



Krishi Vigyan Kendra, West Khasi Hills
ICAR-ATARI, Zone-VII, Umiam, Meghalaya-793103
[Department of Agriculture & Farmers' Welfare, Govt of Meghalaya as Host Organization]
Eastern West Khasi Hills, Nongshillong - 793119



..Cost effective, accessible and year-round income generation potential to ensure a stress-free life to farmers...To ensure food security and zero hunger through better yield, access to a suite of nutritional sources and income-generating crops throughout the year..NITI Aayog on Sustainable development.

PROTECTED CULTIVATION- LOW TUNNELS

- The productivity of crops increases either through genetic improvement or growing them under protected covers. Protected cultivation modifies environmental factors and supplies optimum level which leads to an increase in yield with better quality.
- A polyhouse or greenhouse technology provides favourable environment condition to the plants as it protects them from the adverse climatic conditions such as wind, cold, precipitation, excessive radiation, extreme temperature, insects and diseases. Day by day, traditional farming is becoming uneconomical as it is dependent on nature's will.

Low tunnels are low cost polyhouse structures that are economical for small and marginal farmers who cannot afford huge costs of hi-tech polyhouse. Off season production of crops, nursery raising and cultivation of rare and medicinal plants can be achieved under such structures. The size of the tunnels: 4m x 0.9m x 0.75m with consideration to farmer's need based adjustments. The cover material is a 200 μ m UV LDPE film stabilized polythene sheet. The benefits that a farmer can experience are: (i) higher productivity as they can produce at all seasons (ii) individual choice of crops to be grown (iii) crops are protected from harmful pests and diseases (iv) reduction in labour requirement (v) better quality of produces.

Greenhouse crop production is a factory-like approach with assured input output relationships. Protected technology in high value vegetable crops can be established as a small scale industry in major vegetable growing areas of our region by progressive farmers. Young entrepreneurs and unemployed rural youth can take up this activity as it is a capital intensive proposition.



Nuksa: Ka jingioh haba thung ia u salad (lettuce) kumba 600-700 tyngka shi aiom. Ka lad aikam aijam ia kito kiba khlem kam bad iarap ban kyntiew iaka ioh ka kot jong ki nongrep kiba duna ka jingioh.



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Cultivation in protected structures

Vegetables are grown under protected structures like green houses to tide over unfavorable weather conditions like extremely low temperature, frost/ snow fall during winter and frequent rains during summer, large enough to grow crops under partial or full controlled environmental conditions, to get optimum growth and productivity. The following structures have been demonstrated:



(a) Low cost poly-house



(b) Low cost tunnels

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