ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

(Unit of Alva's Education Foundation (R), Moodbidri)

Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi. Recognized by Government of Karnataka.

A+, Accredited by NAAC & NBA (ECE & CSE)

Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka

Ph: 08258-262725; Mob:722262724,7026262725,mail:principalaiet08@gmail

DEPARTMENT OF AGRICULTURAL ENGINEERING

----ACTIVITY REPORT 2022-23

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
(Unit of Alva's Education Foundation (R), Moodbidri)
Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi. Recognized by Government of Karnataka.
A+, Accredited by NAAC & NBA (ECE & CSE)
Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka
Ph: 08258-262725; Mob:722262724,7026262725,mail:principalaiet08@gmail.com

Index

Annexure

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
(Unit of Alva's Education Foundation (R), Moodbidri)
Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi. Recognized by Government of Karnataka.
A+, Accredited by NAAC & NBA (ECE & CSE)
Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka
Ph: 08258-262725; Mob:722262724,7026262725,mail:principalaiet08@gmail.com

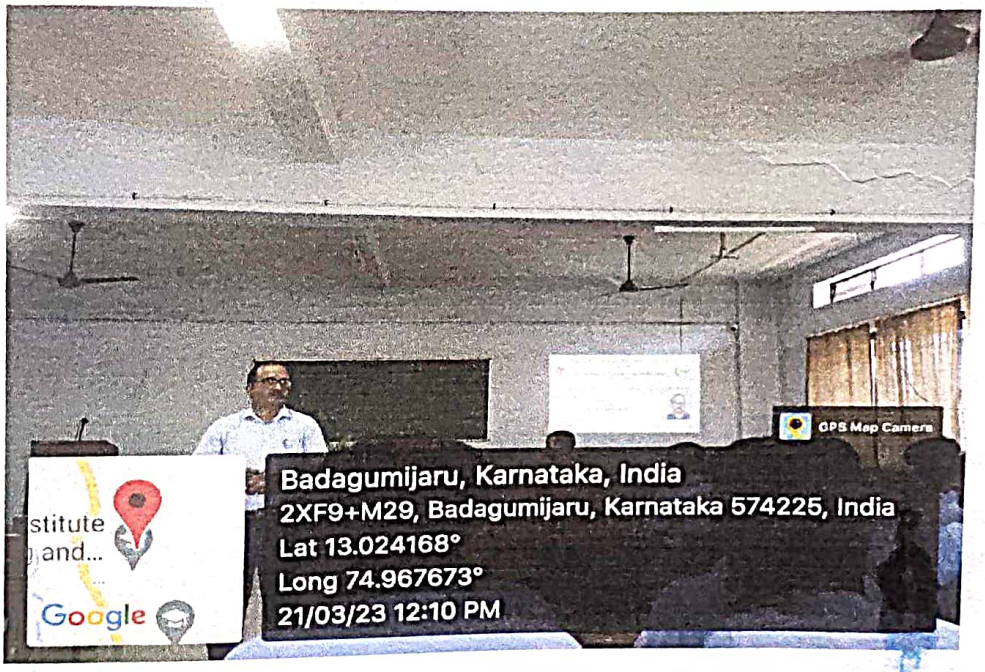
Department of Agricultural Engineering

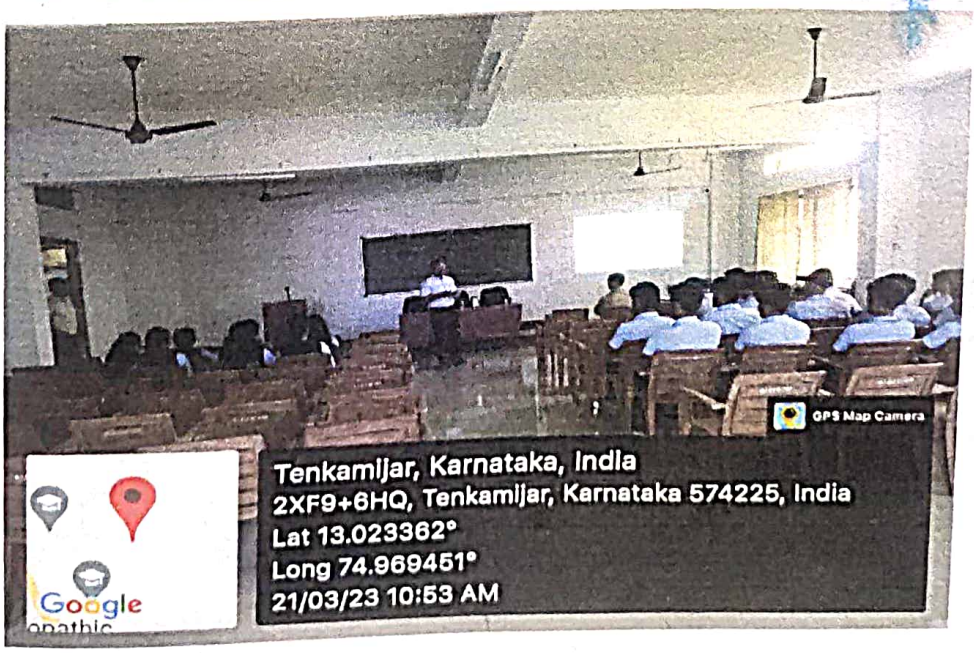
Technical Talk Report on Green House Cultivation and Maintenance in Tropical Climate Region

Objectives

To know and understand the importance of greenhouse cultivation in tropical climate region to revamp the agricultural production.

Report with geo tagged photos





ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

(Unit of Alva's Education Foundation (R), Moodbidri)

Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi. Recognized by Government of Karnataka.

A+, Accredited by NAAC & NBA (ECE & CSE)

Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka

Ph: 08258-262725; Mob:722262724,7026262725,mail:principalaiet08@gmail.com

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
(Unit of Alva's Education Foundation (R), Moodbidri)
Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi. Recognized by Government of Karnataka.
A+, Accredited by NAAC & NBA (ECE & CSE)
Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka
Ph: 08258-262725; Mob:722262724,7026262725,mail:principalaiet08@gmail.com

Outcome of the event

Mr. Praveen was welcomed and introduced by the Head, Department of Agricultural Engineering. Later the technical session was started by the resource person on greenhouse cultivation in tropical climate region. He started the session starting from the basic concept of greenhouse effect followed by informed about greenhouse cultivation and his detailed explanation is given below.

A greenhouse is a framed or an inflated structure covered with a transparent or translucent material in which crops could be grown under the conditions of at least partially controlled environment and which is large enough to permit persons to work within it to carry out cultural operations. The growing of off - season cucumbers under transparent stone for Emperor Tiberius in the 1st century, is the earliest reported protected agriculture. The technology was rarely employed during the next 1500 years. In the 16th century, glass lanterns, bell jars and hot beds covered with glass were used to protect horticultural crops against cold. In the 17th century, low portable wooden frames covered with an oiled translucent paper were used to warm the plant environment. In Japan, primitive methods using oil -paper and straw mats to protect crops from the severe natural environment were used as long ago the early 1960s. Greenhouses in France and England during the same century were heated by manure and covered with glass panes. The first greenhouse in the 1700s used glass on one side only as a sloping roof. Later in the century, glass was used on both sides. Glasshouses were used for fruit crops such as melons, grapes, peaches and strawberries, and rarely for vegetable production.

Advantages of greenhouses

The following are the different advantages of using the green house for growing crops under controlled environment:

1. Throughout the year four to five crops can be grown in a greenhouse due to availability of required plant environmental conditions.

2. The productivity of the crop is increased considerably.

3. Superior quality produce can be obtained as they are grown under suitably controlled environment.

4. Gadgets for efficient use of various inputs like water, fertilizers, seeds and plant protection chemicals can be well maintained in a green house.

5. Effective control of pests and diseases is possible as the growing area is enclosed.

6. Percentage of germination of seeds is high in greenhouses.

7. The acclimatization of plantlets of tissue culture technique can be carried out in a green house.

8. Agricultural and horticultural crop production schedules can be planned to take advantage of the market needs.

9. Different types of growing medium like peat mass, vermiculate, rice hulls and compost that are used in intensive agriculture can be effectively utilized in the greenhouse.

10. Export quality produce of international standards can be produced in a green house.

11. When the crops are not grown, drying and related operations of the harvested produce can be taken up utilizing the entrapped heat.

12. Greenhouses are suitable for automation of irrigation, application of other inputs and environmental controls by using computers and artificial intelligence techniques.

13. Self-employment for educated youth on farm can be increased.

Planning of Greenhouses

- Place
- Direction – North South Direction – Windows not in north Direction
- Structural materials used – Wood / GI
- Polythene sheets 800 gauge (200 Micron)
- Insect Proof Net
- Climate control devises – Foggers, Shade net, Thermostat, Fan and Pad, Natural Ventilators

Green house- Types

- Low tech Cheap green house :
- Tunnels, Ground to Ground. Bamboo are used in construction
- Moderate Tech green house
- Naturally ventilate polyhouses, Uses galvanized iron pipes, contains thermostats to manage temperature and exhaust systems.
- High tech Green house
- Fan Pad system polyhouse, Uses advanced technologies and automated system to control everything happening inside the room.

Poly house construction cost

- Entirely dependent on type of construction.
- Cheapest is around Rs. 400 to Rs. 600/Sq m
- NVP costs around Rs. 800 to Rs. 900/Sq m
- High Tech ranges from Rs. 2000 to Rs. 4000/Sq m
- Net Profit

- One can earn around 8 lacs to 20 lacs per acre per year- set hypothetically

Maintenance

- Pollution free environment
- Water stagnation
- Reachability
- Quality should not be compromised
- Early detection of pest damage and control
- Monitoring Temperature
- Skilled Labour requirement
- Rainy season maintenance.
- Protection against heavy wind
- Frame works should not have sharp edges.

At the end of the technical talk students come to know the importance of greenhouse cultivation, suitable area, climate, crops can be grown and its maintenance in tropical climate region.

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
(Unit of Alva's Education Foundation (R), Moodbidri)
A+, Accredited by NAAC & NBA (ECE & CSE)
Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka
Ph: 08258-262725 mail:aietcivil08@gmail.com
Department of Agricultural Engineering

Annexure

ALVAS INSTITUTE OF ENGINEERING & TECHNOLOGY

(Approved by AICTE, New Delhi and Affiliated to VTU, Belagavi)

DEPARTMENT OF AGRICULTURAL ENGINEERING

Technical talk

on

Green House Cultivation and Maintenance in Tropical Climate Region

Resource Person

Mr. Praveen
Senior Assistant Director
Department of Horticulture
Mangalore

Venue: Civil Seminar Hall
Date: 21/03/2023
Timings:10:30 AM to 12 PM

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
(Unit of Alva's Education Foundation (R), Moodbidri)
Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi. Recognized by Government of Karnataka.
A+, Accredited by NACC & NBA (ECE & CSE)
Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka
Ph: 08258-262725; Mob:722262724,7026262725,mail:principalaiet08@gmail.com

Department of Agricultural Engineering

To

Date -16/03/2023

IQAC Chairman

AIET, Mijar

Respected Sir

Sub: Requesting to permit for conducting technical talk-reg.

We are happy to inform you that Department of Agricultural Engineering conducting technical talk on 'Greenhouse cultivation and maintenance in tropical climate region". The details are mentioned below, kindly request you do the needful.

Resource person details

Name: Mr. Praveen

Designation: Senior Assistant Director of Horticulture

Organization details: Department of Horticulture, Mangalore

Venue: Civil Seminar Hall

Date/month/year: 21/03/2023

Timings: 10:30 AM to 12:00 PM

HOD

H.O.D.
Dept. of Agricultural Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodubidire - 574225

PRINCIPAL
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225, D.K

Alvas Institute Of Engineering & Technology Agriculture Dept <aietag08@aiet.org.in>

Requesting to accept our invitation to give technical talk

Alvas Institute Of Engineering & Technology Agriculture Dept <aietag08@aiet.org.in> Mon, Mar 20, 2023 at 10:54 AM

To: kadripraveen@gmail.com

Respected sir, it is bring to your kind notice that, we are going to organise technical talk on green house cultivation and maintenance in tropical climate region. In this regard we kindly request you to come and grace our students with your precious knowledge.

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
(Unit of Alva's Education Foundation (R), Moodbidri)
Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi.
Recognized by Government of Karnataka.
A+, Accredited by NACC & NBA (ECE & CSE)
Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka
Ph: 08258-262725; Mob:722262724,7026262725,mail:principalaiet08@gmail

Internal Quality Assurance Cell (IQAC)

Department of Agricultural Engineering

Technical Talk

Student's details –

Sl.No	USN	Student Name	Semester	Signature
1	4AL21AG001	A BHOOMIKA REDDY	III	
2	4AL21AG002	ABHISHEK K S	III	
3	4AL21AG003	AJITH MALI PATIL	III	
4	4AL21AG004	AMARNATH I	III	
5	4AL21AG005	ANANYA K	III	
6	4AL21AG006	CHAITRA	III	
7	4AL21AG007	CHANDAN B M	III	Chandan, BM
8	4AL21AG008	CHANDU S	III	
9	4AL21AG009	CHETHAN P	III	
10	4AL21AG010	DEEPAK M S	III	Deepak.M.S
11	4AL21AG011	DEEPAK R	III	Deepak.R
12	4AL21AG012	H P Y SACHIN	III	
13	4AL21AG013	HAFEEL NIYAZ	III	
14	4AL21AG014	JEEVAN KUMAR H N	III	
15	4AL21AG015	K A PREKSHA	III	Preksha
16	4AL21AG016	KEERTHAN ALVA	III	
17	4AL21AG017	KEERTHANA M RAM	III	
18	4AL21AG018	KIRAN V	III	
19	4AL21AG019	MANASI ANILRAO PAPPALE	III	

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
(Unit of Alva's Education Foundation (R), Moodbidri)
Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi.
Recognized by Government of Karnataka.
A+, Accredited by NACC & NBA (ECE & CSE)
Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka
Ph: 08258-262725; Mob:722262724,7026262725,mail:principalaiet08@gmail

20	4AL21AG020	MANSOOR P E	III	
21	4AL21AG021	MONISHA S	III	
22	4AL21AG022	NAGASHREE N	III	
23	4AL21AG023	NAVYA K	III	
24	4AL21AG024	POORNACHANDRA	III	
25	4AL21AG025	PRANEETH	III	
26	4AL21AG026	REGAN AIDON SALDANHA	III	
27	4AL21AG027	SAHANA M GOWDA	III	
28	4AL21AG028	SANTHOSH M	III	
29	4AL21AG029	SAWAN SHETTY	III	
30	4AL21AG030	SHREEHARSHA K S	III	
31	4AL21AG031	SNEHA M	III	
32	4AL21AG032	SUSHA S SHETTY	III	
33	4AL21AG033	SUTHEEJ	III	
34	4AL21AG034	TARUN K	III	
35	4AL21AG035	TEJASKUMAR	III	
36	4AL21AG036	USAMA MEHABOOBSAB KOPPAL	III	

Total No. of students participated -

HOD **IQAC Coordinator** **IQAC Chairman**

PRINCIPAL
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
(Unit of Alva's Education Foundation (R), Moodbidri)
Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi.
Recognized by Government of Karnataka.
A+, Accredited by NACC & NBA (ECE & CSE)
Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka
Ph: 08258-262725; Mob:722262724,7026262725,mail:principalaiet08@gmail

Internal Quality Assurance Cell (IQAC)

Department of Agricultural Engineering

Technical Talk

Faculties details –

Sl.	Faculty Name	Designation	Signature
1.	Deepak Kolake	Asst. Professor.	
2	Dr. Shashikumar	Assoc. Professor	

Total No. of faculties participated -

HOD
Dept. of Agricultural Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodubidire - 574225

IQAC Coordinator

IQAC Chairman

PRINCIPAL
Alva's Institute of Engg. & Technology,
Mijar, MOODBIDRI - 574 225, D.K

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
(Unit of Alva's Education Foundation (R), Moodbidri)
Affiliated to Visvesvaraya Technological University, Belagavi& Approved by AICTE, New Delhi. Recognized by Government of Karnataka.
A+, Accredited by NACC& NBA (ECE & CSE)
Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., KarnatakaPh: 08258-262725;
Mob:722262724,7026262725,mail:principalaiet08@gmail.com

Department of Agricultural Engineering

Feedback Form – Technical Talk

Name of the student: Prerna

Student USN: 4AL21AG015

Semester: III

Date of Technical Talk: 21/3/2023

Name of the Organization: AIET, Mijar

Directions:

For each item please indicate your level of satisfaction by ticking the following statement by choosing a score between 1 and 5.

[Excellent – 5, Very Good – 4, Good – 4, Average – 2, Below Average – 1]

Sl. No.	Statement	5	4	3	2	1
1.	The Technical Talk was technology oriented	5				
2.	The Technical Talk was applicable to your future needs		4			
3.	Technical Talk is enhanced your skills			3		
4.	The program was well placed within the allotted time		4			
5.	The Technical Talk delivered skill of a resource person	5				
6.	The material was presented in an organized manner		4			
7.	would you interested in attending such talks in future			3		
8.	Any suggestions for further improvement : More talks to be conducted					

Prerna
Signature of the student