

Hunger, Disasters and
what we can suggest to help: SFAA 2013
Joan Mencher
with assistance from D. Schneider

What do we mean by a hunger disaster, and how do hunger disasters relate to climate change and its effects on agriculture?

A few essential explanations

- There are two different kinds of hunger disasters:
 - 1. Resulting from something sudden, a local war, an earthquake, a tsunami, Hurricane Sandy, etc. This kind of disaster usually provokes relatively rapid responses around the world.
 - 2. long-term, slowly advancing changes that affect water availability, or the gradual loss of agricultural land to “developers”, to growing biofuels or loss of land to the wealthy, or ignoring the gradual increase in CO² in the atmosphere, etc. i.e. what we see in many places on this globe.

In the second case, I refer to the potential for gradual persistent malnutrition, especially if governments are not willing to step in and provide for those who are losing out. Remembering what it took during the Depression of the 1930's to begin to change life for most people in the US, and the vital role played by government projects like the CCC under President Roosevelt.

It must also be noted that in the second case, persistent hunger and mal-nutrition, we most often refer to disadvantaged groups of people, castes in India, racial minorities in the US, as well as widows with children, people with handicaps, etc.

My talk today focuses on the latter kind of disaster and the policies that breed hunger

I will cover several things that are interrelated.

- The Struggle for Food Sovereignty: Small Farms Versus Corporate Agriculture, GMOs and Climate Change; India's Central Government Policies Versus the States
- What is happening to world agriculture?
- What can India learn from China's mistakes in following the US model?

Differing Paradigms of Development, Feeding the World and Eliminating Poverty

Corporate model

- Multinational corporations control most operations.
Main goal is to sell inputs: fertilizers, herbicides, seeds and pesticides.
- Large corporate farmers focusing on global, rather than local markets; contract farmers with little autonomy.
- Mono-cropping and failing to intercrop and rotate crops

Alternatives

- In both US and “developing” countries, focus on family farms, small/medium-sized farms and cooperative farms producing for local market as well as nearby urban centers.
- Combining the best of traditional farming with ecologically sound advances such as SRI/SCI and ways of increasing root stamina.

Flexibility of farming communities in dealing with climate irregularities vs. Industrial model

Industrial Model

- Inflexible about what is grown. I.E. Focus on corn and soybeans for animal feed & biofuel, designed for profit by producers of chemicals and seeds.
- Under US influence, China uses subsidies on grains for animal feed and biofuels. (*Grain* article) While grain yields increased by **10%**, use of inorganic fertilizers increased **51%** (1996-2005).
- **IOWA Drought 2012: exacerbated by lack of water conservation, absence of soil biota produced by industrial mono-cropping.**

SRI Model

- Farmers can easily switch to various millets, as they did when rains were sparse in 2012 in Tamil Nadu and can also include vegetables and tree crops in poly-cropping strategies.
- Tend to grow several varieties of rice or wheat depending on the particular soil conditions.
- Data on 4-crop rotation studied by Iowa state University and University of Minnesota, showing equal yields with reductions in toxicity of freshwater runoff.

Industrial Agriculture leads to...

- Fertilizer and pesticide run-off: threat to lakes, rivers, and diverse bodies of water.
- Excessive Tillage: negatively affects soil biota, especially those living directly under the soil like earthworms which often die from insecticides.



SRI agriculture leads to...

- Greater biodiversity.
- Deeper root systems, allowing access to moisture and other nutrients. Roots much more resilient.
- Protection against rainfall variation (droughts/ hurricanes)
- Greater resilience of farming communities.



Indian approaches being pushed by PM and other western educated economists (of all parties)

- Present plans call for moving over 400,000 farming families off the land in two States, Tamil Nadu and Uttar Pradesh, in order to set up SEZ's. Yet a case study in Rajasthan shows that for smaller farmers it leads to a significant decrease in quality of diet, including more malnutrition. Only a few larger landowners are benefiting.
- Just as family farmers are fighting for their role in the current US farm bill, so are advocates for Indian smaller farms fighting government plans.

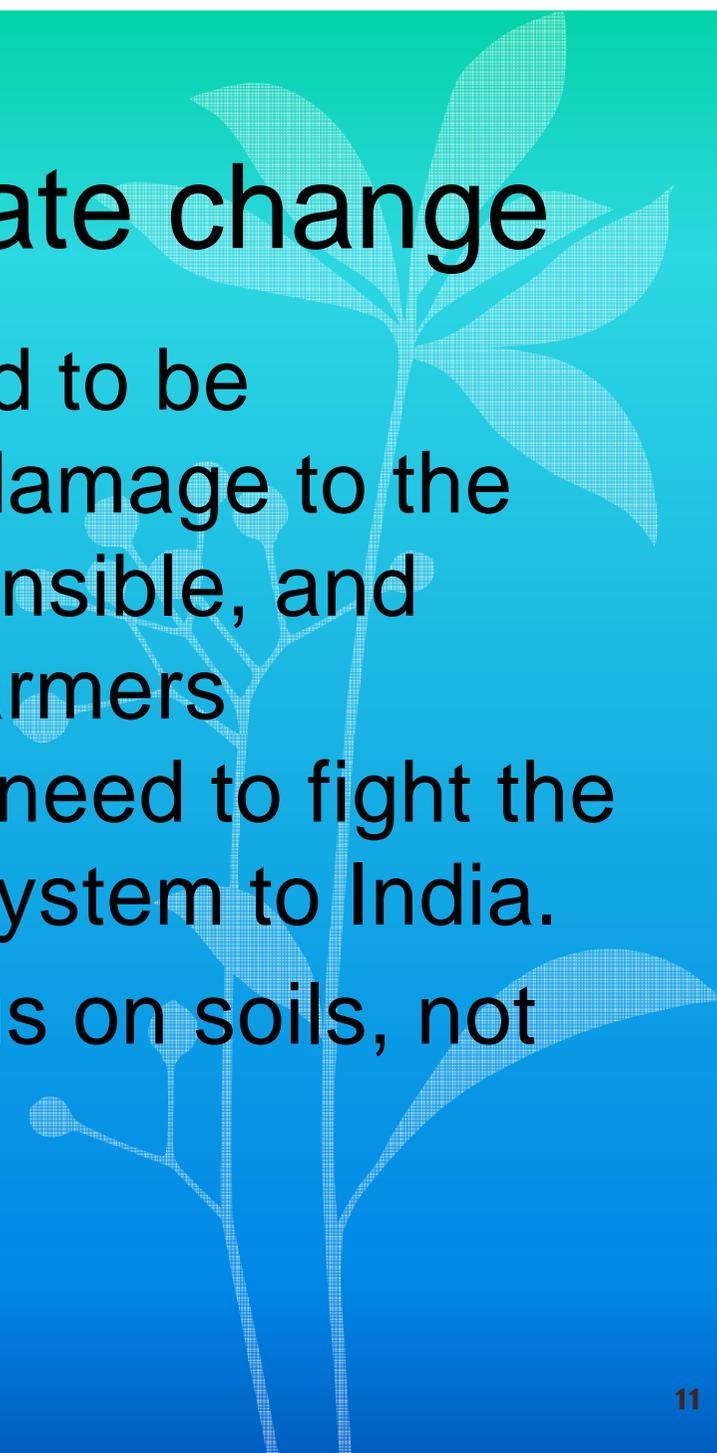


- Massive march for Land Justice occurred in India, in summer of 2012, with 50,000 of India's poorest walking in worn sandals or bare feet 350 miles from Gwalior to Delhi. It was growing towards 100,000 when the government offered to meet their demand.

March for Land Justice (continued)

- A similar March in 2007 led to the government setting up a commission, which did nothing.
- This time demand for action is intense...As some stated, we need “To make sure India’s rise as a global economy isn’t achieved on the backs of its poorest!”
- My question is: Will corporate pressure undermine promises made by the Government, unless people are persistent? Access to land for the poor goes against the plans of the central government and some state govts.
- With elections coming up and a two-day strike in February 2013 (the first since the Independence Movement) occurring all over the country, poorer people are determined to make their needs known and to demand action.

To cope with climate change

A stylized, light-colored plant graphic with several leaves and a central stem, positioned on the right side of the slide. The background is a gradient from light blue at the top to a darker blue at the bottom.

- All farming systems will need to be environmentally sound (no damage to the environment), socially responsible, and economically viable for all farmers regardless of size. Growing need to fight the importation of the US food system to India.
- All systems will need to focus on soils, not primarily inputs.

Uphoff notes the many benefits from SRI/SCI management practices which include:

- Water saving
- Cost reduction
- Resistance to pests and diseases
- Tolerance of drought, storm damage and other effects of climate change
- Higher milling outrun of polished rice from paddy
- The many benefits we are learning exist from soil organisms
- Resistance to pests and diseases
- Tolerance of drought and storm damage plus other effects if climate change
- High milling outrun of polished rice from paddy
- Uphoff also notes that the phenotypes produced using SRI/SCI management methods are superior to those produced by “conventional processes”.

What SRI does

- SRI truly challenges the paradigm for agriculture that the US and its corporations (including Indian branches and Indian corporations) have been pushing.
- Even unimproved (not hybrid) varieties, supplemented by vermicompost, green manure and other organic inputs, can give very high yields with SRI/SCI management--up to 6-12 tonnes per HC--at lower cost, and often with higher market price, since the taste meets local preferences

What else does SRI do?

- Noting the importance of attending to soil organisms, Uphoff goes on to state that:
 - “the orthodoxy of modern agriculture—that the only or best way to ‘feed the world’ is through modified genetics and increased agrochemical inputs—is not the only game in town. . . . The performance of SRI (and SWI, SSI, STI, etc.) plus the advances made in microbiology should bring these new ways of thinking and farming back into the mainstream in the next and future decades.

Moving beyond this, what can anthropologists do?

- First of all, we can document programs such as SRI/SCI and CMSA (program specific to Andhra Pradesh which I have talked about elsewhere) and how they spread and what the bottlenecks are.
- Carry out further analysis of places where SRI is functioning, and connect those processes to social life in its worldwide regional variants, including some of the reasons why it has been quite successful in some areas where there are larger farms and not in others, and to help improve communication between people--farmers and consumers—especially to help bridge the gap between poor farmers and the middle class.

Reaching Policy Planners

- Influencing people in third world countries who have some power who do not know what is happening with US agriculture or what alternatives exist and keep on drawing more and more support in the US.
- Working to influence policy planners in the US as well as India at the state and central government levels.