



A Model Organic Farm

Centre for Demonstration, Training and Knowledge Management on Moringa, Medicinal Plants and Organic Farming

The model farm is being developed on the precincts of the Don Bosco Technical Institute, Hassan (started in 1996), adding to its existing formal and non-formal training programmes.

Forty acres of land were allocated for the farm to cultivate moringa and medicinal plants. Other planned activities included the demonstration and informal training on innovative practices in agriculture, animal husbandry, microenterprises, and livelihoods for women, youth and farmers.

The marginal farmers in the surrounding areas struggled with the effects of unsustainable farming practices such as unscientific use of chemical fertilizers and soil degradation; monoculture of climate-dependent cereal crops; and chemical insecticides.

Moringa was decided upon as an alternative crop because it could withstand erratic temperatures up to 40 degrees centigrade, acidic and degraded soil. Moringa has several medicinal properties and the leaf and fruit (drumstick) are very nutritious. The stem is used for propagation. Organic vegetables and medicinal plants while enhancing health also have a great local market and so lead to increased incomes for marginal farmers.



Director's Note

Climate change, water scarcity, depleted soil. This fearsome threesome is a common reality for farmers who struggle to make ends meet on their small plots of land. It is not enough that experts provide scientific advice on possible solutions. It does not better the farmers' lot. They do not have the training or the scope to practice alternative methods while eking out a living.

BREADS realised the need to demonstrate the possibilities of change. Making optimal use of the resources at hand, BREADS is pioneering a model organic farm in Hassan, Karnataka. Over the 3 years (2017-19), we anticipate that this project will directly benefit 840 farmers and mentor 240 farmer leaders through training and support in organic farming. Indirectly, through the farmer leaders and linked self-help groups, we anticipate further impact on more than 42000 women, youth and farmers. Ultimately we hope that this model can be replicated across all the Don Bosco houses in Karnataka and Kerala, to create a robust culture of organic farming and living, and meet our goals of sustainability.

In this edition of Slice, we are happy to report on the organic progress of this model farm.

Fr. Joy Nedumparambil SDB
Executive Director
BREADS Bangalore

BREADS Calendar

July 2019

- Completion of facilitation visits by Child First Foundation for developing Child Protection Policies in DB Houses in Karnataka
- Project monitoring and evaluation visit to BOSCO Bangalore on 30 & 31 July
- Food Carnival organised by the Retail Management students of DB BEST Academy on 12 July
- Participation in the Regional PDO Network Meet 2019 on 26 & 27 July in Shillong

August 2019

- Monitoring and evaluation visits to BREADS projects in North Karnataka from 5 to 8 August
- Training on Child Protection Policy for the staff at BREADS
- NGO-orientation visit from People's Cooperative Arts and Science College, Kasaragod
- Independence Day celebrations across Don Bosco houses in Kerala and Karnataka
- Inauguration of batch 10 at DB BEST Academy, Lingarajpuram, Bangalore



Objectives and related activities of the centre

- Establish the Centre for Demonstration, Training and Knowledge Management on Moringa and Medicinal Plants and Organic farming (CDTKM) at Hassan DB Institution, Karnataka.
- Set up demonstration plots for organically cultivated moringa, medicinal plants, vegetables, fruits and cereals.
- Building a core training team. Documenting best practices, creating advisories and training modules for farmers.
- Training for selected 240 farmer leaders over 3 years at the farm.
- The farmer leaders to help around 42000 women SHGs, youth and farmers in the villages by the demonstration and practice of organic cultivation of moringa and medicinal plants on their own plots of land.
- Each farmer leader to help 51 women/farmers in production and extension services such as pooling of products and marketing, technical assistance and training on medicinal plants, organic farming and the specific processing of moringa leaves and drumsticks, and moringa oil production.
- The demonstration plots to provide cost estimates for successful organic farming and provide best practices for documentation in a data bank. Knowledge and Skills (K&S) toolkit to be developed and an advisory for farmers fine-tuned.
- Dissemination of knowledge and skills through trainings and workshops for SHG members in Hassan and Vellore districts.
- Establishment of Don Bosco institution-based processing centres to streamline organic moringa production in compliance with the state Food and Drug Administration guidelines (including licensing, product registration, infrastructure design and quality, equipment, etc.)
- Develop access and linkage to markets for the organic moringa produce of DB Institutions. Organic products could be available at cost for DB hostels and the local market.
- Prepare for government-required registration, licenses, certification marks, and marketing and promotion activities.





Growth of the farm till date

- 850 moringa trees were planted across 4 acres of land. Two varieties of Moringa are cultivated; 250 PKM-1 and 600 Bhagya (mainly for leaf processing). The best time for planting Moringa, from July to October, was a time of hard labour and focus. The fruit of the labour was indeed sweet, with a minimum yield of 16 sticks per plant and a maximum of 40 sticks. Plantains were cultivated on 1.50 acres of land. Rain crops were planted: maize on 2 acres of land; paddy on 4 acres; and cereals on another 1 acre. In addition, 250 arecanut saplings were planted in the month of June. The climate of Hassan is very suitable for pineapples, which are also commercially viable, so, 1.50 acres of land were utilised for their cultivation. Vegetables such as brinjal, tomatoes, and chillies were grown on 0.30 acres of land. Learning the benefits of fruits-bearing trees on the farm, the remaining land is being ploughed and prepared to plant 300 different varieties of fruit trees by August.
- Agricultural experts and traditional farmers cautioned that immediate transition from chemical fertilizers to organic methods can have an adverse effect on crop production. Therefore, a gradual transition over a year's time was adopted to sustain the productivity of the land. In the first year, an 80:20 ratio was effectively used for paddy and pulses (80% organic manure and 20% chemical fertilizers). The use of pesticides and fungicides are strictly avoided. Vegetables, pineapples and moringa have been cultivated solely by organic methods.
- The required organic/bio-manure is composted on the farm itself in 6 vermicomposting units. As of now, 1500+ kilograms of vermicompost are produced, contributing 60% of the bio-manure requirements. Additionally 350+ litres of vermi-wash have also been produced from these units.
- The farm is irrigated by a bore well and sprinkler system and drip irrigation. In addition, trenches were constructed across the farm which conserve rainwater and allow water percolation and ground water recharge.
- The farm has an animal husbandry unit with 4 cows, 3 calves and 15 goats at present. Their dung contributes a good share of the bio-manure production.
- Neighbouring farmers are provided training and education on the best use of organic methods of cultivation.



Trainings & workshops conducted on organic farming

Programme	Topic	Days	Participants
Workshop	Vermicomposting	1 day	175 farmers
Training	Organic moringa cultivation	1 day	140 farmers
Training	Production of Panchagavya (bio-manure and plant growth enrichment micronutrient)	2 days	14 farmer leaders
Training	Organic farming	3 days	14 farmer leaders
Training	Organic agriculture	1 day	400 school children from neighbouring villages
Awareness class with the help of farmer leaders	Production of crops through organic methods	1 day	468 farmers

The preconceived notion that organic methods of agriculture cannot fetch better yields and income is gradually being weeded out through this model farm. In the process of transforming 11 acres of barren land into pastoral beauty, the farmers are also cultivating a positive attitude towards organic agriculture.



GLOBAL PARTNERSHIPS FOR URBAN DEVELOPMENT AND SOCIETY 4.0

The 3rd India Advantage Summit (TIA) was organised on 18 -19 July 2019 with a focus on developing global partnerships for urban development and Society 4.0. Usually, at such platforms that showcase cutting-edge innovations in the technical world, it is common to find buzzwords flying around. One of those terms was Society 4.0. What the term might mean to people outside these forums is anyone's guess, but Society 4.0 signifies the digital or information stage that our society that is moving through. As humans, our society has evolved ... [more](#)



Effective prevention of violence against women and need for gender equality lessons in schools

The Women Empowerment Drive and Gender Equality (WEDGE) project at Don Bosco Veedu Trivandrum organized a workshop for the stakeholders on 22-23 June, 2019 at PWD Rest House, Thycaud, Thiruvananthapuram. The workshop addressed the "Effective prevention of violence against women and need for gender equality lessons in schools". Mr. Manual George, Programme Manager-Don Bosco Veedu Society, welcomed the gathering. The workshop was attended by 60 participants, namely, representatives ... [more](#)



CSR Week Activities by AXA Business Services at DB BEST Academy, Bangalore

Don Bosco Breads' Employment and Skill Training (DB BEST Academy), Lingarajapuram organized a series of activities for the students of batch 9 during the month of July 2019. DB BEST offers short-term skill training courses in retail management, business process outsourcing (BPO) and hospitality, intending to address the challenge of imparting skills required for a growing economy. Every batch at DB BEST is designed to focus on industry best practices and to provide competent training to the students... [more](#)



Facilitating the Participation of Children and Community Leaders

BOSCO Bangalore organized a training for the community leaders on 17 July 2019 as part of the Child Rights Education and Action Movement (CREAM) project. An open discussion among the leaders of Child Rights Clubs (CRC) with community leaders was facilitated at BOSCO's new campus, Ramanna Garden, Bangalore. The chief guests on this special occasion were Ms. Veena- Assistant Labour Commissioner, Mr. Venkatesh- Senior Labour Inspector, Bangalore-Division 4, Ms. Anjali Ramanna- Chairperson, Child Welfare... [more](#)

