

SURABHI **THE HOLISTIC HEALER**

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Organic movement is built on a fundamental principle

- The birth right of all living things is health
- This law is true for soil,plant,animal and man: the health of these four is one connected chain
- Any weakness or defect in the health of any earlier link in the chain is carried on to the next and succeeding links, until it reaches the last ,namely, man

Organic movement is built on a fundamental principle

- The widespread vegetable and animal pests and diseases are the evidence of a great failure of health in the plant (Second) and animal (third)links of the chain
- A a consequence of this failure in the plant(Second) and Animal (third) links there will be impairment of health in the human population (the fourth link)

Organic movement is built on a fundamental principle

- This general failure in the last three links is to be attributed to failure in the first link, the soil: the undernourishment of the soil is at the root of all

Organic movement is built on a fundamental principle

- Organic crop and livestock production focuses on building soil organic matter and biology to create a sustainable, dynamic environment for producing healthy food and feed

We have classified the Utility of cows as for

MILCH



DRAUGHT



In the current dairying cows end in the garbage



Present Organic dairy Farming

- As a consequence to the current dairying practice the National soil organic carbon % has come down from 3 to 0.3
- Rainfall has become ineffective

Hence in real organic dairying the priority is in

- Farming Fertility to the soil by increasing the soil biology by using cows as the tool
- From a fertile soil we get
 - Healthy herd
 - Real milk and water
 - Real fruits,nuts,grains,flowers etc

Treatment and prevention in Organic herds

- No Antibiotics- No mastitis in the herd
- No teat dipping
- No Deworming
- No Vaccination-We can eliminate viral diseases but not feeding protein foods grown with urea
- Herd is free from
 - Mastitis,
 - Brucellosis,
 - Weak calf syndrome,
 - Hypocalcaemia etc

Now How to bring the National organic Carbon % to above 3% ?

- Increasing the organic content in it
- Increasing the biological activity and biodiversity
- Increasing the available nutrients
- Increasing moisture holding capacity and more
- "The only known tool to heal the land is animal impact." -
 - Allan Savory,Biologist ,Founder Savory institute

Animal impact for Soil Health



Animal impact with cows

1. IMPACT BY GRAZING

2. IMPACT BY FOLDING OF CATTLE IN MOVABLE ENCLOSURES OR KRAALS



1. When cows graze

- They're nibbling on the grasses in a way that exposes their growth points to sunlight and stimulates growth...
- Their trampling [of the land also] does several things: it breaks any capped earth so that the soil is aerated.
- It presses in seeds [giving them] a chance to germinate, so you have a greater diversity of plants.
- [Grazing herds] also press down dying and decaying grasses, so that they can be better acted upon by microorganisms in the soil. It keeps the decaying process going. -Mulching
- Their dung and urine also fertilizes the soil."

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Animal impact by grazing

- Pruning of grass -While grazing
- Mulching of the soil -lays dead plant material on soil as cover and mulch
- Seeding -Buries the seed and compacts soil
- 100% utilization of dung and urine as manure
- Water infiltration-Breaks hard soil surfaces to allow water in
- Feeding of cows-By Grazing

Building soil with high density short time Grazing



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Working against nature

The animals are feeding without their normal movement



Working against nature

- They are eating forages isolated from soil
- When the cows “recycle” the grasses, the dung has nowhere to go where soil life forms will process it to perform their many beneficial functions-The dung goes to storage tanks

Dung may be precious to us but is stool to the cow



If you smell manure (Dung & urine) you are smelling mismanagement

It is not natural-nature does not collect the excrement of her fauna in this way



Impact for more time compacts the soil



Working with nature

The animals are feeding with their normal movement on the land



Working with nature

They are recycling grass into dung which goes directly to the soil where it will be processed by soil life forms to perform their many beneficial functions



All the dung and urine falls on the ground



When cows are grazing

It is rapidly attacked by dung beetles, earth worms & other soilbiota



Dung pads to mud pads by Bioturbation



Taking it into various depths in the soil



The tunnel systems

- Improves the physical structure of the soil
- Increasing aeration
- Reducing compaction
- Bringing subsoils to the soil surface(Bio-turbation)
- Incorporating organic matter into the soil
- Increases the effectiveness of rainfall

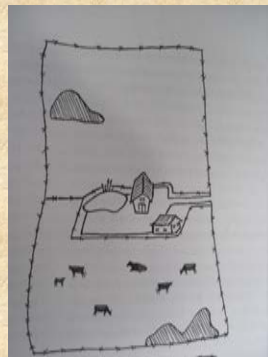
Effective rainfall

- It is the rain that falls on the surface of the soil, soaks in and then leaves the soil only by two ways
 - By flowing through the soil to perennial flows, underground water reservoirs
 - By transpiration through green growing plants

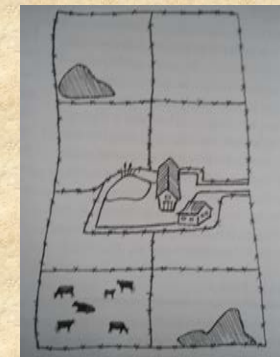
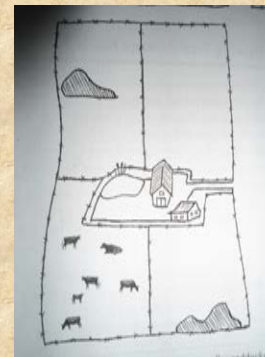
Stocking Density

No of cows	Weight(Kg)	Land area in acres	Stocking density/acre
40	16000	10	1600
40	16000	1	16000
40	16000	0.25	64000

Grazing in a 10 acre property



Grazing in 10 acre property with 6 cows



Advantages of planned grazing (High density short time)

- Cows graze a greater proportion of available plants more evenly
- Distribution of grazing, dung and urine more evenly
- Cows move more frequently to fresh ground which provides a more constant level of nutrition
- Tighter plant communities develop
- Animal performance improves

The next plot waiting for the cows in Gokuldham, Belgaum



Plan your horticulture garden to integrate cows

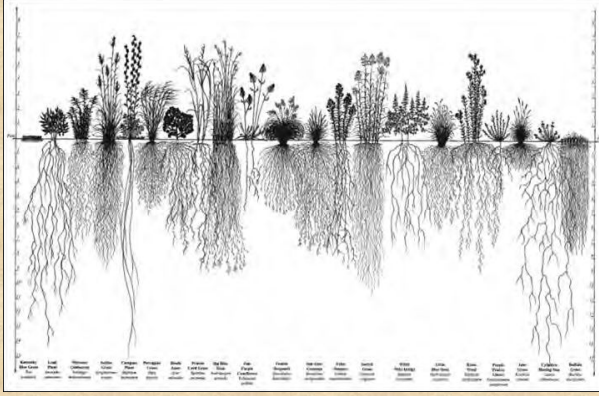


Effect of rest to regrow after grazing-More roots in soil

1. Longer rest periods mean more roots
2. Feeds the micro-organisms
3. Withstands droughts better.
4. Pulls minerals from deeper in the soil
5. The next time they come to graze they get a better quality grass



Root diversity



Building Soil with High Density Grazing

- Water-Holding Capacity Organic matter behaves somewhat like a sponge, with the ability to absorb and hold up to 90 percent of its weight in water. A great advantage of the water-holding capacity of organic matter is that the matter will release most of the water that it absorbs to plants.

RigVeda 6.47.20

- अगव्यूति क्षेत्रमागन्म देवा उर्वी सती भूमिरंहूरणाभूत् ।
बृहस्पते प्र चिकित्सा गविष्टावित्था सते जरित्र इन्द्र
पन्थाम् ॥
- अगव्यूति - Waste land that is not visited by cows. We have come upon a vast tract of land that has no cows. It has the looks of having been devastated by wars. Bring on the cows and provide special care for this land to restore its health, and show the path for good citizens to bring it to life

RigVeda 6.47.21

- .दिवेदिवे सदृशीरन्यमर्धं कृष्णा असेधदप सद्मनो जाः ।
अहन् दासा वृषभो वस्नयन्तोदव्रजे वर्चिना शम्बरं च ॥
- Day by day, in stages by help of black skinned cows? Create habitat and facilities of water and suitable housing for manpower and other land reclamation resources, in one part of land and then moving over to the next part of land, it is possible to reclaim the wasteland, and replace them with greenery to attract rains and make the land habitable

RigVeda 6.47.22

प्रस्तोक इन्नु राधसस्त इन्द्र दश कोशयीदश वाजिनोऽदात् ।
दिवोदासादतिथिग्वस्य राधः शाम्बरं वसु प्रत्यग्रभीष्म ॥

- Thus it is possible to move forward in blocks of ten miles to gradually reclaim waste lands to convert them in to fertile agriculture wealth producing farm land by greening to attract atmospheric rains.

Rig veda 6.47.23

- Thus in blocks of ten miles land reclamation can provide prosperity and wealth by farm produce, for food, cotton etc for clothing, horses etc for energy and modes of transport

Rig veda 6.7.24

- Thus a peace loving life style emerges in society supported tens of horse drawn carriages and hundreds of cows

1.1.3.1 RigVeda 10.27.20

एती मे गावौ प्रमरस्य युक्तौ मो षु प्र सेधीर्मुहुरिन्ममन्धि ।
आपश्चिदस्य वि नशन्त्यर्थं सूरश्च मर्क उपरो बभूवान् ॥ ऋ
10.27.20

Farmlands with cows retain water and maintain healthy soil organisms, with twin bounties Urine and Dung of cows, which eliminate harmful microorganism and keep soil fertile like sun and rains make the land free from harmful pests make it fertile.

4.1.0.28 AtharvaVeda 12-4-28

Stall feeding is harmful घर में गौ को बंध कर मत रखो

यो अस्या ऋचउपश्रुत्याथ गोष्वचीचरत् ।

आयुश्च तस्य भृतिं च देवा वृश्चन्ति हीडिताः ॥
अथर्व 12-4-28

One who keeps Cows at home to feed even after hearing the morning mantra patha suffers in life.

The function of grazing is their utility. If they are not grazing they can become a liability

Working for us



When you graze the forage, you are recycling about 90 % of those nutrients back into the ground,

2.Impact by Folding of cattle in temporary enclosures or kraals



Soil improvement programme by keeping cows on the land in Ahmedabad Iskcon

See what happened to that place within 12 hrs



Uniform distribution of dung and urine.Land is ready for farming

Cows in movable grazing paddocks in Gokuldam, Belgaum



Impact After High density short time Grazing



Over night enclosures in Jaipur



The next day the soil looks like this



Advantages of movable temporary homes for cows in the farmland

1. It saves the labour of collecting manure and spreading it on the land. Manure, in addition, gets evenly spread.
2. The land also gets the urine which is very vital in improving soil health along with the dung. Cow urine is a chief component in breaking down the lignin and cellulose, without which the decomposition time prolongs.
3. The soil is churned or literally powdered, ready for farming.
4. Helps builds soil fertility faster at very little cost.
5. If seed is sown before the cows are kept ,they shall trample the seeds into the soil to enable seed to soil contact-Trample seeding

4.1.0.51 AV 12-4-51

ये वशाया अदानाय वदन्ति परिरापिणः । इन्द्रस्य मन्यवे जाल्मा आ वृश्चन्ते अचित्या ॥ अथर्व 12-4-51

वे लोग जो गोसेवा मे समय नहीं देते, जैविक कृषि, पञ्चगव्य इत्यादि का लाभ नहीं लेते, वे रुद्र के कोप से ग्रसित होते हैं। Those ill advised who do not devote their time and labor for utilizing the family cows , and cultivate organic crops they suffer through pests insects, diseases thrown by Rudra.

Real food is the food produced without pesticides-
Inorganic or organic

4.1.0.9 AtharvaVeda12-4-9 Cow Dung and Urine

गोबर गोमूत्र यदस्याः पल्पूलनं शकृद्दासी समस्यति ।
ततोऽपरुपं जायते तस्मादव्येष्यदेनसः ॥ अथर्व 12-4-9

Throwing away in to waste the Cow Dung and Cow Urine disfigures the society.

Real food comes only from the land where cows are kept and moving

Animal impact triggering life in soil

- Kinetic energy by movement of hooves on land
- Solar energy flow converting carbon to sugars
- Disturbance to grass roots and soil by the prehension pull by cows
- Energy through dung and urine

Advantages of High density short time planned grazing

- Cows graze a greater proportion of available plants more evenly
- Distribution of grazing, dung and urine more evenly
- Cows move more frequently to fresh ground which provides a more constant level of nutrition
- Animal performance improves

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Why urine also should be tapped

- Key substance in the manufacture of humus from vegetable waste
- It contains in a soluble and balanced form all nitrogen and minerals needed for the work of fungi and bacteria which break down the various forms of cellulose-First step in the synthesis of humus
- Medicinal properties

4.1.0.51 AV 12-4-51

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Those ill advised who do not devote their time and labor for utilizing the family cows , and cultivate organic crops they suffer through pests insects, diseases thrown by Rudra. (Rudra here is the controller of harmful diseases caused by microbial agents).

A 12 hour grazing plot for 15 cows in Gokuldam Belgaum



The next day the soil looks like this



Advantages

- ❑ No labor for dung removal/Cleaning goshalas
 - ❑ 100% utilization of dung and urine
 - ❑ No labor on cutting ,chopping and feeding of grass
 - ❑ Feeding the soil
(Effective Rainfall,mulching,manuring)
- The land shall be ready for farming

Vegetable cultivation in Kraaled land



The plot after kraaling



Same plot after the rain



Same land now in dec 2017



After kraaling cows at night



Same plot after rains



Comparative Difference in growth of maize with animal impact

Cows not kept

Cows kept overnight



Paddy cultivation in kraaled plot in Goa



The model cow herd boy



Herders/Grazers

- Grazers have the perfect tool to
 - regenerate land,
 - restore soil heath and humus, and by default build carbon and positively influence the environment.
- **The ability to control the movement of livestock across the landscape puts the power in your hands.**

Working of Livestock(Bulls)

- It is doing what it wants to do
- It is doing what I want it to do
- So we both are happy
- They willingly do it for us if we let them

Take home message from THE COW

- Complete, healthy food from lands depend on only a few hours of grazing as they move
- The cows plough, plant, mulch, fertilize and harvest or prune as they pass
- They also manufacture a directly edible, nutritious food as they pass

Managing the resources

- *"If you continue to do what you've always done, you'll continue to get what you've always got!!" - Henry Ford*
- Cows are our resources and common sense tells that resources do not cause problems. **It is how we manage them that results in problems.**

By keeping cows on land Let us replace

- Pharmacology
with

"Farmacology"

Can you calculate the cost to Society in terms of Health problems attributed to unnatural farming methods. Holistic Farming considers everyones welfare, people, animals, land, water, environment...

Real food comes only when we move cows

FROM GARBAGE

TO PASTURE OR CROP
LAND



Cows by nourishing the soil ensures our protection by providing us with the real food, real water, real flower .

When the soil regains health by animal Impact

- Plants are healthy
- When green cover is healthy
- Animals are healthy
- Man is healthy (Transfer of Real health by cows to man)

The real cow products in holistic cow protection

Those which prevents as against
Versus
Those sold to cure Diseases

The real cow products-Vegetables



Millets

MILLETS

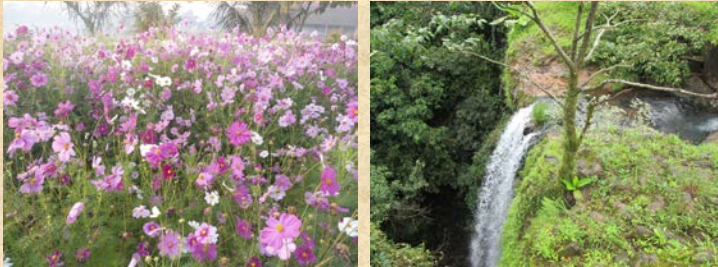
GRAINS



Flowers

FLOWERS

WATER



Summary

- ❑ Organic crop and livestock production focuses on building soil organic matter and biology
- ❑ healthy soils lead to healthy crops, healthy animals, healthy humans, and a healthy planet.
- ❑ Success in dairying is dependant on how effectively we move the cows on land.
- ❑ As the soil improves the quality of fodder improves which in turn improves on the milk
- ❑ A cow moving on land is an asset and a cow separated from land shall be a liability

Summary

- ❑ Graze here today, leave here today and do not come back here till the roots and leaves are fully recovered(2-9 months or more depending on local conditions)
- ❑ Gather the animals together for animal impact, easier grazing management, easier handling and more even grazing.

As a career

If you are seeking a career that can assure you the real food(Fruits,nuts,milk),real water, real knowledge and real environment then the only career available to human being is **“Cow care and land management”**

SRIMAD BHAGAVATA MAHATMYAM Chapter3. Verse 39

- uktaà bhägavataà nityaà kåtaà ca hari-cintanam / tulasé-poñaëaà caiva dhenünää sevanaà samam //39//
- Read daily Srimad BHAGAVATAM, instill Sri Hari Katha in one's heart, water and nurture Tulsi plant, up bring the cows with love and affection - all these actions are equal.

Reference

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Reference videos

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- Holistic management by Allen savory
- Treating farm as an ecosystem by Gabe brown
- The Healing Effects of Holistic High Density Grazing on Land, Livestock & People's Lives, Greg Judy.