

# From Soil to Seed to Plate



**Fun Farming Educational Trail** 





At Annadana, we believe that every person has the right to food and especially to safe food. We also believe that the human race is charged with the responsibility of preserving bio-diversity through sustainable farming so that our children inherit an earth that is clean, healthy and fair.

But none of this is possible unless we each know where our food comes from, the price paid by farmers in delivering such nourishment to our tables and our rich heritage of natural resources, seeds and plants which is being choked.

Come join us in our food revolution. We will give you the skills to grow your own food in an environmentally friendly way using organic methods which are sustainable and waste free.

For more information about Annadana please contact us at:

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http://myrighttosafefood.blog spot.com/





## **Face to Face with Farmers**

Seeds, like children, hold within themselves the future.

India is an agricultural country. But how many modern Indians have been to a working farm? How many children have witnessed the growth of a plant – from seed to seedling to a grown plant? How many of us know how to grow our own food? How many children in this agricultural country have grown vegetables that are then used to make a meal? How many children have felt the joy of being able to pick a ripe, fresh fruit or vegetable off a plant to pop into their mouths?

What people do not understand, they do not value; what they do not value, they will not protect, and what they do not protect, they will lose.

— Charles Jordan



And we are fast losing our relationship with our food. Food is now just another commodity. Our food has lost its identity as we have no idea where it comes from, how it was grown or what work was involved. And because it is another freely available commodity, we don't value it but rather, waste it. We do not think of the environmental impact of the methods used to grow that food and we ignore the economics of the food market.

And so, we must rediscover our relationship with food – rediscover the connection between unhealthy food and our own health, the connection between unhealthy food and the environment, the relationship between unhealthy food and the economic health of the country. All of us live in the circle of life; every change we impose upon our planet will affect us at one point in time.

In this journey of rediscovery, we will discover what is really important to us — our health, the health of our loved ones, our environment and surroundings and our socio-economic well being.

We at Annadana believe that farm visits give students invaluable learning opportunities. It brings to life what students are taught in text books, it assists them to connect with the source of their food and environment so that the choices they make as adults are good choices – for themselves, for the earth and for their country.



## Welcome to Ishana

'Ishana' is our 5 acre certified knowledge farm in Bangalore city where a team of 14 farmers and 5 experts are dedicated to developing best practices in integrated organic farming from soil fertility management, seed saving, recycling and zero waste management. We are proud that Ishana is fast emerging as Karnataka's leading centre for promoting sustainable biodiversity as an alternative to modern corrosive agricultural methods of cultivation.

At Ishana we provide free seeds to impoverished farmers, allowing them to grow chemical free food from a freely replenishable seed stock. The outcome is a win-win deal as farmers supply fairly priced organic produce to organic retail outlets. Farmers of course reap the benefits, but along with them, consumers benefit too as they purchase organic food which is free from harmful chemicals. Less chemicals in the food chain translates to better health outcomes both to consumers as well as the environment. (A chemistry, biology, geography, history and economics lessons ALL rolled into one)!

Ishana farms are designed to host educational farm visits, particularly for young people who are the future of this beautiful planet. Our educational trail is suitable for students of all grades and we are happy to tailor a visit to suit your requirements. We will also be happy to assist in environmental studies projects or anything related to sustainable agriculture.



## Hands on experience

A visit to Ishana allows students to use all their senses whilst learning. They see, hear, touch, smell and taste the things they are learning about, giving them a deeper understanding and the



knowhow of the subject. Farm visits provide sensory explorations, primary data that not only teach, but also connect students more intimately to food production and agriculture.

We encourage students visiting our farm to help in activities such as transplanting, sowing, compost making, weeding, harvesting, etc. by lending a hand to our farmers. Past school visits has shown us that students learn in a way which is fun and practical to leave an impact on their impressionable minds.

Our experience is that children love 'helping' out — especially the younger ones - they show much enthusiasm and enjoy contributing. It helps that its legitimate playing in dirt!

## Student field activities (based on seasons)





#### **FROM SOIL**

**Soil Exploration** – the first step in planting is to ensure that the soil is appropriate and healthy. Therefore we learn how to identify soil types and how to rejuvenate such soils for healthy productivity.

**Vermicompost / composting –** Here we learn how compost boosts soils and the different stages of compost and how good compost is made for gardens and homes. We involve students in helping the farm build its compost pile!

**Making pot mixture** – Growing plants in a garden or field is substantially different from growing plants in a pot. But lots of vegetables and fruits can be easily grown in pots providing a ready source of fresh, healthy food. Here we learn about the right soil compositions for pots to suit varieties of plants.

**Sowing** – Sowing is much more than dropping a few seeds into a pot. It is a technique and must be learnt. But once learnt, it is like swimming – never forgotten!

## Pricking, Transplanting & Harvests -

We learn to identify when plants need to be transplanted to ensure their continued healthy growth. Like children who are ready to fly off the nest to further growth, plants too must be transplanted at the right time, so that they are mature enough to adapt to their new environment. Do this right and you'll have a happy plant that produces abundance. Learn also to know when vegetables are ripe for picking both for food and seed production.

#### TO SEED

**Seed saving** – learn the easy ways to continue the circle of life. 'Adopt a seed' your contribution towards our campaign "Save a Seed to Save a Species". We will teach you the skills of seed saving, so you never have to purchase another plant of the same variety ever again!

Farm Animals: This is always a popular one – generating more interest than organics and sustainability! Children absorb so much through their senses and interacting with animals provides extra sensory inputs allowing young brains to develop. Contact with animals is without a question the favourite farm activity for most kids.

## Integrated learning areas of eco-farming:

Milking cows, source of dairy products, Importance of alternative energies such as Bio gas, learning about co-existence of pests and predators, tree care, cover cropping, intercropping, companion cropping, mulching, green manuring methods and more

### TO PLATE

**Nutritional facts** – A short captive documentary unfolds the ground realities on junk foods and carbonated drinks. When revealing the ugly truth of fast junk foods, what it does to young minds and bodies vis a vis safe nourishing foods, most times students outburst is one of animated reaction of anger and horror.





We are conscious that a large group of children on a working farm can get out of hand if not properly guided. We have evolved a set of rules that allow children to have fun while maintaining safety – both for themselves as well as the farm habitats be it farmers, birds, animals and us!

We request you to kindly adhere to our dos and don'ts.

#### Do

- Listen to the farm guides but also the observe farm sounds.
   Farm sounds are unusual you wont come across them every day and you will see that a whole new world opens up to you by just listening to farm sounds. Also listen to each other or else you may miss the cow dung someone pointing out to you!
- Look before you leap Watch where you're stepping or walking. Farms are working places with different natural undulations -so keep to your group. Be sensible and cautious.
- Stay with your group if you wander off you will not enjoy the visit because you'll be busy looking for your group.
- **Be respectful** to each other, the people on the farm, to the animals, birds, creatures and tools.

### **Don't**

- Run unless you've been told its okay. But if you fall, you
  could injure yourself and may even have to sit out the rest of
  the trail.
- Spit this is an activity best left to animals we think.
- **Be too noisy** If you are, not only will you miss out on farm sounds and other unusual things but also, you will annoy everyone else around you.



- Litter Please take your rubbish with you unless it is bio degradable rubbish in which case, please save it to add to our compost heap. We will say thank you very nicely.
- Touch or pluck- the animals or plants in the fields

## Staffing & Attire

There should be approximately one guardian per group of **15** students.

Allergies, sun, rain are all safety considerations to take into consideration. Have sun block available on the day of the visit and put it on anyone who doesn't have it.

Caps, umbrella, comfortable shoes and cotton clothing are recommended. Based on seasons, please come suitably clad.

The above issues should be addressed prior to the visit.

### POST-FARM VISIT ACTIVITIES

We suggest that classes try the following activities after participating in a farm visit. Follow up activities help ensure that the lessons learned on the farm visit are reinforced. The evaluation helps us asses our success and what needs to be changed for future visits.

## Follow up activities with your class

**Adopt a seed –** The seed packet along with the seed saving tips distributed to the students is to continue the circle of life. We request feedback on the above activity.



Please pick one of the following;

- 1. Have each student in the class write a letter to the farmer they visited, detailing what they liked / learned about the visit.
- 2. Have a follow up food day. During class talk about what different farm products the students are eating.
- 3. Review Relevant Curriculum.
- 4. Be creative! Have an art day about your class farm visit!

We need you to stand with us to defend our food chain!



#### Selected Relevant Curriculum

#### General

Each standard has different curriculum goals that teachers are required to meet. It is important to make farm visits as applicable as possible to ensure participation, interest and relevance to teacher's lesson plans. Farm visits can easily meet curriculum requirements based on the following topics:

- Biodiversity Life cycles
- Watershed stewardship
- Land stewardship
- Habitat
- Seasonality of foods
- Farming methods
- Organic farming
- Genetically Modified foods
- Farm management
- Food and Nutrition
- Crop life (seed to seed, with part of the plants)
- Pollination
- Seed saving
- Irrigation
- Animal husbandry

**Science:** Understanding pH, life cycles, water, nitrogen, carbon and sun cycles



#### **Curriculum Connections**

**Social sciences:** History of the farm, or farming in the region, interviews with farmers, management of the farm, identifying consumers of the farm's products, environmental practices of the farm, mapping activities, directions, regionalism.

**Vocabulary:** Agriculture, sustainable, diversity, habitat, cover crop, organic, CSA (community supported agriculture), compost, pesticides, farmers market, locally grown, herbicides, microorganisms, irrigation etc. Each standard will have different comprehension abilities.

**Social Studies:** Connections between their lives and the lives of people in their community, understand the lives and social structure of the communities that make a difference to our everyday lives, study people who supply goods and services to understand our economy, understand the farmer's role in the food system, awareness of the market - buyers and sellers of goods and services, identify factors which affect people's choices in what they produce and consume (natural resources, finances, weather, etc.)

**Science:** Life Cycles — Living things are diverse, interdependent and evolving, Environment — understanding that all parts of an environment are interrelated therefore, changes to one part affect other parts.

## WE HAVE THE POWER TO HEAL OUR PLANET

# Thank you.

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