

An Overview of Holistic Management and Holistic Decision Making

Two things – agriculture and fossil fuels, are causing climate change. Agriculture is the production of food and fibre from plants and animals from Earth's land and waters. Agriculture made civilization possible, but over centuries caused the vast man-made deserts, and is currently leading globally to producing more eroding soil than food. Viewing the major changes on Earth from space Dr. Elisabet Sahtouris described humans as a "desert forming species". Climate change will continue even in a post fossil fuel world because of desertification.

Scientists trying to address climate change use a core framework for policy formation that is successful with everything humans "make" but is less so with everything humans "manage". Thus we can visit the moon, build cities, make new genes, nanotools and other technological marvels. However we find we are running into ever escalating problems with agriculture, human relations, economies, governance, etc including accelerating desertification / climate change. Using the mainstream core framework all policies / actions aim at achieving an objective, goal, mission or vision. While successful dealing with extremely complicated issues like computers, robotics or getting to the moon - objectives, goals and visions do not cope well with complexity. And mainstream scientists only recognize three tools with which to manage our environment at large, including desertification. These tools are technology, fire or resting land – two of which cause desertification / climate change. All of our experience has shown us that climatologists, governments, environmental organizations and universities - use this core framework unknowingly.

Reversing desertification requires using a modified holistic framework that acknowledges the limitation of goals and visions when dealing with nature's complexity. And that acknowledges the fact that it is the seasonal rainfall environments desertifying (about two thirds of Earth's land) in which billions of tons of above ground grass parts die every year over a few months. The nutrients in this dying material have to recycle rapidly and biologically to keep such lands from turning to desert.

Fire, used for thousands of years to re-cycle dead grass material, is not biological decay, pollutes the atmosphere and exposes soil contributing to desertification / climate change. Resting such land results in slow chemical oxidation replacing fast biological decay - leading to dying grasslands that people try to keep alive using fire. No technology even imaginable can restore biological decay annually on the scale required. Clearly desertification can-

not be reversed other than through accepting that only large grazing animals, with micro-organisms in their moist gut, and hooves laying soil covering litter, can do what is required. Something any gardener would immediately understand – mainly break capped bare soil to allow plants to grow, compact soil to get a better soil to seed contact, and lay dead plant material as litter to cover soil so it retains moisture.

Desertification / climate change began thousands of years ago when humans killed off most large herbivore/predator populations replacing them with fewer domestic grazers and fire. To avoid desertification humans have used a great many of ways of herding livestock to no avail. Modern range science has developed many rotational and other grazing systems again to no avail. Recognizing the failure (other than in more humid environments) of all herding and grazing systems Savory, in the 1960's, developed holistic planned grazing that immediately began reversing desertification. Before widespread adoption planned grazing was tested on land international range experts proclaimed technically beyond reclamation. Cattle numbers were increased 200% immediately using planned grazing and healthy perennial grassland resulted. Herding and grazing systems had failed because all ignored the daily complexity involved - controlling timing to avoid overgrazing and overtrampling, controlling behaviour to ensure trampling causes more plants to grow and litter to be laid, constant drought planning by time not area of land set aside, wildlife factors and much more. Because scientists had not dealt with such complexity Savory adapted to biological needs a military planning process built on 300 years of experience, rather than reinvent the wheel. This simple planned grazing has not yet failed in any situation during the last fifty years and is now in practice on about 40 million acres world wide.

So in summary we train people to manage their lives, resources and land holistically using a holistic framework to guide their actions. If this shows livestock are needed to deal with increasing droughts, floods, poverty, social breakdown, abuse of women and children, cultural genocide of pastoralist and ranching communities, violence and ultimately climate change we train them how to graze increasing animal numbers using the holistic planned grazing process in either herding or fenced situations. The grazing planning process can be learned in as little as one day.