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"Farmers have been coerced, bribed and brainwashed into believing that the only thing that really matters is the economic bottom line. Farmers are beginning to realize that their blind pursuit of profits is, in fact, the root cause of their financial failure." John Ikerd

**Can Organic Agriculture Feed The World** 

Often in discussions about organic agriculture, proponents of high-input industrial agriculture use the argument that if everyone switched to organic agriculture we'd condemn millions of people to starvation. They assume we need industrial farming methods to "feed the world". Fred Kirchenmann, ND organic farmer and former college dean, rebuts this augument in an assay in a new book, For All Generations: Making World Agriculture More Sustainable.

At a time when our agricultural leaders and corporate America seem hell-bent on pursuing the well beaten path of exports and high-tech, high input agriculture, Kirschenmann's comments are refeshing. In a chapter titled "Can Organic Agriculture Feed The World?....And Is That The Right Question?" Kirschenmann argues that instead of being the answer, high tech, high yield farming is a major part of the problem. The problem, he states, is not production but rather "the imbalance of humans relative to the millions of other species". The imbalance disrupts and deteriorates the biotic and ecological communities upon which all life hinges. This disruption and deterioration, he claims, is the real threat to our food supply.

Industrial agriculture, the child of the Green Revolution which increased yields of a few crop varieties around the world [but kills the soil and decreases yields in the long term. KH], contributed dramatically to this ecological disruption. There are, after all, 800 million starving people in the world today, in spite of the advances of the Green Revolution. Kirschenmann argues that it is not a question of "feeding the world" but "keeping the world fed". There is a vast difference. In fact, talking about the problem of hunger in terms of "feeding the world" misses the point, either inadvertently through a lack of understanding or purposefully in an attempt to protect vested interest.

"Power, he states, is the reason we talk about the subject in terms of 'feeding the world' rather than "keeping the world fed". 'Feeding the world' suggests that someone will take responsibility for feeding someone else, and therefore, make them dependent. 'Keeping the world fed' suggest that people will be empowered to feed themselves. Herein lies true food security". And I would add, herein lies true community and individual security as well.

It requires that we empower people to feed themselves. It requires an awareness that farming must be done within an ecological system; that ecological or organic farming practices are essential to feeding ourselves far into the future. As I read about tax breaks for corporate farms, fast track trade

decisions that allows multinational companies to decide the future of local communities and watch agribusiness brazen entrance into local politics, I, like Kirschenmann, am ever more convinced that high input industrial agriculture is not about "feeding people" and certainly not about "keeping people fed." Agriculture today is about power. It's about money and profits for a few while the rest are made dependent upon distant resources and markets.

New food systems that can "keep people fed" are growing. Direct marketing, farmers markets, community-supported-agriculture and organic farming are all on the upswing. (For All Generations is available from WSAA, 8554 Melrose Av, West Hollywood CA 90096, \$34 ppd.) Mary Fund, ksruralctr@aol.com T 785-873-3431

## \*Can Organic Farming Feed The World?

Excerpts from Our Food, Our Future: Can Organic Farming Feed The World?

A noted scientist argues that it can – and must. Donella H. Meadows, Ph.D. Organic Gardening Magazine, September/October 2000. If we want to feed the world, we have to spray the countryside with poisonous chemicals. We have to splice fish genes into tomatoes, and bacteria into corn. We have to pour on chemical fertilizers. It's the only way. Organic methods are for backyard gardens, not for feeding billions.

Alarmist statements like this drive me crazy. They leap with suspicious speed to a conclusion no thinking person can readily embrace...They add up to a dictum so common it is developing a nickname: TINA, There Is No Alternative...

The TINA folks seem to have fixed in their heads the notion that organic means low yield. I don't know where they get that idea...There is a strong body of evidence that organic methods can indeed produce enough food for all—and can do it from one generation to the next without depleting natural resources or harming the environment. For example, at the Farming Systems Trial at The Rodale Institute, a nonprofit research facility in Pennsylvania, three kinds of experimental plots have been tested side by side for nearly 2 decades. One is a standard high-intensity rotation of corn and soybeans in which commercial fertilizers and pesticides have been used. Another is an organic system in which a rotation of grass-legume forage has been added and fed to cow, whose manure has been returned to the land. The third is an organic rotation in which soil fertility has been maintained solely with legume cover crops that have been plowed under. All three kinds of plots have been equally profitable in market terms. Corn yields have differed by less than 1 percent. The rotation with manure has far surpassed the other two in building soil organic matter and nitrogen, and it has leached fewer nutrients into groundwater. And during 1999's record drought, the chemically dependent plots yielded just 16 bushels

16 bushels per acre; the legume-fed organic fields delivered 30 bushels per acre, and the manure-fed organic fields delivered 24 bushels per acre...

In 1989 the National 'research Council wrote up case studies of eight organic farms that ranged from a 400-acre grain/livestock farm in Ohio to 1,400 acres of grapes in California and Arizona. The organic farms' average yields were generally equal to or better than the average yields of the conventional high-intensity farms surrounding them—and, once again, they could be sustained year after year without costly synthetic inputs...

What we can conclude after reviewing the evidence about organic yields is this: The expectation that they will always trail chemical yields is without merit. After a few years of practicing organic methods, and with very little scientific research to guide them, many farmers have come close to duplicating the high yields achieved by the world's most intensive chemical farmers, who have been supported by decades of government and academic research. At the same time, the organic methods have repaired much of the environmental damage caused by the chemicals.

## **Hitting Hunger Head-On**

The Association for Better Land Husbandry in Kenya, Africa, worked in 26 communities in the 1990s to teach organic methods with "near nil investment" because poor farmers could not afford expensive inputs. The focus was on double-dug beds, composting, and use of green and animal manures. In 1 year, 1996, the percentage of households that were free from hunger through the entire year rose from 43 to 75 percent. The proportion that bought vegetables fell from 85 to 11 percent; the proportion that sold

vegetables grew from 20 to 77 percent. The number of households self-sufficient in maize (the staple grain) doubled.

## **How To Conquer Hunger**

In a New York Times article, Sept 99, Peter Rosset, Institute for Food and Development Policy, wrote "There are a persistent misconception about hunger: that people are hungry because of high population density." For every densely populated and hungry nation like Bangladesh, there is a sparsely populated and hungry nation like Brazil. The world today produces more food per inhabitant than ever before; 4.3 pounds for every person every day- more than anyone could ever eat. "The real problems are poverty and inequality. Too many people are too poor to buy food or lack land on which to grow their own. A true solution depends on attacking poverty and inequality."

How To "Feed The World"

The world's farmers can produce all the food the world's population requires, regardless of how high it goes, using organic, no-till, permanent raised beds in gardening, market gardening, mini-farming, mini-ranching as well as farms using no-till machinery. This allows people to feed themselves on a local basis that provides total community food security and is ecologically sustainable, environmentally responsible, socially just, economically viable, humanely managed and Biblically based. Farmers can do it if they have: [1] training in RBA; [2] open-pollinated seed; [3] supportive farm research; [4] no government interference and [5] no political interference. Ken Hargesheimer

## Proving Small Is Profitable Too Peter Bane

Multinationals will never be able to produce "vegetables with the farmer's face on them." Despite USDA's pathetic attempt to gut the meaning of the word "organic" with the issuance of bogus federal rules, the simple message: "Health means eating a lot of fresh, uncontaminated vegetables and fruits" rings clearer and clearer in the national consciousness. Confidence in the conventional food supply is headed for the basement. Thus, conditions for the rebirth of an old industry, truck farming on the urban fringe [and inter-urban, too. KH], appear to have set in permanently.

Bob and Bonnie Gregson [Rebirth of The Small Family Farm, Box 2542, Vashon Island WA 98070, \$10 ppd], calculate that participation in subscription farming by no more than 5% of the 2-3 million people in greater Seattle, where they farm two acres, would keep 1400 tiny farms like theirs on Vashon Island fully busy and prosperous. And they mean prosperous. Their experience and that of other growers suggest that a two-acre general purpose farm operated by two people can earn the local median income within four years from startup and will reach a practical limit at about \$40-50,000 net per year. If enough readers take their example to heart, in a few years we could be seeing these postage stamp farms occupying the economic high ground (the upper 5-10% of all farms by income), while producing most of the food that actually feeds people. We are talking about a new revolution in agriculture!

The Gregsons lay out solid, essential information for the would-be farmer, telling their own story-complete with sore shoulders, marketing stumbles and mature psychological insight-concisely and intelligently. Even more to the point, they analyze, from the perspective of experienced professional

managers the conditions they believe supported their success. They have done so with a welcome absence of naive hucksterism.

"Many are amazed to discover that we two middle-aged novice farmers are making a living on less than two acres of land. Even more amazing is that the model appears to be replicable by almost anyone, almost anywhere in this country and many others. Technological advances, careful planning and marketing directly to the consumer have reestablished this time-honored format as a basis for the new small family farm."

Useful appendices list Meadow Farm's actual crop selection and harvest data, revealing the practical limits of each planting. These two earnestly want their readers to succeed, joining them in a movement that could profoundly reshape the character of the nation.

The main limiting factor facing future small peri-urban [and inter-urban. KH] farmers, but one which life circumstances eased for the authors, is access to capital. Though the financial requirements of a small farm business are modest (\$11,000 by this account) most younger couples, particularly with children, would face significant obstacles in financing a small farm venture, particularly when the cost of purchasing land and housing is factored in. But Bob Gregson is not chairman of the King County Agriculture Commission for nothing. His innovative proposal to institute a "G I Bill" for small family farmers addresses that need for capital hopefully. At once visionary and highly practical, such a program-combining education with the homestead model of finance-could rapidly accelerate a healthy transformative process already underway.

"The loss of the small family farm has seriously damaged our whole culture over the past 60 years. But now, mixed-crop farms as described in this book and pasture-based small livestock operations described in Joel Salatin's books, offer economically viable options to start healing that damage."

The Gregsons have given us a clear testament of a middle-class model that can succeed in the U. S. This simple book is a significant contribution to the literature of ecological restoration in American culture for it describes the steps by which almost any two, having a bit of intelligence and willing to work hard, can pay for the establishment of a system using local resources to serve local needs. Permaculture Activist, No. 38, Black Mountain NC 28711-1209, culturesedge@earthaven.org

#### **MINI-FARMING**

Gardening ranks as one of America's top pastimes, but it can be much more than a hobby. Today you can create a full-time livelihood without owning acres of land. A few acres is all you need to grow herbs, sprouts, mushrooms, edible flowers and specialty vegetables and fruits such as squash blossoms, white beets, blue fingerling potatoes, white asparagus and yellow sugar baby watermelons in urban and suburban areas. In fact, minifarming is becoming an important part of agriculture in America. Charles Walters Jr., publisher of *Acres* magazine, says, "The only bright future in agriculture is to get a few acres, grow the product and be near where the people are." Walters advises, "Find yourself a couple of hundred customers and make yourself a living."

Over the past 30 years, Americans have developed a robust appetite for exotic, healthy and unusual foods. They are looking for colorful ingredients, new flavorings, organically grown produce and ethnic specialties. As a result, restaurants, upscale grocery stores, health-food stores, gourmet shops and mainstream supermarkets are increasingly offering specialty foods to their customers. Meanwhile, the public is seeking out specially grown foods, flowers, herbs and condiments at farmers' markets, swap meets, produce stands and country shops.

The sale of organic foods has been doubling every three and a half years since 1990, despite the fact they are usually priced at a premium, typically selling for 20% to 100% more than nonorganically grown foods. The popularity of farmers' markets has been a particular boon to minifarmers. People growing the perfect lettuce or tomato often can charge more than supermarkets and have buyers standing in line. In fact, unusual items that a supermarket produce buyer won't touch may sell like wildfire at a farmers' market because they are different Organic farmers in particular are benefiting from farmers' markets because supermarkets don't carry enough organic products to satisfy the one in ten Americans who seek them out.

Other popular items include herbs used in cooking, teas, medicines, condiments (e.g. specialty vinegars and mustards), perfumes and aromatherapy, as well as oat grass to help the digestion of household cats. There's also a growing market for decorative or aromatic flowers, as well as heirloom varieties of vegetables and fruit whose seeds are passed down through generations.

Robyn and Robert Rohlfing live in Plymouth, Nebraska, where they are successful organic herb producers. They market most of their herbs locally and have had the same clients for nine years. Robyn explains that of all the herbs used in the United States for cooking and medicinal purposes, only 10% of them are grown in this country.

Even if you don't live in a temperate climate, you can still be in this business by growing flowers, herbs or produce in a greenhouse. Greenhouse nurseries have become the sixth largest source of agricultural commodities in the U.S. as the interest in tropical plants, trees (for woody ornamentals) and medicinal herbs has created a year-round demand. Greenhouse expert Ted Taylor also points to the popularity of 'juicers' as another reason to be in the greenhouse business, growing organic fruits and vegetables to feed the juicer craze. Whether your love is garlic or ginger, mushrooms or marigolds,

oregano or blood oranges, there's probably a way for you to turn your love of food and flowers into a new career or just some extra cash.

# **Knowledge and Skills**

A love of food or for growing things is essential to keep you motivated through the entire learning process. Growing produce, herbs or flowers is part art and part science, and mistakes are costly. You need to have knowledge of plants, growing patterns, plant disease, insects, fertilizers and many other fields. You must be sensitive to market needs and demands, to what people want to eat, what they find appealing, who's buying what and when they're buying. Tenacity and persistence are required as you contact wholesalers, supermarkets, groceries, restaurants, cataloguers, gift-basket stores, herbalists and other potential customers to sell your goods. Selling produce or flowers is like selling any other product. You must show your customers that your product is of high quality and be amenable to their needs.

## Start-up Costs:

"If you're already a gardener, your start-up costs will be minimal, but if you're starting from scratch, expect to spend \$10,000 or more," advises Lynn Bycznski, author and publisher of the *Growing for Market* newsletter. Here's where your money will go:

*Land*: How much land you need to earn a full-time living depends on what kind of crops you have. Where crops can be in ground year-round, a quarter of acre can be profitable. In most parts of the country with a winter season it takes two to ten acres.

Supplies: You will need seed, fertilizers, growing pots, planting boxes, hoses and other supplies. Expect to invest from \$500 to \$2,000 at first. [Greenhouse: Use hoops and plastic to cover beds For higher temperatures use a large hoop house and use hoops over the beds inside the house-KH].

A vehicle to service your accounts: You should be able to get a used truck for around \$4,000 or a used van for \$6,000 to \$8,000; new delivery vans cost around \$14,000 to \$16,000.

*Office supplies*: You can set up an administrative office with computer, multifunction printer and fax, a desk, chair and file cabinet for about \$1,500. Business cards and stationery may cost between \$100 to \$400. While you can make labels and signs yourself by hand or with your computer, spending \$1,000 to \$2,000 on a designer may produce a return many times over in increased sales.

**Typical Gross Revenues:** 

The average gross sales for market gardening is \$8,000 per acre.

\$7,000 to \$12,000 an acre for specialty produce sold to consumers and upscale restaurants.

\$10,000 to \$12,000 an acre for herbs and spices.

\$15,000 to \$30,000 an acre for cut flowers.

*Greenhouses:* According to greenhouse expert Ted Taylor, a 30-by-96-foot greenhouse holding 10,000 six-inch pots can produce \$2.50 profit per pot, or about \$20,000 in 90 days.

*Farmers' Markets:* Grower sales average \$1,000 a day, according to a reader survey by the *Growing for Market* newsletter. In smaller markets, sales range from \$200 to \$700, but in New York's Green Market, sales can reach \$3,000 a day. Expect to pay between \$25 and \$75 a day for a space at a farmers' market, though some markets are now charging a percentage of gross receipts.

Mother Earth News, Jan/Feb 2000 [Ken Hargesheimer, minifarms@aol.com]

Use organic, no-till, permanent beds. Write for free info.

### **Unsustainable Agriculture**

"Corporate farming is unsustainable. Soil is depleted, crops and fields are sprayed with poisons, workers are made sick by chemicals. People complain about the high cost of organic foods but the

reason conventional foods appear to cost less is because tax dollars provide crops subsidies, cheap irrigation water and grazing land and other supports. Tax dollars already pay for a portion of the cost of production then they spend more money buying the item retail. They've paid twice. Most consumers aren't counting the environmental costs of these 'cheap' products, like the money taxpayers spend to clean up pollution caused by corporate farming. They prevent our farmers from planting hemp, which can be grown without chemicals and has multiple uses, forcing us to import it. But they subsidize tobacco, cotton and the use of forest for paper. Logging companies benefit, the Forest Service benefits, Big Agriculture benefits. It is disgusting that government agencies regulating agriculture are staffed with people from industries which compete with hemp and organic farming.

Sustainable agriculture benefits people as it helps the environment things the way nature does them, with as little waste and pollution as possible. They recycle, literally, everything". Nell Newman, Newman's Own Organics. Hemp Times, Fall, 1998.

## WTO AND THE MERCHANTS OF GREED

The famous journalist Ambrose Bierce once defined a corporation as "that inglorious device for obtaining individual profit without individual responsibility." In another era they were called "the robber barons." Today, the ADMs, the Cargills, the Chiquitas, the ConAgras, the IBPs, the Smithfield Foods, the Tysons and others have become the merchants of greed.

These merchants of greed see the World Trade Organization as a wholly owner subsidiary, raw agricultural commodities as the coin of the realm, food as an international weapon, a means by which they can enrich themselves while the poor go hungry, family farmers as "excess human resources," farm

and food workers and peasants as the slaves they rent, politicians, regulatory agencies and academics as corporate instruments to be bought, borrowed and brown nosed, and finally these merchants of greed believe, in the immortal words of ADM ("Supermarkup to the World"),"the competitor is our friend and the consumer is our enemy."

My good friend former U.S. Senator Fred Harris, is fond of saying that corporations can't be made responsible because they have no soul to save nor butt to kick, but they can be made accountable. That is our task here today, to make these merchants of greed accountable.

Food next to life itself is our greatest common denominator, literally history's staff of life. We cannot, we must not relinquish its vital role in our lives --- its control --- to the merchants of greed. We cannot accept when it comes to agriculture and our food supply what University of Missouri economist John lkerd describes as the four pillars of the industrial paradigm --- specialization, simplification, routinization and mechanization. Rather as family farmers, workers and environmentalists our belief is in what Virginia farmer Joel Salatin has described as nature's four pillars --- diversification, complexity, flexibility and biology.

We here today must recognize that eating has become a political act. What we eat, where we eat, why we eat tells us whether we want McDomination or community sustainable agriculture, whether we want untested genetically engineered foods or whether we want healthy, nutritious naturally grown food, whether we want family farmers to receive a fair price for what they produce or whether we want to see the merchants of greed get richer and richer.

Former Yale University chaplain William Sloan Coffin once observed "it is one thing to say with the prophet Amos `let justice roll down like mighty waters,' and quite another to work out the irrigation system."

Well, we are here today because we believe just as Thomas Jefferson did, just as the agrarian populists of a century ago and just as the prairie populists and peasants of the world of today believe, you can not have political democracy without economic democracy. So we are here in Seattle to fashion that irrigation system and just like the mighty waters of the nearby Columbia river, let the mighty waters of democracy roll down. Yes, Woody Guthrie told us right, "roll along Columbia, roll along." --- Remarks by A.V. Krebs, Director, Corporate Agribusiness Research Project, WTO Food & Ag Day Rally, Seattle, Washington, December 2, 1999. avkrebs@earthlink.net

Farm Welfare: The USDA, in 1999, gave \$33.5 Million to farmers to promote their products.

"I've been asking Dad if he thinks I'll be able to make a living at farming." Scott says. "At TX A & M, they give us this big speech on how the small farms are going to be going out of business. It's just going to be big corporations. And that just scared me. Now, I don't know if I want to be fighting those rich guys." Scott Etheredge, Westella, TX. DMN, 26 July 98.

"If I had taken what I learned about agriculture at TX A & M to a third world country, I would have starved to death". Mike Sullivan, ECHO, Ag Missions Conference 1998, quoting his son.

Biopiracy is the theft of indigenous knowledge, the theft of the creative capacities of nature and the false claim by patent holders-mostly corporations-that they created the life form they have pirated. Bio-piracy lays the groundwork for the colonization of creation - of life itself - by the corporations scientists work for. basmati-action@sfu.ca Corporations have patented Basmati Rice [India, Pakistan]; Natural Colored Cotton [Peru] RAFI.

It is not a question of whether pesticides are undesirable or not. The fact is that they are superfluous. They were devised to prop up an agro-industrial framework that was misconceived from the start. When you abandon that framework, you can abandon it's negative thinking pattern. We need to begin studying the natural systems of agriculture by enhancing the positive factors rather than our present focus on killing the negative factors. When we accentuate the positive, we eliminate the negative. Eliot Coleman, Organic Gardening, Nov/Dec 98

Organic farming has been not just ignored but treated with deliberate hostility by our agricultural research system. Scientists have put their reputations and careers at risk by attempting to study organic systems. The organic paradigm has been actively discouraged and unscientifically disparaged by the highest levels of government and academia. The myth that "organic farming means mass starvation" is still vigorously spouted by influential think-tanks and Washington policy shapers. M Lipson, LA Times, 21 June 98

Are organic farmers getting any help from our public institutions? Are the government research labs and univeristy departments developing and distributing knowledge about organic ag? With some tiny exceptions, they are not. Out of nearly \$1.8 billion in USDA research and extension funding [1995] less than 0.1% was spent to study a viable alternative that can help protect our children and communities while keeping America'a family farmers in business.

"Carson's classic warning [Silent Spring] is not merely an echo, for every time the awareness of manmade toxins in our food arises, the lines at farm stands and organic food stores get a bit longer. If the problems of modern agriculture are centralization, simplification and biological reductionism, then the answers include diversity, complexity and local knowledge. Such cannot be obtained in most of our land grant universities and it is a pity. It is in the area of land and food that they have failed us utterly" Paul Hawken, New Organic Grower by Eliot Coleman

US National Commission On Small Farms in their report, A Time To Act, offered 146 recommendations. One is: "A beginning farmer program to teach beginning farmers profitable methods". ¿How can Agriculture have 200 years of agricultural experience need to "teach beginning farmers profitable methods?" KH

12 common food crops were washed, peeled and cored and found to contain: 12 carcinogens, 17 neurotoxins, 11 endocrine disruptors.

The days of chemical farming are numbered. The consuming public is demanding naturally produced foods. Hopefully, ag businesses, industries, [ag extension services-KH] and educational institutions will not react as those in the days of Galileo who wanted to hang him for his teachings. ¡But he was right! C E Scheaffer, VMD, Homeopathy, Small Farm, Nov/Dec 98

**Tropical Small Farms** 

We must remember that one factor of the "Green Revolution" around the world was mass migration of small property-owners to the cities to swell the slums (Sao Paulo Brazil now has 15 million people, at least half of which are rural refugees). So when the Industrial Agriculture mega-business people talk about "feeding the starving millions" they omit to mention that these millions are starving because they were forced off their lands by an agricultural model which was too expensive and too destructive for small farms to hold up under. Our experience in Brazil mirrors what is said here about the small farm. We have seen examples of successful small farms of 3-4 hectares of agroforests (which is the appropriate model in the tropics) earn US\$300-400 per month, with practically zero costs other than family labor. This means a comfortable margin of profit which permits a very good life indeed. Marsha Hanzi. Instituto de Permacultura da bahia Brazil. hanzibra@svn.com.br

V Vantreese, Dept. of Ag Economics, U of KY, said the clues to the future of hemp are found in the boardrooms of huge agriculture concerns: "If the large multinationals can't make hemp work in the marketplace, what type of costs and return differentials might small farmers and businesses work toward? That is the crux of the great hemp debate." Louisville Courier Journal, 18 Jan 99

Another example of government insanity is with Stevia. It is a natural sweetner from a plant in Paraguay and Brazil which is 100 times sweeter than sugar and no calories. It can be grown nearly anywhere. Yet, the government handles it as a controlled substance. Other countries use it by the ton. KH

WHO WILL FARM THE LAND?

In Texas Agriculture, Dec 97 issue, the president of the Texas Farm Bureau discussed "Who will farm the land?." I would like to present the reason for the problem. Solutions are obvious. I grew up on a farm and had three years of vocational agriculture and FFA [Lone Star Farmer]. I have a BS in agriculture from TTU [1957]. I lived and worked on the university dairy farm for three of the four years there.

Young people are not interested in farming and ranching is a fact. Why? I blame the people working in farming and ranching today. All the young people hear is negative. You make the list. The problem is not money. I do not see farmers and ranchers living in shantytown or driving a jalopy pickup. While substitute teaching in vo-ag in a high school, I decided to survey my seven classes as to how many students were interested in production agriculture. In the first class I asked to see a show of hands. A hand went up and came the question, "What is production agriculture"? Only two students in those seven classes were interested. Many subjects covered are not related to production of food and fiber. They are told that to farm they must have over a 1000 acres of land, a \$100,000 tractor and funds to operate. That is not true but is it any wonder the students are turned off. What program is in place to help young people with the financial cost of entering farming/ranching? Stop replacing management skills with money and high tech.

"The worst thing to happen to agriculture in the last two decades is vocational agriculture and FFA." said a TTU professor. I agree. No one encourages young people to enter agriculture. Right now at the Mall in Lubbock, TX, is a advertisement by math teachers encouraging students to study and enter the math field. Most groups do this is some way but not farmers and ranchers. FFA is no longer Future Farmers of America. FFA and vocational agriculture were changed to get greater number of students even if they are not interested in farming and ranching. Someone forgot why VA and FFA existed. Now the goal is more bodies; not more farmers and ranchers. They have had great success. [A teacher told me that VA and HoEx have become a dumping ground for those students that have no where else to go. I believe it. Mar 04]

Young people today are aware of our water, soil and air problems and believe, correctly, that no one has a right to poison them. Agriculture poisons our soil and water and therefore our food. Yet, there is proof that there is just as great a lost of food to pests as before their use. The chemicals are the same ones used in WWII to kill people. There is a grassroots movement back to organic, profitable farming and ranching as before the chemical companies got farmers to buy into their propaganda. Healthy soil produces healthy plants which produces healthy food which produces health people; sick soil produces the opposites.

The number of family farms, producing chemical-free food for local consumers, is exploding across the country. Organic food sales have increased 20-25% per year for the last six years. Dairy products 30%. Young people will be interested but they have to be told of the opportunities . Who will inform them? Every seminar/workshop/camp on entrepreneurship/employment/careers for young people should have someone there to present farming and ranching as an opportunity for financial success, quality of life and happiness. Ken Hargesheimer

Food From The Hood: This is the ultimate success story concerning youth and market gardening. It began in 1992 after the riots in South Central Los Angeles, CA. By graduation each student gardener at Creshaw High [50%dropout rate] has \$2,000 to \$5,000 in the bank for college. The six students, who

started it with teacher Tammy Bird, worked every day after school tackling the six foot weeds in an abandoned lot. Other kids mocked the student's efforts. "You're in that farm program." one sneered. But as their crop ripened, the students became hooked on their green oasis. ¡Their ranks swelled to 30! Food From The Hood is still growing--and the jokes are few. There has not been a single dropout among the youth gardeners.

"The largest underused agricultural resource we have is the urban poor." Marty Strange, Soil, Food and People Conference, Sacramento CA, Mar 2000

"I believe we are on the way to the rebirth of the family farm on a human and humane scale. It will be a painful rebirth. More of those 'farming tigers' [farmers of the 60s and 70s] and the professors that fostered the 'get big or get out' dogma may have to depart life's stage. We are beginning the age of the 2.5 to 10 acres farm." K. Klober, Small Farm Today, Jan 01