

Toward an Agricultural Renaissance in the Verde Valley
Notes on the January 30 and 31, 2009, Discussions
Gardens for Humanity
February 11, 2009

*“In the end we conserve what we love. We love what we understand.
We understand what we are taught.”* – **Baba Dioum, Senegal (1968)**

1. Overview: Visions of Sustainability (Biosphere Relationships)

One day soon, because of what we learn, think about, talk about, pray about, and do in these next weeks, months and years, our society is sustainable: it exists and functions and thrives in harmony and balance with Nature -- with the Biosphere, the ‘environment’, the community of all living beings and their habitats.

This is the next step in our human evolution, in our ‘co-dependant arising’ with all other life forms. We accept our responsibility to become effective stewards and caretakers of this Earth – to relate to and participate in this world as a “communion of subjects”, not a “collection of objects” (Thomas Berry).

In part, this requires our understanding and actions to -- cease our destructive activities; clean up the messes we have made; protect the rest of the biosphere from any further destructive human actions and behaviors; and regenerate, restore, renew and increase the communities of living beings in the biosphere. These understandings inform our criteria and values to guide decision-making.

Bio-mimicry -- Our work and culture and society are not merely in minimal balance with the biosphere – not grudgingly or reluctantly or regretfully sustainable. We learn willingly and joyfully from Nature and natural systems how to serve the biosphere: how to regenerate, restore and heal the full diversity and abundance of what was here, of life on this Earth.

Once again, we observe, watch and learn from Nature, our first and foremost Teacher. As we perceive, acknowledge and respect the beautiful intricate webs of relationships and interdependencies we are part of, we find inspiration and models to re-design and re-organize our society, our food and energy systems, our industries, our shelter and livelihoods.

We come to understand the “big picture” -- the relationships and consequences of our actions; to re-assess and re-evaluate our technologies and their products and by-products. (Do we know what their effects are? do they harm or risk harming living systems? – if so, we cease their production and use – no matter how “cost-effective” they may have appeared under the old ways of understanding, under the old short-sighted ascriptions of ‘value’).

We also understand and put to an end the destructive dynamics that have developed in our social and economic relationships – the top-down corporate control over our food, water, energy, and information that have weakened and destroyed our communities and our local self-reliance.

Water -- We live in a dry climate – water is extraordinarily limited and precious. We focus on how to respect, protect, clean up, conserve, re-use, and retrieve water resources in our homes, communities, industries and agriculture. We learn how to manage water – to know where it comes from, how to work most effectively with it. Our local communities and governments are active in water management and conservation planning and education. We develop means to address and resolve water allocations and water rights issues equitably. We ensure that all living beings – including those not at the table with our lawyers and hydrologists – also have the waters they need to live and flourish.

We design and build rainfall and runoff collection, catchment and storage systems on all drainages and watersheds, and integrate them with soil conservation and erosion control. We use the most efficient irrigations systems for our gardens and farms, combined with soil building and moisture conserving practices. We know and work with our local native drought-tolerant plants, for foods, medicines, fibers, shade, shelter, and beauty. We recycle and re-use ‘gray water’ for plantings around from our homes, schools and businesses – and such uses are encouraged and supported by our systems of self-governance. We recharge our shallow aquifers with storm runoff, using biological filters to remove contaminants.

We protect all waters from contamination by human activities: we find ways to end polluting activities, to re-design industrial processes, and to clean up the waters already affected. (“If you want clean water, the first thing to do is get the hogs out of the creek” – Jim Hightower).

Energy – we end our dependence on fossil fuels, imported and domestic. We learn how to develop enough energy from local renewable sources to meet all our needs efficiently, and to export the surplus. We include rigorous least-cost analyses and efficiency audits in all our energy planning. We do more with less, and we end wasteful habits in energy use as in other spheres of activity.

Waste -- As we strengthen our understanding of and respect for natural resources, we learn to eliminate the waste which has characterized our culture and economy for the past 100 years or so. We find ways to re-use, re-cycle, compost and retrieve resources of all kinds. No more ‘planned obsolescence’, no more throw-away junk that consumes unjustifiable amounts of energy and resources in production, transportation and disposal.

To do all of this, to achieve a sustainable society in the Verde Valley or elsewhere, requires deep understanding and education about pre-existing and existing conditions – where we are coming from, and where we are at – as well as a clear and compelling Vision of where we want to go.

This is our task – to learn about, understand, respect, love, and teach about our biosphere: our land and soils and rocks and waters, our plants and animals and micro-organisms, our sun and rain and winds, our weather and climate in all their rich and diverse webs of interrelationships. Out of our renewed and mindful participation in these relationships grows our renewed culture, our re-oriented educational and economic systems that now serve the harmony and balance of these relationships. And in this wholeness we strengthen and realize our own well-being and health as individuals, families, communities and nation.

2. Education

We must educate first our selves – from Nature, from each other -- and then our communities.

Education to help us bring our sustainable communities and society into being, to give our children and all members of our community the values, tools, understanding, leadership skills, and experiences we need to seek and regain balance with the natural world; to restore to full abundance and diversity our local ecosystems and our biosphere.

Education grounded in acknowledgement and respect for the web of relationships that sustain us. Education that models our fundamental values of compassion and care for one another and for all life; and of the dignity and worth of knowing and working with the earth. Education that opens us to beauty, serenity and peace all around us; and to physical and spiritual awareness, nourishment, and health.

Sustainable local food systems – We need education and training at all levels to design, build and maintain our local, healthy and sustainable food and renewable energy systems; to safeguard and conserve our waters, and to provide energy-efficient shelter for everyone in our communities.

We need to research, compile, adapt, test and refine curricula, materials and methods for use in local gardens and farms of every size; in workshops, seminars and discussion groups; and in our schools, colleges and universities.

Growers, farmers and gardeners want easy access to a full range of the best practices, materials and methods; to technical and financial resources and information; and to demonstration sites.

Our communities need to know about sustainability – what it is, why it is important, how it affects each of us in our daily lives. Many people want to reconnect with the Earth, with the natural rhythms and patterns and cycles that weave all living beings together. Many people in our communities want to know about food – why grow it, how to grow it -- in all size plantings from containers to small plots to backyard gardens to farm fields -- when and what to grow, who can help, where to get good seeds.

We establish and operate one or more ‘Garden and Farm Resource Centers’ in the Verde Valley, to compile and share information and technical resources, to demonstrate coherent state-of-the-art teachings, practices, materials, and whole-system approaches. Our Resource Centers are ‘clearinghouses’ through which we inventory our community strengths, resources, skills, and opportunities, and network and focus them on community issues and needs.

We establish ‘sustainable agriculture incubators’ and demonstration sites, to research, develop and show diverse applications of exemplary food, water and energy systems. We facilitate and coordinate tours to those sites, as well as mentorships, apprenticeships, work-study and service-learning opportunities, training and certification programs.

In our schools, transformation to a sustainable society is the heart of the curriculum – with hands-on gardening as a major lesson and practice of sustainability for all ages. Every grade has an outdoor garden ‘classroom’ – every child has his or her own plot to relate to, work with, and learn from in successive years. Our children are taught -- by the plants and rocks and animals and weather of the Earth around them, and by all their teachers and role models – about respect and responsibility in all our relationships and interdependencies; about the life lessons to be learned from the characteristics of plants; about natural cycles, and living without waste; about cooperation and synergy and symbioses; about the richness and value of ‘labor’ – of working closely and lovingly with the Earth.

These are neither after-thoughts nor distractions – these are the hope and foundation of our children’s future.

The education extends to our leaders in our village and town governments, to our businesses and corporations, to help them understand and commit to the transformation of our systems of governance and economy, through the design, use and encouragement of tax credits, efficiency and conservation standards and codes, and other state-of-the-art practices.

Some educational processes – We focus first and foremost on our children and youth. We develop incentives for them to participate in the transformation to sustainability of our homes, schools, livelihoods, agriculture, and all aspects of community life.

We learn and teach by our example: we model and live the values and behaviors we espouse.

Our educational processes are life-long and multi-generational: we re-weave the fabric of our society, facilitating and enabling our elders and ‘retirees’ to share their wealth of experiences, skills and knowledge, through companionship, mentoring, teaching and learning with our youth and with students of all ages.

Understanding and affirming that the Earth is our teacher, we adopt ‘bio-mimicry’ as a guide to learning and teaching: as we identify particular issues and challenges, we observe and study how living organisms and systems address them. We create and share opportunities to learn about our local natural resource and ecosystems – soils, waters, plants, animals, climates and micro-climates in all their interrelationships. Our children and communities become ‘ecologically literate’ once again.

We model and apply essential social and leadership skills in our education: critical thinking, problem mapping and solving, conflict resolution, compassionate communication, networking, participatory and community-based strategic planning.

Elements of a Local Sustainable Food System – We identify and connect available land, water, know-how, labor, and demand. We inventory and network to connect local producers – growers, gardeners, community-supported farms (CSAs), ranchers, landscapers – with intermediary organizations; with consumers -- markets, restaurants, schools, hospitals, jails, and other community institutions and businesses; and with retrieval and recycling of all waste products related to production, distribution and consumption.

We observe and study our teachers – our local climate and seasons, plants and animals, rocks and soils and waters; and the centuries of local agriculture that went before us – to discern design principles of a local agricultural ecology, a sustainable food system. We incorporate soil building (growing compost, rotations, perennial crops, integrated with livestock) with efficient water use and conservation methods (including mulches and shade), and we select crops adapted to our climate and our cool and warm season opportunities.

We make the best available information, knowledge and resources widely available, through our Garden and Farm Resource Centers and sustainable agriculture incubators; through applied on-farm problem-solving research; through extension education and workshops; and through mentoring networks.

We develop and sustain a rich and diversified agricultural economy. We establish ready access to multiple sources of capital and credit for land, water, equipment, facilities, energy, transportation, and other on-farm, storage, value-added processing, and marketing costs. Our communities and educational systems respect, honor, and teach a full range of agricultural and related occupations; our youth experience, understand, and are motivated by the value and worth of labor with the Earth, with our food, water and energy systems. We have healthy diverse markets for our fresh and processed (dried, canned) foods, including pick-your-own, inclusion in all local stores, and many farmers' markets.

Gardening and farming opportunities are open and accessible to all in our communities -- whether in containers, small back-yard plots, or farm fields. Every neighborhood, and every village and town, has one or more community gardens. Every class in every school has a teaching garden – an outdoor classroom.

3. Community and Network Relationships

Our community and our culture evolve and grow as we understand, affirm and express our relationships to the Earth.

We align our community functions with the cycles of the natural world -- times for planning and preparation; for planting, growth, and harvest; for return to the earth (composting and recycling), and for deep rest and renewal.

We delight in and celebrate these times, with festivals and gatherings enriched with all the arts – music and dance, poetry and theatre, painting and sculpture. And the arts regain their ancient places of beauty and power and healing at the heart of our communities.

We have put an end to the top-down corporate control and pollution from outside of our food, medicines, water, energy, and information – of our minds and bodies -- that have weakened and destroyed our communities. Now, from the bottom-up, our communities once again reflect and express our core values.

Our communities are inclusive, tolerant, respectful of differences, compassionate, and caring of one another. We know each other. Our children and elders at our sides, we work together to share, strengthen, plan for, and realize our common purposes. We support and help one another's dreams, goals, and projects – and they are good!

All ages are well respected and well taken care of. We take care of the hungry and the needy in our communities. In our hospitals and schools, the sick and the young are given the very best, most healthful and nutritious foods and medicines we can grow.

We develop and strengthen our understanding, communications and networks that foster cooperation and mutual aide. We share information and practices – on and off-line. We develop a computer-based bank of skills, resources, organizations and activities (a community 'map' or directory) to help match needs with resources in our community.

4. Economic Relationships

Local food production in the Verde Valley meets the majority of local needs.

Farming is a valued and respected occupation in our community, and is economically and socially attractive to our youth. Our local agricultural products are the heart of our local food, arts and crafts, markets, grocery stores, restaurants, schools, hospitals, and other community activities.

Our sustainable food system supports local growers to be responsible and profitable; develops local markets for local products; creates jobs and economic activities in a wide range of agricultural and related fields; is supported by comprehensive education, training, apprenticeships, mentoring, and other educational activities and opportunities available to all ages and at all levels of complexity; and protects against more loss of productive agricultural lands and waters.

We have developed a new ‘share-cropping’ system to allow people who want to farm to work productively and sustainably on lands and with waters owned by non-farmers. This system addresses legal relationships, length of tenure, valuing and protection of grower and owner rights and investments, liability issues, and other concerns.

We have skilled, motivated and hard-working labor for our farms. By our example, we have taught our young people to respect, value, and be motivated to work with the soil. We have also developed a ‘voluntourism’ network, to connect farmers and gardeners with people (youth, work-study and service-learning participants, interested visitors to the area) who are willing and able to do volunteer work on farms, working through established entities including Chambers of Commerce, intermediary organizations, hotels and other packagers of tourism activities.

Our ‘sustainable agriculture incubators’ offer space, resources (land, water, energy), technical support, state-of-the-art materials and methods, and information to enable entrepreneurs to grow new economic activities in sustainable stewardship, including (for example) wild-crafted and home-grown medicinal herbs; composts and other soil amendments; earthworms, lady bugs and other beneficial creatures; specialty crops and foods (local and native seeds; plant oils, rubber; wines and cheeses, yogurts).

And finally, with the computer-based skills bank and clearinghouse/network of resources and needs that we have developed to support our sustainable agriculture, comes the activation of our own local currency, the basis for a local cash-less barter economy.