Food insecurity; not simply hunger, but malnourishment resulting "from the cost and physical unavailability of food". This condition has become recognized as one of the critical problems of the 21st century, existing in some form and degree in every country in the world. Although it is a global problem, food insecurity affects the world disproportionately.

Of the 22 countries in which the undernourishment rate is over 35%, and food insecurity is a constant reality, 16 are in Africa. And of these 16 countries, the Democratic Republic of the Congo (DRC) is one of them. The third largest country by area and fourth largest by population in Africa, the DRC has potential to become one of its greatest and most prosperous. With its massive hydropower potential from the great Congo River, vast mineral wealth, and undeveloped agricultural potential, it is agonizing that this country should be one of the poorest in the world. The gripping, consumptive conflict and the corrupt, impotent government of the DRC have shackled the country and its people into excruciating poverty.

Agriculture

In the DRC an estimated 70% of the population is rural, and of these rural Congolese almost all of them are subsistence farmers. The Food and Agricultural Organization (FAO) found that the average farm size in the DRC is just .53 hectares, or about 1.3 acres. Rural farmers grow both food and commercial crops, such as: coffee, sugar, palm oil, rubber, tea, quinine, cassava (tapioca), palm oil, bananas, corn, rice, root crops, and other fruits. Cassava is the staple food crop. Basic agricultural practices like fertilizer or irrigation are rarely used because of the high cost, limited availability and lack of knowledge of these kinds of technologies. Marketing opportunities are also limited considering the major method of communication is by radio. The DRC itself is disadvantaged as a developing country in the global market. The infrastructure, both physical and communicative, is ridiculously limited. Roads are impossible to traverse and telephone lines almost non-existent. And the current level of the population with access to the internet, one of the most effective marketing tools of the modern world, is a mere 0.3%. This gives rural farmers no real chance of marketing effectively.

Life

With the ninth highest fertility rate in the world of 6.2 children born per woman, and with about 46% of the population between the ages of 0 and 14, a typical Congolese family usually consists of many children and teenagers. Only 2.5% of the population is 65 years or older, so not many elderly are living in the DRC. Meat is rarely eaten because of the expense so the average diet consists mostly of root crops like cassava, and also corn, bananas, and other fruits. Fish is highly popular, especially along the eastern border, around the Great Lakes. However, due to overfishing, the DRC has been forced to import more and more fish; almost equaling their total amount of production. There is environmental degradation in several forms: the poaching of endangered species like Mountain Gorillas and Forest Elephants; deforestation, a significant amount created by the many refugees and internally displaced peoples (IDPs) living in the DRC; and environmental damage caused by mining.

Mining

Mining plays a huge role in the DRC's economy, being the country's primary form of income as far as exports and foreign investment is concerned. The DRC's mineral wealth includes: diamonds, gold, copper, cobalt, coltan, and zinc. Coltan is a key material in cell phones and computer chips, and the DRC
has 80% of the world's coltan resources. The mining sector employs many Congolese, and being manual labor it is one of the career opportunities in the DRC which requires no education. Jobs like these are in demand in the DRC because of the country's limited educational opportunities.

**Education**

67% of the DRC is literate. However, only 54% of Congolese females are, compared to 80% of males; and this number would drop even more if referring just to the rural poor women of the DRC. Congolese women are targets for sexual violence, and are severely disadvantaged in their opportunities for an education or various careers. The literacy rate is a significant statistic because of the strong connection between education and the ability to escape from poverty. And the Democratic Republic of the Congo is desperately poor. With an average GDP of $300, the Congolese people are second only to Zimbabwe as the poorest in the world. The majority of the Congolese people, about 70%, are poor, rural farmers. Although the agricultural potential of the DRC is high, the actual food production and supply is suffering.

**Major Barriers**

Many major barriers to improving agricultural productivity and income exist in the DRC. In September 2007, the World Bank identified four main challenges: the poor state of physical communication infrastructure; a low-technology, low-productivity agricultural base resulting from a lack of agricultural services; the government's "misguided" strategies and policies regarding agricultural production; and a difficulty for the government to implement the strategies and policies it does have. The Congolese government has not sufficiently invested in agriculture. Although the mining sector is important, agriculture is vital, and has been overlooked. 70% of the population is supported by agriculture, and while the demand for minerals fluctuates in an unstable market, the production and export of food remains essential to the economy of any country. This is especially true for the DRC, which is currently dependant on the importation of foodstuffs, it's current agricultural production not enough to feed its own population.

The challenges described by The World Bank are factual, however, they cannot be met until other barriers are removed. There are two critical problems which much be faced before agricultural productivity can stabilize: the country's recurring conflict, especially in the eastern region, and the current government's inadequacy to meet these challenges, in part due to corruption and a lack of democratic principles.

**Conflict: History and Current**

The first and primary reason for the food insecurity in this country is conflict. The DRC has been in a intermittent state of conflict between government forces and militant groups since the Rwandan genocide of 1994. The violence between ethnic groups, specifically between Tutsis and Hutus, was carried into the DRC by Rwandan refugees, and has continued up to this day in some form. The DRC's natural resources, especially it's mineral wealth, also contributes to the conflict as groups continually seek to control and exploit it. In 1996 a successful rebellion against the government was supported by the surrounding countries of Rwanda, Uganda, Angola and Zimbabwe. In 1998 a terrible war, the start of the deadliest conflict since World War II, broke out, with Congolese rebel groups supported by Rwanda and Uganda, and the Congolese government supported by Zimbabwe, Namibia, and Angola. The Lusaka peace accord signed in 1999 failed to stop the violence which continued in large until another peace agreement in 2003. This agreement ended the worst of the fighting, with the official armies of the surrounding countries withdrawing. By that time about 5 million people were killed, from starvation, disease and the violence around them.
The latest round of conflict began April 2008, when Congolese Tutsi General Laurent Nkunda, began an offensive against the Congolese government, displacing hundreds of thousands of Congolese civilians in the east. This conflict ended with his capture in January 2009, however a BBC news article reported a warning from UN diplomats, who said that the relative calm after the arrest of Nkunda, "could even deteriorate in the short term." The article grimly states that, "eastern Congo is - still - a bewildering patchwork of warlords who will scramble to fill the vacuum." Presently the conflict consists of a Ugandan rebel group, the Lord's Resistance Army, who have killed at least 600 civilians in the eastern DRC, and in April 2009 the Congolese Hutu rebels, many of which belong to the rebel group The Democratic Front for the Liberation of Rwanda, re-emerged, causing more displacements.

Conflict Effects

The recurring conflict, albeit mostly in the eastern region, creates an unstable, insecure environment. Peace treaties are reached with limited success before new conflict arises. Civilians are victim to murder, rape, looting, forced labor, and forced recruitment at the hands of all the armed groups involved, including the government troops. Currently, an estimated 1.4 million Congolese people are internally displaced (IDPs). These people are mostly from eastern provinces like North and South Kivu, which are key provinces for agricultural production. The eastern and southeastern area of the DRC is where most of the agricultural potential of the county is, because of the fertile soil of the eastern highlands as well as the uncultivable (until it's cleared) tropical rainforest which dominates most of the central and northern parts of the country.

Conflict and Agriculture

In September 2008 the FAO explained that although the DRC has a huge potential for agriculture with 6.7 million hectares of arable land, "only some 1.1 million hectares are currently under permanent crops," because "too many farmers had to flee the land due to violence." The ongoing conflict directly affects agricultural production, which impacts the food availability and cost across the country. The rise in global food prices since 2007 compounds the situation. And although the global average prices have dropped since their peak in 2008, the FAO reported in June 2009 that the average price of food in the DRC has risen a staggering 52% compared to the prices a year ago in May 2008. Currently, the average rural Congolese spends 80% of his or her income on food. This is mind blowing compared to the average American who spends less than 10% of their income on food. The uncertain supply and fluctuating prices of food explain the high level of food insecurity for the Congolese people. Refugees in the DRC and internally displaced Congolese rely on humanitarian organizations, food stocks, and the environment around them for nourishment, none of which are very stable sources. As farming requires a certain amount of permanency to plant, and harvest the crops, the ongoing conflict makes this kind of permanence impossible, forcing hundreds and thousands of farmers to abandon their fields. Considering the situation, it's not surprising that 74% of the Congolese people are malnourished.

Governance

Although conflict is a formidable barrier to agricultural production, there is a second critical problem which must also be addressed. The second barrier, and major cause of food insecurity, is the current flawed governance in the DRC. The government of any given country holds a significant role in agricultural production, with influence and partial control over the condition of the economy, as well as control of the direction of subsidies, research and investment. Rural farmers in the DRC are significantly affected by governmental problems when they try to make a living selling their crops in a market where the inflation is around 16%, and excessive regulations and taxes drive the majority of the country to the black market. Thomas L. Friedman explains in his book "Hot, Flat, and Crowded" that countries with large amounts of natural resources (like the DRC's vast mineral wealth) develop a dependence on those natural resources which can "skew a country's political, investment and education priorities, so that
everything revolves around who controls those resources and who gets how much money from them."
Michael L. Ross, a UCLA political scientist, expressed something similar, "a strong reliance on either oil or mineral exports tends to make [a country] less democratic". This theory holds true as far as the DRC is concerned.

**Current State of Governance**

Although the DRC claims to be a democracy, with legislative, executive and judicial branches, a constitution and elections, it lacks even the most basic democratic principles such as: freedom of political beliefs, free elections, and freedom of speech and the press. In November 2008, the Human Rights Watch issued a report exposing the violations of current leader, Joseph Kabila. These violations occurred during the elections of 2006, and were directed against Kabila's political opponent Jean-Pierre Bemba and his supporters. At least 500 of Bemba's supporters were tracked down and killed by the Congolese government. At least 1,000 more were detained and suffered physical abuse, while government officials blocked any efforts by outside parties to investigate. The Congolese government continues to arbitrarily arrest it's political opposition, arresting at least 20 people in Kinshasa as recently as October 2008.

Congolese journalists are not allowed to write about these abuses, and several radio stations and television networks which were connected to the political opposition or gave them a voice were closed down.

Anneke Van Woudenberg, a senior researcher in the Africa Division of Human Rights Watch, explained that "while everyone focuses on the violence in eastern Congo, government abuses against political opponents attracts little attention," and that "efforts to build a democratic Congo are being stifled not just by rebellion but also by the Kabila government's repression."

**Governance and Agriculture**

The corruption of the government and its lack of democratic principles also affects the production, cost, and availability of food. Monchi Lio and Meng-chun Liu of the Chunh-Hua Institution for Economic Research conducted a study in which they found that, "democracy may indirectly foster agricultural productivity by firstly influencing the level of economic freedom." The 2009 Index of Economic Freedom gave the DRC an Economic Freedom score of 42.8 out of 100, ranking it as 173rd in the world; 7th from the bottom. They also gave the Congo a score of 34 for business freedom and 19 for freedom of corruption; both these scores being only about half of the global averages for these areas. The harsh regulations and "arbitrarily enforced tax laws" severely limit economic freedom and business opportunities, and are one reason why about 80% of the DRC's economic activity occurs in the black market. This is why the current government is the second problem facing Congolese agricultural production.

**Current State of Agriculture and Possibilities**

Currently, the DRC has not shown any progress in improving the accountability or transparency of the government in order to limit corruption, nor has it shown any indication of acquiring those democratic principles which would increase economic freedom, and benefit agricultural production. Although conflict in the DRC is less than it was previous to 2003 when the war was in full scale, the recurring conflict, especially affecting the eastern region, shows no sign of ending. Because there appears to be no change for either of the two major barriers to agricultural production the situation for Congolese rural farmers remains extremely difficult.

Resolving the conflict and improving the governance of the DRC would have huge positive benefits for rural farmers and the country's agricultural production as a whole. Internally displaced people could return to their homes and farm again, no longer reliant on humanitarian organizations. The food supply would increase, lowering the cost of food and lifting people from starvation. Programs designed to improve agricultural production and aid rural farmers would have a higher likelihood of success. Trade
between cities like Kinshasa and the currently conflict-torn Goma could stabilize, giving farmers a way of actually earning a living with their livelihood. The Congolese government could focus its money and attention on the rebuilding and recovering of the country, and could also put some effort into protecting the environment from degradation and enforcing anti-poaching laws.

The economic freedom which a truly democratic government, free from rampant corruption, could bring would help the Congolese market recover, and would bring about things like: the removal of excessive regulations, the initiation of new policies to control inflation, a fair tax system, easier access to credit and loans, and the creation of new entrepreneurial opportunities. All of this would greatly assist rural farmers.

Democratic freedom, as well as economic freedom, will also be necessary. Empowering the Congolese people through the government's acceptance of democratic principles would also speed the resolution of problems facing farmers. In the future Congolese farmers could organize to lobby the government of specific problems and make recommendations, which in turn would help the government to respond to its constituent's needs with programs and funding in appropriate areas.

If, by chance, agricultural productivity were to increase in the DRC, it would have little impact on the conflict, which is fueled mostly by political objectives. However it would greatly diminish the number of those who suffer because of it. It could also possibly lessen the number of Congolese desperate enough to join the ranks of armed rebel groups, and may also reduce the amount of looting which occurs. A random increase in agricultural production could have an limited effect on the governmental problems. An increased food supply would reduce the amount of money needed to be spent on the importation of foodstuffs, leaving the government with much needed money to invest in infrastructure. The increased supply of food would lower its cost, resulting in more people able to feed themselves, in turn allowing the government to focus on other issues. However an random increase in agricultural production and food security is unlikely until the two major problems, conflict and governance, are addressed.

Recommendations

The first recommendation for increasing agricultural productivity in the DRC would be to resolve the conflict occurring in the unstable eastern region, and to prevent further conflict. This will require international efforts, seeing as the Congolese government alone is unable to do this. International peacekeeping forces like the U.N. need to increase the number of troops they already have in the DRC, while countries like the U.S. need to contribute more of these troops, in order to fully implement the multiple peace treaties which have been signed, stop the conflict, and bring stability and security to the tumultuous east. The U.S. needs to continue acting as the facilitator of the Tripartite Plus process, which has had success in improving the DRC's relations with key surrounding countries like Rwanda, Uganda, and Burundi. The national government needs to pay and control its army, and prevent members from taking part in the unlawful actions being taken by armed forces.

The global community will also need to continue and increase its assistance in other ways. Much more monetary aid is needed for the organizations already helping in the DRC, such as the United Nations World Food Programme, the Food and Agricultural Organization and the World Bank. As the CIA admitted in the World Factbook, "the government [of the DRC] lacks sufficient financial, technical, and human resources to effectively address not only trafficking crimes, but also to provide basic levels of security in some parts of the country." And until the government has the capacity and ability to implement programs, enforce the law, and govern effectively, it will require help from the international community. The World Bank, the UN and other nations need to focus on debt cancellation and loans for development, which will be extremely necessary to rebuild to DRC's economy and give it a real chance to recover.
The second problem needing to be addressed is poor governance, therefore, the second recommendation to increase agricultural productivity and food security in the DRC is to improve and reform the Congolese government to include basic democratic principles such as: free speech, free press, free and fair elections, freedom of assembly, government transparency and accountability, judicial independence, rule of law, and the formation of political parties. The Congolese government lacks the capacity to implement and enforce programs and regulate in some areas, and also needs to reduce its interference in other areas like the economy. Again, democratic governments often bring greater economic freedom which greatly benefits agricultural production.

The national government of the DRC needs to begin major investments into healthcare, education, infrastructure and agricultural research. A controversial agreement between the DRC and China has recently been proposed, in which China has committed to spend about 9 billion dollars in infrastructure like roads, hospitals and schools, in exchange for a 30-year mining contract. However the dissent among members of the National Assembly is that this mining agreement would actually give the Chinese 80 billion instead of 9 billion worth of natural resources, depriving the DRC of much needed wealth. In an attempt to force the Chinese and Congolese governments to change this agreement, the International Monetary Fund organization is threatening to withhold 10 billion dollars in debt relief and 500 million in additional financial support, and this is also creating dissent among the Congolese National Assembly. Although it is excellent the Congolese government is directing its attention to the crucial need for investment in these areas, the risk they would take with this agreement is too great, and not what the country needs.

Not an Easy Fix

Many factors and problems have led to the severe food security problem in the DRC, and it will take a combination of actions in different areas to completely repair this nation. However, the myriad and multifaceted problems which will need to be addressed in the future cannot be confronted, and the essential investments and programs which need to be initiated will have little impact, until the two major barriers to agricultural production are met. Until the conflict, which has gripped this country for more than a decade is resolved, and until the corruption and impotence of the national government is finally addressed, other propositions to increase agricultural production will be hampered and handicapped and never fully succeed.

Although improving the market infrastructure, increasing access to credit, and securing property rights will eventually be essential if the DRC is to fully recover, the government does not have the ability to enforce such rights in the east, nor does it have the ability to establish a truly functioning market while persistent internal corruption prevents true progress from being made. Although implementation of crop science, which could result in resistant, higher-yielding crops, would undoubtedly improve the DRC's food supply; the effects of such improvements would be limited if implemented now while conflict still displaces thousands of the farmers responsible for growing these crops. The potential of the DRC's agricultural production hasn't even been touched yet, and it will not be reached in the current environment of conflict, corruption and oppression which pervades the country, and exacerbates existing poverty and food insecurity.

The ability, the capacity, and the desire for recovery is there. Clément Vangu-Lutete, Assistant FAO Representative to the DRC, said he hears Congolese people tell them, "we'll take World Food Programme rations, but we want to produce our own food." The people of the Congo want to farm, but they are being prevented by problems outside their control. Although international groups have focused attention and aid on the DRC, the global community as a whole have overlooked the terrible conflict and conditions in which the Congolese people are forced to live under. Aid and attention needs to be intensified in the DRC, or the limited progress it has made as a country in recent years will be lost, and it will never reach its potential.
Bibliography


