

Stop Hunger



Local Defensive Actions



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Hunger in the World Today

Hunger worldwide

According to UN statistics 850 million people worldwide suffer from hunger. They are underweight and do not get enough to eat. Another 2 billion people suffer from malnutrition caused by lack of vitamins A, C or B3 or minerals such as iodine and zinc.

The UN Millennium Goals signed by the nations of the world in 2000 has as its first goal to reduce the number of people suffering from hunger by 50% to around 400 million by 2015. While some countries such as China and Brazil are likely to reach this goal for their people, worldwide the number of people suffering from acute malnutrition increases by 4 million. The number in Africa is now 210 million and India has 220 million suffering from hunger.

The UN Millennium Development Goals - signed in September 2000 has as its first goals:

Eradicate extreme poverty and hunger:

- Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day
- Achieve full and productive employment and decent work for all, including women and young people
- Halve, between 1990 and 2015, the proportion of people who suffer from hunger



The Global System of Food Production

The food production of the world has undergone great changes in the last century as industrial methods of production have been applied to the production of food in wealthy nations where larger and larger farms produce crops using expensive equipment, fertilizers, irrigation, pesticides as well as highly developed and in some cases genetically modified seeds. Many farm inputs are produced by a handful of very large food industrial companies that also purchase much of the products of the farmers and thus dominate food production and supplies globally. Industrial farming methods have been adopted in many third world countries such as India that underwent a so-called Green Revolution in the 1970. This led to great increase in food production and has allowed the world population to almost double since 1970 from 3.7 billion to 6.7 billion while keeping the absolute number of people suffering from hunger unchanged whereby the relative proportion of hunger stricken fell from 30% to 15% of the world's people.

Industrial farming is only possible when using much fossil fuels. Therefore modern farming adds much of the green house gases that are now building up in the atmosphere. The farming methods have at the same time degraded large areas of arable land as topsoil has been lost due to ploughing and growing of a single monocrop year after year while groundwater resources many places have been depleted or polluted by pesticides. Cutting down forests and expanding cities have further compromised the global ecosystems and reduced the area of potentially arable land.

Food sold in developed countries has become more and more processed. Western eating habits and fast food restaurants have spread around the world. These establishments have been quite profitable ventures, the most famous being McDonald's. They have promoted consumption of meat. This has increased meat consumption among those who can afford it, and it has not been good for the environment.

Modern industrial farms may have hundreds of cows or tens of thousands of chicken operated by a single farmer. The farm animals are fed much food that is well suited for human consumption such as maize, wheat, oats and soy beans thus increasing the need for ever more grains at a time when the world population is rapidly growing, and thus adding to the strain on potential or marginal lands that could otherwise have been left untouched as reserves for animals and plants threatened by extinction.

Can the Earth Sustain a Growing World Population

Optimists believe that food production will continue to rise due to new inventions such as new genetically modified crops, new breeds of domestic animals etc. Pessimists forecast a severe food crisis as population will grow while food production will not.

International agencies such as USDA, EU and the World Bank take a limited interest in small family farmers or often create systems that make it difficult for the small farmers to survive. It is, however, worth noting that of the 525 million farmers of the world 450 million or 85% have a farm of 2 hectares or less. These farmers are very important as they feed a large part of the global population.

Recently food prices have risen sharply as world stocks of grain have decreased to the lowest level in decades. This is likely the beginning of a trend of increasing prices. The higher prices are brought about by increasing prices for fossil fuels and increasing demand from the wealthy nations and from the middle classes of up and coming nations such as China. Prolonged droughts in food exporting countries such as Australia and use of crops and cropland for biofuels are additional factors that have limited food supply. Today 25% of US grown maize is used for ethanol production and this proportion is going up.

Global warming and climate change are likely to limit the capacity for food production of many countries in tropical and subtropical areas in the years ahead.

To meet these challenges it is time to take defensive actions by strengthening local food production, working towards self-sufficiency, reducing waste, taking care of land and water and educating people.

Local Defensive Actions

The following presents a list of things to do to stop hunger within six areas: sustainable farming, environment, food security, water, nutrition and income generation.

You can find material to support such actions on the website of The GAIA-Movement.

I. Sustainable farming

Improving the soil

Thriving sustainable farming requires soil full of life. Methods and fertilizers to use include composting, vermiculture, green manure, animal manure, human urine, effective microorganisms, organic tea compost, mulching (covering soil with plant material), crop rotation that includes nitrogen fixing plants such as beans and the testing of soil so as to establish its chemical needs.



Do not harm the soil

It is important that the farming methods do not harm the soil. This can be ensured through conservation tillage, intercropping, ripping or using permanent planting holes (potholing) instead of ploughing and contour farming that catch and withhold rainwater.



Protecting the crop in gentle manners

The crops should be protected without resorting to strong pesticides, herbicides and fungicides. This can be done by using shade nets, natural insecticides (chili pepper, garlic, tephrosia, neem), by paying close attention to the gardening calendars and by manual weeding instead of spraying.

2. Environmental campaigns

Protecting the natural habitats

It is important to maintain the health of the natural habitats with its plants and animals. This can be done by stopping deforestation, stopping bush fires, practicing soil conservation and protecting birds. Reintroduction of edible plants that were once used locally may both provide healthy food and a better environment.

Stopping erosion

Protecting the topsoil by stopping erosion can be done through erosion control, planting of vetiver grass and trees, establishing raised bed gardens, planting of fruit trees and by diverting water away from eroded gullies.



3. Food Security

Processing of food crops

Processing local crops can improve their usefulness. Oil can be produced locally from coconuts, peanuts, sunflower seeds etc. A solar drier can preserve food that might otherwise go to waste. A bamboo or clay cooler can be used to store perishable foods for a while because of cooling through evaporation of water. A storage house with passive cooling can better maintain food just using the wind for cooling. Making preserves out of fruits that cannot be harvested year round can widen their use. Dehydration, salting, smoking and fermenting are other traditional ways of preserving food using simple technologies.



Food preparation

Solar cookers can be used to prepare food without the use of firewood. A magic box (a hay box) can finish cooking food that has already been heated to the boiling point. Steaming instead of frying and boiling food will preserve more of its vitamins.

Protecting stored food

It is estimated that 10-40% of all harvested food is lost in one way or another. Structures, use of biopesticide plants such as tephrosia and other methods to protect food from rats and insects can reduce this loss of food. Ventilation and packaging of foods in the right way can also reduce loss. Control of humidity can prevent fungus, mould and diseases that may destroy stored food.



Other Local Actions

Community events on stop hunger

Through a series of community events the local community and local leaders can learn about and be mobilized to secure food locally.

Themes to be used are:

- Healthy and productive soils - use of compost, conservation farming, crop rotation etc.
- Clean water and sanitation - water purification systems and latrines
- Take good care of your crops - irrigation, water conservation, vetiver grass, natural pesticides, shade nets etc.
- Get the most of your crops - harvest, preservation of food, sell at the right price
- Sufficient and nutritious food - moringa trees, fermenting and malting, soy beans, amaranth, diet for children
- Improving tree cover - production and protection of trees, limit bush fires, wood saving stoves, bamboo cultivation.



For each theme there can be demonstrations, explanations, exhibitions and speeches by local leaders and authorities.

Actions with local preschools

Small children are at great risk if they do not get adequate food. Mobilizing preschool teachers to teach about food production and nutrition and the preschool children to become active in securing food can benefit the children directly as well as the larger community. Actions can include:



- Meetings with parents to tell about the nutritional needs of children
- Starting a garden at the preschool
- The preschool children visits local farms
- Establishing a system for cleaning water at the preschool
- Teaching children about healthy foods

Promote food production in your community

Food production can be promoted in many ways. Schools most often have some outdoor areas where food can be produced. This may also serve as a training ground for the students and the community in sustainable farming. Projects, churches, health posts in your area can promote gardens for the growing of healthy vegetables and fruits. Commercial enterprises oftentimes have outdoor areas where some food could be produced. People who live in cities may also produce food in the gardens around their home and encourage others to do so as well.



Conclusion

It is a horrific fact that 850 million people today do not get enough food to eat, while more than a billion people are overweight. At the same time the richest people on earth continue to increase their wealth at an astonishing pace. By 2007 the world had more than 1,125 billionaires who own as much money as the poorest 45% of the world's people had to live on in that same year.



Modern industrial farming methods have greatly increased the production of food in the past 50 years but at a cost. Much land has been degraded by overuse of fertilizers, pesticides, herbicides, heavy irrigation and mono cropping. Industrial farming relies on vast amounts of cheap fossil fuels, primarily oil. As oil prices are increasing and demand for food is going up food prices that have been falling for many years are now rising at a brisk pace. This coming crisis was very obvious when this Ray Program was analyzing the situation of food production in the world today.

During the few months that have passed since the Program took place in late March 2008 we have seen the global food crisis deepening and having profound effects. Rice prices have doubled during the first half of 2008. Wheat prices more than doubled over the last year. Food riots and protests have erupted in the Philippines and other nations around the world. Poor people in the slums have had to cut down on food as they can no longer afford to eat as much as they did only one or two years ago.

Natural disasters brought forth by climate change and environmental destruction will surely lead to further increases in food prices, more inflation and potential economic distress for nations and people.



The need for local action to secure food is therefore increasingly obvious.