By J.T. Thon

DIRT: THE NAME CONJURES UP IMAGES OF A DEAD UNDESIRABLE THING.

WHEN CONTRASTED WITH THE MENTAL IMAGE OF THE WORD;

SOIL: A WORD THAT IS INFUSED WITH LIFE, THE DIFFERENCE IS OBVIOUS.



"This will be a series of articles discussing the relationship between energy, soil and crop health. It is too large a topic to cover in one article; so it will be discussed over 3 volumes. These articles hopefully will serve as a starting point for the reader to investigate further. This topic is an iceberg of information, but if the reader looks under the surface, this knowledge will hopefully contribute to the once common ability to bring life back into the dirt and transform it into self-maintaining life giving soil. It is my hope you enjoy the quest." – J.T.Thon.

VOLUME 2.

The Hunzakut People Commonly known as the Hunza are a group of People Located in the Himalaya region of Northern India. The Hunzakut People have one of the Longest average life span out of any group of People in the World. The Average Hunza lives to 120 years with many living to 145 years. The Book <u>The Healthy Hunza</u> By J.I. Rodale looks at the Work of a variety of People who have spent many years studying the Enigma of the Longevity of the Hunzakut People. The Hunza people have no known cases of Cancer, rheumatism, diabetes or intestinal diseases. One of the first People to Study the Health of the Hunza People was Sir Robert McCarrison. McCarrison was amazed at the immunity record of the Hunzakut's who although surrounded on all sides by People afflicted with Many kinds of Degenerative and Persistent Diseases Still Did Not Contract any of them.

The plant and animal husbandry practices of the Hunza people are exemplary. While Sir Albert Howard was studying the hunza composting practices he discovered the secret to all diseases in plants. Which was of course, lack of mineralization and lack of healthy soil. It was Sir a. Howard who pioneered the idea of preventative measures instead of corrective measures in agriculture. Sir Howard studied the Hunza crops and noticed that much like their own health, the Hunza crops show little if any signs of disease. Sir a. Howard noticed exactly what Sir R. McCarrison noticed that despite the crops of the tribal neighbors of the Hunza's suffering blight and other plant diseases, the hunza crops and farm animals like the hunza themselves were robust and free of sickness. Why? What, if any, was the common factor? After many years of studying the Hunza's agricultural practices Sir Albert Howard made some interesting discoveries and correlations.

SIR ALBERT HOWARD, NOTICED THAT THE HUNZAKUT FARMERS NEVER USED CHEMICAL FERTILIZERS, WHILE THEIR NEIGHBORS DID. SIR HOWARD, ALSO NOTICED THAT THE HUNZA FARMERS WERE METICULOUS IN THEIR CREATION OF A UNIQUE FORM OF COMPOST.

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THE HUNZA COMPOST CONTAINED 3 PARTS PLANT MATTER AND 1 PART ANIMAL PRODUCTS. THE HUNZA FARMERS WOULD MIX THIS COMPOST IN SPECIAL BUILDINGS DESIGNED FOR THIS SPECIFIC PURPOSE. THE HUNZA NEVER USE THE COMPOST ON THEIR FIELDS UNTIL IT HAD SAT AND PROCESSED FOR AT LEAST 6MONTHS AND HAD BEEN ATTENDED DAILY TO OBSERVE, AERATE AND TURNED. SIR HOWARD'S RESEARCH ON THE EFFECTS OF CHEMICAL FERTILIZERS ON THE HUNZA'S NEIGHBOR'S SOIL WHICH WAS USED EXTENSIVELY THROUGHOUT INDIA SHOWED A GRADUAL DECREASE IN YIELD AND PLANT VITALITY WHEN COMPARED TO THE FIELDS OF THE HUNZAKUT FARMERS. THE PEOPLE OF INDIA WHO CAME TO RELY ON HEAVY ARTIFICIAL FERTILIZERS FOUND THEIR LIVING SOIL TURNED INTO INERT DIRT OVER SEVERAL YEARS REQUIRING THE USE OF MORE AND MORE ARTIFICIAL FERTILIZERS. THESE FINDINGS CORRELATE WITH VIKTOR SCHAUBERGER'S FINDINGS IN AUSTRIA AS MENTIONED IN PART 1 OF THIS ARTICLE.

SIR A. HOWARD NOTICED THAT THE HUNZAKUT FARMERS WERE METICULOUS IN COLLECTING ALL EXCESS PLANT MATTER FROM THEIR FIELDS FOR COMPOSTING. THE HUNZA'S WOULD EVEN COLLECT THE ROOTS FROM THE MILLET, AND GRAIN PLANTS WHICH THEY PULLED OUT BY THE ROOTS WHEN THEY WERE HARVESTED. NO EXTRANEOUS PLANT PARTS ARE WASTED. EVERYTHING IS COMPOSTED. THEN THEY COMBINED THIS WITH DEAD INSECTS, AND DEAD WORMS AND ANIMAL BONES AS WELL AS FERMENTED AND ROTTED MANURE OF A VARIETY OF ANIMALS AND RETURN ALL NUTRIENTS BACK INTO THE SOIL IN A FORM THAT THE SOIL MICROORGANISMS CAN UTILIZE.

They are so meticulous in fact that every farm animal and bird manure they can find is collected and composted until well-rotted and fermented. The Hunza farmer's children even go so far as to follow their cattle around with bowls to collect the manure and never let it sit on the field but process it in the special compost buildings throughout the community. The hunza even collect human waste from their latrines. This use of human waste was carefully done.

IN A HUNZA LATRINE THERE IS A BUCKET OF FRESH TOP SOIL BESIDE THE OUTHOUSE, AFTER EVERY BOWEL MOVEMENT THE HUNZA PUT A FEW SHOVELS OF TOP SOIL ON TOP OF THE WASTE. MANY TRAVELERS FROM ENGLAND NOTICED HOW HUNZA LATRINES HAD NO SMELL EVEN WHEN ONE STOOD RIGHT BESIDE THEM, THIS CONTRASTED SHARPLY WITH THE STENCH FROM THE LATRINES OF OTHER PEOPLES THROUGHOUT INDIA. UNLIKE MANY OF THEIR NEIGHBORS AND FARMERS IN CHINA WHO USED HUMAN WASTE AND MANURE THE HUNZA'S NEVER USED IT BEFORE IT HAD ROTTED AND FERMENTED FOR AT LEAST 6MONTHS. BY RIGIDLY OBSERVING THIS RULE THE HUNZA PEOPLE NEVER ENCOUNTERED PROBLEMS THAT WERE FOUND IN OTHER COUNTRIES WHICH USED HUMAN WASTE OR ANIMAL MANURES WHICH WERE APPLIED RIGHT AWAY TO THE FIELD. WHEN MANURE OF ANY KIND IS APPLIED TO EARLY WITHOUT PROPER FERMENTING AND ROTTING IT IS TOO RICH AND BURNS THE MICROORGANISMS IN THE SOIL MUCH LIKE CHEMICAL FERTILIZERS DO, WHILE ALSO PASSING ON PARASITES AND DISEASE TO THE HUMAN AND ANIMAL CONSUMER. THE HUNZA'S ARE NOT THE ONLY PEOPLE WHO UNDERSTAND THE IMPORTANCE OF WELL-ROTTED MANURE; THE ANCIENT HEBREWS UNDERSTOOD THIS AS WELL AND THIS IS DISCUSSED IN DETAIL IN THE BOOK <u>THE MISHNA AND THE TALMUD</u>.

When one reads the research found throughout the book <u>The Healthy Hunza's</u> one finds that although the hunza people do not have large areas of flat land they have an abundance of high yield nutrient dense crops. We have just discussed the meticulous way the Hunza's prepare and use compost. Which is one aspect of their success but not the only reason. Another reason for their high yields and disease resistant crops is that each family carefully gathers, preserves and selects seed varieties which they have cataloged over generations and use the seed variety best suited to expected weather conditions of that coming year.

The Hunza also construct many of their garden plots by creating terraces out of the Hillsides much like the Inca farmers in Chile and Peru have done. This allows them to build up the Bed and soil layers to unsure great aeration of the soils. They also

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ONLY USE OXEN PULLED WOODEN PLOWS AND IBEX HORN DIGGING TOOLS. THE USE OF OXEN, PREVENTS TO SOIL FROM COMPACTING. THE USE OF THE WOODEN AND HORN FARM IMPLEMENTS IS DUE IN LARGE PART TO THE ISOLATION AND LOW CAPITAL AVAILABILITY RATHER THAN FOR A PARTICULAR REASON, HOWEVER, AS DISCUSSED IN PART 1 OF THE ARTICLE; THE AUSTRIAN POLYMATH AND GENIUS VIKTOR SCHAUBERGER DISCOVERED THE USE OF IRON AND OR STEEL FARM IMPLEMENTS DENUDES THE SUBTLE ENERGY FIELDS FROM THE SOIL BY DEPOSITING RUST PARTICLES INTO THE SOIL, THUS SCHAUBERGER RECOMMENDED THE USE OF WOOD OR COPPER FARM IMPLEMENTS RATHER THAN STEEL.

THE HUNZA ALSO LAYER ROCK DUST FROM THE NEARBY GLACIERS, WHICH THEY APPLY AND MIX INTO THEIR FIELDS BEFORE PLANTING. AS WELL, THEY IRRIGATE THE FIELDS WITH HIGH QUALITY GLACIER FED STREAMS AND TAKE METICULOUS CARE OF THEIR WATER SUPPLY. THE END RESULT OF THESE VARIOUS METHODS AND THE CONCLUSION REACHED IN THE BOOK *THE HEALTHY HUNZA* BY J.I. RODALE IS THAT ALL THIS CAREFUL ATTENTION TO DETAIL BY THE HUNZA FARMERS CREATE CROPS WHICH ARE INCREDIBLY NUTRIENT DENSE. THEY AND THEIR ANIMALS CONSUME THIS SUPER FOOD AND THUS THE IMMUNE SYSTEM OF THEIR FARM ANIMALS AND THE HUNZAKUT PEOPLE FUNCTIONS AT ITS HIGHEST LEVEL. PARTICULAR RELEVANT TODAY COLDS ARE ALMOST UNHEARD OF IN THE HUNZA TERRITORIES.

MANY OF THE SCIENTISTS WHO STUDIED THE HUNZA'S FARMING TECHNIQUES BROUGHT THOSE TECHNIQUES OF COMPOSTING AND FIELD PREPARATION BACK TO BRITAIN. THEY STUDIED THE EFFECTS OF THE HUNZA STYLE COMPOSTING ON THEIR FIELDS AND AFTER A FEW YEARS NOTICED HUGE INCREASES IN THE HEALTH OF THEIR CROPS AND THE FARM ANIMALS WHICH WERE FED FROM THE CROPS PRODUCED FROM THE FIELDS. IN ONE INSTANCE SIR ALBERT HOWARD, NOTICED THAT ALTHOUGH HIS NEIGHBOR'S CATTLE HAD BEEN INFECTED WITH HOOF AND MOUTH DISEASE AND DESPITE THE FACT THAT HIS COWS WERE INTERACTING WITH THE INFECTED COWS OF HIS NEIGHBORS OVER A LOW HEDGE SIR ALBERT HOWARD'S CATTLE NEVER CONTRACTED THE DISEASE. SIR ALBERT HOWARD ALSO BEGAN TO FEED A PRIVATE SCHOOL IN HIS LOCAL COUNTY AND NOTICED THAT THE CHILDREN WHO ATE THE FOOD MADE FROM HIS FARM ALMOST NEVER GOT SICK. CHILDREN WHO CAME TO THE SCHOOL HALFWAY THROUGH THE YEAR WOULD CATCH COLDS AND FEVERS, HOWEVER, THEIR CLASSMATES WHO HAD BEEN EATING THE NUTRIENT DENSE FOOD FROM SIR ALBERT HOWARD'S FARM DID NOT.

SIR ALBERT HOWARD ALSO BEGAN NOTICING A HUGE INCREASE IN THE DENSITY OF EARTHWORMS IN HIS SOIL. MUCH LIKE HE OBSERVED WITH THE HUNZA FIELDS HE NOTICED EARTH WORM DENSITY INCREASED AND ACTIVITY WENT AS LOW AS EIGHT FEET WHEN HE STARTED USING THE HUNZA COMPOST ON HIS FARM FIELDS. EARTHWORMS WERE REFERRED TO BY ARISTOTLE AS "THE INTESTINES OF THE SOIL" AND INDEED THEY ARE. SIR ALBERT HOWARD OBSERVED THEY FORM PART OF WHAT HE CALLED THE TRIUMVIRATE OF HEALTHY SOILS. SIR HOWARD BELIEVED BACTERIA, MYCORRHIZAL FUNGI AND EARTHWORMS WERE THE BUILDING BLOCKS OF HEALTHY SOIL. IN HIS RESEARCH HE NOTICED HEALTHY SOILS HAD 600LBS OF BACTERIA PER ACRE. WHEREAS, FIELDS OF ARTIFICIAL FERTILIZED DIRT HAD SUBSTANTIALLY LESS IF ANY. DARWIN DISCOVERED THAT EARTHWORMS DEPOSIT AN INCH OF TOP SOIL EVERY 5 YEARS AS WELL AS CONSUMING THE EGGS AND LARVA OF MANY INSECT PESTS.

Once again we see that maintaining a healthy Biome in the dirt is key to dirt transforming into a healthy soil. In the study "effects of electromagnetic fields on <u>earth worms"</u> the higher in intensity of an electromagnetic field the lower the mass of the earthworms, earthworms increased in mass with low frequency or no electromagnetic fields. This effect has also been observed in Bacteria. Therefore we can see the smaller the organism the more it is effected by electromagnetic fields.

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In part 3 we will explore the integration of everything discussed in parts 1 and 2 as well as the work of Rupert Sheldrake on Morphogenetic Bioelectric fields and why farming techniques such as Permaculture invented by Bill Mollison are critical to reversing the down ward spiral modern farming is on.