

# National Beekeeping & Honey Mission (NBHM)

## Mini Mission -1

# Scientific Bee Keeping

## Skill Development Training Report



### Sponsored by

National Bee Board (NBB)

Department of Agriculture, Cooperation and Farmers Welfare (DAC &FW) Ministry of Agriculture and Farmers Welfare, Government of India  
ICAR – Agricultural Technology Application Research Institute, Zone VIII,  
Pune

### Submitted by

Dr. Hedgewar Seva Samiti's

**Krishi Vigyan Kendra, Nandurbar**

At. Post.: Kolda , Tal./ Dist.:Nandurbar(M.S.)



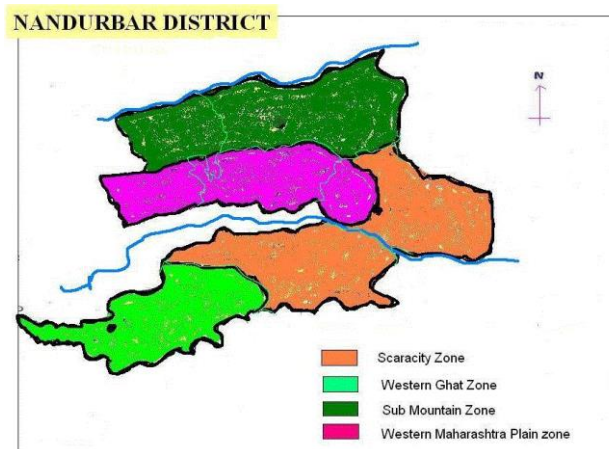
## Table of Contents

1. District Profile – Nandurbar .....	3
2. Scope for Beekeeping.....	4
3. Need for Training.....	4
4. Training Participants .....	4
5. Key Topics Covered .....	5
6. Practical Exposure .....	5
7. Exposure Visits .....	6
8. Assessment and Evaluation.....	6
9. Concluding Sessions .....	6
10. Budget Utilization.....	7
11. Glimpses of the Program .....	8
12. Media Coverage .....	10

## 1. District Profile – Nandurbar

The Nandurbar district appears to be slightly oval in shape, the district is carved from old Dhule district in 1st July, 1998. From medieval times the district is recognized as a Khandesh. The district has now been declared as most backward and undeveloped district of Maharashtra.

Nandurbar district comprising of **six tahasils** and **956 villages**. Total geographical area of the district is **5.03 lakh ha** (5034.23 Sq. Km.), out of which 0.95 lakh ha.(18%) area is under forest, **2.94 lakh ha.(58.03 %)** area under cultivation and only **0.47 lakh ha. (9.34 %)** area is under irrigation. Nandurbar district is surrounded by natural canopy at the North side with Seven Hills range of mountain (Satpuda) in the Western side Sahyadri Mountain. In the middle of the district Tapi river flowing from East to West.



Maximum area of river basin has deep black cotton soils. Nandurbar district is classified in four agro-climatic zones as shown:

### Uniqueness of Area:

The district has Satpuda mountain ranges in northern side. Most of the tribal population lives in the hilly and forest areas in the north and west of Nandurbar district. *Ahirani* and *Pawari* dialects dominate the district. The district has Gujarat and Madhya Pradesh state bordering. As a result, the life style is slowly changing.

### Agriculture scenario in nutshell:

Agro-ecological Subregion (ICAR): Deccan Plateau, Hot semi-arid subregion

Major soils: Shallow black soil, Medium deep black soil and Deep black Soil in decreasing order

### Farming system:

The major occupation of most of the population of district is still agriculture and they are dependent on agriculture. Following major farming systems are observed in the district:

- 1) Agriculture – Dairy – Horticulture
- 2) Agriculture-Dairy
- 3) Agriculture - Dairy-Vegetable

#### 4) Agriculture –Horticulture

##### **Major Field crops:**

Kharif: Cotton, Jowar, Paddy, Pearl Millet, Maize and Soybean

Rabi: Rabi Sorghum, Wheat, Chick Pea

Summer: Ground nut

Major Horticulture crops: Mango, Papaya, Chilli, Onion

## **2. Scope for Beekeeping**

Nandurbar district has a very suitable climate and conditions for bee-keeping. Out of 6 blocks, 3 blocks are located in the Satpuda mountain range. There is ample availability of water and flowers. Crops are taken for 6 months of the year starting monsoon – i.e. from June to December. After that lot of trees from the forest are blooming with flowering season. Navapur block is the most suitable as this is situated in plain area and has availability of crops throughout the year. Ajwain is one of the major crops from this region and is an ideal crop for bee-keeping. The honey produced from it's flowers has a very high demand in the market. KVK has already done a pilot program with help of an entrepreneur. The quantity of honey produced in 6 months was very good and the business turned out to be a profitable venture.

## **3. Need for Training**

Even though the conditions are very favorable for beekeeping not many youths are taking up this as an enterprise to improve their livelihood and income. The reason is they are not aware of the technical knowledge and economics of this enterprise. Hence KVK Nandurbar took this opportunity through NBHM and decided to conduct a series of trainings.

## **4. Training Participants**

Youths who were interested in bee keeping were selected for this training. More than 80% participants were from SC/ST category. Total 155 participants attended the training. Total 6 batches including one online batch were conducted.

Batch No.	Type	Date	SC/ST		Other		Total	
			M	F	M	F	M	F
1	Online	15 To 17 May 2021	25	00	05	00	30	00
2	Offline	23 To 29 Sep. 2021	24	0	01	00	25	00
3		20 To 26 Oct. 2021	25	00	00	00	25	00

4		27 Jan-21 To Feb-2022	16	02	03	04	19	06
5		1 To 07 March 2022	19	01	00	05	19	06
6		15 To 21 March 2022	11	03	07	04	18	07
		<b>Grand Total</b>	<b>120</b>	<b>6</b>	<b>16</b>	<b>13</b>	<b>136</b>	<b>19</b>

## 5. Key Topics Covered

The training sessions conducted and co-ordinated by Mr. P. C. Kunde, Subject Matter Specialist, Plant Protection under the guidance of Mr. R. S. Dahatonde, Senior Scientist and head, KVK Nandurbar.

Following are the key topics covered in the training:

- ❖ Importance of bee keeping.
- ❖ Requirements for bee keeping.
- ❖ Role of bees in pollination.
- ❖ Structure of honey comb
- ❖ Types of bees.
- ❖ Life cycle of bees.
- ❖ Important crops for bee keeping
- ❖ Floral calendar for bee keeping
- ❖ Structure of bee boxes.
- ❖ Tools & Materials required for bee keeping.
- ❖ Enemies of bees & their management
- ❖ Diseases of bees & their management
- ❖ Products from bee keeping.
- ❖ Economics of bee keeping
- ❖ Honey collection & their products

## 6. Practical Exposure

It was not just classroom sessions but lot of practical exposure was given to trainees. They got hands on for many important aspects of beekeeping. Following are some of these practical sessions conducted:

- ❖ Structure of bee boxes
- ❖ Handling of Bee Boxes.
- ❖ Types of bees
- ❖ Diseases & enemies of bees
- ❖ Honey collection

## 7. Exposure Visits

Along with the classroom sessions and practicals, all the participants also got an opportunity to do exposure visits. These visits have inspired the participants to start their own ventures in beekeeping. These visits were made to Sahyadri Farms Ravalgaon, Gondur Dhule, Bee Park at Pimpalgaon Baswant and Sahyadri Farms, Soldhara.

Sr. No	Date of visit	Enterprises	Place of visit	Expert Guidance during visit
1.	27 Sep. 2021	Bee Keeping KVK Visit	Sahyadri Farm, Ravalgaon KVK Malegaon	Shri. P.C Kunde Shri.Rupesh Khedkar
2.	25 Oct.2021	Bee Keeping Papaya processing	Bee Keeping Farm, Gondur,Dhule & Papaya processing Unit,Betavad	Mr. P.C Kunde shri.Vashimbhai Bagwan
3.	01 Feb.2022	Bee keeping	Bee Park,Pimpalgaon (B),Nashik	Shri Nitin Karale Shri. P.C Kunde
4.	05 March 2022	Bee Keeping	Sahyadri Bee keepers,Soldhara,Chikhali	Shri. Ashokbhai Patel Shri.P. C Kunde
5.	20 March 2022	Bee keeping	Sahyadri Bee ,Soldhara,Chikhali	Shri. Ashokbhai Patel Shri. P.C Kunde

## 8. Assessment and Evaluation

All the participants have undergone for pre and post evaluations taken by KVK. Most of the participants have shown a good increase in the knowledge and awareness about beekeeping. This shows that the training has made a very positive impact on the participants.

## 9. Concluding Sessions

Concluding sessions were conducted for every batch. Following dignitaries attended these sessions and provided valuable inputs and guidance to participants:

- ❖ Shri. Krishnadas Patil (President, Dr.Hedgewar Seva Samiti, Nandurbar)
- ❖ Dr. Nitin Panchbhai, Secretary, Dr.Hedgewar Seva Samiti, Nandurbar)
- ❖ Shri Rajendra Dahatonde (Senior Scientist and Head, KVK, Nandurbar)

- ❖ Shri Dilip Patil (District Officer, Jilha Udyog Kendra, Nandurbar)
- ❖ Dr. S. B. Kharbade (Associate Dean, College of Agriculture, Nandurbar)
- ❖ Shri Nilesh Bhageshwar (SAO, State Agriculture Dept, Nandurbar)
- ❖ Shri Lalit Pathak, (Ex. Director, Dr. Hedgewar Seva Samiti, Nandurbar)
- ❖ Shri J. N. Uttarwar (SMS, Agril Engg, KVK, Nandurbar)
- ❖ Shri. P. C. Kunde (SMS, Plant Protection, KVK, Nandurbar)
- ❖ Shri. U. D. Patil (SMS, Agronomy, KVK, Nandurbar)

Many participants shared their experiences regarding training programme. Certificates were distributed to all the participants at the hands of dignitaries present.

## 10. Budget Utilization

Sr. No	Head	Batch 1	Batch 2	Batch 3	Batch 4	Batch 5	Total
1.	Registration & Teaching Material	25000	25000	25000	25000	25000	125000
2.	Lodging & Boarding	87500	87500	87500	87500	87500	437500
3.	Honorarium for resource persons	2000	2000	2000	2000	2000	10000
4.	Demonstration Exps.	27750	29250	14500	25440	10500	107440
5.	Exposure visits	23266	24966	38334	26083	32050	144699
6.	Other Miscellanies Exps.	9484	6284	7666	8977	17950	50361
<b>Total</b>		<b>175000</b>	<b>175000</b>	<b>175000</b>	<b>175000</b>	<b>175000</b>	<b>875000</b>
<b>Online Training</b>							<b>15000</b>
<b>Management cost</b>							<b>31150</b>
<b>Grand Total</b>							<b>921150</b>



## 11. Glimpses of the Program



**SMS, Plant Protection – Session in Progress**



**Exposure Visit to Sahyadri Farms, Ravalgaon**



**Practical Training on Handling of Bee Boxes**



**Exposure Visit to Bee Park at Pimpalgaon Baswant**



**Executive Director, HSS addressing the participants in the closing ceremony**



**KVIC Representative addressing participants**





**Practical Training on Handling of Bee Boxes**



**Certificate Distribution to participants**



**Practical Session on structure of bee-boxes**



**Dr.Kharbade, Associate Dean, College of Agriculture Nandurbar delivered lecture on bee keeping**



**Batch 5 – Participants and Trainers**



**Batch 3 – Participants and Trainers**



## 12. Media Coverage

लोकमत

### कृषी विज्ञान केंद्रात मधुमक्षिका पालन प्रशिक्षण

सात दिवस तज्ज्ञांकडून मार्गदर्शन; जिल्ह्यातील २५ युवक प्रशिक्षणार्थींचा सहभाग

लोकमत न्यूज नेटवर्क  
नंदुरबार : तालुक्यातील कोळदे येथील कृषी विज्ञान केंद्रात सात दिवसीय शास्त्रीय मधुमक्षिका पालन प्रशिक्षण शिबिर घेण्यात आले. या प्रशिक्षणात जिल्ह्यातून ग्रामीण भागातील २५ युवकांनी सहभाग घेतला होता.

या प्रशिक्षणाच्या समारोपप्रसंगी विभागाचे जिल्हा अधीक्षक कृषी अधिकारी नीलेश भागेश्वर यांनी मार्गदर्शन केले. ते म्हणाले, मधुमक्षिका पालनासाठी जिल्ह्यात अनुकूल वातावरण असून हा व्यवसाय वाढीसाठी सर्वांनी प्रयत्न करण्याचे

#### विविध प्रात्यक्षिकांचे सादरीकरण

- या प्रशिक्षणात मधुमक्षिका पालनातील शास्त्रीय बाबी त्रशा मधुमाशीच्या जाती, परागीभवन, जीवनक्रम, मधपेटी रचना, मधुबन लावणे, मध उत्पादने, मधमाशी रोग व शत्रू व्यवस्थापन आदीबाबत मार्गदर्शन कृषी विज्ञान केंद्राचे पीक संरक्षक तज्ज्ञ पी. सी. कुंदे यांनी प्रशिक्षणादरम्यान केले.
- यावेळी मधुमक्षिका पालनातील काही प्रात्यक्षिकांचे आयोजन करण्यात आले होते. त्यात मधपेटीची रचना, मधमाशी ओळख, मधपेटी हाताळणी व मध काढणे आदींचा समावेश होता. प्रात्यक्षिकासाठी महाराष्ट्र राज्य खादी ग्रामोद्योग मंडळाचे कर्मसिंग वसावे उपस्थित होते.

आवाहन केले. यावेळी आर. आर. एस. दहातोडे यांनी शास्त्रीय एस. दहातोडे, डॉ. किरण पाडवी, पद्धतीने मधुमक्षिका पालन या पी. सी. कुंदे, जयंत उतरवार, यू. डी. प्रशिक्षण वर्गाचा लाभ घेऊन पाटील आदी मान्यवर उपस्थित होते. व्यवसाय सुरू करावा, तसेच शेतीच्या कृषी विज्ञान केंद्राचे वरिष्ठ शास्त्रज्ञ उत्पादन वाढीसाठी प्रयत्न करण्याचे

आवाहन केले. मत्स्य विभागाचे आयुक्त डॉ. किरण पाडवी यांनी मधुमक्षिका पालन ही काळाची गरज असून त्याचा जास्तीत जास्त लाभ युवकांनी व शेतकऱ्यांनी घेण्याचे आवाहन केले.

राष्ट्रीय बी बोर्ड, कृषी सहयोग व किसान कल्याण विभाग भारत सरकार यांनी हा सात दिवसीय प्रशिक्षण कार्यक्रम प्रायोजित केला होता. प्रशिक्षणादरम्यान हा व्यवसाय पाहण्यासाठी गुजरात राज्यातील सोलाधारा, जि. नवसारी येथे सहलीचे आयोजन करण्यात आले होते.

Hello Nandurbar  
Page No. 4 Mar 09, 2022  
Powered by: erelego.com

लोकमत

### कृषी विज्ञान केंद्र : २५ युवकांचा सहभाग मधुमक्षिका पालन प्रशिक्षणाचा समारोप

लोकमत न्यूज नेटवर्क  
नंदुरबार : तालुक्यातील कोळदे येथील कृषी विज्ञान केंद्रात राष्ट्रीय बी बोर्ड, कृषी सहयोग व किसान कल्याण विभाग भारत सरकार यांनी प्रायोजित केलेल्या सात दिवसीय शास्त्रीय मधुमक्षिका पालन प्रशिक्षणाचा समारोप करण्यात आला.

या प्रशिक्षणाच्या समारोप प्रसंगी नंदुरबार येथील शासकीय कृषी महाविद्यालयाचे सहयोगी अधिकाऱ्या डॉ. खरबडे,ललीत पाठक,आर. एस. दहातोडे,पी.सी.कुंदे आदी उपस्थित होते. मधुमक्षिका पालनासाठी

#### गुजरात राज्यात सहल

- या प्रशिक्षणासाठी २५ निवडक युवकांची निवड करण्यात आली होती. त्यात मधमाशीची असलेली भीती घालण्यासाठी पेटी हाताळणीचे प्रात्यक्षिकांचे आयोजन करण्यात आले. तसेच मधमाशी पालनातील यशस्वी उद्योजक पाहण्यासाठी गुजरात राज्यात सहलीचे आयोजन करण्यात आले होते. समारोपप्रसंगी प्रशिक्षणार्थींना प्रमाणपत्र वाटप करण्यात आले.

जिल्ह्यात अनुकूल वातावरण असून मधमाशी शेतकऱ्याच्या उत्पादन मधमाशी संवर्धनासाठी सर्वांनी वाढीसाठी आवश्यक असल्याचे प्रयत्न करणे आवश्यक असल्याचे मत, सांगितले. कृषी विज्ञान केंद्राचे पीक संरक्षण हेडगोवार सेवा समितीचे सल्लागार तज्ज्ञ पी. सी. कुंदे यांनी या सात ललीत पाठक यांनी मधुमक्षिका प्रशिक्षणादरम्यान पाहिले, मधमाशीच्या जाती,मधमाशीचे

परागीभवनातील महत्त्व,जीवनक्रम, मधपेटी रचना,मधुबन लावणे,मध उत्पादने, मधमाशी रोग व शत्रू व्यवस्थापन आदीबाबत मार्गदर्शन केले. प्रात्यक्षिकासह मार्गदर्शन केले. प्रास्ताविकात कृषी विज्ञान केंद्राचे वरिष्ठ शास्त्रज्ञ तथा प्रमुख आर. एस. दहातोडे यांनी मधुमक्षिका पालनातील शास्त्रीय बाबकचे समजून हा व्यवसाय केल्यास नक्की यश मिळेल,असा विश्वास व्यक्त केला. कर्मसिंग वसावे यांनी महाराष्ट्र राज्य खादी ग्रामोद्योग मंडळाच्या योजनांची माहिती दिली.

Hello Nandurbar  
Page No. 4 Mar 23, 2022  
Powered by: erelego.com

लोकमत



कोळदे, ता.नंदुरबार येथील कृषी विज्ञान केंद्रातर्फे मधुमक्षिका पालन प्रशिक्षणादरम्यान गुजरात राज्यात काढण्यात आलेल्या सहलीत प्रशिक्षणार्थींना मधमाशी पालन व्यवसायाबाबत मार्गदर्शन करताना उद्योजक.

Hello Nandurbar  
Page No. 4 Mar 23, 2022  
Powered by: erelego.com