## ENVIRONMENT

## World Food Day and Food Security

BSc., MPhil., FLS., AMIBiol.
Dept of Life Sciences, University
of the West Indies



STABLISHED 30 years ago by the Food and A g r i c u l t u r e Organisation (FAO) member countries, World Food Day is an annual celebration held on the 16th of October.

Each year a theme is selected in order to highlight areas where action and a common focus are needed. This year's theme is "Achieving food security in times of crisis". This article is two-fold since one cannot fully appreciate this celebration without knowing something about it. I will give a brief history on how World food Day came to be and why it is celebrated. Secondly we will look at this year's theme in more detail.

This celebration was organised by the FAO member countries at their 20th general conference in 1979, where it was suggested by Dr. Pal Romany. Since then it has been celebrated annually in over 150 countries. The 16th of October was selected since it was the day the FAO was founded in 1945.

The objectives of this celebration are many; here are just a few; to draw attention to agricultural food production, to stimulate national, bilateral, multilateral and non-governmental efforts towards this food security. Also to encourage participation of rural people, economic and technical cooperation among developing countries, as well as to heighten public awareness of world hunger. Designed also to promote transfers of technologies to developing countries, to alleviate the hunger problem, to strengthen the national and international fight against hunger, malnutrition and poverty. Finally the establishment of World Food Day draws attention to achievements and advances in the area of food and agricultural development.

Food security can be simply defined as "the availability of food and accessibility to it."

Therefore a country can be said to attain food security when its citizens no longer live in hunger or with the fear of starvation. To be truly independent, a country should be able to feed its

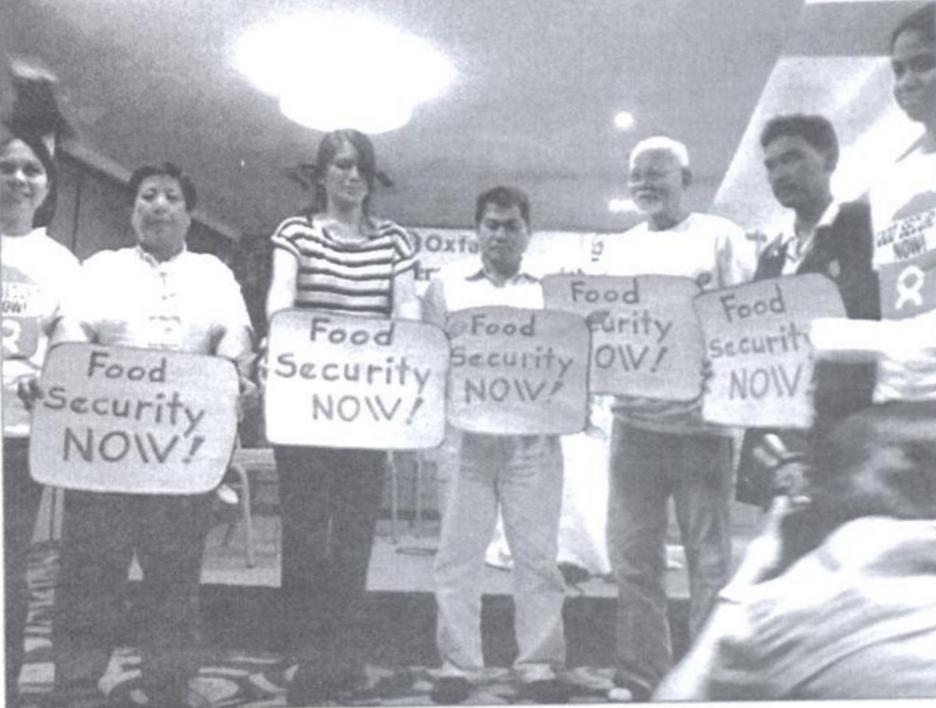
people, they would then not have to depend on other countries for such a basic necessity of life, and in turn be at their mercy and pay whatever they demand for food. A 2003 FAO report lists 852 mil-

lion people worldwide as chronically hungry, while two billion lack food. While in countries that enjoy food security, obesity is a problem. So it is clear to see that the food that is being produced it is not being evenly distributed.

However, the topic of food security is quite complex. It brings into it many different disciplines, such as, science and technology, genetics, agriculture, economics and politics, just to name a few. But I am choosing to focus on some of the factors that affect food security.

Two of the main factors, include land availability and land use. As our global populations increase, more land needs to be allocated to housing and other facilities to support these new communities for education, health and jobs. More land is also being allocated to grow crops for use as biofuels. However, land that is set aside for crop production, either for food or biofuels, undergo continuous intensive farming which can lead to decreased soil fertility and yields. There is also the issue of wealthy governments and corporations buying up the rights to fertile agricultural land in developing countries, such as in Africa, Thailand, and Cambodia in an effort to secure their long term food security.

Other factors that affect food security include the availability of water, when aquifers are being



over-pumped. Climate change is also expected to adversely affect agriculture when it comes to water availability. As the glaciers disappear, so too does the major sources of freshwater for some countries, such as, the Himalayan glaciers which supply the Ganges River.

This river provides water for drinking and irrigation for 500 million people. It is a similar story for the west coast of North America which is supplied by glaciers in the Rocky Mountains and Sierra Nevada. Also the melting of these glaciers would mean an increase in sea levels and

decrease in the amount of land available for farming.

Combined, these constraints will push the prices of food up, therefore limiting supplies to poorer countries. Also with such densely populated urban areas, a food crisis can result in the starvation of thousands, if not millions.

So what is being done to alleviate the crisis? There is increasing research into improving agricultural yields through genetically engineered crops and securing property rights so that a country can feed its population by farming its own land. There is also a need-

ed to educate the population on better farming practices and healthy eating habits. Once they attain food security the resident populations not fall into the trap of obesity and the various diseases that accompany it.

With our growing global population, and constant striving for an ever higher standard of living, which requires more energy, our resources when it comes to food are being strained. It is gearing towards unequal production and distribution of this commodity and if left unchecked can lead to a global food crisis and the starvation of millions.