

# Systems approach to agriculture

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As a human collective, we have used nature as a commodity, and a resource for our own gain, without considering the consequences. Now, it is time to give back to nature, allowing her to replenish, so we may once again live in a sustainable, bio-diverse and abundant world.

The idea that thoughts can affect matter is not a new one. Indeed, indigenous cultures have long accepted the interconnectedness between human thought and the natural world, which scientific research continues to affirm. It is worth considering this relationship as we look for solutions to our global food crisis. Since the 1960s, there has been systematic research into the effect of thoughts on flora. Despite the evidence of how pliable and powerful the human mind is, very little of that research has been applied to some of our most pressing global issues, such as the increasing food crisis. A growing environmental movement, however, combined with the widespread problem of hunger and poverty, has pushed researchers into exploring new innovations based on ecologically sound, socially viable and sustainable systems of agriculture. The *Rural Wing of the Brahma Kumaris World Spiritual University (BKWSU)*, with the majority of its members living in agricultural villages, has also been looking for ways to improve the livelihoods, and lives, of farmers.

Now, a well-established research project of India's top agricultural universities (G.B. Pant University of Agriculture, Science and Technology and S.D. Agricultural University), began as a farmer's personal experiment - *Nanu Ramwas*, a farmer, was being troubled by harmful pests damaging his crops. As a person who regularly does meditation, he reasoned that, rather than complaining about insects and adding chemicals, he started experimenting with the practice of meditation. While doing meditation, he sat in his crop and attempted to repel the insects using the *power of his thought and intention*. He meditated on this thought – "*The vegetation is filled with light and might, and the insects are weak and no longer welcome. They should be gone*". After 2-3 hours of meditation over 2-3 days, the insect population of Nanu Ram's experimental crop was noticeably less. As soon as he shared his findings with Sister Nalita at his local Brahma Kumaris centre, the news quickly spread among the local farming families. Thus, the *Yogic kheti Agriculture* initiative, known outside of India as Sustainable Yogic Agriculture (SYA), was formally started by approximately 400 farmers from central and northern India in 2009. The farmers needed to find ways to address the damage that climate change and human activity have been causing on the health and well being of their families and communities in recent decades.



*Farm women observing plants grown using SYA method*

**Whether one is an environmentalist, a spiritual practitioner or a scientist, the laws that govern nature are irrefutable.**

FAO in its conference on Organic Agriculture and Food Security (2007) highlighted the persistent paradoxes in the world's agriculture that lie at the heart of many problems faced by small farmers in Asia as follows.

- Chemical agricultural inputs have increased in the last two decades yet grain productivity is declining
- More knowledge is readily available through information technologies but nutrition-related diseases are increasing
- Industrialized food systems have environmental and social costs that threaten food security, such as occupational deaths through pesticide poisoning, farmers suicides due to debts and job loss in rural areas

It is now widely acknowledged that to sustain agricultural production, healthy environment and viable farming communities, there must be a 'systems' approach to agriculture. Sustainable agriculture must incorporate traditional knowledge and organic agriculture that links ecology, culture, economics and society. Sustainable Yogic Agriculture does this by utilising a systems-wide approach, recognising all elements of farming: humans, animals and birds, flying and crawling insects, micro-organisms, seed, vegetation and surrounding ecosystems, and the natural elements of sun, soil, air, water and space.

Sustainable Yogic Agriculture (SYA) is addressing the problems highlighted by FAO by: a) restoring the soil microbial population, suggesting a gradual increase of crop yield over subsequent years; b) producing crops that have greater nutritional content and therefore, a higher price; c) reducing farmer dependency on pesticides and fertilisers, and the associated debt.

The practice of introducing systematic thought-based meditation at all stages of the crop cycle, with methods of traditional organic farming is bringing benefit. Meditation is practiced on raw seeds, then at the subsequent stages of sowing, watering and harvesting of crops. *Sushma*, a farmer's wife from one of the SYA villages reports, "There is no doubt that our family is healthier now. You can definitely taste the difference in the food. Also, my husband is no longer getting sick from pesticides. He was not that good about wearing a mask and so was getting lung and mood problems. Those are gone now." Another elderly woman, *Rohini*, who lived in the same village said of her farming husband: "Our relationship is much better. He spends more time in the field, he enjoys the meditation and he comes home happy. There is better food on our table and more money in our pocket too. It is definitely better."

The table below documents the data gathered in three consecutive parcels of land in Gargasina village in Haryana, dealing with a) SYA b) Organics and c) Chemical methods of agriculture on the growth, productivity and quality of bread wheat.

Treatment	Biomass (q/ha)	Grain yield (q/ha)	1000 grains weight (g)	Grains Protein (%)
Organic + yogic	81.31	31.46	44.28	9.13
Organic (Farm manure)	63.28	22.78	41.70	9.78
norganic (NPK)	94.59	31.81	41.74	8.03
Control (No FYM or NPK)	61.89	19.76	40.92	7.75
C.D. (0.05)	3.69	2.48	1.49	0.51

Source: Resource Management Unit, Directorate of Wheat Research, Haryana, India

Another local farming community in Gujarat determined that the in SYA, a total of Rs. 14769.00 (\$330) is saved per acre as compared to chemical farming. The expenses under the yogic process are minimal and therefore the profit margin of the yogic process is higher by approximately Rs. 6290.00 (\$140). While the farmers are experiencing the social benefits of a regular meditation practice as well as financial savings, the scientific results are also significant. Some of the significant observations included the following:

- Seeds that had been meditated upon ('meditated seeds'), germinated more quickly than regular seeds.
- In the yogic fields there are greater quantities of Rhizobium, Azotobacter, Azospirillum and PSB (phosphate solubilizing bacteria), indicating improved soil health.

Local and indigenous communities are being motivated to return to traditional forms of agriculture, whilst adapting these methods

to their environment and social circumstances. Environmental collapse will not be halted and biodiversity not protected unless we address the deeper problems of humanity that rest at the level of attitude and associated behaviour.

The Brahma Kumaris World Spiritual University affirm the view of many environmental philosophers, ethicists, psychologists and religious leaders: *that to bring about change in any social or environmental system, the requirement is a foundation grounded in self-reflection, universal values, and self-change.* Sustainable Yogic Agriculture supports a move towards personal responsibility, positive action and integrated spirituality in a way that directly responds to an urgent global need.

More research must be done to determine the large-scale benefits of SYA. All forms of data are required - social, economic, biological. Whether one is an environmentalist, a spiritual practitioner or a scientist, the laws that govern nature are irrefutable. Give - and more will be given to you. Take - and the little you have will be gone. As a human collective, we have used nature as a commodity, and a resource for our own gain, without considering the consequences. Now, it is time to give back to nature, allowing her to replenish, so we may once again live in a sustainable, bio-diverse and abundant world.

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For people within India who are interested in SYA, please email BK Raju at ruralwing@bkivv.org

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