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**Education: New Opportunities for the People of Burkina Faso** 

## Introduction

"Give a man a fish, feed him for a day. Teach a man to fish, feed him for a lifetime"

— Lao Tzu (Lao Tzu)

Imagine that you have no idea about the world around you; that you have no internet or books and could not go to school or read and write. These kinds of conditions are typical for poor subsistence family farmers and rural families, especially for those in the country of Burkina Faso.

Burkina Faso is a relatively small, landlocked country located in Western Africa and is home to about 15,264,735 people (Burkina Faso, Factbook). Burkina Faso is one of the poorest countries in the world and has a poor industrial base. It is among the many developing and struggling nations in Africa. Ninety percent of the population relies on agriculture for food or income, and most of that population is involved with subsistence agriculture (Burkina Faso, World Factbook). Almost half (45 percent) of the population is below the poverty line and is living under very poor conditions (Population).

An average person in Burkina Faso only makes between 440 to 1,300 dollars per year (GDP per capita; Burkina Faso, World Factbook & Background Note). However, that number is much higher than what most of the rural families and subsistence farmers make, since over sixty percent of the income in the country is held by a very small portion of the population (Strategy Paper 2.3.3). With families having an average of six children plus two parents, it makes it difficult to provide everyone the necessary things to live a healthy, happy life (Burkina Faso, World Factbook). Food is currently becoming much harder to afford. With 110-pound bags of rice rising seven dollars and five cents in just three months (January to April), many families are forced to eat less than normal (Hartill). Other than rice, people in Burkina Faso also eat other staple foods such as sorghum, millet, maize, nuts, potatoes, and, on a rare occasion, meat (Bits of Culture & Burkina Faso, FAO).

Most of the 1,300,000 farms (Strategy Paper) in Burkina Faso are extremely small, and are only large enough to produce enough food for the families that own them. Farmers usually grow maize, millet, rice, and sorghum on their farms using techniques such as sowing in dry ground, clearing land that once was forested, using animals to plow the land and to sow seeds, and a traditional Zai technique. The Zai technique involves growing crops in small pits that catch rainwater and contain manure (Farming Practices).

It is hard for farmers in Burkina Faso to export some of their products, such as cereals and shea nuts, because of state intervention in the production and marketing of export commodities. Special authorization has to be given to export these products. The state prohibits the export of raw goat and sheep skins because there is a policy in place that wants to valorize, or maintain the price of, animal byproducts (Burkina Faso: November 1998). Farmers also are unable to directly export and sell their products and usually have to do it through a trader or business, which is usually called a middleman (Laureys). For those farmers who sell locally, the poor customers are unable to give them much money, and the middlemen can offer them a better price.

The major barriers that are preventing farmers from producing more food and having a greater income are land degradation, drought, soil erosion, export methods, unequal distribution of income, no access to water sources, water based diseases, and the lack of yield improvement knowledge. If the right education was introduced, most of these problems could be fixed or improved.

## The Situation

Most of those in Burkina Faso are completely isolated from the opportunities and knowledge that can be obtained through education and teachings. According to most recent reports, Burkina Faso has the lowest literacy rate in the entire world at 21.8 percent, (Burkina Faso, World Factbook) and its schooling status is very poor. Only forty percent of the children can attend primary school (Education). Those children able to attend school usually only receive four to five years of primary education, (Burkina Faso, World Factbook) and of those children less than 1 percent will receive high or advanced education.

Due to a lack of education, subsistence farmers in this region do not know how they can produce more food and make their lives better. Poor rural families and subsistence farmers get less than the national average of 2,149 calories a day, (Lahmeyer) which is a low amount, considering how much work has to be done every day. They also receive low amounts of money from their small surplus of crops due to poor export methods and the use of a middleman.

What makes problems worse is that the land is being degraded due to deforestation and depletion of nutrients in the soil from poor farming practices (Burkina Faso, World Factbook). Women are also disadvantaged because they receive an average of one year less of education than men, and the literacy rate for women is only fifteen percent, which is half of the male literacy rate (Education). One of the larger problems though is the unequal distribution of income in the country. Sixty percent of the nation's income is held by a small group of wealthy people, and the other 40 some percent is held by the millions of subsistence farmers, rural families, and poor urban families in the country. (Strategy Paper 2.3.3).

However, there is hope. The Carter Center has been working with the government of Burkina Faso to increase agricultural development and the government itself has been working hard on various education plans for the country, including forming grants for girls' education at the primary level. A new project, called the BRIGHT project, is creating new girl-friendly schools that have a supportive learning environment (Girl-friendly). Education, quality of life, and availability of opportunities are slowly improving as the world realizes the severity of the situation and begins to help. There are currently many organizations that are trying to help the country with individual problems. Because of all the problems facing the subsistence farmers and the rest of the population, more work still needs to be done

## Education: How can it help?

The question is, "How can education improve the lives of those in Burkina Faso?" The answer is that education can improve or solve most of the problems that are preventing farmers and rural families from producing more food, obtaining food, or receiving a better income. The following paragraphs are examples of how extension education can solve the major problems that subsistence farmers face.

One of the problems is land degradation. Land degradation is the deterioration of the land, and is caused by deforestation, loss of nutrients from poor agricultural practices, overgrazing, and pollution. With more and more land becoming useless each year, there are problems with finding fertile land for farmers and finding land for the increasing population. Land degradation also leads to desertification, the expansion of deserts. Once the land is degraded, it is abandoned and eventually becomes a part of the growing desert. Education can help with this problem by introducing farmers to new agricultural techniques and technologies that can keep the land fertile. Examples of this would be rotating crops,

growing crops that put nutrients back in the soil, and using the right amounts of natural fertilizers, such as manure and alfalfa. Reversing land degrading would be beneficial to the environment and help retain arable land.

Other problem areas are export methods and unequal distribution of income. Here's the problem in more detail. When farmers sell their crops, they usually cannot sell them directly to another nation or a factory that purchases the crops. Most farmers sell their crops to a trader or businessman (middleman) who then sells them to other nations or factories (Laureys). This step in the process raises the price of food and limits the amount of money the farmers receive. These businessmen become wealthy and join the small portion of Burkina Faso's population that hold sixty percent of the nation's income (Strategy Paper 2.3.3). If we taught the farmers how to read and write and provide them with business resources, they could take out the middlemen and sell their products directly to the customer at the middlemen's price. A cooperative between the farmers could be organized to help them learn together and become more successful and efficient. This cooperative could develop a fair trade system that will allow them to get rid of the middlemen and help them receive a larger portion of the overall cost of the product (Understanding Fair Trade). If this occurred, the farmers would have more money, and they could use that money to further increase their food production and improve their lives.

Soil erosion is another problem that the people of Burkina Faso face. Soil erosion is the displacement and loss of soil due to wind, water, and other natural factors. Soil erosion occurs more easily if the land is degraded and if there is no vegetation on the land. Burkina Faso is very susceptible to high winds coming off the Sahara Desert and to rare but disastrous flooding like what occurred in 2007 (Heavy Rains). Soil erosion can be prevented by planting crops on level ground, planting vegetation, use contour farming on slopes, and creating wind breaks and runoff barriers out of brick or stone. Education would help with this problem because the farmers could learn what regional plants would be best suited to hold the soil, and the most simple and modern ways of contour farming and other soil conservation techniques (Soil Erosion).

Other big problems are the lack of water resources and the increase of waterborne diseases. Waterborne diseases are preventing farmers from working. This puts a strain on food production, especially since almost all work is done by hand and not by machine. Examples of waterborne diseases are bacterial and protozoal diarrhea, hepatitis A, and typhoid fever (Burkina Faso, World Factbook). Educating the people of Burkina Faso about proper hygiene and sanitation practices, such as cooking food in clean water, could reduce the incidences of waterborne diseases. The problem with this is that many hygiene and sanitation practices, such as washing hands and going to the restroom in a safe, designated area, cannot be done if there are inadequate water resources. Effective water resources would also allow more fields to be irrigated, which will increase yields. Education on how to build latrines, and how to capture, store, and transport water is needed along with funding to begin to create a healthier country (Water Aid).

The last problem is the lack of yield improvement knowledge. Simple things can be taught to subsistence farmers in Burkina Faso that can improve their yields. Some of these things are the proper ways to store their grain (Burkina Faso, Carter Center), better methods of farming that don't involve cutting down forests, more efficient harvesting methods, the correct way to plant seeds, and the proper way to use natural fertilizers. These simple acts can increase food productivity immediately while not hurting the environment.

# **Getting Started**

What first should be done is to set up political agreements between Burkina Faso, national governments, and organizations that will permit the creation and establishment of educational extension

programs and institutions in Burkina Faso. Together, these groups will need to form a plan about when, where, and how they will start administering education to the farmers of Burkina Faso. Then, they will need to organize people and money that will be used to teach the subsistence farmers things that they need to increase their productivity and provide them with the tools and items needed to succeed. These groups also need to organize all of their agricultural knowledge that can help solve the problems facing Burkina Faso families.

Large organizations, such as the World Food Program, and wealthy countries need to provide initial funding so that the educational institutions can be created in Burkina Faso. Then, it is only a matter of time before education and the support of education grows into a very productive state. People that can speak the Burkinabe languages and have extensive agricultural knowledge will be needed to help teach helpers what needs to be known in order to teach the people in Burkina Faso. The more people able to instruct the people of Burkina Faso, the faster progress will be obtained.

There are many organizations, such as the Carter Center and Water Aid, which are helping those in Burkina Faso. What needs to be done between these groups is the establishment of a "Head Committee" that will coordinate these groups' efforts. This would be a much more organized approach to solving the problems that the different groups are addressing.

### Conclusion

Increased agricultural productivity and food security can be obtained for subsistence family farmers and rural families in Burkina Faso if education programs can be implemented that teach subsistence farmers and provide them the knowledge and services they need to improve their food production.

What is unique about education is that it can lead to continued growth and improvement. With proper infrastructure, the educational institutions can keep track of new technologies, ideas, and suggestions that would further help those who are seeking ways to improve their food productivity and lives.

Indeed, time is an important factor in the success of education on the lives of rural and subsistence farming families in Burkina Faso. Once extensional education begins, the farmers can apply their new knowledge to their way of life and increase their food production and income. With a higher income and more food, these farmers can eat more, which will benefit their health, and can help those families around them. They will also not hesitate to establish formal educational programs in the lives of their children. As their lives improve, children will begin to learn how to read, write, and communicate in school, and the education status of Burkina Faso will be greatly improved. Higher education in the youth of Burkina Faso will open more doors for the people to succeed and further learn how to improve their lives.

After the farmers see the positive effects of the new things they learned, they will hopefully spread their knowledge to the rest of the farmers in the country and to the bordering countries that are facing the same problems. Over time, the lives of the millions of people in these western African countries could improve and food insecurity would no longer be such a huge factor for these countries. We shouldn't just want to give people the food they need, but teach them how to produce it themselves. The world has the knowledge to improve the lives of all the misfortunate, so let's share it!

### **Works Cited**

```
"Adapting Farming Practices in Burkina Faso." 21 Feb. 2007. Tearfund International Learning Zone.

14 Sept. 2008. <a href="http://tilz.tearfund.org/Publications/Footsteps+61-">http://tilz.tearfund.org/Publications/Footsteps+61-</a>
```

70/Footsteps+70/Adapting+farming+practices+in+Burkina+Faso.htm>

"Background Note: Burkina Faso." US Department of State. 12 Sept. 2008.

<a href="http://www.state.gov/r/pa/ei/bgn/2834.htm">http://www.state.gov/r/pa/ei/bgn/2834.htm</a>

"Bits of Culture- Burkina Faso." Massachusetts General Hospital. 14 Sept. 2008.

<a href="http://www.massgeneral.org/interpreters/b\_bf.asp">http://www.massgeneral.org/interpreters/b\_bf.asp</a>

"Burkina Faso." The Carter Center. 14 Sept. 2008.

<a href="http://www.cartercenter.org/countries/burkina\_faso.html">http://www.cartercenter.org/countries/burkina\_faso.html</a>

"Burkina Faso." World Factbook. 4 Sept. 2008. Central Intelligence Agency. 12 Sept. 2008.

<a href="https://www.cia.gov/library/publications/the-world-factbook/geos/uv.html">https://www.cia.gov/library/publications/the-world-factbook/geos/uv.html</a>

"Burkina Faso." Food and Agricultural Organization. 14 Sept. 2008.

<a href="http://www.fao.org/ag/agn/nutrition/bkf-e.stm">http://www.fao.org/ag/agn/nutrition/bkf-e.stm</a>

"Burkina Faso: November 1998." World Trade Organization. 14 Sept. 2008.

<a href="http://www.wto.org/english/tratop\_e/tpr\_e/tp89\_e.htm">http://www.wto.org/english/tratop\_e/tpr\_e/tp89\_e.htm</a>

"Burkina Faso Poverty Reducing Strategy Paper." International Monetary Fund. 14 Sept. 2008.

<a href="http://www.imf.org/external/NP/prsp/2000/bfa/01/index.htm#Figure1">http://www.imf.org/external/NP/prsp/2000/bfa/01/index.htm#Figure1</a>

"Burkina Faso: Six Killed and Thousands Affected by Heavy Rains." 1 Sept. 2008. All Africa.

14 Sept. 2008. <a href="http://allafrica.com/stories/200809011049.html">http://allafrica.com/stories/200809011049.html</a>

"Education" Oxfam. 14 Sept. 2008.

<a href="http://www.oxfam.org.uk/coolplanet/ontheline/explore/journey/burkina/educ.htm">http://www.oxfam.org.uk/coolplanet/ontheline/explore/journey/burkina/educ.htm</a>

"Girl-friendly Schools See Enrollment Rates Soar." Plan. 14 Sept. 2008.

<a href="http://www.plan-international.org/news/bright/">http://www.plan-international.org/news/bright/>

- Hartill, Lane. "Understanding West Africa's Rising Food Prices." Catholic Relief Services. 14 Sept. 2008. <a href="http://crs.org/burkina-faso/rising-food-prices/">http://crs.org/burkina-faso/rising-food-prices/</a>
- "How to Prevent Soil Erosion" eHow. 14 Sept. 2008.

<a href="http://www.ehow.com/how\_2078923\_prevent-soil-">http://www.ehow.com/how\_2078923\_prevent-soil-</a>

erosion.html?ref=fuel&utm\_source=yahoo&utm\_medium=ssp&utm\_campaign=yssp\_art>

- Lahmeyer, Jane "Burkina Faso General Data of the Country." 21 Dec. 2004. Populstat. 14 Sept., 2008. <a href="http://www.populstat.info/Africa/burkinfg.htm">http://www.populstat.info/Africa/burkinfg.htm</a>
- "Lao Tzu Quotes." Brainy Quotes. 16 Sept. 2008.

<a href="http://www.brainyquote.com/quotes/authors/l/lao\_tzu.html">http://www.brainyquote.com/quotes/authors/l/lao\_tzu.html</a>

- Laureys, François "ICTs and Rural Development: a case from Burkina Faso." 7 Mar. 2007. IICD. 14

  Sept. 2008. <a href="http://www.iicd.org/articles/iicdnews.2006-11-06.1897137599">http://www.iicd.org/articles/iicdnews.2006-11-06.1897137599</a>
- "Population Below Poverty Line by Country." Nation Master. 16 Sept. 2008. <a href="http://www.nation">http://www.nation</a> master.com/graph/eco\_pop\_bel\_pov\_lin-economy-population-below-poverty-line>
- "Understanding Fair Trade." 5 Sept. 2008. Global Exchange. 28 Sept. 2008.

<a href="http://www.globalexchange.org/campaigns/fairtrade/">http://www.globalexchange.org/campaigns/fairtrade/</a>

"Water Aid Burkina Faso." Water Aid. 16 Sept. 2008.

<a href="http://www.wateraid.org/burkina\_faso/default.asp">http://www.wateraid.org/burkina\_faso/default.asp</a>