

[illegible]

A hand-drawn map of a rural landscape. In the center is a farmstead with a large red-roofed building, a smaller grey building, and several circular ponds. To the top left is a larger blue pond. The landscape is filled with green fields, trees, and winding paths. Faint text labels like 'PARKS & GARDENS' and 'ACCESS ROAD' are visible. The overall style is artistic and illustrative.

Introduction

“Every bioregion needs a vital Biodynamic farm and educational centre that anchors the creative light of the sun, moon, and stars deep into the body and soul of the local geography and community.”

Current Situation

Globally, planet and society are facing serious challenges, some of which are:

- Topsoil erosion, deforestation, loss of biodiversity and species extinction, ocean acidification, water-table depletion, rocketing lifestyle diseases, climate calamities

The situation is compounded in South Africa, with:

- Annual topsoil loss at 157,500,000 Tons (12,6 T/HA/Year)
- Between 7 – 14 million people go to bed with an empty stomach each night (14%-28% of population),
- 16 children dying of hunger every day
- ¾ of young children don't meet the minimum standard of nutritional intake
 - Their ability to learn permanently damaged by hunger
- An excessively high violent crime rate
 - Overwhelming evidence now linking severe childhood malnutrition to an increased propensity for violence in adulthood
- 90% of all maize is GMO – only country in world with GMO as its staple food
- Unemployment rate of 36,7%

Current Situation (cont.)

Industrial agriculture, which treats human, animal and all of nature as expendable inputs, serve as both cause and fuel to these challenges:

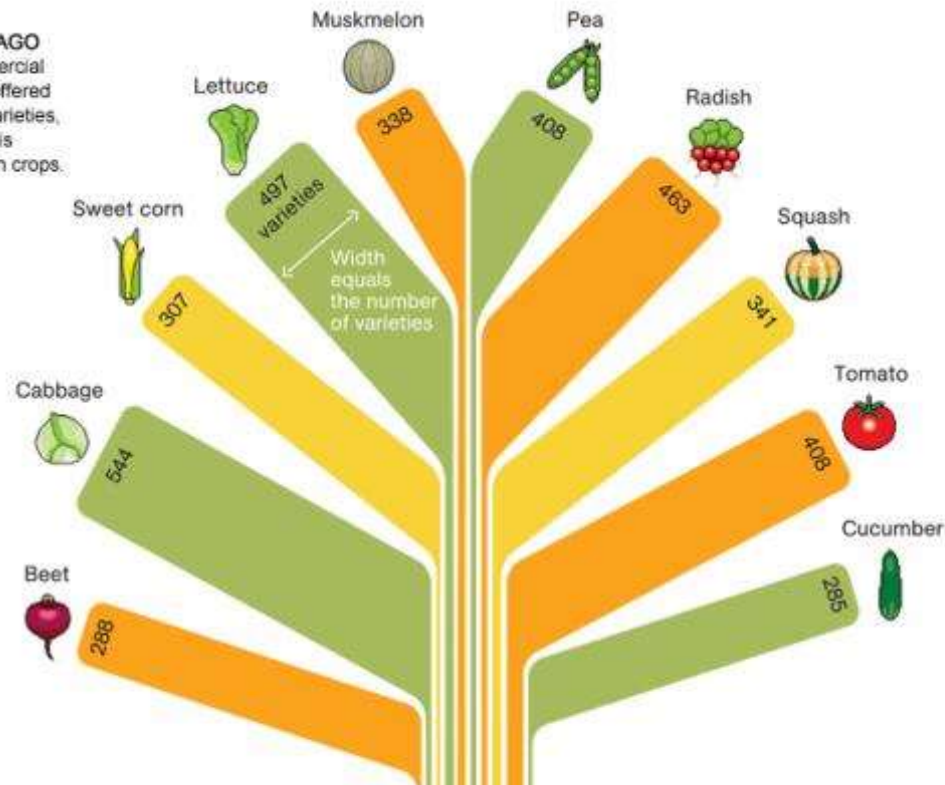
- Producing food void of nutrition and laced with toxins and poisons
 - For South Africa no quantification required or maximum limit of pesticides allowed on crops
 - Animals pumped full of antibiotics and growth hormones, kept in inhumane living conditions
- Pollute, contaminate and destroy life sustaining systems including our air, water sources, soils, forests, driving thousands of species extinct through:
 - Large scale monocultures, excessive spraying of fertiliser, pesticides, fungicides, herbicides, large scale animal feedlots all of which produces toxic run-off
- Privatisation of seeds/life, which is being intensified by the coming new:
 - UPOV 91 (Union for the Protection of New Varieties of Plants) and PVP (Plant Variety Protection) legislation, driven by international Big/Chem Ag
- Exploitation and poisoning of workers
- Capturing and monopolising of the food value chain - from land and seed to retail
- All of which erodes human health, social cohesion and our very consciousness

Current Situation (cont.)

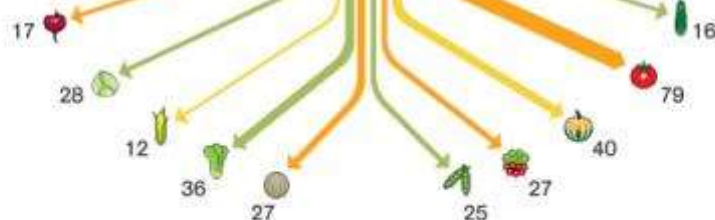


Loss in Seed Diversity

A CENTURY AGO
In 1903 commercial seed houses offered hundreds of varieties, as shown in this sampling of ten crops.



80 YEARS LATER
By 1983 few of those varieties were found in the National Seed Storage Laboratory.*



* CHANGED ITS NAME IN 2001 TO THE NATIONAL CENTER FOR GENETIC RESOURCES PRESERVATION

JOHN TOMANIO, NGM STAFF. FOOD ICONS: QUICKHONEY
SOURCE: RURAL ADVANCEMENT FOUNDATION INTERNATIONAL



The Alternative

- A food system that values human and nature
- Do not aim to control and patent life/seed
- Do not waste/pollute our precious and dwindling natural resources
- Enhances our natural resources and diversity for current and future generations
- Address all of our societal problems:
 - Food sovereignty, meaningful/fulfilling employment, malnutrition, crime, climate change and heals the human-human and human-nature relationship

The Alternative (cont.)





Objective

- To create a regenerative community based farm, growing nourishing food and reconnecting people to the Earth. We do this through growing food Biodynamically and creating a culture of soil, plant and animal stewardship
 - A farm around which the surrounding community and culture itself can be revitalised and built up
 - To serve as an example that an alternative way of doing/producing/eating/living is possible
 - Provide an environment which stimulates and unlock the full human potential and together with nature create untold of abundance

Objective (cont.)

In addition to growing nourishing produce, the farm will have a strong social focus:

1. Serve as a demonstration/learning farm
 - Hold regular workshops – e.g. growing your own food, seed saving, compost making, etc.
 - Learning/practical/intern/research programmes with schools, colleges, universities and other institutions.
2. Serve as platform for community engagement
 - To discuss, engage and mobilise around various issues facing our food, food system and environment.
3. Support surrounding micro/subsistence farmers
 - Provide them access to market by aggregating their small individually produced quantities.
 - Provide them access to inputs like seeds, compost, etc. at bulk discounted prices.

Benefits of Regenerative Agriculture?

Key benefits of regenerative agriculture to people and planet:

1. Nutrient dense wholesome food

- Real food feeding body, mind and spirit
- Free from toxins and poisons (of food, soil, water, people and animals)

2. Resilience, self-sufficiency and security

- Locally produced food = food sovereignty
- Better able to cope with unpredictable weather patterns and global price shocks
- Meaningful local jobs

3. Lower inputs and greater output

- Let nature do most of the work providing greater yield and profits
- Not dependent on expensive chemical inputs (fertiliser, pesticide, fungicide, etc.)

4. Biodiversity and health

- Preserve nature, water sources, ecosystems and health
- Builds organic matter and top soil while sequestering CO₂ from atmosphere:
 - 1% increase in soil organic matter increases soil water holding capacity by 236,000 litres per hectare

The Plan

- 1 Hectare (HA) mixed vegetable farm
- Producing healthy, vibrant and nourishing vegetables
- Intensive no-till/minimal soil disturbance cultivation



The Plan (cont.)



The Plan (cont.)

In addition to growing food, also provide organic agricultural training/workshops
Space for community to engage and organise on issues facing food/food system



An aerial photograph of a rural landscape serves as the background. It shows a mix of green fields, some blue water bodies, and a network of roads and paths. The text is overlaid on this image.

The Plan (cont.)

Farm Layout

- 1HA farm – 160m x 63m
- Divided into 15 plots
 - To allow for crop rotation – determined by nutrient requirements (heavy feeders followed by light feeders) and plant families (four years break between vegetables in same family planted in same bed).
- Producing healthy, vibrant and nourishing vegetables
- Intensive no-till/minimal soil disturbance cultivation

Expected Cost

CAPEX		MATERIALS		TOTAL FIXED COST	
Irrigation	R 120 000	Compost	R 100 000	Capex	R 550 000
Cold Room	R 80 000	Fertiliser/Soil Amer	R 15 000	Materials	R 305 000
Greenhouse	R 150 000	Seeds	R 30 000		
Seeder	R 5 000	Shade Netting	R 30 000	Total	R 855 000
Wash bay&pack house	R 120 000	Frost Covers	R 30 000		(\$57,977)
Water Tank (40,000 l)	R 75 000	Insect Netting	R 30 000		
		Tarp	R 30 000		
Total	R 550 000	Seedling Trays	R 4 000		
	(\$37,295)	Vegetable Crates	R 3 000		
		Tools	R 15 000		
		Scales	R 3 000		
		Miscellaneous	R 15 000		
		Total	R 305 000		
			(\$20,681)		

Expected Production & Sales

Vegetables	# of Seedings	# of Beds Allocated	Beds Under Harvest	Yield Per Seeding Per bed	Yield For Season	Sales @ *Retail Price	Sales @ *W Price	*Average Price
Beans	5	28	5,6	29 kg per week	1 949	R 75 984	R 45 590	R 60 787
Beetroot	6	28	4,7	160 x 4 beet bunches	896	R 34 935	R 20 961	R 27 948
Broccoli	4	28	7,0	120 heads	1 008	R 39 302	R 23 581	R 31 442
Cabbage	2	28	14,0	150 heads	2 520	R 98 255	R 58 953	R 78 604
Carrot	8	28	3,5	180 x 10 carrot bunches	756	R 29 476	R 17 686	R 23 581
Cucumber	2	2	1,0	115 long per week (38 p/week)	730	R 28 447	R 17 068	R 22 758
Garlic	1	16	16,0	600 bulps	11 520	R 449 165	R 269 499	R 359 332
Onion	2	28	14,0	181 kg	3 041	R 118 561	R 71 136	R 94 849
Lettuce	8	28	3,5	250 heads	1 050	R 40 940	R 24 564	R 32 752
Spinach\Kale	4	28	7,0	150 bunches per week	3 780	R 147 382	R 88 429	R 117 906
Tomatoes	2	2	1,0	68 kg per week (22kg p/week)	634	R 24 704	R 14 822	R 19 763
					Annual Sales	R 1 087 150	R 652 290	R 869 720
					Annual Expenses	R 632 004	R 632 004	R 632 004
					Annual Profit	R 455 146	R 20 286	R 237 716

\$31 141 \$1 388 \$16 264



Thank You!

Solving the problems of
hunger, food sovereignty,
climate calamities, dignity
and meaningful work
through regenerative
agriculture.