

## Biofuel Park, Tinthani



The project entitled “Establishment of Bio-fuel Park at Tinthini in Yadagiri District of Karnataka” was initiated on during 2012-13 working under UAS, Raichur covering an area of 42 acres of land. This is situated on the banks of river Krishna from where the irrigation facility was created by layout of pipe lines. The project was initiated with the funding assistance of Karnataka State Bio-energy development board, Bangalore and in collaboration with the University of Agricultural Sciences.

For the establishment of the project and for smooth and effective running and achievement of the above objectives a budget outlay of Rs. 591 lakhs was submitted to KSBDB, Bangalore of which Rs. 296 lakhs was sanctioned.

Promotion of bio-fuel species like pongamia, neem, Simarouba etc were planted in 32 acres of bio-fuel park and they are in productive stage. Seeds and seedling produced on farm were distributed to farmers on free of cost. Totally 50,000 seedlings were distributed among the farmers, school premises and kitchen garden. Seedlings were also issued to the forestry department for road side planting. The survival rate of 70-80 per cent was initially recorded. Further the gap was filled and growth is satisfactory. These plants are started flow ering and bearing fruits.



Presently about 4000 bio-fuel plants are well survived in the bio-fuel park and they are expected to produce economic yield in two years.

The condition of the seedling in farmers field is satisfactory and about 60-70 per cent survival has been recorded. The plants are expected to yield in 3-4 years.

Presently pongamia seeds are procured from farmers @ Rs32/kg thus creating awareness among



the farmers.

1. The processing of oil has been imitated and demonstrated its use as tractor fuels and lightening house hold lamps. The programme will be expanded to panchayath / hobli level in due course i.e. after increase in production.
2. Utilization of bio-fuel seeds for various value added products like seed cake has been demonstrated.
3. Awareness regarding the Self Employment generation and increased subsidiary income for the farmers has been given through trainings ( on campus and off campus), distribution of literatures, exhibitions etc. On date 177 training programmes were given to benefit 32821 farmers/students/NGOs/ agriculture departments/ CADA. About 19 exhibitions were organized across the state which benefitted 611207 visitors.



**Objectives:** (write the centre objective or the KSBDB objectives of BRIDC as in the MoU)

- Promoting community oriented decentralized growing of bio-fuel species
- Harvest and processing in a decentralized manner in villages adopting milk model
- Value addition to the feed stock at community level at panchayath / hobli level
- Promote utilization of value added products at village level for agriculture, animal husbandry and to meet the needs of house hold energy needs
- Self Employment generation in villages through bio-fuel activities
- Increased subsidiary income for the farmers.

**Present Coordinators nominated by the institution:**

Sl. no	Designations	Name	Designation and Department at College	Email and Mob
1.	Principal Investigator	Dr. B.K. Desai	Director of Research	
1.	Coordinator	Shyamrao Kulkarni	Coordinator Dept of Agronomy	<a href="mailto:shams1487@gmail.com">shams1487@gmail.com</a> 9449289710

**1.3 Present staff details:** (if there was no staff please write the row as Vacant)

Sl. no	Designations	Name	Edu Qualification	Email and Mob	No .of years at Service at BRIDC
1.	Project Assistant				
2.	Lab Technician				
3.	Helpers 1	Mr. Lingappa	SSLC		7 years
4.	Helpers 2	Mr. Hanumnathappa	PUC		5 years
5.	Helper 3	Mr. Shivakumar	PUC		7 years

## Activities of the Biofuel Park

- Tree maintenance : Maintaining tree plants in 35.5 acres
- Awareness programme: Conducted 32 trainings and awareness programme
- Procurement of pongamia seeds

The details of planting activities carried out in various blocks at park



Sl No.	Block name	Area planted (ac)	Species planted		Spacing	Date of planting
			Botanical name	Common name		
1	Block A1,A2,A3,A4	8	<i>1.Azadiractha indica</i>	Neem	5m × 5m	22-09-13
			<i>2.Pongamia pinnata</i>	Honge		
			<i>3.Simarouba gluca</i>	Laxmitaru		
			<i>4.Apomixis polystrichia</i>	Amura		
			<i>5.Modhuca latifolia</i>	Hippe		
			<i>6.Clophyllum innophyllum</i>	Surahonne		
			<i>7.Melia dubia</i>	Hebbevu		
			<i>8.Melia azadiractha</i>	Arabevu		
2	Block B	7	<i>1.Azadiractha indica</i>	Neem	5m × 5m	19-09-13
			<i>2.Pongamia pinnata</i>	Honge		
			<i>3.Simarouba gluca</i>	Laxmitaru		
			<i>4.Apomixis polystrichia</i>	Amura		
			<i>5.Modhuca latifolia</i>	Hippe		
			<i>6.Clophyllum innophyllum</i>	Surahonne		
3	Block C <sub>1</sub>	1	Clonal orchard – Pongamia (Honge) No. of clones : 25, No. of rametes : 20 Total no. 500, Design : RCBD		3m × 3m	04-10-13
4	Block C <sub>2</sub>	4	<i>1.Azadiractha indica</i>	Neem	4m × 4m	28-09-13

			<i>2.Pongamia pinnata</i>	Honge		
			<i>3.Simarouba gluca</i>	Laxmitaru		
5	Block C <sub>3</sub>	2	<i>1.Melia azadiractha</i>	Arabevu	2m × 2m	28-09-13
6	Block D <sub>1</sub> D <sub>2</sub>	6	<i>2.Pongamia pinnata</i>	Honge	6m × 6m	31-10-13
			<i>3.Simarouba gluca</i>	Laxmitaru		
7	Block E <sub>1</sub>	5	<i>1.Azadiractha indica</i>	Neem	6m × 4m	22-12-13
			<i>2.Pongamia pinnata</i>	Honge		
			<i>3.Simarouba gluca</i>	Laxmitaru		
			<i>4.Apomixis polystrichia</i>	Amura		
			<i>5.Modhuca latifolia</i>	Hippe		
			<i>6.Clophyllum innophyllum</i>	Surahonne		
			<i>7.Melia dubia</i>	Hebbevu		
			<i>8.Melia azadiractha</i>	Arabevu		
8	Block E <sub>4</sub>	1.5	<i>Melia dubia</i>	Hebbevu	6m × 6m	05-10-15
9	Block A4	1.0	<i>1. Melia dubia</i>	Hebbevu	High density	25-09-18
<b>Total</b>		<b>35.5</b>				





### 2.3 Year wise training and awareness programs conducted by the centre:

Sl. No.	Year	No. of training program conducted (a)	No. of Awareness program conducted (b)	No. of workshops conducted (c)	Total no of beneficiaries (a+b+c)
1.	2014-15	8	24		4517
2.	2015-16	45	32	2	10849
3.	2016-17	8	4	2	623
4.	2017-18	34	30	1	3090
5.	2018-19	7	70	1	2710



## 2.2 R & D Work progress:

Sl. No.	Year	Project Title	Output of the project	Name of the funding agency (if any)
1.	2015-16	Evaluation of Biofuel plants in Hyderabad Karnataka region	In progress	-
2.	2016-17	Evaluation of intercrops in Biofuel plants	In progress	-
3.	2018-19	Performance of <i>Melia dubia</i> under high density planting	In progress	-

**One Phd student working on** Performance of *Melia dubia* under high density planting

One acre plantation of pongamia clonal orchard. Clonal orchard – Pongamia (Honge)

No. of clones : 25, No. of rametes : 20

Total no. 500, Design : RCBD



### **Any success Stories Biofuel park:**

During November, 2019, 10 B.Sc. Agri students from College of Agriculture, Bheemarayanagudi undergone 21 days training on **Entrepreneurship development on**

**Biofuel production, utilisation and marketing development** at Biofuel Park, Tinthani. They have got hands on training on different aspects of biofuel production.

### 1.0 Achievements of Park:

- Totally 19 exhibition being organised during Krishimela, jatra mahotsav, we have sensitised about 611207 people.
- During 2015-16 Biofuel Park, Tinthani being awarded as Best presentation during UAS, Raichur Krishimela.



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Sl. No	Place of Exhibition/Krishimela/Work shop	Date of exhibition	Number of farmers attended	Number of Students attended	Number of Teachers / lecturers/st aff attended	Total number of participant
1	UAS, Raichur	14-11-2014 to 16-11-2014	25000			25000
2	International Biofuel day Dharwad	10/08/2015	725	212	75	1012
3	Rajanakollur	28/08/2015	1500	2150	150	3800
4	Krishi mela, UAS Dharawad	27 <sup>th</sup> -30 <sup>th</sup> Sept-2015	200000	3153	45	203198
5	Krishimela, Shimogga	3 <sup>rd</sup> -6 <sup>th</sup> Oct 2015	22000	704	62	22766
6	Workshop for bio-fuel information and demonstration	8 <sup>th</sup> -9 <sup>th</sup> Dec 2015			45	45
7	Krishimela, Bidar	11 <sup>th</sup> – 13 <sup>th</sup> Dec 2015	5635	1750	47	7432
8	Krishimela, Bagalkot	19 <sup>th</sup> – 21 <sup>st</sup> Dec 2015	2150	425	23	2598



9	Savayava Krishi, Totagarike and Matsya Mela UAS Raichur	30-01-16 to 01-02-16	6500	750	15	7265
10	Ankalimath	29/05/2016	5235	350	15	2590
11	Koppal	29/08/2016	8320			8320
12	RAWE programme at Santhekellur	08/09/2016	55	473	12	540
13	Krishi mela, UAS Dharawad	24 <sup>th</sup> -27 <sup>th</sup> Sept-2016	147102	15000	250	263352
14	Krishi & Horticulture Mela, UAHS, Shivamoga	21-24 Oct, 2016	24759	530	32	25321
15	Krishimela, Raichur	05-08, Nov 2016	5404	876	95	6375
16	Horticulture Mela, UHS, Bagalkot	18-20, Dec 2016	3200	540	21	3761
17	Ghanamatheswar jatra, Santhekellur	31-12-2016	540	150	12	702
18	KSRDB, Bhailhongal	25-27, January, 2017	25000	2000	50	27050
19	Krishimela, Ankalimath	18-19 <sup>th</sup> May 2017	80			80
<b>Total</b>			<b>483205</b>	<b>29063</b>	<b>949</b>	<b>611207</b>

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- **Three International Biofuel Days** were celebrated on **10-08-2015, 10-08-2016** and **10-08-2017** at Biofuel Park, Tinthani, Santhekellur and Biofuel Park, Tinthani respectively, over **1500** seedlings were planted during on this occasion. B.Sc. Agri students, high school students and farmers were participated and gained knowledge on importance of bio-fuel production.
- To disseminate bio-fuel information **177** trainings and awareness programme being organized, **32821** people were benefitted.
- **Thirteen (13)** exhibitions were organized at Ankalmath Jatramahotsava, Ankalmath, Krishibagya programme at Koppal and Krishimela, UAS, Dharwad, UAHS, Shivamogga, UHS, Bagalkot, UAS, Raichur, Jatramahotsava, Santhekellur and Bhailhongal. Around **611207** farmers and students were get sensitized about benefit of bio-fuel. During exhibition at Koppal, **Shri Krishna Bhyregowda, Agriculture Minister** visited our stall and interacted with staff about the bio-fuel activities.
- Biofuel related posters; technical bulletins were prepared for diffusion of technologies.
- **25** bio-fuel based **SHGs** were formed.
- Supplied bio-fuel seeds for planting around Yadgir district by making soil ball which was organized by **Pollution Control Board** and DC office, Yadgiri.
- During 2015-16, on the occasion of Deepavali festival, Bio-fuel Mahiti Andola was organised at UAS, Raichur main campus, College of Agriculture, B. Gudi and College of Agriculture, Kalaburagi. **Pongamia oil** was distributed for lightening of lamp during the festival.
- **Field activities:** To enhance productivity of Biofuel Park, inter crops like transplanted pigeonpea, drill sown pigeonpea, groundnut, mesta, foxtail millet, castor were introduced.

- **Fifty five thousand four hundred** biofuel seedlings were produced and planted in farmer's fields and school premises. There was 60 per cent establishment of seedlings in farmers field and school premises.

(Shyamrao Kulkarni )

**Coordinator**

**Biofuel Park, Tinthani**

**Mob. No: 9449289710**