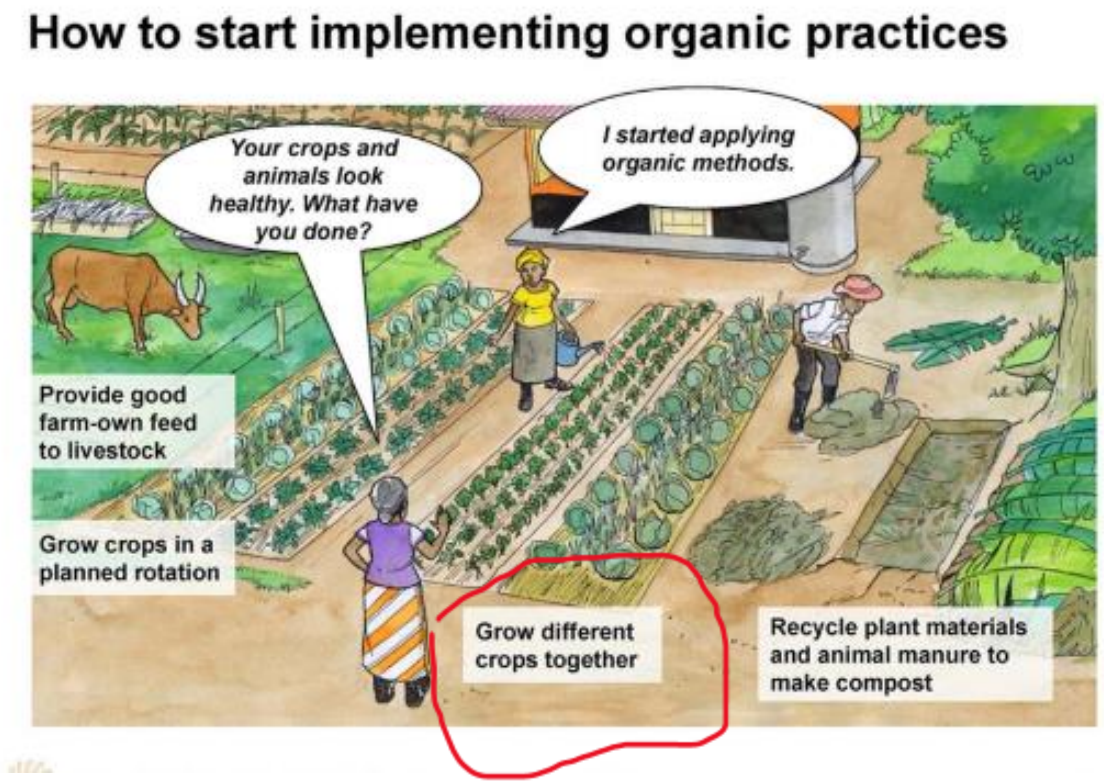
3.1.6. Ecosystem

- **Organic Farming would contribute beneficially to the ecosystem.**
- **The CB shall set standards/ procedures for a minimum percentage of the farm area to facilitate biodiversity and nature conservation**

3.1.7. Choice of Crops and Varieties

- **All seeds and plant material shall be certified organic.**
- **Species and varieties cultivated shall be adapted to the soil and climatic conditions and be resistant to pests and diseases.**
- **In the choice of varieties, genetic diversity must be given importance.**
- **When organic seeds and plant materials are available, they shall be used.**
- **When certified organic seed and plant materials are not available, Chemically untreated conventional seed and seedlings can be used.. The producer shall intimate the CB for use of in conversion or non-organic seeds seed material, season wise in their system plan and the same shall be verified during inspection by the CB.**
- **The use of genetically engineered seeds, transgenic plants or plant material is strictly prohibited**.

3.1.8. Diversity in crop production and management plan



- **The basis for crop production in organic farming shall take into consideration the structure and fertility of the soil and the surrounding ecosystem, with a view to minimizing nutrient losses.**
- **The organic farms shall be required to maintain sufficient diversity, -to reduce pressure from insects, weeds, diseases and other pests, and -to maintain or increase soil, organic matter, fertility, microbial activity and general soil health.**
- **Soil fertility shall be maintained through,**
  - **-the cultivation of legumes or deep-rooted plants and**
  - **-the use of green manures,**
  - **- crop rotation several times a year and**
  - **- fertilization with organic inputs.**

3.1.9. Nutrient management - 1

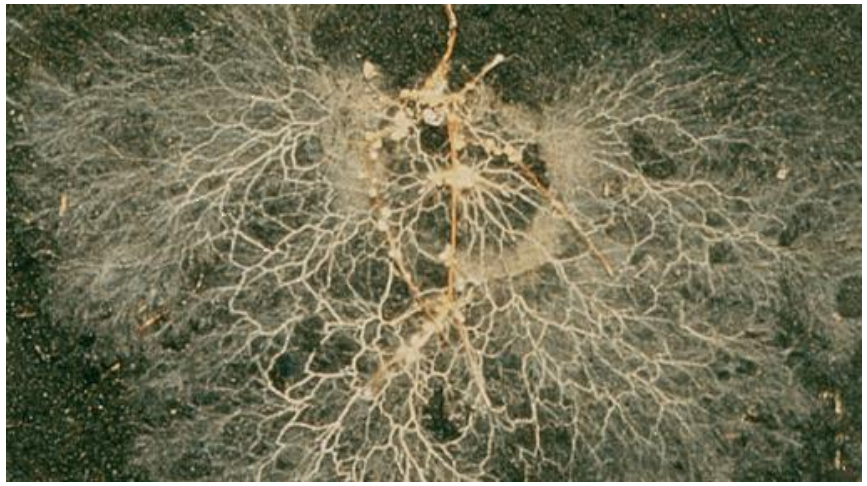
- **i. Biodegradable material of microbial, plant or animal origin produced on organic farms shall form the basis of the nutrient management programme to increase or maintain its fertility and biological activity.**

- **ii. Fertilization management should minimize nutrient losses, accumulation of heavy metals and other pollutants shall be prevented,**

- **iii. Non-synthetic mineral fertilizers and brought-in bio fertilizers (of biological origin) shall be regarded as supplementary and not as a replacement for nutrient recycling.**

- **iv. Desired- pH levels shall be maintained in the soil by the producer.**

- **v. The CB shall set limitations to the total amount of biodegradable material of microbial, plant or animal origin brought onto the farm unit, considering local conditions and the specific nature of the crops.**



3.1.9. Nutrient management -2

I. **vi. Mineral fertilizers must be used as a supplement to organic/decomposed materials. Organic or mineral fertilizers that are brought into the farm (including potting compost) can be used when, the circumstances demand as per Annex 3(1).**

II. **vii. Permission for the above materials will be given when other fertility management practices have been optimized/ exhausted.**

III. **Human excreta is not permitted for use in organic production to prevent transmission of pests, parasites and infectious agents.**

IV. **ix. Mineral fertilizers must be applied in their natural composition and will not be rendered more soluble by chemical treatment. The CB may grant exceptions as prescribed in Annex 3(1). <u>These exceptions shall not include mineral fertilizers containing nitrogen.</u>**

V. **x. The CB will restrict the use of inputs such as mineral potassium, magnesium fertilizers, trace elements, manures and fertilizers with a relatively high heavy metal content and/or other unwanted substances, e.g. basic slag, rock phosphate and sewage sludge.**

VI. **All synthetic nitrogenous fertilizers are prohibited**

3.1.10. Pest, Diseases and weed management-1

i. Organic farming shall minimize losses from pests, diseases and weeds.

-Balanced fertilizing must be practiced, Select crops and varieties well-adapted to the environment, Follow rotations, intercropping, green manures, etc.

-Growth and development shall take place in a natural manner.

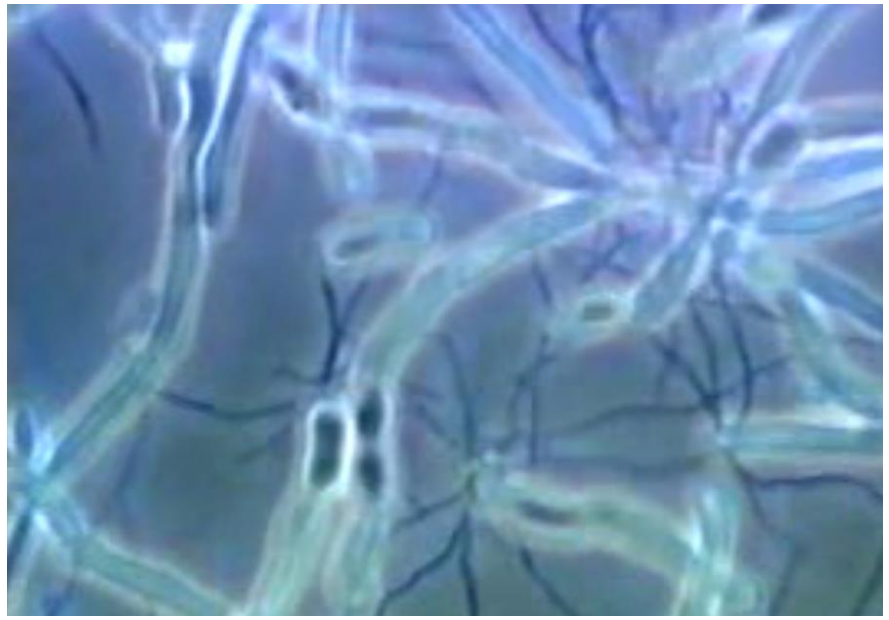
ii. Preventive cultural techniques like balanced nutrient, e.g. suitable rotations,, green manures, early and pre-drilling seed bed preparations, mulching, mechanical control and the disturbance of pest development cycles.

-CBs will ensure that suitable measures are in place to prevent transmission of pests, parasites and infectious agents.

Lady Bird beetle, a predator on Aphids

3.1.10. PEST, DISEASES AND WEED MANAGEMENT-2

iii. Pest management must be to disrupt the ecological needs of the pests.
-The natural enemies to be protected through proper habitat management of hedges, nesting sites
-An ecological equilibrium shall be created to bring about a balance in the pest predator cycle.
iv. Products used for pest, disease and weed management, prepared at the farm from local plants, animals and microorganisms, are allowed. - Additional products used will be evaluated by CB to ensure quality of organic product or ecosystem.
v. Thermic weed control and physical methods for pest, disease and Weed management are permitted.
Vi Thermic sterilization of soil can be done in a restricted way where rotation can not be practiced.



Thin Dark line Trichoderma viridae twining itself on Fusarium fungal pathogen

3.1.10. PEST, DISEASES AND WEED MANAGEMENT-3

vii. Equipment brought from conventional to organic farms shall be properly cleaned.
viii. The use of chemical herbicides, fungicides, growth regulators, synthetic dyes, insecticides and other pesticides are prohibited.
ix. Use of Ethylene Oxide (ETO) is strictly prohibited.
x. Permitted products for plant pest and disease control are listed in Annex -3(2). The producer shall keep documentary evidence of the need to use the product.
xi. Commercial inputs shall always be evaluated as per the criteria given in Annex -3(3) by the CB before approval is given for use.
xii. GMO products are prohibited.

Annex -3(2)

Products for Plant Pest and Disease Control

Certain products are allowed for use in organic agriculture for the control of pests and diseases in plant production. Such products should only be used when absolutely necessary and should be chosen taking the environmental impact into consideration.

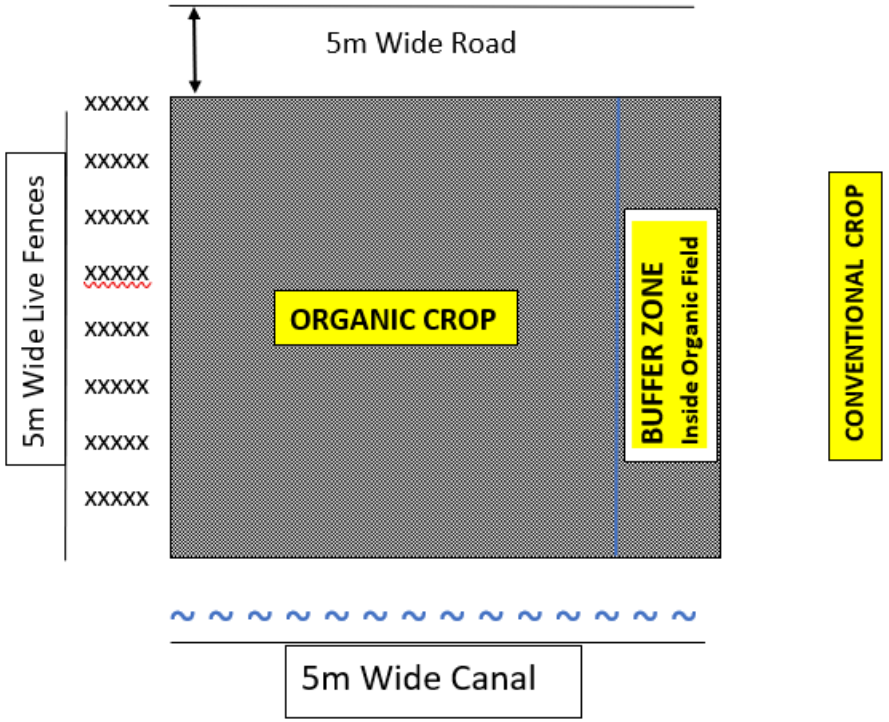
Many of these products are restricted for use in organic production. In this annex "restricted" means that the conditions and the procedure for use shall be subjected to conditions.

Inputs	Condition for use
Substances from plant and animal origin	
Azadiracta indica (neem preparations)	Permitted
Plant based extracts–garlic, etc.	Permitted
Casein	Permitted
Sucrose	Permitted
Fructose	Permitted
Sunflower oil	Permitted
Mustard seed powder	Permitted
Onion oil	Permitted
Cow milk	Permitted
Citronella oil	Permitted for all uses except herbicides
Clove oil	Permitted for all uses except herbicides
Rape seed oil	Permitted for all uses except herbicides

3.1.11. CONTAMINATION CONTROL

i. Measures must be taken to minimize contamination from outside and within the farm.
ii. An adequate buffer zone must be maintained to prevent contamination from conventional farms.
iii. Crops including seeds and forage in the buffer zone being nonorganic are not permitted for use along with organic products.
iv. The buffer zone will be verified by the CB during annual inspections.
v. If contamination is suspected, the CB will ensure an analysis of the relevant products and find the sources of pollution
vi. Polyethylene and Polypropylene or other polycarbonates coverings such as plastic mulches, insect nets only are allowed. These also shall be removed from the soil after use and it must not be burnt on the farmland.
The use of polychloride based products is prohibited.

Buffer Zone requirement:



3.1.12. SOIL AND WATER CONSERVATION

i. Soil and water resources must be handled in a sustainable manner.
Relevant measures shall be taken to prevent erosion, salination of soil to prevent the excessive and improper use of water and the pollution of ground and surface water.
ii. Clearing of land through the means of burning organic matter, e.g. straw burning shall be restricted to the minimum. The clearing of primary forest is strictly prohibited.
iii. The CB will check appropriate stocking rates which do not lead to land degradation and pollution of ground and surface water.

Fig. 3.6. Contour farming.