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HYDROPONIC opens a new door to Bio-Entrepreneurship

Elevation in population and diversity in human food habit motivated the youth to think out of the boxes and to enter into a new world of alternate farming i.e. Hydroponics. This method of farming does not need soil as a media, hence it is not mandatory to have a huge land or to soil your hand to grow herbs and vegetables. Bio-entrepreneurs are now reaching the vertical length to enhance the productivity & quality of produce. In this growing system, plants are grown in inert material with the help of nutrient solution consists of all required macro and micronutrients in presence of optimum temperature, light and air. For a start up with hydroponic farm the first hurdle that needs to be addressed, is expertise.



IHT expert explaining drip system in growbags



Interactive lecture during supervisor level training on Greenhouse Vegetable Cultivation

TRAININGS AT IHT

Hydroponic Crop Production

Internship Programme: Owing the interest among young entrepreneurs, IHT has launched an extensive Internship Program on “Hydroponics” for 40 days this month for undergraduate and graduate students. The program was detailed about growing nursery of various herb and vegetables, their planting and growing. During this program, the morphology, physiology of plants, required nutrients and method of application were discussed to make participant understand the growth behavior of crops.

Entrepreneurs Trainings: Entrepreneurs from Greater Noida, Noida, Ghaziabad, Varanasi, Kolkata has participated 3 days course on Commercial Hydroponics. The participants visited the commercial hydroponic production area in the Institute, which gave them a clarity and confidence to start individual projects on Hydroponic with commercial viability. They appreciated the learning environment of the Institute.

Capacity building of farmers from Jharkhand

Institute of Horticulture Technology (IHT) has organized four different capacity building programmes for seven days each for the farmers of Jharkhand under the banner of State Horticulture Mission (SHM) in “**Hi-tech Horticultural Crop Production**”. Farmers from different district of Jharkhand were deputed to Institute of Horticulture Technology, Greater Noida, recognized by Ministry of Agriculture and Farmers Welfare for developing their skills in agricultural practices.

Thirty farmers from each districts in Jharkhand that are Palamu, Khunti, Simdega and East Singhbhum were deputed to share their experiences about the progress of protected cultivation in their state and the constraints they faced there in getting appropriate inputs. Faculties of IHT addressed detail about the quality nursery production of vegetable crops, soil solarization, mulching, micro-irrigation, fertigation, greenhouse technologies, production technology of greenhouse vegetable crops and integrated pest management to address hurdless they are facing in everyday. The farmers were provided hands on trainings on soil bed preparation, soil sampling & testing, use of bio-fertilizers, weed and pest management techniques in the Technology Park of IHT.

Farmers were taken for an exposure visit to National Centre for Organic Farming, Ghaziabad. The experts from the center interacted with the farmers and apprised them about the technologies available for successful organic agriculture.



Few Glimpse of Training Programmes at Technology Park



Landscape Gardening -Supervisor Level Course

IHT has completed 1-month Supervisor Level course on Landscape and Gardening successfully. Landscape & Gardening is one of the most preferred start up business for architects today. Challenge occurs when an architect starts working with horticultural plants. Knowledge sharing through Capacity building only can mitigate the challenge and create opportunity for a person to kick start on entrepreneurship in the same.

Trainees from various states showed their interest and joined in the program for one month at IHT main campus at greater Noida. During this program, participants were explained about the soil and reclamation of soil as per requirement of different landscape and garden plants. They were introduced to different kinds of horticultural plants, their identification, propagation, multiplication of turfs, time and method of planting. It is very important to choose appropriate plants and other components to keep a harmony with the place and garden design.

IHT expert has explained the correct method of soil sampling depending on herbs, shrubs or trees growing area and determination of nutrient availability to the trainees.

Trainees were also taken for exposure visit to different housing societies and park for demonstration of different landscape. It also helped them to identify the requirement of landscape as per the infrastructure present there. The program was appreciated by the participants the most.

Greenhouse vegetable cultivation - Supervisor Level 1

A skill development program was conducted in IHT for the whole month of June at IHT main campus at Greater Noida. It is evident from the data pertaining to prospects of poly house cultivation from Ministry of Agriculture, Govt. of India that increased productivity; efficient use of water, energy and labour; high quality and clean products, subsidy provision for establishment of this high cost infrastructure, round the year employment to the farmers, helps to overcome adverse climate conditions for production of vegetables, raising healthy seedlings for transplanting in open field were top ranked prosperity.

Participants from Rajasthan, West Bengal and Haryana participated for this program. They were explained in such way so that they can be able to grow into their own business on Protected Cultivation of vegetables. They were explained various methods to minimize insect or pest incidence inside the structure, use of insect attract traps etc..

The key of success in protected cultivation is appropriate intercultural operations in vegetables. During hands on training and visit to technology park, participants practiced training and pruning in parthenocarpic cucumber to get maximum benefit through higher quality produce productivity. Participants were also introduced to the hydroponic cultivation of lettuce, which can be grown throughout the year under NFT system.

Jharkhand Farmers- Outside state exposure visit

IHT has organized a seven days exposure visit of farmers from Dumka, Hazaribag, Ranchi, Ramgarh & Deoghar to Himachal Pradesh under the banner of MIDH. Farmers visited to various institutes and research centers such as CPRI, YSPUHF & DMR.

CPRI, a research and development institute is completely devoted to provide information about potato crops. The farmers were addressed by the experts of CPRI. In the interactive lectures and demonstration, the farmers were acquainted with the above information. The Farmers took keen interest in the interactive lecture and raised many queries which were addressed by the experts of the institute.

The main objective of Y. S. Parmar University of Horticulture & Forestry is to promote education, research and extension education in fields of horticulture, forestry and allied science. The Faculty disseminate several techniques include production of sustainable vegetable in changing climatic conditions. A good response from farmers was observed they practiced many grafting techniques saw different varieties of apple produced in their farms.

DMR is another form of National Centre for Mushroom Research and Training (NCMRT) which is known as 'Mushroom City of India'. The farmers had a detailed interaction with the experts on various aspects of spawn and mushroom production and post-harvest management.

Other than Shimla, farmers have also visited National Center of Organic Farming, Ghaziabad and Technology park in Greater Noida to understand efficient use of agri resources and get a better crop.



Expert explaining Cultural Practices in Apple Fruits

Future Trainings

Training	Duration	Starting Date	Closing Date
Production Technology of Greenhouse Vegetable Crops-Supervisor Level II	3 month	02.09.2019	30.11.2019
Hydroponics – Level 1	1 month	05.09.2019	04.10.2019
Nursery 3 weeks training	3 weeks	19.08.2019	06.09.2019
Floriculture and Landscaping	1 month	09.09.2019	07.10.2019