Discussion Guide

A Thousand Suns

global
oneness
project

About the Film

A Thousand Suns tells the story of the Gamo Highlands of the African Rift Valley and the unique worldview held by the people of the region. This isolated area has remained remarkably intact both biologically and culturally. It is one of the most densely populated rural regions of Africa yet its people have been farming sustainably for 10,000 years.

Shot in Ethiopia, New York and Kenya, the film explores the modern world's untenable sense of separation from and superiority over nature and how the interconnected worldview of the Gamo people is fundamental in achieving long-term sustainability, both in the region and beyond.

About the Guide

This guide is intended to provide opportunities for deeper engagement with the themes from the film *A Thousand Suns*.

Join educators worldwide already sharing our films in their classrooms and learning environments. This film, along with the discussion questions and suggested actions, provide useful tools for lively conversations.

This guide can help by providing:

- Suggested discussion questions that relate to the films' main themes
- Action ideas to support sustainable agriculture
- Background information on the Gamo Highlands of Ethiopia

Ultimately, we hope *A Thousand Suns* and this guide will plant some seeds of new thought and, importantly, new action. Given the scope of the challenges we face as an earth community it will certainly take each of us — doing whatever we can locally — to make the necessary changes we need globally.

The Gamo

The Gamo Highlands of Ethiopia provides a powerful case study of what can go right, and wrong, with efforts to achieve sustainable agriculture.

The following describes this area's geography and unique culture, and details current threats to the Gamo way of life.

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 13,000 feet 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.

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 potatoes. 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.

THREATS TO THE GAMO

Outside Religions

The Gamo is a unique system in which people and nature have coexisted 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.

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 some companies which influence AGRA 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 GLOBAL SIGNIFICANCE OF THE GAMO

Globally, we continue to grapple with the question of how a growing human population can coexist 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 a relative handful of 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, and 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%, outperforming conventional industrial agriculture.

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.

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.[1]

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 used to maintain ownership of their traditional indigenous seed varieties, to a handful of multinational corporations.[1]

1. Sengupta, Sonimi. 2006. "On India's Farms a Plague of Suicides" New York Times. Sept. 19, 2006.

Discussion Questions

The following questions can be used to help facilitate reflections and discussions following a screening of *A Thousand Suns*.

We also encourage you to come up with your own questions or topics specific to your community and interests. Thinking about new ideas and sharing your thoughts can be the first step toward taking more concrete action.

FOOD

Agriculture

- Are there aspects of the Gamo culture's agrarian lifestyle that are relevant to farming more sustainably in the Western world?
- What are the implications of the Western world being so out of touch with food production and where our food comes from?
- In the film, Mburu Gathuru, executive director of the Institute for Culture and Ecology, feels that farming solutions should be farmer-driven. What would farmer-driven policies look like? What pros and cons do you see from grassroots, ground up policies vs. corporate or top down models?
- Do you think there are ways to feed Africa without depending on outside assistance?

Indigenous Knowledge

- In what ways does being *'closer to the land'* contribute to the Gamo culture?
- While quick-fixes may solve food security in the short-term, they often have longer-term detrimental effects, as illustrated by the first green revolution in Asia. How might indigenous knowledge help ensure a more sustainable food supply for us all?
- How might the indigenous practices of the Gamo people be applied on a global scale? Would such practices be realistic in the Western world? What changes would be required for them to be adopted elsewhere?

ECOLOGY

Biodiversity

- In the film, Achim Steiner suggests that nature has developed strategies for coping with crisis over millions of years and that we have much to learn from nature. What are some of nature's strategies?
- One of the unique aspects of the Gamo Highlands is its tremendous biodiversity — the hundreds of varieties of agricultural species — which has made it less vulnerable and more resilient over 10,000 years. In an increasingly monocultural world, how do we maintain the necessary resilience that nature has evolved over eons?
- How does the biodiversity of the Gamo region illustrate ecological interdependence?

Sustainable Resources

- What do you think has made the Gamo culture sustainable for over 10,000 years?
- How might the ancient and modern worlds work together to develop more sustainable practices?
- What should be the role of science and technology in places such as the Gamo region? Is there a place for them? Why or why not? Who decides?
- "Part of what we've lost is we're trying to rely only on our own energy but it's nature's energy pouring through us which we need to draw on, right now, in our search for sustainable energies," says scholar Mary Evelyn Tucker. How would you characterize 'nature's energy'? What are ways we can draw upon it?

RELIGION

Fundamentalism in the Gamo

- What are the pros and cons of introducing a new belief system into the Gamo?
- What do you think is the proper role of the evangelical church in the Gamo culture?
- In what ways do you think the Christian church might change the culture?
- What can monotheistic and indigenous traditions learn from each other? Can they coexist? What do they each have to offer the world at this time?

Indigenous Wisdom and Worldview

- Is there a place in the modern world for believing that the earth is sacred?
- What steps do you think we need to take to reconnect culture and religion to ecology?
- How does indigenous wisdom understand the concept of sharing and ownership?
- The Gamo worldview has a very different narrative than our Western worldview. What aspects of theirs might we incorporate into our own, very different way of seeing the world?

DEVELOPMENT

International Aid

- How might AGRA harness indigenous knowledge and work together with local communities?
- AGRA and others stand to make a profit from their philanthropic efforts in Africa. Can external profit making and preservation of indigenous culture coexist?
- Traditionally, international aid has been controlled by outside 'experts', but many believe it is indigenous people who must manage the process. Who is right? Why?
- Critics of the Green Revolution in Africa feel that economic development models are being imposed and indigenous peoples are forced to assimilate unsustainable Western consumerist paradigms of development, disrupting 10,000 year old traditions of land use. Do you agree? Why or why not? If yes, what do you see as alternatives?

Quotes from *A Thousand Suns*

"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

"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."

Lea 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 a 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

"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

"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

"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

"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 on for the coming generation."

Kapo Kansa, Gamoan Elder

Actions to Support Sustainable Agriculture

We all need to eat in order to live. The foods you choose to eat can help support sustainable agriculture in your region. Because large-scale industrial agriculture is currently the predominant model in North America, it's not always easy to find sustainably grown food.

The following pages contain more information about different types of sustainable food and where to find them.

ORGANIC FOODS

Organic foods are grown using methods that seek to replicate the ecology of the natural environment by maintaining biodiversity and fostering healthy soil and growing conditions. For example, organic foods do not use chemical fertilizers or pesticides that negatively affect biodiversity.

Organic farming is actually not a new practice. Human beings have been farming without synthetic or chemical fertilizers or pesticides for millennia. The heavy use of chemical fertilizers and pesticides was first widely introduced around WWII. Eventually farmers around the world saw the negative impacts of this type of industrialized farming, and began to study and develop methods that increased the long-term productivity of their farms. Many refer to the renewal of this traditional farming practice as "organic."

Actions you can take as an individual

- Propose an organic school lunch program.
- Know your brands! Use the **Cornucopia Institute's Dairy Report and Scorecard** to find out which milk and dairy brands are both organic and sustainable.
- Ask your store manager or local restaurant to carry the food you want! For more information and suggestions on how to go about this, visit **Sustainable Table**.
- Buy organic whenever possible.

Actions you can take as a group

- Organize a community seed exchange.
- Serve popcorn made from heirloom varieties of corn to pop and serve during the film screening or discussion groups.

SEASONAL FOODS

Although today's global marketplace allows us to buy foods grown virtually anywhere in the world all year round, these options are not the most sustainable.

By purchasing local foods in season, you eliminate the environmental damage caused by shipping foods thousands of miles, your food dollar goes to local farmers and you enjoy the healthy benefits of eating fresh fruits and vegetables.

Actions you can take as an individual

- Eat a sustainable and whole foods diet by selecting local seasonal foods at the market.
- Educate yourself about what seasonal varieties of food are available in your area.
- Join a CSA (community supported agriculture) program. Members purchase shares in a farmer's crop before the season begins and are provided a portion of the harvest all season long.

Actions you can take as a group

- Turn an abandoned lot, or a friend's lawn (with permission) into a vegetable garden.
- Get together with friends and neighbors for a seasonal foods canning event.

To find out more action ideas and information about organic and seasonal foods in your area visit Sustainable Table at www.sustainabletable.org

LOCALLY GROWN FOOD

There are many benefits to locally grown food.

- Buying locally grown food helps to stimulate regional economies by supporting farmers in your area.
- Locally grown food uses fewer fossil fuels because significantly less energy is used for transportation and refrigeration.
- Fresh food just harvested tastes better than food that has been prematurely picked, frozen and shipped thousands of miles.
- Farmers markets selling local and regionally grown food can be found in cities all across the U.S. Or, grow your own! Did you know that 15% of the world's food is grown in urban gardens?

Actions you can take as an individual

- Can or freeze local foods rather than buying out of season food from 3,000 miles away.
- Visit a pick-your-own farm (good for freezing and canning).
- Choose an individual dish and track where all of its ingredients came from.
- When dining out, ask your server what's local and organic.
- Vote your values with your dollar (and fork!) by selecting locally grown whenever possible.
- When you can't buy locally grown, buy fair trade products and support worker rights.

Actions you can take as a group

- Invite your neighbors to cook a meal together using only local ingredients or native varieties of food.
- Encourage your local institutions — churches, hospitals, workplaces, schools — to purchase fresh, local, and organic foods.
- Organize a group to visit a local family-owned farm.
- For a complete listing of farms and farmers markets near you please visit **Local Harvest.**

ADDITIONAL ACTION IDEAS AND RESOURCES

Eat Well Guide

Sustainable foods can be found in your community by purchasing organic and locally grown produce and products. It's easy to find farmers markets, restaurants and more with the user-friendly Eat Well Guide.

Ask For More Sustainable Food

If you shop in a chain supermarket and prefer not to change where you buy food, look to see if any of the fruits and vegetables sold in your store are organic or from local farms. If your store doesn't carry this kind of food, ask the store manager to begin carrying local and or organic food.

International Food Crisis

Nearly 1 billion people worldwide don't have secure access to food. Local and international organization are coming together to promote sustainable solutions to feed the world's people. Find out more at US Food Crisis Group.

Save Our Seeds!

Slow Food USA has created a catalog of foods that are threatened by industrial standardization, the regulations of large-scale distribution and environmental damage.

The U.S. Ark of Taste

Profiles over 200 rare regional foods, and is a tool that helps farmers, ranchers, fisherman, chefs, retail grocers, educators and consumers celebrate our country's diverse biological, cultural and culinary heritage. Learn more at Slow Food USA.

LEARN MORE ABOUT THE ISSUES

Food First: Institute for Food & Development Policy
foodfirst.org

Institute for Agriculture & Trade Policy
iatp.org

Native Harvest: White Earth Land Recovery Project
nativeharvest.com

The Oakland Institute
oaklandinstitute.org

Pesticide Action Network North America
panna.org

Slow Food USA
slowfoodusa.org

Eat Well Guide
eatwellgide.org

Sustainable Table
sustainabletable.org

Food and Water Watch
foodandwaterwatch.org

US Food Crisis Group
usfoodcrisisgroup.org

global
oneness
project