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## Cosmic Farming -A New Ray of Sustainable Agriculture

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#### **Abstract**

osmic farming is new concept, based on systematic & synergistic mediating energy from Cosmos. Cow is essential component in promotion of organic techniques. Two cows can help 4-5 ha area to manage organically. Biodynamic operation is based on lunar cycles influenced by Stars, Planets, and heavenly bodies. Plants grow with support from cosmos i.e. Rhythms of Sun, Moon, Planets and wider constellations of Zodiac are the key component to mediate cosmic energy. Heal the polluted atmosphere which can heal every one is the basic principle of cosmic farming. Homa Therapy is potential tool to resolve environmental pollution and ultimately heal the atmosphere. Agnihotra ash obtained in performance of Agnihotra and Biosol prepared from ash is a potent bio enhancer to enhance soil fertility & crop production. With a Resonance Point up to 80 hectare can be activated to receive cosmic energies with same human efforts.

#### Introduction

osmic energy is the life force that is existent everywhere. It is present in the cosmos, between the galaxies, the ■ molecules and in the space. It is essential to maintain. the order in life. The effects of climate change and population growth are posing major challenges to agricultural productivity and increasing the vulnerability of food and agricultural systems. Sustaining agricultural productivity requires the efficient management of agricultural resources, which involves a clear understanding of the temporal dynamics and spatial variability of natural resources. In agriculture, energy from fossil fuel and important sources are used. Over the last several decades, the availability of cheap fossil fuels has made a significant contribution to feeding the world. The 'green revolution' of the 1960's and 1970's addressed food shortages, not only through improved plant breeding, but also by tripling the application of inorganic fertilizers, expanding the land area under irrigation and increasing the use of fossil fuels for farm mechanization, food processing and transport (FAO, 2011). Indiscriminate use of agro chemicals and many other factors have adversely impacted soil biology environmental ecology also which is dwindling and becoming expensive to the government, farmers and to the society. However, cheap energy sources appear to be becoming progressively scarcer and energy. Modernizing food and agriculture systems by increasing the use of fossil fuels as was done in the past may no longer be an affordable option. We need to rethink the role of energy when considering our options for improving food systems.

All natural cosmic food grown with the aid of *PachMahaBhutas* without use of chemical fertilizers and pesticides are capable of curing all diseases. *Rishies* called Food *Annam Brahmaie* 

Satvik; they are rich in fibre, vitamins, minerals, amino acids and other nutrients. Cosmic energy or the *Pranic* energy or lives of the cosmic foods are more potent food in curing disease and promoting a peaceful and healthy life. Organic foods are easy to digest and assimilate and create fewer wastes within intestine. Soil can be defined as a substrate for infinite organism; whereas, air is also an important elements for plants. Plant needs approximately 44% carbon di oxide as well as 44% oxygen. Water comes next to air and one of the important elements needed by plant. The sun plays the most significant role in plant system. During current age it quite natural where plenty of natural resources can pave a way to sustainability. The concept of "Cosmic Farming" thus conceived a potential tool for sustainable agriculture. Cosmic energy is the fundamental source of plant growth. Unlike chemicals sold in the commerce, this energy is free and it isn't toxic, it is highly beneficial. In fact, ancestors respected these sources and utilized their free gesture for welfare. The sun is the power of photosynthesis to covert the solar energy into life force rest only with the green leaves. Farming by synergistic and systemic mediation of energy from different component of cosmos has been dealt as "cosmic farming".

## History of Agriculture with Respect to Cosmic Farming in India

- India has been a cosmic country for thousands of years.
- Country was forced to initiate conventional farming on name of Green revolution.
- Within few decades it has shown ill effects.
- Few people initiated Conservation farming and few Jaivik Krishi.
- These are under experimental stage.
- Probably reverting back to cosmic farming could be viable option.

#### Plant Nutrition & Sustainable Agriculture with Cosmic Farming

nrich organic inputs which can have higher nutrients and microbial population to make soil healthy and sustainable for higher quality production. Hence, current practice of nutrients management needs revamping. Plants get their nutrition quantitatively from atmosphere qualitatively from the soil. Plants require more than 30+ elements for their satisfactory performance. Plants have only organic diets which are taken in oxidized, chelate and ionic forms which are accomplished by the soil microbial consortium. Nutrients can be made through biologically rich soil and diverse group of plants duly integrated with cow in the system. More than 78 percent N which account for 75-80,000 t of N is freely available per hectare in the atmosphere. Plants belonging to leguminous

group have capacity to mediate free N from the atmosphere through microbial transformation. Plenty of phosphorus in non available form is available in soil, its solubility need to be enhanced through suitable microbes. Potash is non constituent element, burrowed from soil and returns back through bio mass- which needs to be recycled in field. Nutrients might be deficient in upper horizon, but most of them in non available form are available in deeper horizon of soil. Plant roots and earthworms help to bring these nutrients to upper horizon. Biomass produced in process is primary source of food to everyone and are used for many other purposes i.e. compost preparation, mulching, preparation of bio enhances. Few plant parts have pesticide property hence; can be utilized for pest management. Pests and erosion is indicator of reduced Aura energy of soil and plants. It is imperative to human being to pay back gesture to nature which is only possible by assertive coverage of area through accommodation large number of plants in one or other way.

#### Present Scenario of Indian Cosmic Farming

- Natural Farming
- Bio-dynamic Farming
- Rishi Krishi
- Natural Farming
- Nateuco Farming
- Panchagvaya Farming
- Homa Farming
- JaivikKrishi

#### Natures' Gesture to Mediate Cosmic Energy

- Soil microbial consortia and earthworm have capacity to mediate cosmic energy.
- Plants inhale carbon dioxide and exhale oxygen essential for survival of human being.
- Chlorophyll present in foliage mediates solar energy in process of photosynthesis basic step of food production.
- Nodules in legume have bacteria which capable of harnessing free nitrogen available in atmosphere.

Some practices to helpful for harnessing these energies, these are;

- Practice of use of BD calendar for farming activities.
- Habitat development through intensive plantation of different kinds of plants including, those belonging to leguminous crops.
- Enhancing crop rotation by inclusion of legume as a sole crop, cover crop, intercrop, green manures, pump crops as per feasibility.
- Practice of mulching (organic mulches like paddy straw, wood

chips, coconut husk, dried fallen leaves of forest trees etc.) should be as a thumb rule.

- Practice of animal husbandry to promote integrated farming system.
- Enhancing soil humas formation and its maintenance.

## **Energy Security is Important to Food Security and Sustainability**

oday there is a large gap between energy demand and access. Energy development, especially renewable energy, also has the potential to create green jobs in rural communities. Renewable energies such as bioenergy, solar, wind, hydro and geothermal can be used in agrifood systems as a substitute for fossil fuels to generate heat or electricity for use on farms. FAO's "Energy-Smart Food for People Issues Paper" provides a comprehensive analysis of the energy status of the food sector from the perspective of demand and supply. The ESF Programme aims to help countries promote energy-smart agrifood systems through the identification, planning and implementation of appropriate energy, food security and climate-smart strategies that spur agricultural growth and rural development.

## Details of Experimental Crops Using Cosmic Energy

he use of the space environment to uncover hidden potential in crops, commonly described as space breeding, was a focus of a project undertaken by the Joint FAO/ IAEA Division of Nuclear Techniques in Food and Agriculture. Approximately 10 kg of rice of the Pokkali variety was sent into space by a Chinese spacecraft to observe heritable alterations in the genetic blueprint of these seeds and planting materials induced by the effects of cosmic rays, microgravity and magnetic fields in space. Upon return to Earth, the seeds were planted in the greenhouse at the FAO/ IAEA Agriculture and Biotechnology Laboratory in Seibersdorf, Austria, with the objective of evaluating progeny for desirable traits such as resistance to stress and improved quality.

# Relationship between Researches Done Relating to Cosmic Energy with Food Security

Using Cosmic Rays to Measure Moisture Levels in Soil

ith a cosmic ray neutron sensor, scientists track these fast-moving neutrons in the atmosphere to determine how much water is already in the soil and when the farmer needs to add water to help crops thrive even in harsh climate conditions. The cosmic ray neutron sensor is a device that can measure moisture levels by

detecting fast moving neutrons in the soil and in the air just above the soil. It is faster, more portable and can more easily

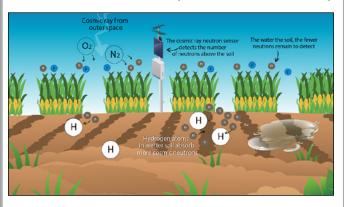


Figure 1: How the cosmic ray neutron sensor works

cover an area compared to traditional methods.

### Enhancing Agricultural Resilience and Water Security Using Cosmic Ray Neutron Sensor (D12014)

he Joint FAO/ IAEA Division of Nuclear Techniques in Food and Agriculture is launching a new Coordinated Research Project (CRP) titled 'Enhancing agricultural resilience and water security using Cosmic-Ray Neutron Sensor' to use the CRNS and the GRS to measure, assess and monitor soil moisture for the purpose of agricultural water management: irrigation scheduling, management of extreme weather events (flood and drought), and development of climate change resilience strategies. The overall objective of CRP is 'Establishing landscape soil moisture sensing using CRNS for improving agricultural water management practices and climate resilience strategies'.



Figure 2: Soil moisture heterogeneity mapping in Petzenkirchen (research station of Austrian Institute for Land and Water Management Research) using backpack CRNS.

# The Contribution of Nuclear and Isotopic Techniques

he isotopes of nitrogen-15 and phosphorous-32 are used to trace the movements of labelled nitrogen and phosphorous fertilizers in soils, crops and water, providing quantitative data on the efficiency of use,

movement, residual effects and transformation of these fertilizers. The nitrogen-15 isotopic technique is also used to quantify the amount of nitrogen fixed from the atmosphere through biological nitrogen fixation by leguminous crops. The carbon-13 isotope signature helps quantify crop residue incorporation for soil stabilization and fertility enhancement. This technique can also assess the effects of conservation measures, such as crop residue incorporation on soil moisture and soil quality.

## Impacts & Future Scope of Cosmic Farming

- Healthy Farming
- Healthy eating
- Healthy wildlife
- Healthy environment
- Healthy budget
- Healthy animal & human being, Healthy future.

- In fact, cosmic farming could be "Sun rise industry". If undertaken in assertive way, country can go organic way and assure for Green Economy.
- It will have enormous impact on human health and economy of the country.

#### Conclusion

to insight on organic cultivation and for this context cosmic farming will be the best suited option for future generation for sustainable agriculture. It can provide positive impact for survival of humanity at this crucial juncture.

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