**Global Majority E-Journal**

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The *Global Majority E-Journal* is published twice a year and freely available online at: [http://www.american.edu/cas/economics/ejournal/](http://www.american.edu/cas/economics/ejournal/). The journal publishes articles that discuss critical issues for the lives of the global majority. The global majority is defined as the more than 80 percent of the world’s population living in developing countries. The topics discussed reflect issues that characterize, determine, or influence the lives of the global majority: poverty, population growth, youth bulge, urbanization, lack of access to safe water, climate change, agricultural development, etc. The articles are based on research papers written by American University (AU) undergraduate students (mostly freshmen) as one of the course requirements for AU’s General Education Course: Econ-110—The Global Majority.

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Uganda’s Gender Divide
and Moves towards Equality

Kerry Milazzo

Abstract
In Uganda women are considered anything but equal to their male counterparts due to a lack of education, cultural beliefs, and low access and acceptance of birth control. Most women have been forced into accepting the role of second-class citizens. However, when women are educated their lives change drastically. They have opportunities to provide for themselves and their families, which alters the poverty cycle. Instead of marrying at young adolescent ages, they will wait until they are older and ready for a family. This article focuses on how programs promoting education for women, creating job opportunities for women, and accepting birth control empowers women. The women of Uganda deserve a chance to be equal to men in hope for better lives.

I. Introduction
In 2010, Uganda had a population of 33.4 million, of which statistically exactly half (50.0 percent) were female. Most Ugandan women are being suppressed by their male counterparts, particularly their husbands. These women have little to zero choice on what happens in their lives, and the lack of female education is a major reason for this. Giving Ugandan women an education would allow them to earn their own income. Most of these women are stuck because they have no way of providing for themselves and for their children. These women need empowerment by implementing a variety of educational programs, including programs that help to improve the acceptance of birth control in Ugandan society.

Women in Uganda have typically no choice over having children. Their husbands force them to have sex and they do not use protection, leaving them with large families to provide for. Most of these women do not even get to have a say in having sex. There is no acceptable reason that a woman should be forced to listen to everything her husband says. The gender divide between

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1 World Bank (2012).
men and women in Uganda is remarkable and little progress has been made over the last few decades. Increasing the Ugandan society’s acceptance of birth control can give these women more power and a say in their marriage. These women need help in order to start to better their lives and to better the lives of their own children.

While some organizations are out there to help them, this is simply not enough. People need to try and help educate these women and stop the gender divide. There is no reason that girls should be married at age 14 or 15 and be a mother soon after that. The women of Uganda need education and birth control in order to overcome this gender divide.

This article examines the struggles the women of Uganda endure. It also looks at the spread of HIV/AIDS and discusses how there is no proper education system for most girls. This article also shows that some organizations are trying to solve these problems and how successful some of these organizations have been. It is structured as follows. The next section (Section II) will provide a brief review of the literature, followed by some empirical background on the socio-economic development of Uganda over the last few decades (Section III). The fourth section then discusses the power of education, the influence birth control could have, the linkage between fertility and health, the impacts a woman’s job can have, and how working together as a community will be able to end the suppression of Ugandan women.

II. Literature Review

As being one of the countries with the largest gender divide there have been many publications that discuss this current problem in Uganda. There is a variety of different suggestions for how to solve this problem as well as a considerable amount of criticism for the Ugandan government’s attempts at fixing it. The following three publications discuss some of the most important issues revolving around this topic of gender discrimination in Uganda.

- Blacker and Opiyo (2005) wrote an article on “Fertility in Kenya and Uganda: A comparative Study of Trends and Determinants,” where they point out that Uganda’s women do not want to have many children but that there is a lack of birth control for these women. Ugandan women are getting married at an average age of just below 18 years and typically start having children within a year of getting married. With a lack of birth control and abortions being illegal, these women are stuck with children they cannot provide for. Most women in Uganda have an average of 6 children and are not wealthy enough to provide for all these children. Blacker and Opiyo (2005) also investigate the trends that occur with these women in Uganda and the spread of HIV/AIDS. Many HIV/AIDS infected husbands are not protecting their wives and the women cannot do anything about it. This causes HIV/AIDS to spread, and many of these young mothers are then also giving it to their future children. Blacker and Opiyo stress the desperate need of birth control in Uganda.

- An article by Ann Blanc and Brent Wolff (2001), entitled “Gender and Decision-Making over Condom Use in Two Districts in Uganda,” discusses the difficulties women have discussing birth control in general with their husbands. Men typically have all the power in this relationship because they feel they are superior. Most women in Uganda do not want to keep having children but do not know how to bring up the use of a condom with their husbands. They are not educated and even though they have heard of condoms they are not aware that condoms can prevent the transmission of HIV/AIDS. Most of these
women are too scared to confront their husbands. Essentially, Blanc and Wolf are trying to spread the message that women need to be better educated so that they are willing to confront their husbands and can discuss topics such as the use of condoms.

- Nick Wadhams (2009) wrote a *Time Magazine* article on “The Battle in Uganda over Female Condoms.” In this article he explains the Ugandan government’s attempt at making condoms accessible for women in Uganda. With funding from the United Nations, the Ugandan government gave out 100,000 female condoms in efforts to stop the spread of HIV/AIDS. Trying to give women some control over their body, the Ugandan government thought this was a good first step. However, this has received criticism because just handing out condoms is not going to solve the problem. Wadhams believes that the government needs to do more to solve this problem. Additional problems are that the Ugandan society is not accustomed to female condoms. According to the article, many believe that female condoms will take a long time to become accepted into society but the Uganda government believes this is a first step to giving women a choice.

### III. Empirical Background

The ultimate factor to this suppression of women in Uganda is poverty. The women of Uganda cannot provide for their families because they are poor. They cannot try and change their lives because they are not educated. The people of Uganda are suffering through poverty. Currently, 65 percent of the Ugandan population are living on less than $2.00 a day, while 38 percent are living on less than $1.25 a day.²

![Figure 1: Percent of Population Living in Poverty, 1989-2009](image)

Source: Created by author based on World Bank (2012).

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² World Bank (2012).
Even though poverty has started to decline in Uganda, these women are still living in it, which makes it difficult for them to have a say in their own lives. Figure 1 shows the decline of poverty in Uganda as well as in Sub-Saharan Africa (SSA) since about 1992. Until about 2006, Uganda had a greater percentage of their population living under $2 a day and under $1.25 a day than SSA. The progress made during the last decade is promising, but the degree of poverty in Uganda is with about 65 percent of the population living below $2 a day and about 38 percent living below $1.25 a day still serious.

As shown in Figure 2, despite progress, Uganda’s life expectancy is still low. The life expectancy of a female living in Uganda was 54 years in 2010, which was one year lower than the regional average of 55 years. Fortunately though, the gap in life expectancy between Ugandan and SSA women has become much smaller today than it was for example 10 years ago. The life expectancy for males in Uganda also was substantially below that of SSA males in 2000, but has (with about 53 years) now caught up with that of the average life expectancy of SSA’s males. The fact that the male life expectancy has caught up with SSA, while that for females has not, seems to support the claim that gender discrimination is worse in Uganda than in SSA.

![Figure 2: Life Expectancy Rate, 2000-2009](image)

Source: Created by author based on World Bank (2012).

As shown in Figure 3, despite some setbacks due to the 2008 world economic crisis, Uganda has made substantial progress in increasing its GDP per capita, PPP (in constant 2005 international $) since 1986. Uganda is however still one of the poorest countries in the world, and it is still lacking substantially behind the average of SSA. In 2010, Uganda’s GDP per capita, PPP (constant 2005 international $) was only slightly more than half of SSA’s PPP-adjusted GDP per capita.

IV. Discussion

IV.1. The Power of Education

Uganda is failing at giving females an education, which is allowing the gender divide to exist. Currently, only 65 percent of Ugandan females over the age of 15 are literate, while 83 percent of Ugandan men are literate. This is a significant difference, and it is used by many men to suppress the ambitions of women. Being more educated allows Ugandan men to have more power than Ugandan women. With an education these women could change their lives.

In Uganda, more than 700,000 children between the ages of 6-12 have never attended school with a majority being female. The lack of a strong education system is affecting this country negatively. Even if children have attended school the problem of low education continues to exist because 2 out of 3 children attending primary school fail to complete primary school. However boys are more likely to finish primary school than girls. In 2009, it was reported that 57.9 percent of boys would finish primary school, compared to 56.4 percent of girls. This recent data reflects a relatively small difference and a considerable improvement compared to 2001, when only 53.1 percent of the girls would complete school compared to 66.6 percent of the boys. Compared to the rest of the region, Uganda’s education level is similar to its neighboring countries in recent years. However, in 2009 it was slightly lower than the SSA average, where 57.8 percent of females complete primary school and 59.2 percent of males finish school. Figure 4 shows the elementary school completion rates of children in Uganda and SSA.

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4 World Bank (2012).
5 Nybo (2010).
6 Nybo (2010).
Uganda needs to invest in their youth and reconstruct their education system. Young females particularly need to be educated in order to prolong starting a family and in order to have a chance at earning an income. The number of girls under the age of 14 who are not currently in school continues to grow. In 2010, it was recorded that 265,626 females under the age of 14 were out of school. This is over 100,000 more than in the previous year, when there were 157,153 girls out of school. Additionally, how much can these students who are enrolled actually learn with nearly 50 students per teacher? As shown in Figure 5, Uganda’s student teacher ratios are slightly higher than the region’s average of 45.6 students per teacher.

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7 Hope Uganda (2012).
The Girl Effect is an organization that promotes the education of young girls living in poverty. The goal of this organization is to educate these young girls and give them a future so they do not get married off at young ages. A girl who is married off at a young age will continue the poverty cycle because their daughters will most likely not go to school and be married off at a young age, and so on. That is why this organization focuses on young girls’ education to end this cycle. Girls who receive an education will 90 percent of the time invest their income into their family compared to the 35 percent of boys who are willing to do the same thing.\(^8\)

The efforts of organizations like The Girl Effect are making a difference. One example is Peace Margaret, an orphan in Uganda, who has finally been able to go back to school (after a 4-year absence because she was forced to be a servant girl to earn money after her parents’ death). Now with the support of UNICEF, Margaret has the support she needs in order to stay in school. Margaret said, “Let me go study and maybe in the future become an important person, not a housegirl.”\(^9\) These young girls have a desire to learn they just need support in doing so. They do not want to be housegirls and married off into society but if they do not have support they do not have the finances to do this on their own. By giving young girls an education it gives them hope for a better future and an end to this gender divide.

IV.2. Influence Birth Control Could Have

Ugandan women are forced to listen to their husbands because they do not have any say or power in their relationships. By implementing birth control in this society women could be empowered because they can now decide when to have children. Most of these women have on average 6 children.\(^10\) This number is only one less child than the average from 1990, which is shocking because it shows that over the course of 20 years very little has changed. These young women have no choice because their husbands, who are typically much older, are in control. Even though the number of pregnant teens is declining, the fact that 24.9 percent of the females between 15-18 years old are mothers in this society is absolutely ridiculous.\(^11\) Figure 6 below shows the slow decline of this trend.

Uganda has one of the highest population growth rates because birth control is not common. These people are accustomed to having large families with many children. However the problem with this is that women therefore have no say in the amount of children they have. Many of these women do not want many children but are forced to have unprotected sex with their husbands. Men feel that condoms are not necessary which also helps spread diseases such as HIV/AIDS. Birth control would empower these women in having a choice with their lives. There is no reason that there should be a gender divide in a marriage. A woman should be able to say when she wants to have sex and not be subject to her husband’s desire. Furthermore, only 13 percent of females between the ages of 15-25 use condoms.\(^12\) This number is extremely low and shows the little access that women have to condoms, mostly due to their husbands not allowing them to use condoms.

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8 Girl Effect (2012).
9 Nybo (2010).
10 Wadhams (2009).
The implementation of birth control into Uganda would help empower these women. It would allow them to have a choice in their own body. The Ugandan government has tried to help by handing out female condoms. Randomly handing out condoms does not solve this problem. The problem is that males in society do not accept birth control and this has to change in order to protect these women. They do not want to keep having children especially if they are passing down harmful diseases to them. Currently in Uganda there is only a 21 percent contraceptive prevalence, which means only 21 percent of the entire female population use some form of birth control. This is an extremely low number so birth control needs to start being more accessible for women. By making birth control more accessible it is giving women more control over their lives.

IV.3. Fertility and Health

One of the biggest problems of concern for the women of Uganda is the spread of HIV. The use of condoms in this country could help stop the spread of this disease. Uganda is one of the most reproductive countries in the world with most females have on average 6 children. If a mother has HIV she now has just given it to her children. The amount of children who are born with HIV continues to grow each year in Uganda. In the past 20 years this number has drastically increased. In 1990 there were only 55,000 children born with HIV. Today that number has more than doubled in 2009 with 150,000 children being born with HIV. Figure 7 shows the growth and more recent stabilization of HIV in Ugandan children.

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13 Bunting (2008).
15 World Bank (2012).
Figure 7: Number of Children Born with HIV, 1990-2008

Source: Created by author based on World Bank (2012).

In Uganda many women do not receive the proper medical attention while being pregnant. Many deaths occur during birth because of a lack of facilities for these women as well as a lack of staff. In 2006, only 41.9 percent of Ugandan births were assisted by skilled staff members, which is slightly below that of SSA, where 46.1 percent of births were assisted by skilled staff members.\(^{16}\)

Having a child in this impoverished country can be dangerous. In Uganda, 430 women die out of every 100,000 births, while 63 infants die for every 1,000 births.\(^{17}\) While these numbers are lower than the Sub-Saharan African region (see Figure 8 below), these numbers are overall still very high and that is why medical attention needs to be brought to Uganda in order to help these women. Men do not seem to care because they are not the ones at risk during birth.

Figure 8: Estimated Maternal Mortality Ratio per 100,000 Live Births, 1990-2008

Source: Created by author based on World Bank (2012).

\(^{16}\) World Bank (2012).

\(^{17}\) World Bank (2012).
IV.4. Effects of Having a Job

Some organizations have devoted themselves to helping the women of Uganda provide for themselves. The main goal of these organizations is to teach these women some kind of skill or trait that they can use to earn money. With this money they can now provide for their family if they have one or provide for themselves so they are not forced into a marriage. Simply giving these women a way to earn money has drastically changed the course of their lives.

- Krochet Kids International is an organization that was created with the mission of empowering people to rise above poverty. This organization gives poor women the opportunity to make a living for themselves. The company’s vision is to, “create sustainable economic development programs that support holistic growth of individuals and communities within developing nations.”\(^{18}\) This is what they have done for the women of Uganda. This organization teaches women in Uganda how to simply crochet a hat. By teaching and training them how to do this they have now provided these women with a steady source of income to provide for their family. These hats are then sold all across the world and each woman signs them, which allows customers to see who made their hat as well as whose lives they have helped. This organization helps empower women because it makes them able to earn a living on their own. Currently there are 150 Ugandan women employed by this organization.\(^{19}\) One Ugandan woman stated, “I send my gratitude and pray that they should continue to help the vulnerable women outside the program.”\(^{20}\) This program has changed the lives of many women and has given them hope for the future.

- Bead for Life is another organization that has devoted its efforts to empowering the women of Uganda by simply giving them a job. This opportunity has truly changed the lives of these women. Like Krochet Kids this nonprofit organization helps the women of Uganda by training them to make jewelry and then selling it. These women make beaded necklaces and bracelets and get to receive the profits from their work. This organization gives women hope of a better future for their family because it helps them to save money to start their own businesses. In 2011 this organization helped 1,400 families in Uganda.\(^{21}\) This organization has impacted the people of Uganda tremendously and has helped many women provide for their families. 74 percent of women enrolled in this program are successful at starting their own businesses where they can then be their own bosses. This organization gives the women of this country a chance they never expected to pursue their own careers.

Figure 9 shows the percent of females employed between the ages of 15-24 in Uganda as well as in SSA. In Uganda, this number is declining. In 1994, 63.6 percent of females between these ages were employed. About 15 years later, only 54.4 percent of females between the ages of 15-24 were employed in Uganda.\(^{22}\) On the other hand, the percentage of females working continues to increase slightly in the region; the SSA numbers are however still below those of Uganda. The fact that a higher percentage of females between the ages of 15-24 are working in Uganda that in SSA does however not necessarily mean that Ugandan women have more say.

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\(^{19}\) Gustines (2012).
\(^{21}\) Bead for Life (2012).
\(^{22}\) World Bank (2012).
Krochet Kids International and Bead for Life give the women of Uganda hope that more women will have jobs. Having their own income and a steady job allow these women to feel empowered. They now can make decisions in their own life and do not rely on men. Having their own source of income can stop the gender divide. Women do not have to depend on any man or be forced to stay with abusive husbands. There needs to be more organization like these to help the women of Uganda fight against this gender divide. A steady source of income helps these women overcome poverty, which then allows them to overcome the gender divide.

IV.5. Community Outreach

The women of Uganda need to realize that they are not in this alone. By working together they will be able to overcome this gender divide. Mothers need to stop marrying off their daughters in order to end this poverty cycle. By working together as a community they will be able to end this unfair suppression. Placing new community standards such as making child marriage illegal will help these women. By improving the overall living standards in these communities the quality of life will increase and so will chances of equality.

- Empower a Child is an organization based out of Uganda that rebuilds communities. This organization’s goal is to stop poverty in an area by helping the families and children have better lives. They try and improve the quality of life for female children in Uganda. However this organization works with the community as a whole helping developing new community standards and rules and regulations. All children are to stay in school and become involved in group activities. They change communities as a whole and educate children to believing in gender equality. They have created a healthy living environment for these children called Remand home, where they can live and learn without being forced to work or to get married. Currently there are around 200 children in this program.23

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23 Empower a Child (2012).
Another organization similar to Empower a Child is the Uganda Rural Fund. This organization helps the community as a whole in forming food supplies, building homes, spreading education and helping empower women. This group helps women get elected to community positions so they can now have an important role in community standards. They help Ugandan women form activist groups and show them how they can fight for their rights. This group empowers women because it shows them that they can overcome this divide and have their voices heard.

These two organizations also give women hope for a better future because they are changing the role women play in the community. By instilling the beliefs that it is acceptable for women to form groups and fight back they now have hope. To overcome the gender divide in Uganda, changes have to start in the Ugandan community.

V. Conclusion

Despite some progress, Uganda remains stuck with a major problem of gender inequality. The women of Uganda need help now in order to become equal to men in society. More organizations needed to be created and or the programs of existing organizations need to be rolled out in order to stop men from suppressing women in Uganda. By implementing a proper education system in Uganda this will not only help create equality between the genders but will benefit society as a whole. Educating the youth of Uganda will help the economy and stop the cycle of poverty. With an education, children of Uganda, particularly young girls, can drastically alter their future and the future of their own children.

Something as simple as birth control could change this country for the better. Uganda needs to start offering more options for birth control, especially for young women. They need to have access to this in order to prevent them from having so many children. And the society needs to learn to socially accept this. With birth control becoming a normal part of everyday life this could slow down population growth rates and help achieving higher GDP per capita growth rates.

People need to take action now and help Uganda to break the gender divide that is ruining the lives of far too many women. By implementing more programs such as Krochet for Kids and Bead for Life, women will have successful jobs and be able to provide for their families. By having a job, an education, and birth control there is no reason they cannot be equal to their male counterparts, and actually better the situation for everybody in Uganda.

References


Blanc, Ann and Brent Wolf (2001). Gender and Decision-Making over Condom Use in Two

24 Lillpopp (2012).


Access to Clean Water and Educational Opportunity in Nicaragua

Nathan Strauss

Abstract

This article examines the accessibility of clean water sources in Nicaragua and reviews Nicaragua’s water resource management in terms of obstacles and challenges. It also examines how citizen concern and engagement could improve Nicaragua’s water resource management. The article then reviews some of the sources for Nicaragua’s low school enrollment, whereby it is conjectured that water accessibility is an important factor. The article concludes that Nicaragua’s long-term economic development prospects would be enhanced significantly if the Nicaraguan government would pay more attention to the access to safe water and education.

I. Introduction

Access to safe drinking water sources is a great opportunity determinant in developing countries, including Nicaragua. While a majority of the urbanized population maintains access to so-called improved water sources, rural areas are often not so lucky, with only 68 percent of the population in these regions having access to an improved water source (The World Bank, 2012). One study suggests that nearly 43 percent of rural families surveyed carry their water from outside sources, which is a time consuming responsibility. The average time spent carrying water each day was approximately 37 minutes, which equates to 225 hours per year, not counting time spent bathing or washing at the sources (Johnson and Baltodano, 2004).

As it is often the duty of children and women in particular to carry water, the time spent doing so and the frequency of the action have a direct impact on the time available for these social groups to attend school regularly. Furthermore, families lacking access to potable drinking water run a higher risk of contracting illnesses that can further impair their chances at receiving a complete education. At least 35 percent of households surveyed reported members suffering from gastrointestinal problems related to drinking water, with an average of 3 days per year lost to illness for adults (see Johnson and Baltodano, 2004).
Moreover, it can be conjectured that direct access to improved water sources within the vicinity of the living space frees up women and children to pursue an education while simultaneously increasing their standard of health. With the ability to take part in an educational system, it is often found that these individuals have more opportunities to leave rural areas and enter the workforce in the hopes of improving their standard of living. In doing so, the subsequent increases in GDP per capita allow for improved economic growth across the country giving it higher standing in the industrialized world.

This article examines the willingness of rural communities to engage in projects meant to improve their access to clean water facilities. Furthermore, it details the effects improved access has on educational opportunity for young people, especially women, and how a more advanced education can lead to an enhanced standard of living. This information is presented in a structure that first evaluates the source material, before delving into light analysis of empirical data and then heavier discussion of the primary themes—access to improved water sources and educational opportunity. The concluding section of the document is meant to provide a brief summary of the discussion overall while offering potential insight into improvements meant to better Nicaragua’s socio-economic future.

II. Literature Review

While not necessarily the most recent data available, the following paragraphs summarize the information presented within a selection of articles that most accurately address the issues presented in this article’s thesis. The publications discussed in the subsequent paragraphs present practical analyses of community concern over water source improvement projects, educational opportunities, and the various factors that can influence opinions on these issues, such as per capita income and regional location. As such, these articles serve as credible sources of supporting material meant to improve arguments in the discussion section that support the thesis statement that improved access to potable water and in turn, more consistent education, raises the standard of living for rural households in Nicaragua.

Ahkmouch’s (2012) paper, entitled “Water Governance in Latin America and the Caribbean,” addresses many aspects of water management and allocation in a variety of Latin American countries, including Nicaragua. Figure two in the Nicaragua specific subsection is especially relevant, providing a graph showing obstacles to water management coordination at a central level. As expected, the data seems to imply that lack of political commitment and strategic planning are primary obstacles, while there exists a comparatively high interest in change on the localized level. The paper also details how water is allocated throughout the country, and what bodies exist as mechanisms for coordinating action across various ministries and public agencies.

An article by Johnson and Baltodano (2004) presents a comprehensive analysis on the economics of watershed management within the local level, as applied specifically to research done in Nicaragua. Results of the research indicate that on the local level, residents place a relatively modest value on water quality improvement over the course of a year: approximately US$10,000. The data presented on the economics and logistics of watershed management on the local level is both pertinent and easily identifiable, ultimately concluding with the idea that a participatory, multi-sector approach is best for identifying complementarities that can simplify management of complex systems like watersheds. Such information is supported further in a study of the Silvo-pastoral Project (Pagiola, Rios and Arcenas, 2008), which indicates that even poorer households are willing to participate in paying what they can to improve the quality of
their resource management systems. Not only did such households readily participate in Payments for Environmental Services (PES) programs, but in some cases contributed more to improvement initiatives than better-off residences.

In addition to understanding what lengths residents are willing to go to in order to improve living conditions and watershed management systems, it is also important to understand the distribution of improved water sources across the region. Such information allows for more precise identification of the variables causing lack of access to such resources, be it a product of poor management or environmental degradation. Such data is accumulated in at least one study (Bain et al., 2012), which also details the various types of facilities utilized in accessing drinking water. The Bain study further breaks down the distribution of potable water into how well it complies with standards of the Millennium Development Goals (MDGs).

The issue of resource degradation and its link to poverty is addressed in even greater detail through research conducted by Edward Barbier (2010). The data presented in Barbier holds relevance in its examination of the circumstances of the rural poor, who are often concentrated in less favorable environmental areas, and thus face a greater impact from poor resource management and a hesitancy to engage in PES programs aimed at improving resource access and quality. Beyond this, Barbier (2010) makes the important connection of tying the relationship between resource degradation and poverty to access to outside employment, which allows for a variety of substantive solutions and tradeoffs that can be made on the part of the rural population in an effort to more efficiently control resource usage.

In addition to Barbier’s efforts to tie resource degradation to outside employment, Zabaleta (2011) presents a comprehensive analysis of the effects that child labor has on school enrollment and educational attainment in Nicaragua. The largest portion of the data collected in the article presents the consequences of child labor on educational opportunity over time, based on a three-year longitudinal study of Nicaraguan households. Overall, Zabaleta determines that child labor has a largely negative influence on educational achievement, noting that a regular working day of as little as three hours can have serious negative implications for educational proficiency.

### III. Empirical Background

Nicaragua is the largest country within the Central American Isthmus, having a population of close to six million individuals spread across more than 12,000 square kilometers (World Bank, 2012). Unlike other countries in the region, Nicaragua is recovering relatively well from an intense period of war, and has seen modest growth in its GDP per capita (in real terms) since 1995. However, as Figure 1 shows, Nicaragua’s GDP per capita was in 2010 still far below that of the average developing country in Latin America and the Caribbean (LAC), and the discrepancy has actually become larger within the last decade. In 2010, Nicaragua’s GDP per capita was with US$2,613 (in constant 2005 international $) 200 dollars below that of 1981, while GDP per capita (in constant 2005 international 4) of the average developing country in LAC has increased from about US$7,500 in 1980 to nearly US$10,000 in 2010 (see Figure 1).
Figure 1: GDP per capita (PPP-adjusted and in constant 2005$), 1980-2010

Source: Created by author based on World Bank (2012).

Despite the disappointing developments in terms of GDP per capita, Figure 2 shows that Nicaragua was able to basically catch up with the average developing country in terms of life expectancy. In 1980, the gap in life expectancy between Nicaragua and LAC was exactly six years, while it was less than half a year in 2010.

Figure 2: Life Expectancy at Birth (years), 1980-2010

Source: Created by author based on World Bank (2012).
The final statistic we want to look at in the empirical background section is the number of telephone lines per 100 people in Nicaragua and the average developing country in LAC. While the number of telephone lines does not have to be representative to the overall development stage of a country, it provides some indication, especially if looking at developments over time. As Figure 3 shows, Nicaragua seems to fall behind the average developing country in LAC as the gap between Nicaragua and LAC has widened considerably, especially the 1990s.

Figure 3: Telephone Lines (per 100 people), 1975-2010

Source: Created by author based on World Bank (2012).

IV.1. Access to Safe Water in Nicaragua

Figure 4 depicts the disparities in potable water access between urban and rural populations. As to be expected, a much lower percentage of rural populations have access to these water sources than individuals living in urban areas. In 2010, 68 percent of the population in rural areas had access to safe water, compared to nearly 100 percent in urban areas. Without direct access to improved water sources, many rural populations face arduous walks to collect water that may after all still be contaminated, resulting in health issues and potentially harmful absences from work and/or school.
IV.2. Water Resource Management

One of the most important determining factors in how water access is allocated nationally is resource management, which in Nicaragua is controlled through a network of government agencies. As reported in Ahkmouch (2012), in Nicaragua, these organizations include primarily the Ministry of Environment and Natural Resources (MARENA), National Authority of Water (ANA), Aqueducts and Sewer Systems National Institute (INAA), Aqueducts and Sewer Systems National Company (ENACAL), Ministry of Agriculture and Forests (MAGFOR), and the Ministry of Health (MINSA). The allocation for uses of water resources is primarily managed in Nicaragua by MARENA, MAGFOR, INAA and ENACAL, while water quality is managed solely by MARENA and INAA. Water allocation is further divided into three sectors, either for domestic, agricultural, or industrial usage; these sectors are even further managed by one or more of these specific agencies.

Despite the prevalence of this handful of government agencies, it should also be noted that there is not a central agency for addressing water related issues, nor is there an inter-ministerial mechanism for addressing territorial water concerns (Ahkmouch, 2012). Without such central bodies in place, the network of management agencies is difficult to navigate and can cause a variety of issues in legislating water usage and forming national policies on the matter. Figure 5 shows the main obstacles to horizontal coordination in water policy making in Nicaragua.

Furthermore, Figure 6 provides a detailed list of the many obstacles in creating effective water policy in Nicaragua, as well as the degree of impact that each issue has on the issue overall. Were many of these issues to be tackled by the national government, improved water access would likely become available to a broader spectrum of Nicaragua’s population. It is important to note, however, that such change is not solely the duty of the Nicaraguan government—it is
also the duty of the citizens to negotiate policy with their legislators and work to create the most effective system for addressing their circumstances. Citizens, too, must be aware of the benefits that come from improved resource management and water allocation policy. A lack of awareness of potential health benefits, among other things, can be largely detrimental towards encouraging popular support for resource management legislation (Johnson and Baltodano, 2004).

Figure 5: Main Obstacles to Horizontal Coordination in Water Policy Making


Figure 6: Main Remaining Challenges in Nicaragua’s Water Policy-Making

IV.3. Citizen Concern and Engagement

In order for the Nicaraguan government to effectively institute policies to better manage water resources, the communities in need of assistance must demonstrate concern over the issue and a willingness to become involved in the policy making process. Furthermore, the degree to which different rural communities value water access is determined by the different purposes for which it is utilized. For some communities, water access is important agriculturally and potable water is available for consumption; in others, potable water may be unavailable, and as such, becomes the primary concern. Johnson and Baltodano’s study focuses largely on water valuation in terms of domestic consumption. As a result, the data presented in the study portrays several communities’ commitments to securing improved water sources for use in drinking, cooking and bathing and may not be as precise as data collected based on water as an input into a production process, like agriculture (Johnson and Baltodano, 2004).

The data collected in Johnson and Baltodano’s study indicates that the success of potable water projects are contingent upon cost and the behavior of the community. The study found that in some cases improved water sources were not properly maintained by the community or were not used at all for one reason or another. Effectively, this nullified a previous rule of thumb that dictated that as long as the costs of a water source project did not exceed 5 percent of household income, most households held positive interest in securing water from the project. Rather, the data accumulated by the study would seem to indicate that a better understanding of household demand for water may be needed and could be contingent on community preferences (Johnson and Baltodano, 2004).

In one aspect of the Johnson and Baltodano study, citizens in the rural community of San Dionisio were surveyed on their willingness to pay for improved water sources. Respondents were asked the following:

“Imagine that it were possible to improve your most frequently used water source, be it potable water, well, spring, stream or river. Improving the source means that there would be more water of better quality from the same source. Think about how much it would be worth to you to have water from this source.”

In addition, respondents were then asked if they would be willing to pay a declining series of monthly payments starting at US$1.43. The combination of questions had strength in that it effectively covered the definition of a potable water project while evaluating to what extent a community would be willing to pay towards gaining one or improving their current system. As a result of the survey, it was determined that on average, households in the San Dionisio community were willing to pay US$0.38 a month to improve their water system, or approximately 0.61 percent of their annual income.

Conversely, communities where a traditional water source was already available, such as a well or water pump, households were often not willing to pay more than 1 percent of their annual income towards improvement (Johnson and Baltodano, 2004). While this study merely presents data on a selection of rural communities in Nicaragua, it provides a useful example in determining to what lengths a typical community will go to improve their water utilities. Essentially, it can be surmised that it is the communities with the least or most inaccessible water

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1 Johnson and Baltodano (2004), p. 64.
sources that are willing to fully endorse policies to improve water systems. Other communities are partial to improvement, but contingent upon the cost of the program. In fact, Johnson and Baltodano (2004) go so far as to claim that poorer households will nearly always be willing to pay less than richer households. While this may be true in the case of the localities examined in the study, data presented in Barbier’s study may refute that notion.

Barbier (2010) notes the inextricable linkage between environmental preservation/resource sustainability and the livelihoods of the rural poor. Moreover, Barbier discusses the notion that, contrary to Johnson and Baltodano’s research, the sheer importance of natural resources, like potable water sources, is enough to encourage most communities to invest greatly in their management and eventual improvement. Contrary to popular belief, Barbier argues that environmental degradation is not a result of the actions of the poor, and that poor communities are in fact especially mindful of their resources when given the opportunity. The commonly held idea of a “poverty-environment trap” that involves poverty stricken households degrading the environment to make a living, while subsequently furthering their poverty through said degradation, must be revised in light of a more complex relationship between impoverished communities and the environment (Barbier, 2010).

V. Educational Access and Opportunity

Many families require the assistance of their children in helping to manage their property and family resources. In the case of boys and young men, they are needed to assist their fathers in tending crops and maintain the property; girls and young women are often needed at home to accomplish domestic tasks, including the fetching of water, which can be extremely time consuming. Because of these responsibilities at home, school enrollment rates following completion of primary school in Nicaragua are relatively low overall (see Figure 7).

![Figure 7: Primary and Secondary School Enrollment (gross, percent), 1970-2010](image)

Source: Created by author based on World Bank (2012).
As of 2010, net secondary school enrollment for the country was at approximately 45 percent, which is quite low though a significant improvement from the nearly 35 percent it was in 1990. Figure 7 shows the progress made in gross primary and gross secondary school enrollment from 1970 to 2010. While net enrollment is clearly a better indicator of progress than gross enrollment, Figure 7 shows the developments for gross enrollment as data on net enrollment is only available for the last few years. It can be conjectured that with increased urban population growth, and in turn, increased access to improved water sources, further progress in school enrollment ratio can be expected in the coming years, even though the trend of the last few years has shown some stagnation.

Despite some economic growth and improvement in school enrollment (shown, respectively, in Figures 1 and 7 above), Nicaragua faces a drastic deficit in educational enrollment when compared to Latin America and the Caribbean. As seen in Table 1, only 44 percent of Nicaraguan children who start primary school are able to complete it in the typical six years. This is the worst figure in Latin America, including if comparing Nicaragua to countries with similar levels of economic development like El Salvador, Honduras, and Guatemala (Zabaleta, 2011).

Enrollment rates for secondary education are similarly low—and fall far short of the average for Latin America as a whole, which settles at approximately 72 percent. When considering this data, one must also take into account the fact that children who have already entered the work force are significantly less likely to pursue a consistent education than children who are not working. Approximately 60 percent of working students will pursue an education, as opposed to 80 percent of non-working students (Zabaleta, 2011). It is, however, important to realize that while school enrollment percentages allow us to conjecture as to the true educational achievement of a country’s youth, they are not conclusive and there are cases in which young people are able to effectively balance both work and study.

Table 1: Net Enrollment Rates in Primary and Secondary Education and Survival to Last Grade of Primary Education in Selected Countries of LAC

<table>
<thead>
<tr>
<th></th>
<th>Net enrolment rates, primary education (%)</th>
<th>Survival rate to last grade, primary education (%)</th>
<th>Net enrolment rates, secondary education (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>El Salvador</td>
<td>–</td>
<td>92</td>
<td>69</td>
</tr>
<tr>
<td>Guatemala</td>
<td>82</td>
<td>95</td>
<td>62</td>
</tr>
<tr>
<td>Honduras</td>
<td>–</td>
<td>93</td>
<td>81</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>76</td>
<td>96</td>
<td>44</td>
</tr>
<tr>
<td>Latin America</td>
<td>93</td>
<td>94</td>
<td>84</td>
</tr>
</tbody>
</table>

Notes: The figures for Latin America correspond to the weighted average for the net enrolments rates and the median for the survival rate.

Source: Zabaleta (2011), Table 1 (based on UNESCO data).
The research conducted in Zabaleta’s study ultimately indicates that the longer a student works, the more they must make a trade-off with schooling, essentially sacrificing one for the other. In many cases, students are forced to sacrifice school for work and eventually suffer failure in school further down the line, be it through repetition of a grade or ending of schooling all together. As a result of this cause-and-effect scenario, these children enter adulthood having had less schooling than their peers and, as such, face a distinct disadvantage in earning potential over the course of their futures (Zabaleta, 2011). In fact, the currently held belief is that the educational threshold to achieve an acceptable standard of living in Latin America is completion of secondary school—a requirement that Nicaragua has great difficulty meeting, having among the lowest secondary school enrollment rates in the region.

While enrollment rates vary by year, in all cases evidence seems to suggest that the more hours worked, the lower the rates become; rural students that must assist their families in necessary functions of living, such as domestic work and farming, or who must help augment their family’s income through other work face a distinct handicap in reaching completion of secondary schooling, let alone primary school (Zabaleta, 2011).

VI. Conclusion

Access to improved water sources, as well as the opportunity to pursue an education, has an enormous impact on the living standards of the global majority, and Nicaragua is no exception. As evidenced by the data discussed in the main body of the research, both issues require significant involvement on the part of the Nicaraguan government to provide better public services aimed at improving the circumstances surrounding both of these issues. Access to clean water in particular could be argued to be the root of the dilemma as a whole. Without immediate access to clean water, people must expend time carrying water from a further source or face the risk of illness from contamination. Both of these problems are detrimental to work and education. Time spent carrying water could be used for either, while a sick individual becomes unable to attend school or work. Furthermore, lack of access to clean water contributes to the “poverty-environment” trap that complicates the livelihoods of rural communities in a number of developing countries, including Nicaragua.

There are several ways in which global efforts can assist in improving the living standards in Nicaragua. For instance, increased funding to PES projects creates incentive for rural communities to maintain the environment and avoid the path towards the “poverty-environment” trap discussed by Barbier. Moreover, a prevalence of PES projects increases community participation and creates job opportunities that may not exist otherwise. Beyond this, targeting funding directly at improving the living standards of the poor may be effective as well. International aid for the development of improved water sources or for scholarships to encourage school enrollment could both help drastically in improving the opportunities presented to a new generation in the Nicaraguan work force.

If Nicaragua is to improve its economic status and create a higher standard of living for its citizens, one of its primary concerns must be strengthening support to organizations and government agencies that works towards regulating child labor and ensuring that children in rural areas are able to attend school regularly. Only once these public services are provided by the government can the rural community began to put effort into its education and strive for a more developed standard of living and higher per capita GDP.
References


Children in El Salvador: Getting Exploited and Missing Opportunities

Yeomin Ryu

Abstract
This article researches past and current child labor exploitations in El Salvador that began to become endemic during El Salvador’s civil war from 1979-1992. It looks into negative results caused by child labor. Child labor exploitation is an important issue not only because children get lower wages and work in poor conditions but also because this issue will cause the youth in El Salvador to miss their own opportunity to get educated and find a landmark of their life. Solving the child labor problem in El Salvador will play an important role in deciding not only children’s future but also El Salvador’s future.

I. Introduction
Since the Universal Declaration of Human Rights in 1948, the importance of human rights has been reinforced in the world. Most countries ratified most of the human rights conventions, including the one on the Rights of the Child,\(^1\) yet many children are continued to be exploited through child labor.

This article covers the history of child labor abuse in El Salvador and examines what kinds of negative results come from the child labor exploitation. As will be shown, the Salvadoran civil war, which was a conflict between the military-led government of El Salvador and the Farabundo Martí National Liberation Front (FMLN),\(^2\) was the beginning of widespread and intense child labor exploitation in El Salvador. Until 1992, when the civil war ended, many children were abused by being forced to be child soldiers. After the end of the civil war, children in El Salvador continued to being exploited through child labor, especially in the sex industry, the sugar harvest industry, and in the informal sector where many children, especially girls, work as servants. As Human Rights Watch (2006, p. 5) pointed out:

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\(^2\) The FMLN was a coalition of five left-wing guerrilla groups.
Over 20,000 El Salvadoran girls and women between the ages of 14 and 19 were employed as domestic workers in sugar cane industry in 2004. Further, over 60 percent of domestic servant girls surveyed reported physical or sexual abuse or psychological mistreatment by their employers.

The two main negative results of child labor are (1) negative side effects on children’s health and (2) the exclusion of children from getting a basic school education. Enforcing the fundamental right to be educated can be a solution to stop full-time child labor in El Salvador. This article provides first a brief review of the literature, followed by some empirical background on El Salvador. The subsequent discussion focuses first on where child labor exploitation has happened in El Salvador and examines then the two main negative results of child labor. The last section closes with some conclusions.

II. Literature Review

There is a lot of literature on child abuse cases in El Salvador, especially on the exploitation of children during El Salvador’s civil war. The most relevant for our study is a June 2004 report by Human Rights Watch (2004a), entitled “Turning a Blind Eye: Hazardous Child Labor in El Salvador’s Sugarcane Cultivation”. This report documents the prevalence of child labor in the planting and cutting of sugarcane in El Salvador. Also, it shows us the hazardousness of working for sugarcane harvest field for young children. The following are some other influential publications.

- Julia Dickson-Gomez (2002), who is a Professor at the Center for AIDS Intervention Research (CAIR) at the Medical College of Wisconsin, wrote an article entitled “Growing up in Guerrilla Camps: The Long-term Impact of Being a Child Soldier in El Salvador’s Civil War” that focuses on how the experience of being abused as a child soldier in the battle field can affect children’s entire life. She also shows how exploiting children as labor force prevents them from getting fundamental education and being mentally healthy.

- Dickson-Gomez, Bodnar, Aradenia, Rodriguez and Gaborit (2006) provide a qualitative analysis of childhood sexual abuse and HIV risk among crack-using commercial sex workers in El Salvador’s capital San Salvador. The analysis is based on interviewing 40 female sex workers who were sexually abused while being a child. Dickson-Gomez et al. explain the relationship between childhood sexual abuse and later HIV risk.

- Schechter and Bochenek (2008) wrote an article on “Working to Eliminate Human Rights Abuses of Children: A Cross-National Comparative Study” that deals with three recent cases: one of which covers child labor on sugar plantations in El Salvador. In his book, he explains how the international law about child labor has been formed. Especially, while dealing with the case of El Salvador, he focuses on how child labor exploitation is done in El Salvador and difficulties of eliminating child labor in El Salvador because of multinational corporations by using an example of Coca-Cola.

- Finally, most recently, Jocelyn Courtney (2010) wrote an article published in the Journal of Military History on “The Civil War That Was Fought by Children: Understanding the Role of Child Combatants in El Salvador’s Civil War, 1980-1992.” This article generally explains how the civil war started in El Salvador and the reason of using children as
soldiers. However, the most notable contents in this article are children soldiers’ trauma after civil war and how employment and education problems arose after the end of the civil war.

III. Empirical Background

El Salvador is one of the smallest countries in Latin America and it has the 15th largest economy in Latin America. The population of El Salvador slightly surpassed 7 million in 2010. El Salvador’s GDP heavily depends on the service sector, which counts for more than 60 percent, the industry sector counting for nearly 30 percent, and agriculture counting for 10 percent. It initiated industrialization with the establishment of the Central American Common Market (CACOM) in 1970.

The outbreak of civil war, which has lasted for 12 years, had a severe negative effect on El Salvador’s economic development. As is shown in Figure 1, GDP per capita (in constant 2005 international $) declined from US$4,372 in 1980 to US$3,854 in 1981, and continued to fall to US$3,559 in 1982. It then remained at about that level for the remainder of the civil war. During the 1980s, El Salvador heavily relied on foreign assistance, mainly from the United States. After the end of the civil war, GDP per capita rose relatively sharply, partly due to an increase in foreign investments and a surge in domestic consumption. However, economic growth stagnated in 2008 and decelerated in 2009 due to the global slowdown and due to El Salvador's dependence on exports to the United States and remittances from the United States. As Figure 1 shows, El Salvador continues to lack far behind the average developing country in terms of GDP per capita.

Figure 1: GDP per capita, PPP (constant 2005 international $)
in El Salvador and LAC, 1980-2010

Source: Created by author based on World Bank (2012).

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There also is a significant gap between the rich and the poor in El Salvador. According to the United States Central Intelligence Agency (CIA) World Factbook, El Salvador is the country with the 31st highest income inequality in the world.\textsuperscript{4} Though this implies that El Salvador has a highly unequal distribution of income, El Salvador is more equal than most other Latin American countries.\textsuperscript{5} Despite an average GDP per capita of about US$4,000 (in constant 2005 international $) in 2010, there are still many people in El Salvador living in poverty, despite the considerable progress made since the end of the civil war.

As Figure 2 shows, the poverty headcount ratio at $1.25-a-day and $2-a-day show overall the same trend. The ratios were increasing from 1989 (which is the first year for which such data exists) until 1991. They then declined until 1995, when they increased sharply until 1998. The poverty headcount ratio at $1.25-a-day actually reached its highest level of 17.5 percent in 1998. The ratios then decreased sharply in 1999, after which they show some volatility within an overall downward trend, especially a very sharp reduction from 2005 to 2006, followed by some stagnation and increase due to the 2008 world financial crisis.

As shown in Figure 3, despite the civil war, life expectancy has steadily increased during the 1980s. This was mainly due to programs by the Ministry of Public Health and Social Services, which were recognized as national priorities, focusing on improvements of health services, control of malaria, improved sanitation and drinking water quality, and also increased child survival.

\textbf{Figure 2: Poverty Headcount Ratios, 1989-2009}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{poverty_headcount_ratios.png}
\caption{Poverty Headcount Ratios, 1989-2009}
\end{figure}

Source: Created by author based on World Bank (2012).

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{life_expectancy.png}
\caption{Life Expectancy by Year}
\end{figure}

As shown in Figure 3, despite the civil war, life expectancy has steadily increased during the 1980s. This was mainly due to programs by the Ministry of Public Health and Social Services, which were recognized as national priorities, focusing on improvements of health services, control of malaria, improved sanitation and drinking water quality, and also increased child survival.


However, after decades of reducing the gap in life expectancy between El Salvador and the average developing country in LAC, Figure 3 also shows that the gap has once again started to become larger since 1994. In 1994, El Salvador’s life expectancy was on average exactly 1.0 years below that of the average developing country in LAC. Since 1994, the gap has increased continuously for every year, reaching 2.4 years in 2010. While the widening gap may appear relatively small, it is a potentially alarming development.

**Figure 3: Life Expectancy at Birth (years), 1980-2010**

![Graph showing life expectancy at birth from 1980 to 2010 for El Salvador and Latin America & Caribbean (developing only).](image)

Source: Created by author based on World Bank (2012).

Figure 4 shows that El Salvador has made considerable progress with immunizations against measles and DPT (diphtheria, pertussis, and tetanus), and hence, El Salvador has now a lower under-5 child mortality rate than the average developing country in LAC, see Figure 5.

**Figure 4: Immunization against DPT and Measles in El Salvador, 1980-2010**

![Graph showing immunization rates for DPT and measles in El Salvador from 1980 to 2010.](image)

Source: Created by author based on World Bank (2012).
Figure 5: Under-5 Child Morality ((per 1,000 live births) in El Salvador and LAC

Source: Created by author based on World Bank (2012).

IV. Discussion

IV.1. Main Areas of Child Labor Exploitation in El Salvador

El Salvador’s civil war, which killed 75,000 people, persisted from 1979 to 1992. It got attention from the world not only because of its huge amount of harms but also because of its significant use of child soldiers in the civil war. The Salvadoran civil war is distinct for dependency on child soldiers. Over 80 percent of the government’s troops and over 20 percent of the FMLN’s were under eighteen years of age.和睦

Recruiting child soldiers tends to happen as a forced way through abduction (kidnapping of individuals), press ganging (larger group roundups), or quota recruitment (setting conscription quotas that had to be filled by a particular town or geographical area. The following two excerpts from Courtney Jocelyn (2010) show how the recruitment process is working.

In 1981, Carlos and his friend were walking on the street when a truck filled of soldiers came by and picked them up. His friend was released several days later because he was too small and wore glasses, but Carlos was forced to begin training with the Fuerzas Aérea (the air force). He was fourteen at the time. Looking back on his recruitment, Carlos recalled how he had never wanted to serve. “I did not share the ideology of the Air Force,” he said. But if he had tried to escape, his family would have been killed.

Efrain Antonio Fuentes Mojica was abducted and forced to join the military just before his sixteenth birthday. Like Carlos, Efrain was afraid that if he did not go with the FAES, his family would be punished. He found out later that they were killed anyway.

6 Courtney (2010).
According to a study by the Ministry of Labor and Social Welfare (2005), entitled *Entendiendo el Trabajo Infantil en El Salvador*, about 9 percent of Salvadoran children from the age of five to 17 were working in order to help support their families. That translates to more than 222,000 working children, of whom more than half were believed to be working in exploitive and dangerous conditions.

Today, the main field of abusing child labor force is the agricultural sector, especially in sugarcane farms. Schechter and Bochenek (2008) mention that child labor is rampant on El Salvador’s sugarcane plantations. According to a news released by Human Rights Watch (June 10 2004)\(^7\), up to one-third of the workers on El Salvador’s sugarcane plantations are children under the age of 18, many of whom began to work in the fields between the ages of eight and thirteen.

- The increased existence of multinational corporations in El Salvador with increased foreign investments is one of the main causes of instigating child labor abuse. Multinational corporations in El Salvador such as Coca-Cola and Starbucks ignored child labor abuse to maximize their benefits. For example, Coca-Cola indirectly supported the use of child labor force in sugarcane plantations. Jim Lobe (2004) documents that Coca-Cola buys the sugar milled from the cane from El Salvador’s largest sugar mill, Central Izalco. Central Izalco purchases sugar cane from at least four plantations that use child labor in violation of the law.

Another main area of child labor is in the informal sector where many children, especially girls, work as servants helping with cleaning and cooking. Many times, these children are also physically mistreated and sexually abused. Various reports by Human Rights Watch have documented how children working as domestic help are abused in El Salvador.

- As stated in Human Rights Watch (2004b), children working as domestic help in El Salvador may work for up to sixteen hours each day, sometimes with only one or two days off each month. Human Rights Watch (2004b) also reports that over 60 percent of girls surveyed for a 2002 study by the International Labour Organization’s International Programme on the Elimination of Child Labour (IPEC) reported physical or psychological mistreatment, including sexual harassment, from their employers. Although the IPEC study on domestic work concluded that its use outside the home was among the worst forms of child labor, the Salvadoran government has not identified domestic labor as one of the priority areas.

- Another report by Human Rights Watch (2006) reports that in El Salvador over 20,000 girls and women between the ages of fourteen and nineteen are domestic workers. The Human Rights Watch report also states that based on an ILO-IPEC study in El Salvador, 15.5 percent of girl domestic workers who had changed employers had left their previous employment because of sexual harassment or abuse, making such abuse the second leading cause for leaving a position. The lack of government oversight and the vulnerability of domestic workers combine to give employers carte blanche to abuse their domestic workers.

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\(^7\) Human Rights Watch, *Child Labor on Sugar plantations* (2004)
IV.2. Health Problems among Working Children

Malnutrition and child labor are closely related to each other. Most of the children who are engaged in child labor are from poor families. Furthermore, the poor working condition for children is another reason for health problems of children.

In sugarcane plantations, children are required to use machetes and other dangerous knives to cut sugarcane, and work in the hot sun more than nine hours each day. Also, they cannot get medical treatment for being hurt while working. Anyway, the field with the most significant health problems in child labor is the commercial child sex industry. A significant number of children, especially girls, residing in San Salvador’s metropolitan areas are exposed to the danger of sexual work and drugs. Dickson-Gomez et al. (2006) explained the endless vicious cycle in sex work, drugs, and the decline of health conditions.

Girls and women who had been sexually abused increased their crack use over time, and many reported turning to street-level sex work. They reported being forced to leave the brothels because their physical appearance deteriorated with continuing drug use or they were unable to afford to pay for a room because all their money was spent on drugs. Street-level sex work, in turn, increased women's sexual and physical victimization as well as their exposure to HIV/AIDS. El Salvador has the second largest number of people living with HIV/AIDS in Central America, behind Guatemala. As Table 1 shows, female sex workers, especially rooted from childhood sexual abuse, are the most-at-risk population, with an HIV prevalence of 5.7 percent.

<table>
<thead>
<tr>
<th>Table 1: HIV and AIDS Estimates</th>
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<tbody>
<tr>
<td><strong>HIV and AIDS Estimates</strong></td>
</tr>
<tr>
<td>Total Population*</td>
</tr>
<tr>
<td>Estimated Population Living with HIV/AIDS**</td>
</tr>
<tr>
<td>Adult HIV Prevalence**</td>
</tr>
<tr>
<td>HIV Prevalence in Most-at-Risk Populations***</td>
</tr>
<tr>
<td>Percentage of HIV-Infected People Receiving Antiretroviral Therapy***</td>
</tr>
</tbody>
</table>


Source: USAID/El Salvador, HIV/AIDS Health Profile (September 2010).

IV.3. Negative Effect of Child Labor: Lacking Education

There are a lot of children in El Salvador who are excluded from getting generally considered basic services, such as getting an education, health care, and enough nutrition. The existence of excluded children in a society is strongly caused by the high income inequality among the rich and the poor. To explain, in order to support the family, it is common for children from poor
families to dedicate themselves by being involved in workplaces, especially in sugarcane farms and coffee plantations.

It is easy to see that children who work do not have much of a chance to be fully educated. Indeed, as shown in a report by Human Rights Watch (2004a), children who work on sugarcane plantations often miss the first several weeks or months of school. For instance, a teacher in a rural community north of San Salvador estimated that about 20 percent of her class did not attend school during the harvest. Other children drop out of school altogether.

Another example of child labor abuse and missing of getting an education can be found from the case of child soldiers in the Salvadoran civil war. Child Soldiers International (2001) mentions that about 80 percent of the government troops were composed of children under 18 years of age. They were forced to be trained to learn fighting skills during the most developmental age and missed out on schooling. Without having proper education at an appropriate time, child soldiers have then trouble in adapting to the society even after demobilization. Furthermore, in 1999, “UNICEF reported that 61 percent of FMLN children were not integrated into the demobilization programme. Among those who did pass through this programme, only 5 percent completed the education programme.”

Figure 6 shows the evolution of the percentage of children who complete primary education in El Salvador between 1980 and 2009 for all available years during this period. Despite some data gaps, it shows that the percentage of children completing primary education was lower during the first few years of the civil war then during the 1970s. Hence, it can be concluded that the early years of the civil war deterred children from completing primary education by exploiting children as child soldiers. It then started to accelerate more or less steadily since 1987, reaching 96 percent in 2010.

**Figure 6: Primary Education Completion Rate (percent of relevant age group)**

Source: Created by author based on World Bank (2012).

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8 Statement of J. C. Legrand to the Latin American and Caribbean Conference on the Use of Children as Soldiers, Montevideo, Uruguay, 5-7/7/99; as reported in Coalition to Stop the Use of Child Soldiers (2001), p. 163.
Figure 7 shows El Salvador’s school enrollment ratios for secondary and tertiary education. Considering the fact that the completion rate of primary education in 2010 was 96 percent, enrollments in secondary and tertiary remain extremely low. Obviously, the transition from primary to secondary depends on the financial situation of each family. Primary schools are usually provided for free by governments. Therefore, enrolling primary school costs less than that of secondary and tertiary, both, in terms of actual school fees as well as in terms of opportunity costs of lost income. Hence, enrollments in secondary and tertiary school can be a substantial financial burden for poor families and actually prevent their children from getting a secondary and tertiary education.

![Figure 7: Secondary and Tertiary School Enrollment (gross, percent), 1970-2010](image)

Source: Created by author based on World Bank (2012).

The relatively low enrollment ratios for secondary and especially for tertiary schools explain why only 40.3 percent of the labor force have a secondary education and only 24.5 percent of the total labor force have a tertiary education. A well-educated labor force is becoming more and more critical for a country to succeed in the globalized world economy. Countries with low education levels will fall behind and to some degree, the low GDP growth rates of El Salvador compared to the average developing country in LAC, as is implicit in Figure 1, may already be an indication that El Salvador will fall behind if not taking the elimination of child labor and investments in education more seriously.

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9 Based on World Bank (2012); this data applies for 1996, which is the only year for which such data is available for El Salvador.
V. Conclusion

Child labor abuse has been one of the most important social issues in El Salvador. The recruiting of child soldiers in the Salvadoran civil war was the most remarkable case of exploiting child labor in the world. However, abusing child labor has been endemic in the society in various fields such as agriculture and sex work. Although El Salvador could achieve economic development with the inflow of multinational corporations, it also led to recruiting children in coffee and sugarcane plantations.

Child labor is a multidimensional problem. Child labor comes with a variety of health problems but it also can deter the nation from growing in the longer-term because it prevents children from getting enough education. Eliminating child labor will be an important task for El Salvador as it will result in increased human resources who are highly educated and healthy. This would reinforce the national power. The El Salvadoran government will need to recognize the fact that it is important to make more educational opportunities by reinforcing legislative regulations on child labor exploitation and providing more public education.

References


The Impacts of Cote d’Ivoire’s Urbanization on its Economy and Populace

Michael Bible

Abstract

Even though Cote d’Ivoire is—by Sub-Saharan African standards—an urbanized nation, it continues to depend heavily on agriculture. Furthermore, despite urbanization, Cote d’Ivoire is still a highly impoverished nation. This article explores a number of impacts of urbanization in the West African nation of Cote d’Ivoire, including effects on agriculture, living conditions of the nation’s population, and the environment. This article will also examine some of the ways in which the negative impacts of urbanization can be curbed and how the positive impacts of urbanization might be broadened in Cote d’Ivoire.

I. Introduction

The West African nation of Cote d’Ivoire (also called Ivory Coast) has, in recent decades, become an increasingly urban nation. Not only that, the population of Cote d’Ivoire has exploded over the past four decades, tripling from 6.7 million in the early 1970s to over 20 million people today. This population eruption has resulted in shifting demographics within the nation and has had both positive and negative effects on the Ivorian population.

This article proposes some steps to maximize the benefits of the urban boom in Cote d’Ivoire while curbing its deleterious effects on urban and rural inhabitants alike. Urbanization has been a blessing for individuals who were a part of the move to the cities, while it is a curse for those stuck in rural parts of the country. As a predominately agricultural society, shifting demographics have reduced agricultural output by moving farmers away from their ideal landscape. On the other hand, with urbanization has come a significant increase in literacy/education and female/spousal empowerment and a change in marital and filial duties that more effectively connect families and people.

This article proposes ways in which this growing urban phenomenon may be extended to those remaining in rural settings within Cote d’Ivoire. It will also suggest some means of mitigating the negative impacts of urbanization, thereby increasing the effectiveness of urbanization in Cote
d’Ivoire and preserving the old way of life and its contributions to the nation (i.e., the cocoa trade). This article will also emphasize the need for increased education and awareness to prevent the negative impacts of urbanization such as pollution, sanitation issues, unemployment, agricultural downturn and issues of water availability.

II. Literature Review
There are a number of sources that provide quite a bit of insight into the positive and negative effects of urbanization in Côte d’Ivoire. The following three sources discuss a number of social, and to some extent economic, developments resulting from Côte d’Ivoire’s urbanization.

- One of the earliest publications on Côte d’Ivoire’s urbanization is an article by Remi Clignet (1966). Clignet explores the way in which urbanization has worked to affect social change, particularly in regard to family structure. By examining the familial relationships of both rural and urban sects of the same ethnic groups, the Aboure and Bete peoples, Clignet draws a number of conclusions about the way in which urbanization has served to shape family structures in Côte d’Ivoire. Some noteworthy features of her article include explorations of the empowerment of women, changing marital expectations (ages, male versus female obligations, ethnic partner choice, etc.), impacts on children, and increased literacy rates that have all resulted from urbanization in Côte d’Ivoire. She concludes that Côte d’Ivoire’s urbanization (as it happened before 1965) eroded ethnic differentials in some patterns of behavior.

- Obrist, Cissé, Koné, Dongo, Granado, and Tanner (2006) published an article in the European Journal of Development Research entitled “Interconnected Slums: Water, Sanitation and Health in Abidjan, Côte d’Ivoire” in which they discuss the interconnectedness of urban areas and the way in which urbanization, particularly within slums and quartiers précaires, has affected the livelihoods of individuals living in these, and surrounding, areas. This article places particular emphasis on Abidjan, the capital and commercial center of Côte d’Ivoire. The authors are interested in presenting the results of a number of in-depth studies done in this region regarding the state of water provision, sanitation, health care, and environmental impacts on the urban population (in slums). The article concludes with the idea that understanding slums as a structural phenomenon of urbanization, requires examining them as entities separate from the city itself.

- Potts (2009) published an article entitled “The Slowing of Sub-Saharan Africa’s Urbanization: Evidence and Implications for Urban Livelihood” in the journal Environment and Urbanization. She explores the state of urbanization in a number of sub-Saharan African countries, including Côte d’Ivoire. Her article includes a number of tables detailing specific quantifiable aspects of urbanization within this region of Africa. An important implication of this article is that, while urban fertility is falling in Côte d’Ivoire, death rates are falling, and hence, countering the effects of fertility drops. Potts also observes significant differences in infant and child mortality rates between rural and urban populations.

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1 Within Abidjan, the municipality of Yopougon is the focus of the study; a municipality consisting of ten settlements (six slums, a middle-class neighborhood, and three villages in the peri-urban area surrounding the city.)
III. **Empirical Background**

### III.1. Political Turmoil in Côte d’Ivoire

Since 1980, Côte d’Ivoire has experienced quite a bit of political unrest. Its president from 1960-1993, Houphouet-Boigny served seven fairly uncontested terms before his death though there were two unsuccessful coup attempts in 1963 and 1973. However, 1990 was the first year in which a multiparty election was held and the presidency was contested by Laurent Gbagbo who lost despite an appeal to the Supreme Court. Houphouet-Boigny was succeeded by Henri Konan Bédié, a member of his ethnic and political group. The following election in 1995 assured his continued presidency though the polls were mostly boycotted by the opposition. Under Bédié’s presidency, attempts were made to exclude certain challengers from running for the presidency based on their ethnic identification. Tensions escalated greatly and in December of 1993, soldiers mutinied and Brigadier General Robert Guei took control of the country. The October 2000 election pitted Guei against Gbagbo who was, after significant controversy, named president. In 2010 there was more controversy over the presidency when Gbagbo refused to step down despite losing the election. For nearly half a year, the nation teeter-tottered on the brink of civil war, something the country is not unfamiliar with. Gbagbo was arrested and Alassane Ouattara now holds the Ivorian presidency.²

Early in Gbagbo’s presidency (September 2002), a failed coup ignited a civil war, pitting the government-controlled south against the rebel-held north. Intervention from France, the UN and the Economic Community of West African States created a buffer zone that slowed the fighting. Despite reaching peace agreements in January of 2003, the issues that had divided the country including land ownership, qualifications for holding office, and the basis for nationality, were never completely resolved and tensions exploded in late 2004 when the government, in violation of the cease-fire agreement, bombed rebel-held areas in the northern part of the country. An official cease-fire was finally established in April of 2005 though fighting continued, thus forcing elections scheduled for that year to be called off. Finally in 2007 and agreement was reached that allowed for Gbagbo’s continued presidency with the post of prime minister given to the rebel leader Guillaume Soro.³

### III.2. Economic and Social Development

The population of Côte d’Ivoire has grown substantially in recent years – more than tripling from 6.7 million to over 22 million people in the span of less than 40 years. Côte d’Ivoire is the fifteenth most populous country in Africa with approximately 22 million people. According to the International Monetary Fund (2012), Côte d’Ivoire ranks 161st amongst the world’s nations in terms of purchasing power parity-adjusted GDP per capita. The chart below shows the progression of Côte d’Ivoire’s GDP per capita over the period 1980-2010. Over that period of time, Côte d’Ivoire’s GDP per capita has fallen from $2,620 in 1980 to $1,704 in 2010, despite increased urbanization. On the other hand, developing countries as a whole in sub-Saharan Africa (SSA) have seen increased GDP per capita in the past decade, overtaking that of Côte d’Ivoire in 2004. Furthermore, income is highly unevenly distributed in Côte d’Ivoire, with the top ten percent of the population accounting for more than 30 percent of Côte d’Ivoire’s total income (World Bank, 2012).

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² See Comhaire (2012).
³ See Comhaire (2012).
Côte d’Ivoire is the world’s largest exporter of cocoa. Côte d’Ivoire accounts for 40 percent of total GDP in the West African Economic and Monetary Union (WAEMU) and is therefore the region’s largest economy. Cocoa is Côte d’Ivoire’s major export/product and it’s interesting to consider this agricultural industry given that a shift towards a more urban country would seemingly reduce the agricultural labor force. Despite this fact, it is worth noting that the cocoa industry has proven highly resilient despite the country’s many economic downturns that have resulted from civil war, coup d’états, and other periods of social and political turmoil.

While very little quantitative data on literacy rates is publicly available for Côte d’Ivoire, the few years with recorded literacy rates indicate an upward trend for both adults and youths in the country. Compared with those of developing countries of SSA as a whole, however, the literacy rates of both groups in Côte d’Ivoire have been consistently lower. Neither the region nor Côte d’Ivoire has a particularly high literacy rate; even now, literacy rates are below three quarters of the population in both Côte d’Ivoire and the developing countries of SSA (see figures 2 and 3 below).

In studies of different ethnic groups within Côte d’Ivoire who have moved from rural to urban areas, Clignet (1966) found increased literacy rates in children who had moved to the city. Though the study is somewhat dated, these results suggest a positive correlation between urbanization and literacy rates in Côte d’Ivoire. With over fifty percent of the nation’s population living in cities, it is no wonder that there is increased access to education. According to Charlick (1978, p. 191), a large portion of educational opportunities within Côte d’Ivoire are, and traditionally have been, concentrated in the urban southeast, particularly Abidjan. This indicates a positive relationship between proximity to urban centers and literacy rates observable from figures 2 and 5.
Figure 2: Literacy Rates in Côte d’Ivoire, 1988-2009

Source: Created by author based on World Bank (2012).

Figure 3: Literacy Rates in Developing Countries of SSA, 1990-2009

Source: Created by author based on World Bank (2012).

Life expectancy at birth in Côte d’Ivoire has increased by eleven years over the past forty years. This increase in life expectancy has also coincided with increased life expectancy throughout the region. As figure 4 demonstrates, life expectancy in Côte d’Ivoire has grown from 44 years in 1970 to 53 years in 1987, after which it declined to 50 years in 2000 (largely due to HIV/AIDS),
and then increased once again until 55 year in 2010. Figure 4 also shows that life expectancy in developing SSA was below that of Côte d’Ivoire until 2003, but slightly overtook Côte d’Ivoire’s life expectancy from 2003 to 2008, when Côte d’Ivoire caught up.

**Figure 4: Life Expectancy in Côte d’Ivoire and Developing SSA, 1970-2010**

![Graph showing life expectancy trends](image)

Source: Created by author based on World Bank (2012).

Potts (2009) makes note of the fact that, in addition to increased life expectancy, urban populations enjoy a certain degree of decreased infant and child mortality, providing for a more youthful urban population. In general, urbanization is understood to be an increase in the urban share of a country’s population. In Côte d’Ivoire, the urban share of the population recently surpassed fifty percent and over the past few decades has grown substantially. Côte d’Ivoire is actually considered an urbanized country by sub-Saharan African standards. Generally, the gross domestic product in purchasing power parity per capita has had an observable upward trend that could perhaps be correlated to the increasing urbanization of Côte d’Ivoire. There has also been an increase in literacy rates amongst adults in Côte d’Ivoire over the past twenty years that is very probably related to increasing urbanization in the country.

IV. **Urbanization’s Effects on Côte d’Ivoire**

Much like any other nation experiencing urbanization, Côte d’Ivoire and its inhabitants have experienced significant positive and negative outcomes from urbanization. While urbanization brings people together and makes goods and services more accessible, it also creates issues that stem from overcrowding and high density population zones. This section will thus explore some of the positive and negative implications of urbanization specific to Côte d’Ivoire. In particular, this section is concerned with identifying problems that need to be remedied and things that are being done well that need to be extended.
IV.1. Côte d’Ivoire’s Urban Population Growth

Côte d’Ivoire has a total population of approximately 22 million people and, as of 2010, 50.1 percent of its population live in an urban setting. This is the first year in the country’s history in which the number of people living in cities exceeded the number of people living in rural areas. As figure 5 shows, the urban percentage of the population of Côte d’Ivoire has increased fairly consistently over the past forty years while the rural percentage of the population has consistently declined in the same period of time. Of Côte d’Ivoire’s 42 cities, only one (Abidjan) has a population that exceeds one million people, and only four have populations that exceed two hundred thousand inhabitants. Most of the country’s cities are rather small.

Figure 5: Percentage of Population Living in Urban and Rural Settings in Côte d’Ivoire, 1970-2010

![Graph showing urban and rural population percentages from 1970 to 2010](source)

Source: Created by author based on World Bank (2012).

IV.2. Decline in the Value Added by Agriculture

With a decrease in the percentage of individuals living in rural areas due to the urbanization that has occurred in Côte d’Ivoire, it is to be expected that one should find a decrease in the importance of agriculture as a source of the nation’s industry. This makes sense in that a decrease in the percentage of the population living in rural areas and working in agriculture – on cocoa farms for instance – would result in lower yield or these products would be a smaller share of a larger economy with new bases in cities/urbanized areas. As figure 6 demonstrates, the value added to the national economy by agriculture has been on a clear decline in the past few decades (World Bank, 2012). This does not necessarily mean that agriculture is any less important for the economy of Côte d’Ivoire; it may just mean that there is more industry in cities contributing to the national economy. Urbanization has certainly impacted the agricultural industry in Côte d’Ivoire.
In a recent article entitled “Urbanization without Structural Transformation: Evidence from Sub-Saharan Africa”, Gollin, Jedwab and Vollrath (2012) observe that while most nations that have undergone urbanization have also experienced structural transformation within that nation’s society, urbanization within African countries, including Côte d’Ivoire, seems to behave contrary to this trend. They observe that often times African urbanization has not been accompanied by new industry or infrastructural improvements. Their research suggests that, while other countries that experience urbanization do so while undergoing either an industrial revolution or green revolution, Africa has followed a different pattern. They call the movement accompanying African urbanization a Natural Resource Revolution. This helps to explain why there has been so much urbanization in Côte d’Ivoire but very little growth of industry or agriculture.

While Africa is endowed with immense natural resource wealth, it also has a strong comparative advantage in the production of a number of non-food crops, including cocoa, Côte d’Ivoire’s largest export. African nations have an unfortunate tendency to simply export raw resources rather than refining them to higher-value outputs. This means that Urbanization occurs in such a way as to provide for easier export of goods; however, it does not provide for a skilled labor force. According to Gollin et al. (2012), urbanization in Côte d’Ivoire was driven by the cocoa booms that characterized the 1960s, 1970s, and 1980s. During this period, the percentage of people living in urban environments in Côte d’Ivoire more than doubled from 18 percent in 1960 to 41 percent in 1990. This is perhaps the greatest shift in population concentration that Côte d’Ivoire has yet seen.

The peaks of the curve shown in Figure 6 can thus be explained by the cocoa booms experienced during the aforementioned period. The relative constancy of the trend-line after 1994 suggests that that time in the history of Côte d’Ivoire was not characterized by the same degree of cocoa production as it was earlier. Figure 6 also indicates that the value of agriculture to the nation has fluctuated around 30 percent for many years suggesting that it is actually a fairly important, and large, part of the Ivorian economy as suggested by the nation’s reliance on cocoa. Ultimately, the
nation relies most heavily on agriculture – whether cocoa, coffee, or palm oil – and statistically speaking, urban households are poorer as a result of this lack of industry.

Given that urbanization in Côte d’Ivoire occurred to a large extent during booms to the cocoa industry, it was necessarily associated with cities that provided export friendly locations. It is, therefore, worth noting that most urbanization in Côte d’Ivoire has occurred in coastal cities or cities near borders that allow for trade. Abidjan, for instance, is the nation’s largest city and it is located in the coastal region of Côte d’Ivoire with easy access to the trade-friendly waters of the South Atlantic.

IV.3. Use of Electricity

In the span of about forty years, according to World Bank, electrical consumption per capita has increased more than twofold. In 1971 Côte d’Ivoire used around 91 kWh of electricity per capita and in 2009 it used about 203 kWh per capita (see figure 7). This increase in electricity usage coincides with the increased urban population observable in figure 5. It makes sense that an urbanized state should use more electricity than a predominately rural state and therefore it is easy to see where this increased usage comes from.

![Figure 7: Electric Power Consumption in Côte d’Ivoire, 1971-2009](image)

Source: Created by author based on World Bank (2012).

In recent years, the Ivorian government has taken interest in implementing activities and projects designed to upgrade urban living areas. This has occurred to a large extent in Abidjan in recent years with attempts to improve primary infrastructure (roads, water, and electricity) set in motion over the past forty years. In fact, the World Bank has supported five different projects in Côte d’Ivoire aimed at urban development; the Second Urban Project was aimed at improving the infrastructure of Abidjan between 1981 and 1987. Other projects were implemented in other large urban centers in Côte d’Ivoire such as the city of Man. Agencies such as the World Bank, the Côte d’Ivoire’s Urban Development Directorate, and Côte d’Ivoire’s Department for Urban Upgrading have worked to significantly improve infrastructure in many of the most populous
municipalities (World Bank, 2002). These improvements to urban living conditions, particularly in the expanded availability of electricity to the populace began in the mid-1970s and have continued into the new millennium. It can, therefore, be concluded that to a large degree, the increased electricity use identified in figure 7 has stemmed from improved infrastructure in urban Côte d’Ivoire.

IV.4. Increasing Carbon Dioxide (CO₂) Emissions and other Environmental Issues

While CO₂ emissions are not typical of agriculture, they are very typical of industrial production. Heightened CO₂ emissions are also indicative of an urbanized state in that industry and other carbon dioxide producing activities concentrate in urban centers. It is clear in comparing figures 5 and 8 that there is a correlation between urbanization and the carbon dioxide emission of Côte d’Ivoire. It can be assumed that the increasing carbon footprint of Côte d’Ivoire has resulted from the increase in industry, vehicular transportation, and fuel/power use associated with urban centers.

Figure 8: Carbon Dioxide Emissions in Côte d’Ivoire, 1970-2008

Source: Created by author based on World Bank (2012).

In recent studies conducted in Abidjan, Obrist et al. (2006) found that the interconnectedness of the wealthier and more impoverished areas has dramatically impacted the environments of both areas. In one of the municipalities studied by this group, they found that a substantial proportion of the population of Abidjan was living on over seventy settlements on illegal or non-residential land. These settlements, designated quartiers précaires, were hazardous areas but the government has shown little interest in intervention. The slums of Abidjan are located right next to approved, safe, “modern” housing and the uncleanliness of the slum environment has an impact on these surrounding regions.

Some of the most significant environmental hazards emerge from the wastewater generated by the slums of Abidjan. Even settlements miles from the city feel the impact of poor waste
management. Waterways carry wastewater and garbage from the city to rural populations who suffer from the contaminants. There is little understanding of the impact that individuals have on their environment and, therefore, they perpetually dispose of waste in an irresponsible manner.

Not only are populations outside of the city affected by this poor management of human-generated waste but also other sections of the city population suffer on account of poor means of disposal. Drainage channels in particular pose the greatest threat to the environment in that for years they have served as an irresponsible means of disposing of waste. Open drainage channels throughout the city are heaped with human waste and other garbage creating a noxious smell and severe health hazards. In fact, the Ebrié Lagoon, just outside of Abidjan has been overwhelmed by pollutants though recent efforts have been put in place to recover its natural purity. The great majority of this poor waste management stems from the fact that so many city-dwellers actually live in illegal slums in hazardous locations. More government intervention is needed to curb these unhealthy settlements and increase the availability of real homes within the city.

V. Conclusion

While urbanization in Côte d’Ivoire has been shown to be linked to increased life expectancy and higher literacy rates amongst the population of urban areas, there are also negative implications inherent to the idea of urbanization. It is true that Côte d’Ivoire is a predominately agricultural society and that a major reason for urbanization in the country was the cocoa boom. This, unfortunately, hardly improves anyone’s condition within the nation. I feel that the government of Côte d’Ivoire should discourage simply exporting goods but should encourage the refinement of those goods within the nation. This would create jobs, increase the income from exports, and would help to truly industrialize the nation’s urban centers. It is also possible, given that a green revolution has yet to occur in Côte d’Ivoire, the government should encourage more productive means of harvesting goods (coffee, cocoa, palm oil) so as to increase profitability from exports. These are two simple ways in which the population of Côte d’Ivoire might escape the negative effects of the natural resource revolution occurring there.

Pollution is another major policy issue that needs to be addressed in urban areas. Urban living conditions need to be improved so that hundreds of thousands are not living in hazardous slums. This means that the government ought to institute greater waste education throughout the population and needs to create a more dedicated waste management organization prepared to handle sanitation issues within cities and their outskirts. The government must also lose its apathy towards illegal home locations, thereby curbing the creation of unsafe slum areas in the first place. It is important that policy makers ensure that the safety of city-dwellers is a higher priority by increasing the availability of more modern homes made of safer materials. It is important that the environment be taken care of so as to prevent serious health hazards and to ensure the continued availability of safe water. It must be made clear to the public that contaminating water supplies is simply unacceptable.

These are only a few, very simple steps that can be taken to curb the negative effects of urbanization. Urbanization presents a unique opportunity and challenge to policy-makers and a country’s population. On the one hand, there are significant benefits to urbanization (i.e. increased life expectancy, increased education, and increased access to infrastructure) but on the other, there are a number of negative consequences (health hazards, pollution, increased poverty). Ultimately, it is up to the government of Côte d’Ivoire to continue efforts to make its urbanization a more beneficial experience. Projects to increase infrastructure must remain a
priority, and educating the public and preventing environmental damage must become a greater concern if Côte d’Ivoire is to be a more successful nation in the modern world.

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