

1. Modern Agriculture vs. Natural Agriculture

The Current Model for agriculture started out with the best of intentions. Produce more food for a growing population while shifting the work force to more valuable sectors like industry, manufacturing and high-tech jobs. Attempts were made to help the developing nations tool up to produce more food with less effort.

However, things aren't improving. Throughout the world food production is becoming less and less reliable, more fragile, and increasingly toxic. Agriculture has been used to mortgage our future. With the modern banking system's need for expansion, small farms

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have gone through waves of mergers and acquisitions only Wall Street would understand. Developing countries have sold their birthright to high-tech, high-debt, mono-crop systems that have a built in expiration date. The chemical industry has ridden piggyback on the beast and taken its profits, but the farmlands are spent.

Natural Farming is the most economical way to solve this impending global food problem. We are approaching a two-fold global crisis in food production, as both the quantity and quality is declining. There is an economically viable way to make crop fertilizers and livestock feed from waste products that are currently being lost to the environment.

The pollution from pesticides and herbicides contained in produce is well documented. As different feed-borne pathogens devastate livestock in developed countries, people are growing concerned about the industrial processes that are causing this problem. It is now also a problem in developing countries. The growing dilemma is affecting human health as witnessed in the rise of “diseases of the rich.”

As people in outlying communities become accustomed to the modern food packaging and distribution system, they are suffering from all the ailments of their richer city dwelling counterparts. From diabetes to gout to cancers, rural folk who used to grow 90% of their food supply now specialize in only 1 or 2 commodities and buy their daily food stocks from the stores. This is increasing their health risk, as they gobble down large quantities of refined processed white sugar and

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fibreless white flour as well as high fat, high salt canned goods or completely processed meals.

Most countries are now *fast food nations*, as they adapt their local palates to nutritionally poor franchise foods. Franchisers economize on ingredients with even less nutritional value than equivalent foods in the developed countries they are copying. In addition, deteriorating health reflects exactly what the new diet is worth. Children rarely experience wholesome foods. They dunk their donuts and dip their chips in ignorance as they feast on a bold new diet for a new age.



Starting out small in the green house prepares the plant for bigger things later.

Natural Farming considers the biological aspects as an equal in importance to the natural chemical processes of food production.

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Reusing plastic cups from the fast food industry in the nursery is a form of recycling.

The current paradigm is man centered. The modern theory of agriculture claims that plants are nothing more than chemical assemblies of basic inert ingredients. They expound that we can isolate the chemicals and sell them to the farmer, and then they can feed the plant directly. The petroleum industry has done quite well with this approach, making food growers ever dependent on the large manufacturers of fertilizer inputs. This added cost has taken away the autonomy of the small hold farmer and forced many into endless debt cycles. These schemes cause farmers to increase land area and production so they can justify the mechanization and high cost of inputs. *Farmers* who sit in board meetings and make decisions based on profitability studies or return on investment analysis run the largest farms in Europe and North America. Food quality and nutrition takes a back seat to satisfying investors and shareholders.

Through this man centered paradigm we have been trained to see the chemical side of growing food with almost total neglect of the biological side. We feed the plant directly with chemicals. The problems of nutrient run off, nutrient loss through volatilization and the destruction of beneficial microorganisms, insects, birds and reptiles have been largely ignored. The biological processes in the soil and plant are rarely taken into consideration in this prevailing system. Farmers are trained to add more chemicals when plants are struggling to survive. This is a post symptomatic approach to disease and pest management that makes farmers more dependent on their suppliers.

It is my opinion that this model has failed on a global level. The developing countries on this planet can't afford to bring to market the food they need. Something is terribly wrong. Here in the Philippines, the small hold farmer can no longer afford the hybrid rice seed, urea, complete fertilizer, triple phosphate, and fungicide and still cover his labor. By the time he harvests, he has no profit and little food surplus to live on. He needs a real job just to cover his full time hobby growing rice!

The Philippines is host to I.R.R.I., the international Rice Research Institute, and yet is importing rice from Vietnam. It has an annual short fall because of poorer yields in existing regions. This is also due to lower net production because fewer new farmers replace the farmers who give up on rice growing.

The answer is not in modifying genetics. Playing with the created order of things is not wise. Let's face it; modern theory has led us into this mess. It has failed for the last fifty years; how can we expect good results now? We keep experimenting on consumers only to find out the problems in subsequent years, long after things can be reversed. The foundation is wrong. The assumptions are flawed.

It's time to get back to the fundamentals of agriculture, sustainable agriculture. Natural farming involves efforts to simulate the natural environment to stabilize our food production. The key is to build on sound, scientific principles that will increase fertility in the soil. This will bring about healthy plants, insect resistant plants that will produce high quality food while feeding the worker, family, community and world. We do that by simulating a climax vegetative state which we can grow food, like the forest. However, we don't

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destroy the rain forest; we study it. The forest is an incredible University for learning from, not experimenting with. We experiment on our soil and with our plants.



Recycled soda cups make for good potting cups. Technically, we are recycling by re-using discarded waste from the fast food industry. We always reduce, recycle, reuse or refuse to buy it in the first place.

At Aloha House we are using many different solutions to address some of the problems we are all facing as populations grow. We can't reverse the destruction that is outside our influence, but we can have an effect on our immediate area of influence. We are able to make a difference if we have good information, a reasoned approach and a foundation to build upon.

We need to build on a sure foundation, not on shifting sand. Farmers read a little and hear a lot. We get into trouble when we don't do our homework. We can't farm by rumor. We need to get a hold of

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the information behind all the data that is flowing from the journals, media and Internet. We have a large volume of scientific data available, but most farmers don't know how to use it. To quote Mr. Hoffman: "*we are data rich but information poor*". It's time to assess the state of modern agriculture and see what the options are from a fresh perspective.



We have many nutritious plants that we grow for forage crops and compost as well as human consumption. Livestock convert our surplus production and crop wastes into high profit meat products that are without toxins or chemical residue.

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There can be billions of microorganisms in a handful of soil.