



MADHUBAN SRI AUROBINDO ASHRAM – DELHI BRANCH
ENVIRONMENT MANAGEMENT & AWARENESS PROGRAMME
END OF PROJECT REPORT (CSR PGPL 2023-24)



Khushali women learning floriculture

I. ABOUT MADHUBAN ASHRAM

Madhuban Sri Aurobindo Ashram – Delhi Branch in Talla Ramgarh is situated at a height of 5000 feet in a picturesque valley overlooking the mountain peaks of the Kumaon Himalayas. The area consists of fruit orchards and small farms owned by local people. It is a home to migratory birds, diverse Himalayan flora and fauna and intersected by running rivulets.

It is also called *Dev Bhoomi* –the land imbued in spirituality, Sri Aurobindo himself has referred to the region of Talla Ramgarh as “My foothold in the Himalayas”, and The Mother has called this terrain “Valley of Divine Love.



Guided by the master- The Relics at Madhuban inspiring us to work for village ecology



Beauty and bounty of the Madhuban Ashram

- Madhuban is well-known for its beautiful gardens that are filled with flowers especially from March to September.
- Orchards that are filled with fruits in summer and fields that grow various herbs and vegetables almost throughout the year.
- These gardens are maintained by a team of trained sadhaks and trees carefully pruned.
- Vegetables are grown organically and tended by a team of agriculturists from nearby villages.
- We promote projects that facilitate village khushali in areas of integral education in primary schools and women’s livelihood.

II. OVERVIEW OF PROJECT UNDERTAKEN IN 2023-24

The Environment management and awareness initiative of the Madhuban Sri Aurobindo Ashram supported by CSR demonstrated the feasibility of farming, horticulture and floriculture as well as development of certain agro-products (such as jam, chutneys and pickles) as sustainable and eco-friendly livelihood options for women and young people in the Talla Ramgarh district.

The goals of the initiative were to:

- Demonstrate a ‘lab-to-land’ approach to organic farming.
- Training for growing organic seeds, plants and manure
- Encourage young people (interns and villagers) as well as women from the Khushali Livelihoods programme to work in the Ashram farms
- Develop a compendium of observations and recommendations on organic farming practices.



Women during lab to land approach in organic farming



Khushali women at the lab to land program mentored by Kamini Devi- A village leader

The Ashram farms are in that sense a laboratory where organic farming techniques are used and constant experimentation with vermicomposting, *gau mutra* (cow urine), decomposed cow-dung and neem oil are on-going.

Adolescents and women from nearby villages also do *shram daan* in the Ashram farms. Volunteers help with composting and harvest.



Ajay mentoring the village youth



Young women and school children being trained in the Ashram khet labs

As part of the Environment Management and Awareness Program we realised, that we needed to bring in localised expertise by inviting other NGO's in the area.

So we connected with The Margshala team and the local B2R (Business to Rural) and then had a workshop with Khushali women and young people from the villages around Madhuban Ashram titled Khojshala wherein the importance of agriculture as a livelihood option was emphasized.

The participants were young people whose families were already agriculturists and who owned gardens and orchards. This workshop under **Environment Management and Awareness Program** was an important step as it also seeded the thought in the youth to stop 'palayen' – (migration to cities)



Initial discussion for needs and trainings for youth





Training focus by the Margshala team





Mentors and participants during the training





Participants during the training



Participants taking notes during the training



Community mind mapping for Environment Management and Awareness Program



Training in small group

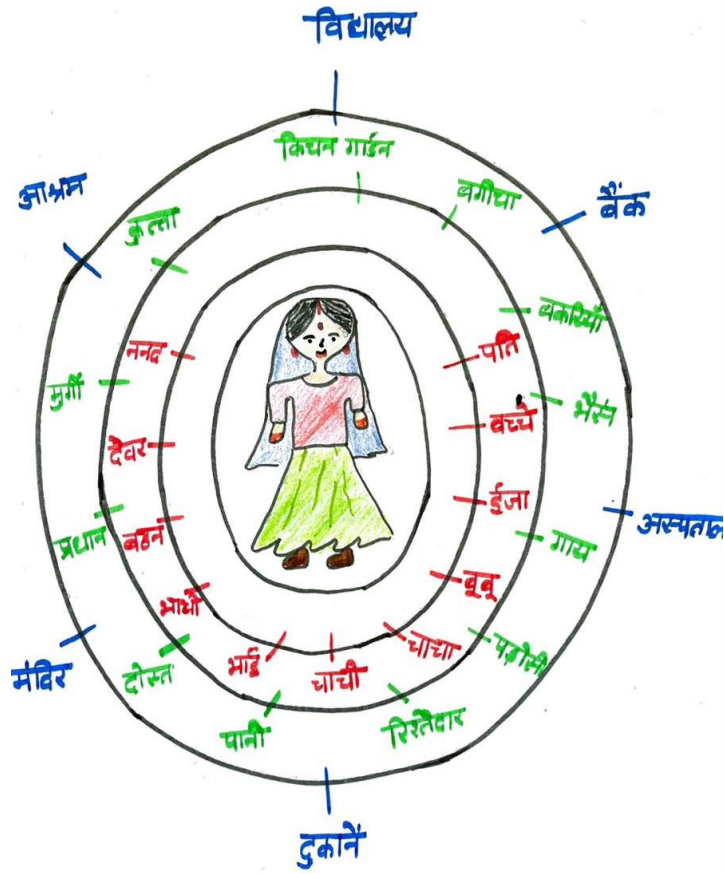
Under Project Environment Management and Awareness Program along with local partners we also felt the need to give technical support to our own farms and the village farms for organic farming.

We took help and guidance from the G.B. Pant Agricultural & Technology University, at Pantnagar. Four batches of the third year students from B.Sc Technology came to Madhuban to work at the Madhuban farms and orchards and also to assess the village farming needs by visiting local farms around the ashram.

A summary of their recommendations have been included in this Report.

I. VEGETABLES, HERBS, FRUITS AND FLOWERS GROWN AT MADHUBAN – LAB TO LAND INITIATIVE

Khet/Field No. Polyhouse	What is grown in the lab to land programme for village-wide adoption.
Khet no.1	Herbs: Chives, Oregano, Lemon balm and Parsley
Khet No. 2	Potato, beans, radish, rosemary
Khet No. 3 Polyhouse	Coriander, red amaranth, Since this too is a polyhouse the seeds of Tomato, Lettuce, Brinjal and Cherry Tomato (red) are germinated in the beds
Khet No. 4	Peas
Khet No. 5	Apple and walnut. Garlic
Khet no. 6 Polyhouse	Swiss chard, Lettuce, Cauliflower, Cabbage, Broccoli, Spinach. Capsicum and Pumpkin.
Khet no.7	Onion
Khet no. 8& 9	Peas
Patch near car park	Garlic
Polyhouse	Basil, Lavender, Lemon balm, Sage and Rocket are being germinated in the polyhouse
Upper hillside plantation – ‘Helipad’	Rosemary 105 saplings have been planted on the upper side hill two beds on the way to the helipad.
Other vegetables/lentil grown	Karela, Sponge gourd, Red Capsicum, Cherry Tomato (Yellow), Cucumber, Ornamental Chilly, Laal Saag and Green Chilli, Onion, Beans, Lady Finger, Potato, Rajma
Fruits	Apple, walnut, Kiwi



Village Jutiya eco system: social network mapping

Flowers, fruits and vegetables that grow in the valley homes depending on the availability of water:

- Vegetables- Potatoes, Peas, Tomatoes, Cauliflower, Spinach, Lemons, Onions, Gourds, Garlic and Ginger
- Fruits- Peaches, Apricots, Pears, Plums, Walnuts
- Flowers- Buransh, Marigold, Torch Lilly, Hydrangeas

Most of the farming is done by the house holders and every hand is important, spraying of pesticides is common.

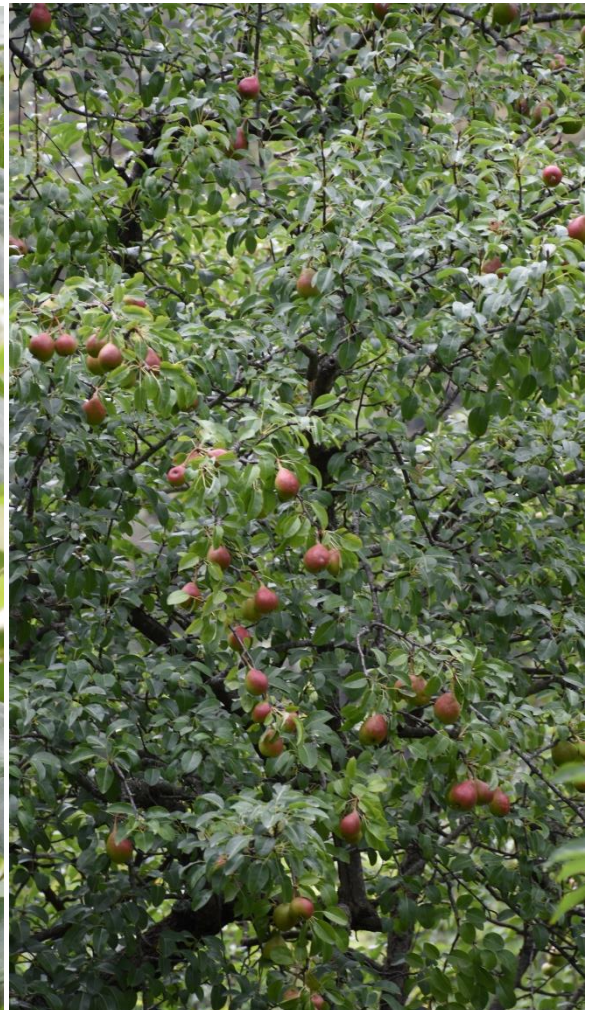




Buransh flowers being sorted by women for making juice – spring season activity



The bounty of Madhuban – peaches grow in the summer months





Fruits are summer's bounty in the Talla Ramgarh valley



Young girls learning to sow peas in the khet at Madhuban



The peas planted sprout in glee and joy



Sowing, planting and nurturing are skills taught at the lab to land programme in our khets

- Peas were harvested and brought to the Ashram kitchen, women in their homes harvested the peas to send to the market for earning, and the quality of the produce has been good.



Peas being peeled as testament of farm to table in Madhuban by visitors

- Emphasis on growing Agro products like herbs, salads and floriculture is the emphasis so that these products become a source of earning in villages.
- The Madhuban Ashram Environment Programme advocates eco-friendly, agro-products based on sustainable livelihoods toward long-term goals of preventing migration, promoting good health and income generation.
- Saplings and seeds are given to local farmers and training imparted in growing herbs and flowers, especially hardy, local varieties.

II. THE G.B. PANT AGRICULTURE AND TECHNOLOGY (GBPUAT) UNIVERSITY WAS INVITED BY US TO GET TECHNICAL INPUTS FOR OUR ENVIRONMENT PROJECT

- Four batches (2 of young men and 2 batches comprising of young women: a total of 160 students) from the Final Year of Agriculture Technology from GBPUAT were invited.
- They developed a set of observations and recommendations for each polyhouses and khet maintained by the Madhuban Ashram
- The Ashram also facilitated a Rapid Rural Assessment study in three villages nearby the Ashram – namely Jhutiya, Behrakot and Naikana – and their environs.
- They sat with farm sadhaks in meetings (‘baithaks’) and discussed organic farming
- The interns also visited Jhutiya, Behrakot and Naikana villages to observe the farms run by villagers and women agriculturists from the Khushali livelihoods programme.
- Transect walks to the villages were done by the students and they observed the various types of landholdings/farms in the valley as well in the hilly areas.

Their observations from these visits focused on three major areas:

- i. Organic farming as a livelihood programme – especially women working in hilly area small holdings.
- ii. Control of pests, pest management and mitigation of harm caused by wild animals (boars, bears, monkeys and langurs) on crops and in orchards.
- iii. Use of organic pesticides and composting in fields and orchards in the villages.



GBPUAT interns at the Ashram Khets

VILLAGE VISITS BY THE STUDENTS OF GBPUAT UNIVERSITY



Village home visit by GBPUAT students in Geeta's house to observe and understand local farming techniques



Students at TREC teacher-educator Sugandha's home



Observation by students about the health of plants at home farms of the village women



Local vegetables as were observed

III. RECOMMENDATIONS FROM GBPUAT INTERNS

Broadly the recommendations for the Ashram farms and the landholdings of Khushali agriculturists were:

- i. Getting seeds that were best suited to rain-fed, highland agriculture from GBPUAT or recommended suppliers.
- ii. Attending the *kisan melas* held in March and October every year on GBPUAT campus.
- iii. Using organic fertilizers like neem oil and cow urine in measured quantities.
- iv. Improving soil health (Madhuban Ashram farm sadhaks were shown how to gather soil samples – GBPUAT has offered soil testing services).
- v. Providing technical support for bottling and packaging of pickles, jams, and chutneys.
- vi. Accessing information on government schemes for Khushali farmers.

RECOMMENDATIONS SPECIFIC TO THE ASHRAM FARMS FOR FURTHER UP-GRADATION OF LAB-TO-LAND PROGRAMME –

- i. Line Sowing: it helps in saving inputs and proper weed management
- ii. Use of resistant and improved varieties such as:
 - a. Radish: Snow white, Korean cross and Menu Early
 - b. Carrot: Ooty-1, Early Nantes and New Korda
 - c. Garlic: Yamuna Safed-3 and Agrifound Parvati
 - d. Turmeric: lakadong
- iii. Grow marigold as trap crop on the sides of plot. Marigold attracts nematodes and gram pod borers and hence protects the main crop.



Marigolds growing at the Madhuban Ashram

- iv. Living and organic mulching as it helps in controlling weeds, soil borne disease, moisture conservation and weed problems. Covering soil with dry leaves which can be decomposed easily (e.g. pulse crop dry matter) or polyethylene sheets can be used as a mulch.
- v. Poly-tunnels - this will help in growing vegetables which are sensitive to frost injury and need particular temperature to grow. These are easy to set up and requires less input cost, moreover help in soil conservation and make practices more effective
- vi. Alley cropping - it is a method of growing fruit trees along with the crop plants, shade loving plants such as haldi can be taken along with the peaches in farm. It will help in optimum utilisation of the land and due to differences in the need, there is no competition for nutrition and sunlight.
- vii. Disease management - for management of disease organically, cultural practices such as sanitation, crop rotation are beneficial, it helps in breaking the life cycle of pest.

However, 10% cow urine solution is very effective as a broad spectrum control for pest and disease.

SAVE SOIL CAMPAIGN

Interns suggested that the Madhuban Ashram could campaign for the losses of soil, and its health, which is deteriorating every day, lots of soil erodes down to the lowlands and introduction of pesticides and chemicals in agriculture and allied sectors has started deteriorating soil quality. Therefore if Ashram campaigns for the 'safe and healthy soil' it will help Ashram farms as well as the community in the long run.

MERA GAON MERA GAURAV – ENVIRONMENT MANAGEMENT AND AWARENESS PROGRAMME WITH VILLAGE CHILDREN

The Teacher Resource Education Centre (TREC) runs an Integral Education programme for teachers, women of the Khushali Livelihoods initiative and the children of the village, based on Sri Aurobindo's Three Principles of Education.

As part of the environment management and awareness grant, on Sunday and holidays; during the winter and summer holidays, children and adolescents from the village learnt how to observe their ecosystem and connect to their natural resources so as to become 'the green warriors' issues of water scarcity, vermin compost making and learning various arts and crafts like painting and aipan taking inspiration from their environment.

Under the program we introduced basket weaving from ringal (local bamboo) as a skill to help children concentrate and facilitate their motor skills while inculcating in them an awareness of their environment. This creates in them the urge to protect natural resources.

As part of waste management and recycling material we encouraged activities and skills around material that is found in homes, use of discarded water bottles, wool and other discarded material.

WASTE MANAGEMENT AND RECYCLING WORK

When we look at environment management it is a project that needs to be also linked to waste management and recycling material. With this intent we started project 'Recycling plastic bottles as planters'

Recycling and reusing material started at the Madhuban Sri Aurobindo Ashram under Project Environment Management with the women and local schools is a small initiative to make a waste less ecosystem in and around and needs a further focus.



Planters made from recycled plastic bottles



Beauty from waste: flowering planters from discarded plastic

Demonstration of above is also carried on to visitors from other schools so as to spread this awareness.

THE ENVIRONMENT PROJECT CAME FULL CIRCLE WHEN:

- ECLC Trainers and visiting faculty under the program strengthened the Sunday and holiday time camps to inculcate in children awareness for their local ecology.
- Women of khushali trained for environment consciousness worked with local primary schools teaching the teachers and children hand skills – like flower-making and aipan painting in order to inculcate a pride in their environment.



Sugandha our peer educator in the government primary school initiating an environment circle



Environment Workshop in progress by facilitators



Children sharing their skills of basket weaving using local bamboo material with the Russian teachers- A step ahead to take environment management and awareness using local resources



ECLC Sunday classes children using recycled paper as part of story telling



ECLC Classes with emphasis on environment consciousness



Khushali leader Chitra Negi in Shishu Mandir School teaching children to make marigolds from wool and local material



Children from the AuroMira School in Kechla, Odisha at a basket weaving demonstration



Crochet flower-making class in progress for Auro Mira children to sensitize them to use house hold material

The children formed a link with their local rituals like Phool Dei and Harela celebrating the environment. They illustrated stories about flora, fauna, animals and birds that they saw around them; they coloured stones that they gathered from the river and learnt to re-use paper to make puppets and small decorative items.

The project helped us to carry on the work of environment management in the school children. This has facilitated them to raise their voice and skills for respecting their natural resources.



Children from village learning River Dance

ECLC children also created stories by writing and performing skits, singing songs, participating in story-telling workshops about mountains rivers and animals as part of the ‘Mera Gaon, Mera Gaurav’ campaign.



Depiction of local themes through art as part of environmental awareness in children of the valley



Children as Mother's Environment Warriors used their skills of art and craft to create their own environment booklets



Khushali's sensitivity towards the Environment in local schools

PROJECT OUTCOMES:

- The project has promoted level one training to local women and children, the gardeners and khet sadaks of the Madhuban Ashram in the use of organic farming practices.
- It has seeded of a lab-to-land approach to agriculture within the Madhuban Ashram
- With inputs from the GBPUAT interns, farming practices have been improved and scaled up to include apple and kiwi orchards, new varieties of plants and flowers
- Agriculture as a viable livelihood option has been demonstrated to young people in the village and to the women involved in the Khushali Livelihoods programme.

- Agriculture as a source of livelihood has been initiated for the Khushali women leaders and for the children in two village schools.
- Consciousness for waste management and recycling has been initiated amongst the village community.



Tending khets at Madhuban Ashram for the lab to land program

- Children and adults in the village need to be further supported for learning and implementing the findings from this year's project especially in areas of organic produce and water management as environment management as a project needs to continue.



Water Scarcity is still a challenge and needs to be taken up as an extended project

We are grateful to the guidance of our master:

*“Sounds of the wakening world, the year’s increase,
Passage of wind and all his dewy powers
With breath and laughter of new-bathed flowers
And that deep light of heaven above the trees
Awake mid leaves that muse in golden peace
Sweet noise of birds, but most in heavenly showers love”
- Sri Aurobindo*