"PURIFICATION THROUGH FIRE: EXPLORING THE HEALING POWER OF VEDIC AGNIHOTRA IN AGRICULTURE, ECOLOGICAL AND SPIRITUAL BALANCE" By

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Agnihotra and Homa Organic Agriculture: Ancient Vedic Wisdom for Modern Sustainable Farming

Since the late 1990s, when we all became involved in environmental issues, we've observed that in battles over clearcut logging, mega dams, industrial chemical pollution, conventional farming, and more, the debate is often framed as one side versus the other. The result is a win-lose scenario-where someone or something always bears the cost. In each conflict, the values and beliefs held by opposing sides are often starkly different. Under such conditions, the choice is framed as either the environment or the economy. But if we are truly fighting for our grandchildren and all future generations, we cannot afford to have casualties. We need solutions where no one-and nothing essential-is sacrificed. We can't afford to go on destroying our planet and fragmenting it bit by bit to get ourselves to verge of ecological collapse, caused by the misuse of our own power.

This calls for alternative approaches that transcend the usual binaries—methods rooted in harmony rather than opposition, in healing rather than extraction. One such promising path is found in the ancient practice of Homa Organic Farming.

Homa Organic Farming represents a fascinating integration of ancient Vedic fire techniques with contemporary agricultural practices, offering a holistic approach to sustainable farming. At its core is Agnihotra, a precise fire procedure performed at sunrise and sunset that purportedly creates a unique microclimate conducive to optimal crop growth, soil health, and environmental balance. This system challenges conventional agricultural paradigms by emphasizing atmospheric healing as a foundation for plant vitality & ecosystem resilience.



Agnihotra is based on biorhythm

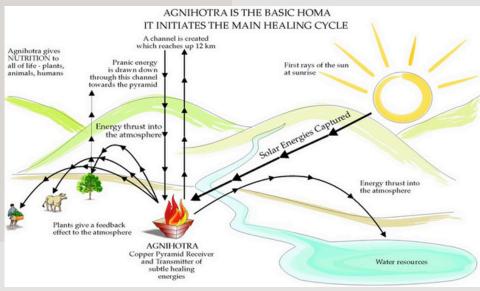
The fundamental side of homa organic farming is that chanting of Sanskrit mantras (Agnihotra Yainya) at the specific

"Agnihotra is not just a ritual—it's a seed of harmony sown into the soil, where fire meets earth to awaken life, restore balance, and cultivate abundance with reverence for nature."

times of sunrise and sunset in front of a fire in a copper pyramid of fixed size and shape. The timing is most important. There is no specific agricultural practice related to Homa organic farming, however the farm and household it's practiced in, is energized and awakened. The ash that results from the Yajnya is employed to energize composts, plants, animals, etc. The practice is used to treat the atmosphere, the soil, plants, pests and disease problems. Homa organic Farming is holistic healing for agriculture and might be utilized in conjunction with any smart organic farming system. It's very cheap and simple to undertake however needs discipline and regularity. Agnihotra (Sanskrit: agni means fire, hotra means healing) is that the basic Homa fire technique, supported the bio-rhythm of sunrise and sunset, and might be found within the ancient sciences of the Vedas. Agnihotra has been simplified and adapted to modern times, therefore anybody can perform it. During Agnihotra, dried cow dung, ghee (clarified butter from cow's milk)) and brown rice are burned in an inverted pyramid-shaped copper vessel along with a special mantra (word-tone combination) is sung. These days it's in the main practiced by organic farmers in South America and India however is additionally gaining increasing attention in North America and Europe.

Utilizing the healing fire, healing ash and vedic sounds, the sounds of natural law to awake the inner intelligence of the plant and promote a peaceful healthy life for all who eat them, the chanting of mantras removes negative energies from the environment.

All life on Earth draws its energy from the sun, making the natural rhythm of sunrise and sunset deeply significant. Agnihotra is a simple fire procedure aligned with this biorhythm. Performed in a small copper pyramid using pure cow dung, ghee, and unbroken brown rice, it involves chanting two specific mantras and offering the rice into the fire precisely at sunrise or sunset. The practice takes just ten minutes in the morning and evening and can be easily learned-even by children. While it requires discipline to follow exact timings, this routine brings us into closer harmony with nature as sunrise/sunset is the basic biorhythm for all life on this planet. Many find it has a calming, balancing effect on both body and mind.



Agnihotra is the foundational Homa fire that sets the healing process into motion.

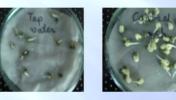
ANCIENT ROOTS, MODERN GROWTH: A TRADITIONAL FARMING METHOD REVIVED

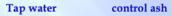
As previously mentioned, Agnihotra is the foundational practice of Homa Organic Farming. Ideally, a small hut should be established at the center of the farm, where Agnihotra is performed consistently at sunrise and sunset, following precise timings. The ash produced from Yajnya—Agnihotra Ash—is highly valuable and can be utilized in various ways: it can be mixed into the soil, added to irrigation water, or applied directly to support the healing of diseased plants.

Additionally, a powerful organic fertilizer known as Homa Biosol can be prepared right on the farm. This nutrient-rich solution is created by combining Agnihotra Ash with cow dung, cow urine, and vermicompost—offering a sustainable, farm-based input that enhances soil vitality and plant health.

Laboratory experiments have demonstrated that both the Agnihotra atmosphere—created by performing Agnihotra near plants —and the application of Agnihotra ash to soil, seeds, or irrigation water significantly enhance plant growth.

The result shows 38% and 31% more growth in shoot length and root length in the seedling treated with Agnihotra fumes environment. Here you see the difference between germination of seeds with tap water, with Control Ash (same substances are burned as in Agnihotra – but without the timings, the mantras, and the pyramid shaped copper vessel), and with Agnihotra Ash Field research on crop yield and





Agnihotra ash

Comparative Study of Seed Germination under Varying Conditions

quality under Homa Organic Farming has been conducted at several agricultural universities, including those in Palampur (Himachal Pradesh), Coimbatore/Ooty (Tamil Nadu), and Dharwad (Karnataka). One noteworthy example comes from the University of Agricultural Sciences, Dharwad, where a series of four M.Sc. these were completed. These studies focused on the effects of Homa Farming

on various horticultural crops, specifically:

- Tomatoes
- Cabbage
- Soybeans
- Okra

The research evaluated parameters such as crop quality, resistance to pests quality, resistance to pests

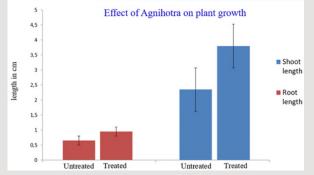
and diseases, and overall yield. Let us now take a closer look at the findings related to yield.

As yields increase in Homa Organic Farming as compared to Conventional Farming, and costs are less (as no agrochemicals have to be bought), the profit of farmers should be higher. This assumption has been confirmed in a

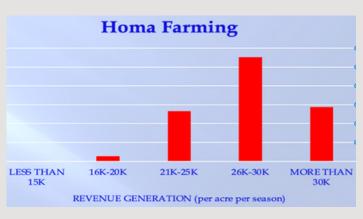
survey done as Ph.D. research recently by Priyanka Khanzode at University of Mysore.

This survey compared Homa Farming with Conventional Farming. A comprehensive study

of 450 farms-225 involving a total conventional and 225 organic farms practicing Agnihotra-based Homa Farming -was conducted across diverse agroclimatic regions of India, including the South (Karnataka), Central (Madhya Pradesh), and North (Chhattisgarh). This wide-ranging analysis offers below the compelling evidence that farmers who adopt Homa Organic Farming experience substantial improvements not only in crop quality and yield but also in their overall economic well-being. The regular performance of Agnihotra and other Homa techniques appears to play a pivotal role in transforming livelihoods, proving ancient Vedic practices can measurable benefits even in today's modern agricultural landscape.







Agnihotra for the Earth: Traditional Fire Rituals Healing Modern Soil Crisis

This quote from thousands of years ago shows the importance of our soil:

"Upon this handful of soil our survival depends. Husband it, and it will grow our food, our fuel, and our shelter and surround us with beauty. Abuse it, and the soil will collapse and die, taking humanity with it." (The quote originally was in Sanskrit language, probably taken from Atharva Veda.)

We appear to be approaching a critical point of soil degradation. According to the FAO (Food and Agriculture Organization of the United Nations), nearly one-third of the world's soil has been degraded since 1960. If agrochemical-based farming continues at the current pace, by 2050 only 25% of the productive land available in 1960 will remain—insufficient to feed the growing global population. Urgent action is needed to restore soil health, and Homa Farming offers a promising solution.

Homa techniques stimulate beneficial microorganisms—viruses, bacteria, fungi, and algae—helping reestablish a balanced micro-flora and micro-fauna in the soil.

A study at Gogate College, Ratnagiri (Maharashtra, India), explored the effects of Agnihotra Ash on farm soil. Four samples were tested, and 1% Agnihotra Ash was added. One week later, microbial

Fungi Control colony Agnihotra Ash Control Ash colony colony size(mm) size(mm) size(mm) Aspergillus fumigatus No growth 10 40 Colletotrichum 8 No growth 4 Fusarium 10 No growth 5

Microorganisms	Colony size (mm)		
	Control	Agnihotra Ash	Control Ash
Bacillus pumillus	0.5	1	1
Pseudomonas aeruginosa	1	2	1
Klebsiella pneumoniae	0.5	2	1
Baker's yeast (Saccharomyces cerevisiae 1)	1	8	1
Industrial Yeast (Saccharomyces cerevisiae 2)	1	10	1
Saccharomyces cerevisiae 3	1	3	1

rise in counts showed a dramatic beneficial bacteria-nitrogen fixers increased 100-fold, and phosphate solubilisers by 1,000-fold- while harmful fungal flora decreased (Berde/Kulkarni 2015). These effects may also depend on soil organic matter content. Further research is essential. Supporting this, experiments by Dr. Ram (ICAR-CISH, Lucknow) confirmed Agnihotra Ash's ability to suppress harmful bacteria.

"Reviving the Earth: A Multi-Pronged Approach to low cost Sodic Soil Rehabilitation"

In 2006, a field trial was conducted at Virendra Kumar Singh Krishi Vigyan Kendra in Virendra Nagar, Dhaura (District Unnao, Uttar Pradesh, India), to evaluate the impact of different treatments on soil quality, particularly soil pH. Before planting wheat, the soil's pH was alarmingly high-measured at 9.86, indicating severe alkalinity. Three separate plots were with different prepared treatments:

- 1. Conventional agro-chemicals
- 2. Vermicompost
- Vermicompost Agnihotra Ash

"The results were truly eye-opening. After the wheat harvest, the plot treated with vermicompost plus Agnihotra Ash showed the most significant improvement, with soil pH dropping to 7.67 remarkable shift encouraging toward healthier soil conditions."

combined

with

"The Microbial Path to pH Balance: Bioremediation of Acidic Soils"

On a Homa therapy farm in southern Poland, runby Jarek and Parvati Bizberg, the soil once painted a bleak picture. When tested by the local agricultural department, it showed a pH of just 4.4—highly acidic and considered unsuitable for cultivation. Agricultural engineers were firm in their assessment: "Nothing will grow here."

But instead of giving up, the couple turned to the ancient science of Agnihotra and Homa Organic Farming. With dedication

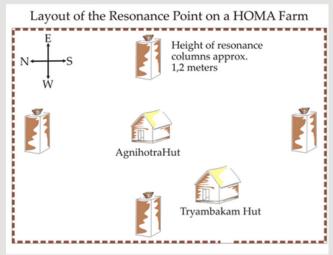


Vegetables grown at the Homa Farm of Fundacja Terapia Homa,
Cals
Poland

and consistency, they performed Agnihotra daily and incorporated Agnihotra Ash into the soil. To everyone's surprise, the results spoke for themselves. Not only did a wide variety of vegetables thrive, but the yields were abundant, and the taste, texture, and quality of the produce were noticeably superior. Over time, the land began to transform. A recent soil test revealed a remarkable change—the pH had risen to 7.2, moving the soil from highly acidic to perfectly neutral.

This inspiring transformation is a testament to the healing power of nature when supported by the right energies and intention.

FROM SMALL PLOTS TO BIG FIELDS: THE POTENTIAL OF HOMA FARMING AT SCALE



Spatial Planning and Setup of Resonance Points in Homa Farms

In India, nearly 70% of farms are small or marginal, each spanning 1 hectare or less. But what about larger farms—can Agnihotra still be effective on plots of 10 hectares or more?

Some suggest using a larger copper pyramid, but this doesn't work. Agnihotra

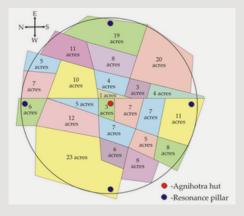
relies on precise sound, vibration, and resonance. Altering the pyramid size disrupts this harmony—just like enlarging a sitar wouldn't amplify its sound, it would distort it entirely.

Thankfully, there's a way to scale Agnihotra's effects: the Resonance Technique. Ten identical pyramids are activated once and then positioned at the cardinal directions of the farm. Agnihotra is

then performed in a central hut, while a Tryambakam fire is lit elsewhere on the land. This setup has been proven effective in extending the benefits of Agnihotra across areas of up to 80 hectares (approximately 200 acres) - "a method proven especially effective in South America.

Since farms in India are often much smaller, the accompanying graphic illustrates how neighboring farmers can collaborate by sharing a single resonance system—optimizing both time and resources."

More information on the resonance technique you find in Berk/Johnson 2009 from which also these graphics were taken.



"ASSESSING THE ENVIRONMENTAL BENEFITS OF AGNIHOTRA ON POLLUTION CONTROL"

"The Bioenergetic Impact of Agnihotra on Air Quality"

Numerous studies, including those by Kumari & Punam (2015) and Abhang et al. (2015), have reported a marked decrease airborne microbial concentration following the practice of Agnihotra. A welldocumented experiment at Ferguson College in Pune illustrated this effectively: agar plates placed in the Agnihotra environment exhibited a notable reduction in hemolytic colonies. While the untreated control room showed 70 colony-forming units per plate, the Agnihotra room recorded just 23—demonstrating its strong air-purifying potential. On average, the microbial colony count in the surrounding air dropped by 70% after Agnihotra compared to before it was performed.

Chemical and Physical Air Pollution

Recent experiments at Vikram University (Ujjain, M.P.) and North Maharashtra University's Institute of Environmental Sciences (Jalgaon, MH) measured harmful pollutants—SO₂ and NO₂—commonly. SO₂: Sulphur Oxides, NO₂: Oxides of Nitrogen, SPM:

, SPM: AMBIENT AIR QUALITY REPORT Numerous studies have VALUES ARE IN MG/M³; SAMPLING PERIOD: 30 MIN shown that Agnihotra Ash

Condition **RSPM SPM** Date Time SO₂ NO₂ 5:15 to 28/03/2016 Before Homa 7.9 27.3 105 69 5:45 28/03/2016 6:30 to **During Homa** 6,2 23,7 75 7:00 7:00 to After Homa 28/03/2016 29.1 83 8.3 10:30 to 15 hrs after Homa 29/03/2016 219 11:00

urban areas due to vehicles. They also analyzed particle pollution. Results showed significant insights into both chemical and physical pollution levels.

Ancient Fire, Modern Cure: Agnihotra's Role in Combating water Pollution"

purifying
properties. When
added to water,
the ash initiates
both chemical
and physical
processes that

contribute

purification.

one instance.

In

possesses water-

Effect of Agnihotra on Microbial count 200 180 Colony count in CFU/m3/min Before 160 Agnihotra 140 120 After 100 Agnihotra 20 60 40 20 Set 1 Set 2

Suspended Particulate Matter (particles floating the air), RSPM: Suspended Respirable Particulate Matter (particle size equal or less than 10 micrometres - these small particles can go deep into our respiratory system) produced by combustion, now dangerously high in

untreated (non-potable) water met the WHO standards for safe drinking water after being treated with Agnihotra Ash. Similarly, polluted water from Pune's Mula-Mutha River was passed through a column filled with the ash. Several parameters of water quality show notable improvements – very polluted water turned into potable water.

Conductivity to -48%, Total solid content-90%, Hardness to -84%, Biological oxygen demand to -48%, Chemical oxygen demand to -7%, Most probable number to -98%, and Standard plate count to -93% (Abhang et al, 2015).

Purification of Water with Agnihotra

Polluted water from the Narmada River was stored in glass bottles inside an Agnihotra room—a space where Agnihotra has been consistently performed at sunrise and sunset for several years, and where silence is maintained apart from the chanting of Agnihotra mantras (No Agnihotra Ash was added). After five days, tests revealed that the coliform bacteria count had decreased by approximately 70% compared to a control sample of the same water kept in a regular laboratory setting.

River Purification with Homa Therapy

The experiments referenced above clearly demonstrate that both Agnihotra and Agnihotra ash contribute to water purification. However, these studies were conducted on a small scale. For agricultural purposes, the challenge lies in treating larger water sources such as rivers and subsoil reservoirs. Can Homa Therapy be effective at that scale? One particularly noteworthy preliminary study by Sharma et al. (2011) explored this question by analysing the water quality of the Narmada River in Madhya Pradesh. Water samples were collected monthly from four locations: two upstream sites (Omkareshwar and Mandaleshwar), one downstream (Barwani), and a midpoint near Maheshwar, where regular Homa Therapy practices were conducted. Remarkably, the site near Maheshwar showed consistently better water quality across all tested parameters compared to the other locations.

THIS RESULT HIGHLIGHTS HOW HOMA THERAPY, ROOTED IN ANCIENT VEDIC SCIENCE, OFFERS EFFECTIVE SOLUTIONS FOR REDUCING ENVIRONMENTAL AND WATER POLLUTION.

Parameter	WHO max. allowed	Omkareshwar	Mandleshwar	Maheshwar	Barwani
рН	6.5 - 9.2	8	8.2	7.5	8
Total Solids	1500	1090	1256	650	1225
Total Hardness	500	555	620	475	650
Chlorides	600	550	520	250	652
Nitrates	45	15.5	20.5	12	22.5
Sulphates	1000	450	375	250	350
Coliform Count	100ml	500 ml	600 ml	100 ml	700 ml

Homa Organic Farming goes far beyond revitalizes the ecosystem, and creates a being a sustainable alternative conventional agriculture—it is a powerful, nature-aligned system of ecological restoration. Rooted in the ancient Vedic practice of Agnihotra, Homa Farming not halts further environmental degradation but actively works to purify and regenerate the air, water, and soil. Where chemical-based farming depletes and pollutes, Homa Farming heals, enriching the land and strengthening its natural cycles.

By harmonizing with the rhythms of nature through fire rituals and mindful land stewardship, this approach encourages the proliferation of beneficial soil microbes,

supportive environment for healthy crop growth. Farmers benefit from reduced input costs, improved vields, and more nutrient-dense produce-all while contributing to the long-term well-being of their land.

This synergy between ancient wisdom and ecological science provides more than just a method of farming-it offers a path toward healing the planet. As soil health continues to improve each year, Homa Farming ensures that future generations inherit a fertile, balanced, and thriving Earth—a legacy of regeneration, resilience, and reverence for nature.

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Priyanka Khanzode

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Ph. D. Thesis, University Of Mysore, October 2021

> "Ignoring Vedic wisdom is like silencing the Earth's voice—it speaks in rhythm and reverence. Agnihotra isn't superstition, but a sacred sync with nature's heartbeat, calling us back to balance."