

Bio-Farming- A Comprehensive Methodology For Social Advancement and Better Health

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Now a day's millions of people who must fight every day against acute **hunger** and **malnutrition**. More than 113 million people across 53 countries experienced **acute hunger** requiring urgent food, nutrition and livelihoods assistance (IPC/CH Phase 3 or above) in 2020. The food production cost is mounting high by adaptation of conventional farming pattern which includes application of inorganic fertilizers, pesticides, modern farming techniques. Conventional farming pattern results in degradation of eco system and contamination of food products which leads to poor health standards. Bio farming techniques have received world attention because of the growing concern about the degradation of the agriculture resource base. With the hiking input costs and the low commodity prices, the farmers are looking for low cost input and exploit biological system such as biological nitrogen fixation, vesicular arbuscular mycorrhizae (VAM), etc., to increase soil fertility improve the efficiency of applied fertilizer and thus to enhance soil productivity. Through there are naturally occurring associations, inoculation of crop plants with the preparations of these microorganisms shown to or believed to stimulate productivity.

Bio farming helps in generating employment in farm sector and improves quality of products which yield better market price and results into social and economic upliftment of farmers.

Benefits of Bio-farming

Bio farming helps to produce food crops without the use and traces of toxic synthetic chemical products. In bio farming we will be using living organisms from the microscopic beneficial fungus and bacteria to insects and animals and other life forms.

- It is eco- friendly and maintaining ecological balance
- Bio farming helps in conserving natural resources
- It produces good quality products with less input cost
- It increases the soil fertility and its texture
- It easily cops up with adverse effect of climate change and reduce risk of crop failure
- Conservation of natural resources
- It minimize the contamination of food products
- It induces self protection mechanism in the plant
- It reduces the water requirement of the plant

Principal

1. Test and balance your soils and feed the crop a balanced, supplemented diet.
2. Use fertilizers that do the least damage to soil life and plant roots.
3. Apply pesticides and herbicides responsibly while relying on customized management practices to reach maximum genetic potential.
4. Create maximum plant diversity by using green manure crops and tight rotations.
5. Manage the decay of organic materials and the balance of soil, air and water.
6. Feed the soil using carbon from compost, green manures, livestock manures and crop residues.

Bio-farming approach yields more income general public because

- It expands the yield in long term in more steady way
- It is stronger to the environmental change (Temperature, flood, dry spell and soil disintegration)
- Little wastage of the crop through pest by adaption of supportable pest control strategies for bio pest control
- Mixed cultivating effortlessly
- Better nature of food grains yield more income

Consequently, bio-farming creates continually high income at lower cost through effectively

accessible asset to the general public. Steady creation of crops at lower cost gives ranchers ordinary employment. At last, it causes the general public to move towards better personal satisfaction inferable from sound what's more, nutritious food combined with higher salary.

Why is bio Farming So Special?

As a completely natural and sustainable farm management practice, bio farming is based on unique values. In other words, bio farming is not only a farm practice but also a philosophy of working together with nature.

Bio farming includes the utilization of customary homestead rehearses in mix with cutting edge logical examination and current ranch developments. For instance, utilizing manuring and natural soil disinfestation. As a holistic farm management approach, bio farming aims to create a socially, environmentally, and economically sustainable food production system. More precisely, bio farming is based on managing the agro-ecosystem rather than relying on external farming inputs, such as pesticides, artificial fertilizers, additives, and genetically modified organisms.

Ground-breaking and Completely Natural Farm Practices

Bio farming are genuine lifelines who work hard to grow healthy and nutritious crops.. An extra duty regarding them is to keep up or improve the most significant of normal assets while securing the earth for the people in the future. In this manner, it's habitually thought about how natural ranchers deal with their yield creation. The appropriate response will for the most part rely upon the laws and guidelines of every nation. Be that as it may, probably the most well known natural homestead the executives rehearse is:

- Crop rotation, used to keep up soil ripeness and to improve crop security from different pest.
- Natural supplement the board, in view of progress of soil natural issue through manuring, fertilizing the soil, or mulching.

- Developing spread harvests, a helpful practice for controlling bug irritations and weeds, forestalling soil disintegration, just as improving the supplement content in the dirt.
- Preventive yield insurance measures, for example, picking safe assortments, transformation of planting or planting, and reaping time.
- Depending on characteristic predators as an organic bug assurance measure.
- Weeding as a non-concoction weed the board practice
- Anaerobic soil disinfestation that wipes out or diminishes soil-borne bothers
- Appropriate space between the harvests
- Mechanical soil development
- Reusing materials
- Depending on inexhaustible assets.

Scope and modes to promote bio farming

- Increment in biological activity makes lower profundity supplements accessibility possible.
- Increases water holding limit of the soil.
- Improves surface and structure of soil

Serious issues in showcasing indian natural items

- Price desires are excessively high corresponding to quality
- Low consistency of value
- Slow shipment, limitations for bringing in Indian natural items
- Time devouring and muddled desk work while managing send out specialists
- The helpless client care from the Indian merchants after deals is the serious issue in trade promoting
- Lack of legitimate advertising system an advertising usage
- Less exertion to create residential market

Conclusion:

The bio farming gives a few roads to the ranchers through which they create more pay and higher status in the society. It brought about better execution per unit territory when contrasted with traditional cultivating. Nonetheless, administrations engaged with bio farming give great possibilities to improve soil fruitfulness and limit soil debasement with the help of normal asset preservation and bio specialists. The Bio farming has made a great deal of sway in India during most recent couple of years, however need of segment explicit strategy of the legislature and research organizations which help in fortifying its situation in ranch society and spreading ability the nation over, accordingly an improvement in strategy causing issues to can further fortify the nation's economy as well.

References

K Sanjeev, Mala K, Meena L. R., Kochewad S. K., Meena L. K. and Singh S.P.(2017) Bio-Farming: A holistic approach for Social Upliftment and Better Health. *South Asian J. Food Technol. Environ.*, 3(1): 521-525

Santhoshkumar M and Reddy G. C., Sangwan P. S. (2017). A Review on Organic Farming Sustainable Agriculture Development *Int. J. Pure App. Biosci.* 5 (4): 1277-1282 ISSN: 2320 – 7051