Gamo Fact Sheet The Gamo Highlands of Ethiopia

"The Gamo Highlands survived the onslaught of population growth and movement intact with their culture and crop genetic diversity. They've been cut off from the rest of Ethiopia for several centuries showing how it is possible for a community to survive without outside links."

Dr. Tewolde Behran, General Manager, Ethiopian Protection Authority



The Gamo Highlands

The Gamo Highlands are perched high above the African Rift Valley in Southwestern Ethiopia. This isolated area is one of the most densely populated parts of rural Africa that has been farmed sustainably since agriculture was created 10,000 years ago. It is currently home to four million people whose culture and ecology have remained intact in the face of both colonialism and globalization.

The varied landscape rises up to 13000 ft above sea level and is roughly 62 miles long and 18 miles wide. The region is basically devoid of roads, yet it is unique in its resistance to the food shortages and famines that have devastated much of the country. This is due to a unique traditional food system that interweaves a diverse number of tree, root, cereal, and vegetable crops with forestry and livestock production.

Life in the Gamo

The defining aspect of land-use in the Gamo highlands is a set of intricate and well-enforced traditional laws called Wagas. These laws stem from the belief that everything is connected and bound in a delicate balance. Together they form a natural resource management system that dictates everything from interpersonal relationships to the conservation and preservation of pasture, forest, soil, and water. Because all of the Wagas are interconnected, if any one aspect is denied or imbalanced then the whole system is understood to be at risk. "One of the things that strikes me whenever I'm in the Gamo is the lack of anything that I'm used to seeing. There is no plastic....You're sitting in someone's hut and you're drinking out of a gourd and you're eating out of woven baskets or clay that they've made. Everything comes from their farms."

Leah Samburg, Ecologist, Gamo Biodiversity Expert





"In the West, development has been very anthropogenic. Resources were only for the welfare of human beings and people considered the environment as resource to be exploited – they don't feel that they are part of the environment. Here in the Gamo people believe that they are a member of the whole thing. They give respect for the tree, for the mountains, for the rivers. It's a very connected system here."

Abera Ogato, Gamoan Elder

The Gamo Food Systems

A view of any part of the Gamo highlands presents a picture, not of an intensely cultivated and densely populated agricultural region, but rather a patchwork of scattered tree cover, dense groves of bamboo, rolling pastures, and shrub land scattered over the landscape. Upon closer examination, however, these are components of a carefully managed and meticulously organized agroecosystem in which forestry and livestock management define the physical environment as much as crop production does.

Diversity in many ways defines the agroecosystem of the Gamo Highlands. It has a varied physical landscape, the communities are geographically isolated and the agricultural system incorporates an enormous genetic diversity of crop species. Due to the subsistence nature of farming and the availability of locally-adapted crops, individual farmers maintain an extremely high diversity of seeds and can name literally hundreds of crop varieties ranging from enset, barley and taro to yams, wheat and oromo potato. Different varieties have a range of uses but are most often selected for use in varying environmental conditions, taking into account soil type, elevation, moisture levels and topography. They are also intercropped to provide insurance in case of disease or climatic stress.



"Here we know that sacred forests protect waters. The pastureland is for the livestock. The livestock make the manure to fertilize the crops. Without manure there is not enough fertilizer for the highland soil. So to maintain productivity from a plot of land you must have all these things in balance."

Abera Ogato, Gamoan Elder



"I think the challenge as we look at various religious systems and cosmologies is to identify what is helpful to our current situation. It's not to say that any one of these traditions is perfect. No, but it is the case that indigenous peoples had a sense of limits and of taking only what was needed from the earth and knowing what the earth needed to replenish itself."

Mary Evelyn Tucker, Author, Professor at Yale Divinity School



Threats to the Gamo: Outside Religions

The Gamo is a unique system in which people and nature have co-existed sustainably for millennia. But in the last few years, the Evangelical Protestant Church has made inroads into the most remote areas and is eroding the traditional animist social structures that have until now bound the people of the Gamo to each other and the environment. These outside funded parishes and schools teach a disdain for traditional values. New members of these parishes have begun to engage in negative acts including the cutting down of sacred trees, disrupting community meetings, planting crops in pasture land, and denouncing indigenous leaders as backward or even evil. The results have been devastating to the point of causing violence between communities. Six months after the filming of A Thousand Suns, the Ethiopian Government, at the behest of Evangelical Protestant Missionaries in the region, took away the organizational rights of 42 indigenous groups who focus on preserving the traditional cultures of the Gamo.

Threats to the Gamo: The 'New' Green Revolution

In 2006, two of the United States' biggest foundations, The Gates foundation and the Rockefeller Foundation, joined forces to 'end

hunger in Africa'. Their joint Nairobi based initiative is called the Alliance for a Green Revolution in Africa (AGRA) and its \$262 million budget aims to bring a 'new' Green Revolution to Africa. According to Samuel Muhunyu (Slow Food Kenya & Network for Eco-farming in Africa) and Gathuru Mburu (Institute for Culture and Ecology) AGRA intends to move farming away from household food security and into an external market-based agriculture. Through loans, farmers are encouraged to use external inputs, such as expensive genetically modified seeds, chemical pesticides and fertilizers. As long as crops succeed then all is well, but when they fail the farmer is at risk of losing everything because they are now at the mercy of an external market system that dictates whether or not they receive an income. Many opponents of AGRA say that it is essentially a mechanism to generate profits for multi-national corporations. They point to the fact that the companies behind AGRA include Monsanto, Syngenta and Dupont all of whom are involved not only in the production of chemical inputs but in the patenting of the genetically modified seeds which are being promoted by AGRA. These companies therefore stand to profit from the expansion of AGRA in Africa.

The Original Green Revolution

The original Green Revolution of the 1950s and 60s brought about massive yield increases through the use of chemical fertilizers, pesticides and 'improved' seeds. Initially it staved off famine and kept agricultural production in line with the growing population, but by the 1970s and 80s food production plateaued and crop failures increased.

The Green Revolution's failures include an increased vulnerability to pests, water shortages, reduced soil fertility, soil contamination from the use of pesticides, soil erosion, reduced availability of nutritious food crops for local populations, rural impoverishment, and massive reduction in genetic diversity.

India

In Punjab, India, an early Green Revolution showcase, farmers now apply three times the amount of fertilizers to maintain the same yields. They are also running out of groundwater and losing increasingly large portions of their crops to pesticide-resistant insects. The high level of debt and vulnerability of Indian farmers has led to a notorious slew of farmer suicides – often by ingesting agrochemicals – with 17,107 cases documented in 2003.

Globally

By the 1990s an estimated 40% of all farmers in the Third World were using Green Revolution seeds, with the greatest use found in Asia, followed by Latin America. The world lost an estimated 75% of its agro-biodiversity and control of seeds shifted from farming communities who use to maintain ownership of their traditional indigenous seed varieties, to a handful of multinational corporations.²

"Africa is on the pathway to 21st century agricultural production systems. My hope is that it will have more options and more knowledge at its disposal to not repeat some of the very painful and costly mistakes that other parts of the world have committed in the pursuit of modern agricultural development."

Dr. Achim Steiner, Executive Director, United Nations Environment Program

"Putting the entire seed sector in the hands of companies, local or foreign, eventually means the same thing. It's corporate. While actually it is the farmers that have the skills. The farmers have the traditional knowledge. We need to develop structures for more village-based seed banks for communities. Granted, there is research to be done but this should be done with the people, and not owning the people's resource. We would wish to see the seed sector strongly in the hands of the farmers, supported by policy so that they can continue. That's the most sustainable approach to food security."

Samuel Muhunyu, Slow Food Kenya & Network for Eco-farming in Africa

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The Global Significance of the Gamo

Globally, we continue to grapple with the question of how a growing human population can co-exist with the natural environment. The Gamo's unique agricultural system (and the worldview that sustains it), provide valuable clues as to how this might be possible.

The people of the Gamo have been successfully farming in a sustainable manner since the birth of agriculture 10,000 years ago. They have developed the ability to conserve crop genetic resources while practicing highly productive farming strategies. Globally we are down to 2 or 3 viable strains of our most important food crops; however, in the Gamo they have more than 65 varieties of barley, more than 12 varieties of wheat more than 100 varieties of Enset and dozens of varieties of Casava, Taro and Yam. The Gamo defies the common assumption that agricultural intensification decreases biodiversity. The viability of organic farming (farming that does not use chemical pesticides and fertilizers) is further evidenced by the United Nation's Report 'Organic Agriculture and Food Security in Africa'. In their analysis of 114 organic projects across 24 countries they found that not only did financial stability and quality of life improve, but yields increased by up to 116%, out-performing conventional industrial agriculture.

"There was a superstructure here already thousands of years ago that we exercised. A command system to use land, for farming, for grazing, for forests, to manage conflict, to make the market and everything, whatever we need in our lifespan is in this system... It is not permitted among Gamos to take out whatever he likes from the ground. There is a limit. You are taking grasses which you need. You don't destroy others. You are taking trees for your consumption. Not to destroy others. You want to pass a resource for the coming generation."

Kapo Kansa, Gamoan Elder

"Organic agriculture is sometimes portrayed as an exclusive philosophy and science. But certainly eco-agriculture, I think, is a more appropriate entry point for farmers and farming policies in Africa to evolve. Africa does not need another religion, another philosophy to arrive on the continent. It needs a series of supportive, investive and ultimately farmer-focused interventions that will allow African farmers to further evolve and develop their own farming systems."

Dr. Achim Steiner, Executive Director, United Nations Environment Program

"We must feed the present population but we must also look at the future and find ways of ensuring that we change our agricultural systems and ways of handling the environment so they become sustainable into the indefinite future. If we don't do that, we will only be thinking of our present life and not caring very much about the lives of our children let alone their children and their children."

Dr. Tewolde Behran, General Manager, Ethiopian Protection Authority

The Gamo Highlands have been cultivated sustainably for more than 10,000 years. Its people and culture are embedded in an ecosystem that is intensively managed and yet unlike ours, includes an astounding amount of diversity, stability, and resilience. During that time they have evolved a way of being in the world that has ensured their long-term survival. Their management of everything; from water tables, soil nutrient cycles to their social infrastructure stems from a view of the world as sacred, alive and entirely interconnected.