CAREER OPPORTUNITIES IN FOOD SECURITY

Description of the Field
Food security is a condition related to the supply of food and individuals' access to it (https://en.wikipedia.org/wiki/Food_security). It was further defined at the World Food Summit of 1996 as existing “when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life” (http://www.who.int/trade/glossary/story028/en/). In many countries, health problems related to dietary excess are an ever-increasing threat.

Food security is built on three pillars of supply and demand:

- Availability: sufficient quantities of food available on a consistent basis.
- Access: having sufficient resources to obtain appropriate foods for a nutritious diet.
- Use: appropriate use based on knowledge of basic nutrition and care, as well as adequate water and sanitation.

Food security is a complex sustainable development issue, linked to health through malnutrition, but also to sustainable economic development, environment and trade. There is a great deal of debate around food security, with some arguing that:

- There is enough food in the world to feed everyone adequately; the problem is distribution.
- Future food needs can - or cannot - be met by current levels of production.
- National food security is paramount - or no longer necessary because of global trade.
- Globalization may - or may not - lead to the persistence of food insecurity and poverty in rural communities.

Issues such as whether households get enough food, how it is distributed within the household and whether that food fulfills the nutrition needs of all members of the household show that food security is clearly linked to health.

Agriculture remains the largest employment sector in most developing countries, and international agriculture agreements are crucial to a country's food security. Some critics argue that trade liberalization may reduce a country's food security by reducing agricultural employment levels. Concern about this has led a group of World Trade Organization (WTO) member states to recommend that current negotiations on agricultural agreements allow developing countries to re-evaluate and raise tariffs on key products to protect national food security and employment. They argue that WTO agreements, by pushing for the liberalization of crucial markets, are threatening the food security of whole communities.
Related issues include:

- What is the net impact of the further liberalization of food and agricultural trade, considering the widely differing situations in developing countries?
- To what extent can domestic economic and social policies - and food, agricultural and rural development policies - offset the diverse (and possibly negative) impacts of international policies, such as those relating to international trade?
- How can the overall economic gains from trade benefit those who are most likely to be suffering from food insecurity?
- Do gains “trickle down” to enhance economic access to food for the poor?
- How can food and agricultural production and trade be restrained from the over-exploitation of natural resources that may jeopardize domestic food security in the long term?
- How to ensure that imported food products are of acceptable quality and safe to eat?

(Source: http://www.who.int/trade/glossary/story028/en/)

Career Paths and Necessary Qualifications
Opportunities to work in food security are available and likely to increase. Yet the route into such a career starts at a much earlier stage. A lot of disciplines relate to food security, and an understanding of science is necessary. Food science means being part of a collaborative effort. The answer to the problem is not the preserve of one discipline but will be found where several disciplines work together to tackle the biological, ecological, environmental, geographical, agricultural and even sociological, economic and financial barriers to feeding the world.

To gain an entry-level position, a candidate would ideally complete at least a graduate degree in a related field yet possess a multi-disciplinary background, a couple of years of field experience and a focus on a specific food security-related topic or emphasis. Some examples within the broader field of food security include:

**Nutrition**
Nutrition is at the core of food security efforts, and while the challenge is multi-sectoral, experts in nutrition are needed for a wide range of food security programming. A nutritionist could work on food labeling, creating a food education campaign for kids or on maternal nutrition and breastfeeding programs. The nutrition discipline is known for prizing research and publications, so if you want to pursue this path, a doctoral degree might also eventually be advisable.

**Agriculture development**
A common path to a food security career is one in the many areas of agriculture. From irrigation and pest management to animal husbandry and dairy production, there are many specialties in the areas of agriculture science that one can pursue — even insect farming. Food technology is also a growing field in eradicating hunger, an area where engineers, scientists and entrepreneurs can get involved.

**Climate change**
Climate change has already contributed to food insecurity around the world. An uptick in natural disasters and irregular weather patterns wreak havoc on farmers and make the production of enough food for our world’s growing population an increasingly difficult endeavor.
Food production is also one of the biggest contributors to climate change. So how do we increase food production while decreasing its impact on the environment? This is a quickly growing area of global development work where those with a background in areas like environmental science, natural resources management and forestry can play a role.

*Supply chain management*
A large ecosystem of people, organizations and activities is necessary to get food from farm to table. The issue of food security is less that we don’t produce enough food to feed the world, but that the food doesn’t efficiently get to the right people at the right time.

Do small-holder farmers have access to credit? Are storage facilities adequate to preserve food long enough to safely distribute to consumers? Can more value be created — both nutritionally and monetarily — by processing a commodity into a more premium product? Those with a background in business and finance, food safety and commodity marketing are among those who are often called upon to help improve supply chains for food security.

*Land rights*
To meet increased food production needs, we will need land to grow that food. As younger generations flock to cities and leave their pastoral homelands behind, how we use that land for agriculture development will become an increasingly complex challenge. And encouraging farmers to stay and invest in crop production requires a sense of security that their investments will not be seized by governments or landowners on a whim.

Access to land rights, for people of all descents, gender and socio-economic backgrounds, is a key component to feeding our world. Professionals with a background in law, investment, gender, policy and governance can all play a role.

*Integrator*
There’s no one silver-bullet solution to solving world hunger, and attempts to do so will require cooperation between the private and public sectors, civil society and across multiple disciplines. In addition to specialists from the various areas that impact food security, there is a critical need for professionals who can help bridge the gaps and facilitate cooperation and partnership across all of these actors to truly achieve results. An integrator could be a communications specialist, corporate social responsibility professional, program manager or a specialist who has developed the ability to work across disciplines.


**Demand**
The demand for qualified individuals is on the rise, especially those with a varied background in the social, environmental, and life sciences. Those who also possess a legal, governmental, and/or business background may find their skills valuable to the field of food security.

**Future Challenges of the Profession**
Ensuring global food security will only become more challenging in the future as demand for food is projected to increase by 50 percent over the next 20 years. Increased demand will come primarily from population and income growth in middle-income countries. Growth in agricultural productivity, already lagging globally, also faces increasing threats from climate change, scarce water supplies and competition for energy resources from industry and urbanization.

(Source: [http://www.state.gov/s/globalfoodsecurity/rls/other/129952.htm](http://www.state.gov/s/globalfoodsecurity/rls/other/129952.htm))
Sample Group of Employers

- Africare – [www.africare.org](http://www.africare.org)
- American Refugee Committee – [www.arcrelief.org](http://www.arcrelief.org)
- Bread for the World – [www.bread.org](http://www.bread.org)
- CONCERN Worldwide US Inc. – [www.concernusa.org](http://www.concernusa.org)
- CARE – [www.care.org](http://www.care.org)
- Save the Children – [www.savethechildren.org](http://www.savethechildren.org)
- World Food Programme – [https://www.wfp.org/](https://www.wfp.org/)
- World Health Organization – [http://www.who.int](http://www.who.int)

Resources for Additional Information

**Internet Resources**

- International Nutrition Foundation: [www.inffoundation.org](http://www.inffoundation.org)
- Center for Global Health Policy - [www.idsaglobalhealth.org](http://www.idsaglobalhealth.org)
- Center for Strategic & International Studies- [www.csis.org/program/global-health-policy-center](http://www.csis.org/program/global-health-policy-center)
- Families USA- [www.familiesusa.org/issues/global-health/matters](http://www.familiesusa.org/issues/global-health/matters)