

Organic Agriculture

Organic agriculture is a holistic production management system, avoids usage of synthetic inputs and genetically modified organisms, minimizes pollution of air, soil and water, and optimizes the health and productivity of interdependent communities of plants, fisheries, animals and people. Organic Agriculture activates Microorganism in the soil, adds humus and increases the limit of Organic Matter in soil, develops texture and structure of soil, makes plants strong and healthy, protects plants and crops from diseases, pests and other disasters, gives Poison and Toxicity free crops, nourishes friends pests / insects, nourishes fishes, establishes a good and fresh environment, establishes public health..

Organic Agriculture contributes to the followings -

Biodiversity: Our soil has lost its fertility and strength only due enormous usage of harmful, hazardous toxic chemical fertilizers and pesticides. Toxic chemical fertilizers and pesticides made the soil, crops plants toxic. As a result we have lost our earth worm, frogs, snakes, fishes, friendly insects and pests, birds etc.

The family farmers/small-holder farmers can resume biodiversity through producing crops organically. They can follow the following measures in this regard –

1. Through Domestic Animals: Each and every granary in the village home in Bangladesh was full with rice, cow shed was full with cows and the pond was full with fishes. We know that only the domestic animals alone can resume these three riches again easily. (1) They (Cattle) can make our soil fertile by ploughing and by manuring (2) fertile soil can full our granary and (3) granary can feed the fishes. So, this is very very urgent and important to take initiatives saving and resuming our lost domestic animals immediately for biodiversity.



2. Through ducks: We can resume biodiversity through duck farming. They will move into the wet rice fields and will collect their feed. Harmful insects and pests are their main feed. Ducks are an important aspect in the ecology of Bangladesh's wet-rice agriculture. Ducks are herded into fields well prior to harvest so that they will eat algae, insects and pests, as well as fertilize the soil with their droppings.



(1) Through Crop rotation: Crop rotation / diversification reduce insect and pathogen infection. Soybean, Millets, buckwheat, yam, sugar beet, turmeric, garlic, ginger, etc. can be produced rotationally for reestablishing biodiversity.

(2) Through Perching: We can resume biodiversity through perching.



(3) Through Biological pest control: We can resume biodiversity through using organic and bio pesticides.



(4) Through Habitat for beneficial organisms: We can resume biodiversity through habitating for beneficial organism.

We can also resume biodiversity through (5) Pheromone trap (6) Light trap (7) Aerial net (8) Predatory insects and mites (9) Predatory mites (10) Vertebrates etc.

Food security: As per UN reports –

“Only Organic Agriculture can establish Food security” FAO: Rome 03/05/2007

“Organic Agriculture will feed the World very soon” – International Research finds

“Organic agriculture can be more conducive to food security” UNEP, UNCTAD

It is safe and cheaper and saves total cost up to 60%

Gives about 15-20% more production as initiates thousands of roots of plants



More yielding



More yielding

Saves money of the Farmers
 Decrease water requirement in the soil
 Discourage pesticides requirements.

Climate change: Existing agriculture procedure is more than 30% responsible for climate change and global warming. We can indicate the following reasons –

1. Agricultural machineries manufacturing companies emit millions of tons of green house gases.
2. The agricultural machineries and equipments emit millions of tons green house gases.
3. Chemical fertilizers and pesticides manufacturing companies emit millions of tons of green house gases
4. Rice processing industries emit millions of tons green house gases for boiling and drying.

As a result we are facing lot of natural calamities as flood, cyclone, tornado, tsunami, earthquake, severe drought, hot and cold etc.



Drought



Flood

But organically rice production can help reducing climate change and global warming as well as natural calamities through –

1. Wooden plough green tilling prepare soil properly as it deepens 8-12”
2. The bullocks / cows leave their dung and urine those are fertilizer.
3. Manually harvesting / cutting rice does not emit green house gases.
4. Manually or semi-auto processing of rice emits very low green house gases.
5. Non par-boiled rice saves about 50% fuel and water.



Green tilling emits fertilizer in the soil during ploughing



Organic Rice Field

Community building : Organically agriculture can build up a strong community among the farmers in the perspective of soil management, weed management, nutrients management, pests management,

good agricultural practice etc. for more production, processing and for marketing. They can also establish Cooperative Societies for their own safety in different perspectives and issues.



Community building through community farming

Environmental preservation: Only organic agriculture can preserve the environment successfully as follows –

Only organically rice production can full the granary of the farmers with rice

Only organically rice production can full the cow shed of the farmers with cows

Only organically rice production can full the ponds of the farmers with fishes

Only organically rice production can full the trees with birds

Only organically rice production can full the friendly pests and insects in the nature

Only organically rice production can resume healthy soil, water and air

Only organically rice production can resume the natural procreation system



Environmental preservation



Environmental preservation :

As a result, the foods and feeds will be safe and nutritious. Thus the public, livestock health and the environment will be peaceful.

Seed saving and exchange: Our staple / main crop is rice. We had hundreds of varieties of rice those were more nutritious, sticky, tasty, drought resistant, disease resistant, strong and beneficial. Even 30 years before each and every farmer was a seed bank. They preserved and exchanged their seeds one another.

Community seed banks are collections of seeds that are maintained and administered by the communities themselves. Community seed banks play a vital role in ensuring seed security and improving farmers' access to seeds, conserving agricultural biodiversity and the associated traditional knowledge, providing options for adapting to climate change, as well as can contribute to the realization of Farmers' Rights.



Community Seed Bank



Peasant's Seed Bank

Preservation of the values of traditional farming: The benefits are as follows –

- Reduces the Toxic Load
- Keeps Chemicals Out of the Air, Water, Soil and our Bodies
- Reduces Farm Pollution
- Protects Future Generations
- Builds Healthy Soil
- Tastes Better and Truer Flavor
- Assists Family Farmers of all Sizes
- Avoids Hasty and Poor Science in Your Food
- Eating with a Sense of Place
- Promotes Biodiversity
- Celebrates the Culture of Agriculture

Conclusion: We can save our soil, nation, water, air, fisheries, and animals through organic agriculture easily.

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