2012

Why Oil Production has a Negative Impact on Socioeconomic Development in Chad?

Annicette Kessely
CUNY City College

How does access to this work benefit you? Let us know!
Follow this and additional works at: http://academicworks.cuny.edu/cc_etds_theses
Part of the Economics Commons

Recommended Citation
Kessely, Annicette, "Why Oil Production has a Negative Impact on Socioeconomic Development in Chad?" (2012). CUNY Academic Works.
http://academicworks.cuny.edu/cc_etds_theses/94

This Thesis is brought to you for free and open access by the City College of New York at CUNY Academic Works. It has been accepted for inclusion in Master's Theses by an authorized administrator of CUNY Academic Works. For more information, please contact AcademicWorks@cuny.edu.
Thesis: Why Oil Production has a Negative Impact on Socioeconomic Development in Chad?

This is in memory of my beloved late father DrNgare Joseph Kessely
Table of Contents

Acknowledgements........................................................................................................3

Introduction..................................................................................................................4

History of oil production..............................................................................................5

Finance of oil production in Chad................................................................................6

Chad oil revenue management system.........................................................................9
  Direct revenue............................................................................................................10
  Indirect revenue.........................................................................................................11

Economic Growth and Economic Development..........................................................12

Several reasons oil production has had a negative impact on socioeconomic development in Chad..................................................................................................................14
  Regression statistics..................................................................................................14
  Government expenditure.............................................................................................19
  Inflation.......................................................................................................................26
  Lack of democratic institutions...................................................................................27
  Level of corruption increase.......................................................................................29
  Lack of openness to foreign investment......................................................................31
  Environmental damage in the oil region.....................................................................34
  Lack of share of oil revenue in the oil production region.........................................36

Solutions to Chad socioeconomic ...............................................................................37
  Change of leadership.................................................................................................37
  Civil society................................................................................................................39
  Chadian economics....................................................................................................40
  Multinational Corporation.........................................................................................41
  International community...........................................................................................42

Conclusion....................................................................................................................43
Acknowledgements

I would like to express my deepest appreciation to Professor Mitchell Kellman for guiding me to complete my Thesis. I would have been able to succeed without Professor Mitchell Kellman’s patience and commitment. In addition, I would like to thank Professor Zhou Lu for introducing me to the world of economic development. Coming from a developing country, I understand the impact of GDP growth on socioeconomic development. Professor Zhou Lu’s lecture on economic development will have a lasting effect on my career.

Furthermore, I would like to thank my beloved late father Dr Ngare Kessely who guided and provided me with resources from Chad to complete this paper. I am also grateful that my father encouraged me to pursue this topic which is an important development issue in Africa.
Introduction

Oil production in Chad is considered one of the most important Sub-Saharan investments in Africa. In 2000, the World Bank agreed to finance oil production under the condition that oil revenues would be invested in socioeconomic development projects. Furthermore, the World Bank emphasized that oil revenues should be used in a transparent and accountable matter.\(^1\) Oil production started in Chad in 2003 and brought billions of dollars to the government. Nevertheless, the Chadian population continues to live in extreme poverty.

The purpose of this paper is to evaluate the impact of oil production on socioeconomic development. It will demonstrate that oil production has done little to improve the living conditions of the Chadian people.

International Crisis Group working to prevent conflict worldwide-
www.crisisgroup.org\(^1\)
History of oil production

Chad is located in central Africa. It is a landlocked country surrounded by the African countries of Libya, Soudan, Niger, Nigeria, Central Africa Republic and Cameroon.

Oil exploration in Chad began in the 1970’s. Oil was discovered in the Lake Chad Basin and Doba basin in southern Chad by a consortium comprising Chevron, Conoco, ExxonMobil and Shell. Oil exploration and development activities ceased due to an outbreak of civil war in 1979. Conoco withdrew from the project. Exxon took over the operation and became one of the major investors in this operation. Today oil production in Chad is produced by a consortium of three companies: ExxonMobil, which holds a 40% stock, Chevron who holds 25% and the Malaysian company PETRONAS who holds 35%. The oil fields currently under production are in Kome, Miandoum, Moundouli, Nya, Maikeri and Bolobo located in Logone Oriental department in the Southern Chad. These sites contain an estimated capacity to produce 977 million barrels of oil over 30 years. Chad’s daily output of oil production fluctuates between 170,000 to 200,000 barrels.
Finance of oil production in Chad

Chad’s oil production success depends on its access to international markets because of its landlocked status. Exxon Mobile’s concern was to build a pipeline of 1060 kilometers to transport the crude oil from the Doba basin through Southern Chad to the Cameroon border until it reached the port of Kribi for export. In addition, 85% of the pipeline construction was to be located in Cameroon and 15% in Chad. The Chadian government did not have the resources to finance the pipeline. As a result, they requested a loan of 4.2 billion dollars from international banks to finance the oil production project.

However, international banks refused to finance the project because Chad was considered an unstable country in terms of foreign investment due to their history of wars and corruption. ExxonMobil developed the idea to secure guarantees from the World Bank in order to persuade international banks to invest in the oil project in Chad. The World Bank agreed to finance the oil project under two conditions. First, stated that the revenue from the oil production must be used to reduce extreme poverty in Chad. Second, the oil revenue would be managed under a transparent and accountable framework. Furthermore, the World Bank hoped the project would be successful and a model for future projects in developing countries. Finally, on June 6, 2000, the World Bank agreed to start the project. The Chadian government introduced Chad’s law 001 which outlined guarantees for the good management of future oil revenues so it could secure a commitment of support from the World Bank.²

² International Crisis Group working to prevent conflict worldwide- Africa briefing n65 Nairobi/Brussels, 26 August 2009
Map of oil fields under exploitation in Chad

[Map showing oil fields under exploitation in Chad, including locations such as CNPC, Am Timan, and Moundou.]
MAP OF CAMEROON-CHAD OIL PIPELINE
Chad’s oil revenue management system

Chad’s oil revenue management system is based on the law 001 which set up a legal framework for managing oil revenue guaranteed the proceeds be earmarked to battle poverty. The law 001 PR/ 1999 stipulated that the oil revenue would be overseen by civil society and government. This joint government- civil society revenue oversight committee law 001 is a unique institution as a progressive effort to hold the government accountable for the use of oil money. A watchdog committee called the “College de Controle et de Surveillance” was set up to monitor government expenditure on priority needs like schools, hospitals and roads. The government of Chad would consult with churches, trade unions, and NGO’s on how to spend and distribute the money for socioeconomic development projects. This law consisted of sharing the oil profits in a transparent and accountable manner, as well as to protect the environment and reduce poverty.

International Crisis Group working to prevent conflict worldwide- Africa briefing n65 Nairobi/Brussels, 26 August 2009
Direct Revenue

Oil production revenue is composed of both direct revenue and indirect revenue. Direct revenue royalties and dividends are paid by the ExxonMobil consortium into Chadian government controlled escrow accounts at Citibank in London. The direct revenue from oil production is to be earmarked and spent on priority sectors, targeting poverty reduction. Another joint government and civil society known as the Petroleum Revenue Oversight and Control Committee (“the College”) was also established with the authority to approve or reject specific projects financed by direct oil revenues.

After payments are disbursed to the World Bank and European Investment Bank from the Citibank account, the remaining direct revenues are allocated as follows:⁴

- 10% to a Future Generations Fund to save for the post oil era in Chad

- 72% to capital investment in five “priority sectors” to fight poverty: education, health, social services, rural development, infrastructure, and environmental and water resources.

- 4.5% to the oil producing region in southern Chad as additional, earmarked funding

- 13.5% to Chad’s treasury for discretionary spending, until 2007; thereafter, these funds will be divided among priority sectors.

Title: Chad’s oil: Miracle and Mirage Following the money in Africa newest petro-state by Ian Gary and Nikki Reisch⁴
Indirect Revenue

The indirect revenues include income taxes, customs and duties on the oil companies deposited in the Chadian government treasury account. The indirect revenue is managed by the Chadian government.

According to the World Bank internal report released in April 2004, total revenues were expected to reach 5-8 billion dollars over the next 25 years\(^5\). The respected PFC Energy consulting firm estimated in 2004 that Chad would gain 3.8-6.1 billion dollars from oil revenues over the next 15 years.\(^6\)

From 2003-2008, Chad received $4.3 billion dollars in direct revenues, which surpassed the World Bank and PFC Energy consulting estimations. In 2007, Chad received an estimated 290 million dollars in indirect revenues deposited into its government treasury account.

\(^5\)http://Web.worldbank.org/\(^5\)internal report
\(^6\)http://www.pfcenergy.com/ PFC energy consulting group
Economic Growth and Economic Development

Professor Zhou Lu, of City College of New York defined: “Economic growth an increase in per capita national income.

Economic development implies:

- Economic growth
- Improvement in human welfare such as health and education
- A rising share of manufacturing industries and services in national product
- Improvement in the environment, economic equality, and political freedom.”

In order to have economic development a country needs to have economic growth. Economic growth allows a developing country to invest in socioeconomic development such education, health, rural development, roads, water resources and job creation. For example, the oil production increased GDP growth rate in Chad in 2004 and 2005. The GDP growth rate in Chad established by the World Bank databank in 2004 was 34% and in 2005 was 17% due to oil production. In 2008, oil production brought revenue of $4.3 billion dollars to the treasury of Chad. Despite this growth rate, the socioeconomic condition of the Chadian population did not improved.

http://data.worldbank.org/

http://data.worldbank.org/
According to Human Development Index of the United Nations Development Programme (UNDP) in 2008, Chad was ranked 170th out of 177 countries with an average life expectancy of 49 years.\(^8\) The low life expectancy rate of 49 years means the government provided poor or non-existence health care in many regions of Chad. The GDP per capita income was $650 in 2007 and fell to $550 in 2008. This low per capita income showed that Chadian population lives in extreme poverty. The Chadian population did not see an increase in the standard of living due to a very low per capita income of $550.00. This low per capita income does not allow the Chadian people to save or invest for their basic needs such as food, education, and healthcare. As a result, 80% of the Chadian population continues to live on less than a $1/per day. Moreover, 80% of the population lives below the national poverty level: in 2008, Chad ranked last in Human Poverty Index for developing countries and 151st out of 156 in the Gender – related Development Index\(^9\).

Several reasons oil production has had a negative impact on socioeconomic development in Chad

Regression Statistics

The study of regression statistics aims to investigate the relationship of human development index on economic development. Data was collected on the World Bank databank and United Nations Development Programme from 1990 to 2009. We used data from World Bank data bank and United Nations Development Programme to examine the statistical associations between Human Development Index (HDI) and economic development. In this study we made our dependent variable to be Human Development Index and other indicators such as health expenditure per capita (current$), household final consumption, primary completion rate female (%of relevant age group), population growth and general government consumption which are independent variables. In addition we used military expenditure as an independent variable to show the impact on human development index.

The model used is: \( Y(\text{Human Development Index}) = \beta_0 + \beta_1(\text{general government final consumption \$}) + \beta_2(\text{Health expenditure per capita current dollars}) + \beta_3(\text{Household final Consumption expenditure current dollars}) + \beta_4(\text{military expenditure}) + \beta_5(\text{Primary completion rate, female \% of relevant age group}) + \beta_6(\text{Population growth}) \)

<table>
<thead>
<tr>
<th>Empirical Results</th>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>logGovCons</td>
<td>government consumption</td>
<td>-0.004360721</td>
<td>(0.024469895)*</td>
</tr>
<tr>
<td>logHeathExp</td>
<td>health expenditure</td>
<td>0.069587288**</td>
<td>(0.021976814)</td>
</tr>
<tr>
<td>logHouseholdCons</td>
<td>household consumption</td>
<td>0.016357367</td>
<td>(0.029308612)</td>
</tr>
<tr>
<td>logMilitExp</td>
<td>military expenditure</td>
<td>-0.015551664</td>
<td>(0.014815127)</td>
</tr>
<tr>
<td>logPopu</td>
<td>total population</td>
<td>-0.10141414**</td>
<td>(0.031141303)</td>
</tr>
<tr>
<td>LogPrimaryFemComplet</td>
<td>Female primary completion rate</td>
<td>0.091840208**</td>
<td>(0.01396788)</td>
</tr>
</tbody>
</table>

* Standard error ** p-value<5%
The empirical results showed that the R Square was 99%. This means that the independent variables together explain 99% of the variance in the dependent variable.

Colinearity is not a problem in this model.

It has been shown in econometric theory that regression coefficients have units. This implies that precise interpretations can be given to each coefficient.

Our regression result showed that holding other variables constant, for every 1% increase of government final consumption expenditure, Human Development index (HDI) decreases by 0.004%; for every 1% increase of health expenditure, HDI increases by 0.069%; for every 1% increase of household consumption, HDI increases by 0.163%; for every 1% increase of population growth, HDI decreases by 0.101%; for every 1% increase of military expenditure, HDI decreases by 0.015%; for every 1% increase in primary female completion, HDI increases by 0.091%. There is a positive relationship between HDI and health expenditure, household consumption, primary female school completion. However there is a negative relationship between HDI and government consumption expenditure, military expenditure and population growth.
In sum, the negative correlation between general government final consumption expenditure and HDI is the result of Chadian government expenses on weapon expenditure which affected HDI. Population growth decreases HDI because the government has fewer resources to invest in health, education and per capita income. On the other hand, 1% increases in health expenditure and primary female completion rate increase human development index.

Therefore, if the government of Chad wants to see an improvement in Human development index, it needs to increase the level of investment of its state budget on health, education and job creation which will increase per capita income.

The effect of human development index was consistent with our regression result coefficient on Health expenditure (0.61) and Population growth (-.101) which was statistically significant at the 5% level with a P value of 0.005 for 0.006 for health expenditure, and 0.005 for population growth.
The result of this study proved that the Chadian government did not use oil revenue on socioeconomic development. To illustrate, from 2007-2009, human development index is a development measure of life expectancy, literacy, education and the standard of living is the lowest in the world. However, this study showed that an increase of investment by the government of Chad on education and health will increase human development index to a better level.
Government Expenditure

We collected and utilized data from the World Bank to create a bar chart from Excel to explain how the government of Chad utilized GDP growth on government expenditure.

http://data.worldbank.org/
GDP% Expenditure on Education

http://data.worldbank.org/
GDP% public expenditure on Health

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP% Public expenditure on Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>2.7</td>
</tr>
<tr>
<td>1996</td>
<td>2.6</td>
</tr>
<tr>
<td>1998</td>
<td>2.5</td>
</tr>
<tr>
<td>2000</td>
<td>2.49</td>
</tr>
<tr>
<td>2002</td>
<td>2.43</td>
</tr>
<tr>
<td>2004</td>
<td>2.26</td>
</tr>
<tr>
<td>2006</td>
<td>2.1</td>
</tr>
<tr>
<td>2008</td>
<td>2.6</td>
</tr>
<tr>
<td>2010</td>
<td>3.1</td>
</tr>
</tbody>
</table>

http://data.worldbank.org
Military Expenditure % of GDP

http://data.worldbank.org/
GDP PER CAPITA

http://data.worldbank.org/
Chad’s share of oil revenue on ministry expenses
We observed in the bar chart that the Ministry of Infrastructure in Chad has the highest share of oil revenue, averaging 50%. The Ministry of Education and Health received less than 6% of oil revenue. The Ministry of Agriculture received an average of 1% of the revenue of oil money. Eighty percent of the Chadian populations barely have a meal a day due to poor decision-making by the government of Chad. As a result, the Chadian population continues to live in hunger and poverty.

The government overlooked the agriculture sector which employs and feeds the Chadian population. Consequently, low investments on priority sectors such as health, education, and agriculture had a negative impact on socioeconomic development.

In summary, the World Bank databank indicated that oil production in the chart of GDP growth brought a growth rate of 34% in 2004 and 17% in 2005. A lack of government expenditure 2% of GDP on priority sectors such as education, health, and low per capita income has a negative impact on socioeconomic development. However, the government used the revenue of oil money to purchase military weapons. Military expenditures of GDP for the years 2006, 2007, and 2008 averaged 7% respectively which had a negative impact on socioeconomic development. Investing more money on weapons and less money on education, health care, rural development proves how the government of Chad is not doing enough to improve the standard of living of their population.
Inflation

Chad had the highest inflation rate (10%) in 2010 in the Central African Economic Monetary Community region. This high inflation was due to economic growth from oil production and very poor macroeconomic policy. The Central Bank of Chad did not attempt to stabilize the economy by controlling the money supply and the interest rate. The consequences of high inflation forced the Chadian population to spend all their income on basic needs such as food and medication. As a result, the Chadian people became poorer.

http://data.worldbank.org/
Lack of democratic institution

Chad lacks effective democratic institutions and an effective judiciary system. Chad has not had a fair and real election since its independence in 1960. The country is ruled and governed by those in power who have no respect for state law. The freedom of press does not exist, so it is difficult for the media to hold the government accountable for the management of any mineral resources.

The oil production has contributed to the deterioration of governance in Chad. President Idriss Deby of Chad, an autocratic leader, who came to power in a coup 21 years ago, rules the county under a dictatorial regime. Idriss Deby’s priority has always focused on state finance and war, and not on socioeconomic development. Idriss Deby refused to respect the rule of democratic institution, such as transparency and accountability. Chadian people are not informed about the benefits, expenses, and revenue of oil production. As a result, the government is not accountable to the Chadian people on the management of state resource. For example, in 2006, Idriss Deby used the Chadian parliament to repeal the law 001 that required the Chadian government to consult with churches, trade unions and NGO's on how to allocate oil revenue expenditure for priority sectors.
The watchdog committee “College de Control et de surveillance” was denied power to oversee the management of the oil revenue. As a result, the government of Idriss Deby took total control of oil revenue management. The President of Chad changed the new law to no.002/PR/2006. Idriss Deby replaced the civil society members in the watch dog committee with his loyal colleagues in order to divert the revenue into his personal account. The direct revenue was no longer used for socioeconomic projects but for government priorities such as the purchase of weapons and corruption. Idriss Deby diverted direct revenue funds to purchase weapons (12% of the budget) in order to maintain power. In response, the World Bank blocked direct revenue from being deposited into the Citibank account. The Chadian government threatened the World Bank and oil companies that it would stop oil production. The World Bank negotiated with the Chadian government to resume business. The Chadian government agreed to use 70% of the direct oil revenue for socioeconomic development. In 2008, Chad paid back its World Bank loan and is now compelled to no external conditions.

http://www.crisisgroup.org
An increase in the level of corruption

Chad has not signed the United Nations Convention against corruption. As a result, in 2005 Chad was nominated the most corrupt country in the world by Transparency International.\textsuperscript{13} Idriss Deby used direct and indirect oil revenues for his personal funds. The President of Chad encouraged large infrastructure projects which led to a budget deficit. Large sums of oil revenue were allocated to investment in physical infrastructure, roadbuilding, public building and education establishment. These projects never materialized. For example, a hospital would be built without opening due to lack of personnel. Most of these projects were under taken by his family members and those loyal to him. The Ministry of Infrastructure received the second largest budget allocation. The president of Chad appointed his family member as the head of Ministry of Infrastructure. The Ministry of Infrastructure is awarded of public contracts and which could embezzle the public funds easily.

\url{http://www.transparency.org/policy_research/surveys_indices/cpi/2010}\textsuperscript{13}
According to Chad oil: Miracle or Mirage following the money in Africa newest petro-state by Ian Gary and Nikki Resich aim to focus on corruption of the government with the oil revenues.

“The public sector received half of the revenue earmarked for priority sector and over six times that allocated for education. However lack of transparency in the award of contracts lead to over invoicing and illicit diversion of huge sums of money to the benefit of those close to the regime. This pushed up public expenditure and fostered budget imbalances. Public contracts are awarded, fostering the development of patronage structures aimed at reinforcing the regime’s control over all sectors of society.”

The lack of transparency in public policy and the use of oil money have allowed senior elite government members to enrich themselves. Most of these elite evade taxes and bribe officials and are never prosecuted by the government. If they were tried, they would not be convicted or sentenced to jail because there is no law in Chad that provides penalties for engaging in corrupt practices.

Finally, corruption is widespread at all levels of public and private sectors in Chad. State resources are distributed via patronage network. Diversion of public funds is a severe problem in Chad.

In conclusion, Idriss Deby has always encouraged corruption during his 21 years of rule, which brought a system of political patronage and nepotism. The President of Chad used state resources to reward people who were loyal and supported him during elections. He also used the oil money to dismantle the opposition party and strengthen his military power.

The lack of openness to Foreign Investment

The Corruption Perceptions Index published by Transparency International in 2005 classified Chad as the most corrupt country in the world. This high level of corruption placed Chad as a difficult country to do business with. Furthermore, the different bureaucracies are inefficient. The judiciary system inspires low confidence and the transportation costs are very high as a result of the lack of a railroad and poor roads. This has discouraged foreign companies from investing in Chad. These issues have a negative impact on job creation which affects socioeconomic development.
The lack of human capital in Chad

Human capital has been defined as competence, knowledge and personality attributes embodied in the ability to perform labor so as to produce economic value. Chad lacks human capital. This is a direct consequence of economic growth and socioeconomic development. A weak input of production function such as capital, labor and technology does not help Chad improve GDP growth rate. The government does not foster an environment where, intellectual Chadians living aboard are encouraged to return to Chad and develop their country. Most leadership positions in public and private sectors are given to employees who belong to the president's tribe or are loyal to him and his political party. Leadership positions are not given to employees who are competent or have several years of experiences in their field. For example, my late father Dr Ngare Kessely, obtained a PHD in International Relations from the University of Paris in 1976. He specialized in peace & conflict resolution, foreign aid and Development. Dr Ngare Kessely decided to go and serve his country after working for the United Nations for 10 years in the late 80’s. He was considered the most competent employee in the Ministry of Foreign Affairs. When President Idriss Deby, a Muslim from the north came into power 21 years ago, he refused to give my father, a leadership position in the Ministry of Foreign Affairs because he was a Christian from the south of Chad. This issue of not placing competent men in appropriate leadership positions affects the development of a country.
To provide another example, the watchdog team “College,” (Chad management oil revenue) wanted to nominate a competent and experienced Christian to replace a Muslim cleric on the seat of their team. Marc Beremadji was a competent and experienced budget analyst, who was a former Minister of Finance and Consultant for the World Bank for Management of the Petroleum Economy Project. The Government declined the nomination because they didn’t want an expert Christian from the South to supervise the management of the oil revenue. In sum, the Government refuses to appoint competent Chadians to manage the oil revenue.

Finally, the lack of human capital shows how the government of Chad lacks knowledge on utilizing oil revenue to invest in job creation through private enterprise, export, education, health, and rural development. However, Chad experience deficit in its economy for several years due to lack of Economic professions whose goal it is to stabilize inflation, decrease unemployment and improve growth.

The Chadian government needs to encourage human capital and create an environment where competent Chadians can utilize their knowledge for socioeconomic development.
Environmental Damage in the oil region

According to the article The Chad’s oil: Miracle or Mirage by Ian Gary and Nikke iRelish aims to explore the negative effects oil exploration has on the environment. “The communities nearest the oil production region have experienced the most significant social and environmental impact from the region”15

Furthermore, the exploitation of natural resources by oil corporations has contributed to the degradation of the environment in oil region of Doba. Gas flares and other forms of pollution have changed the geochemical composition of the soil, rivers and other components of the environment. Ninety percent of the population of the oil region of Doba depends on crop farming and fishing for their livelihood16. For example, the loss of fertile soil affects the agricultural output of the community. As a result, the community faced a decline in output in both farming and fishing activities and an increase in poverty.

In addition, oil extraction has a negative impact on the biodiversity of the region. The forest region is full of medicinal plants and fruits for the population of Doba. The loss of biodiversity eliminates animal, sand, vegetables, and species which are very important for the survival of the community.

http://www.crisisgroup.org
http://www.waado.org/environment/petrolpolution/economcs.htm
Moreover, the exploitation of oil by ExxonMobile has brought pollution in the region which affects the ozone layer. The pollution of oil production has caused soil erosion, ground water and marine area contamination, and severe health problems for the surrounding communities in oil production regions.

Finally, oil production has a negative impact on the socioeconomic life and environment of the immediate oil bearing communities and its inhabitants; it has left a balance sheet of ecological and physical disaster. The environmental problems in the oil region surrounding the extraction of oil is also a disaster for economic development of the region.
Lack of share of oil revenue in the region of oil production

The oil region Doba is considered a poor rural area which is home to 87% of the country’s population. Doba did not benefit from the oil production due to very small shares of oil revenue in the region. The bar chart graph below shows the poor distribution of oil revenue which represents 1% in the Logone Orientale (Doba). Data were collected from the Ministry of Oil and Energy in Chad. Doba has no infrastructure such as hospitals, schools, clean water, paved roads, gas stations, an airport, internet cafés and no electricity. The government of Chad overlooked Doba because Five percent of the oil revenue was supposed to be used for socioeconomic development for the oil region Doba.

Data collected from the Ministry of Oil and Energy of Chad 2005. Sharing of markets sectors priorities by region for the years 2005.
Solutions to Chad socioeconomic development

Change of Leadership

President Idriss Deby has been in power for 21 years and his priority is not to improve the condition of the Chadian people. He has demonstrated in the past in governing Chad that his priority is to stay in power through corruption and increasing his military power. Idriss Deby does not respect the Constitution of Chad. He changed the Constitution so that he may be reelected unlimitedly. President Idriss Deby has total control of the executive, legislative and judiciary powers. A lack of a strong democratic institution is an obstacle to socioeconomic development.

In addition, the United Nations Development index showed that Chad has been among the poorest countries in the world for the past 20 years. There is no improvement in socioeconomic development during President Idriss Deby reign. Furthermore, Chad has not achieved any of the United Nations Millennium development goals. In September 2000, world leaders joined forces at the United Nations headquarters in New York to adopt the United Nations Millennium Declaration which consists of reducing extreme poverty before 2015\textsuperscript{17}. The Millennium Development goals are: the end of poverty and hunger; universal education; gender equality; child health; maternal health; combating hiv/aids; environmental sustainability and global partnership.

\textsuperscript{17}http://www.un.org/millenniumgoal
The Chadian people should acknowledged that President IdrissDeby, in his 21 years in power, has done nothing to improve their socioeconomic condition. They remain among the poorest nations in the world, even with their oil revenues. The United Nations Development Index 2010 showed no improvement in education, health or per capita income. The Chadian people must be courageous and fearless if they want to see their lives improve. They must demand change through revolution like in North Africa. They must use the power of technology to create these changes. The Chadian people should follow the example of their brothers and sisters in Tunisia and Egypt, who used social media networks, likes Facebook and YouTube, to organize and mobilize to gain change of leadership.
Civil society

The civil society such as NGO's, human rights, religious leaders should worked with opposition parties to demand real democratic leadership that would work for the interest of the people. The new leader of Chad would work with the legislative and judiciary branches to create solid democratic institutions and oversee that the oil revenue would be utilized for socioeconomic development.

The new leader will continue to improve the job of the watch dog committee “College” to verify, authorize and oversee Chadian government expenditure of the oil revenue.
**Chadian Economics**

Economics professions in Chad should play a very important role into bringing sound fiscal policy to influence the nation’s economy. The budget should be used wisely to increase surplus and not budget deficit. The Chadian economist should create an Association of Chadian Economics and be more involved in decision making. They should encourage a market economy. Price should be determined by supply and demand. Moreover, they should work with civil societies, opposition parties and governments to suggest ideas to maintain a good state budget management. Their goal is to increase GDP growth, stabilize inflation and decrease unemployment. Moreover, Chadian economists should suggest to their government to invest in free enterprise, agriculture, education and health in order to create jobs. As a result, tax revenue would fund the government budget. This would decrease the informal economy. Chadian economy should not highly depend on the oil sector which is the principal export good. Unfortunately, the oil sector does not create enough jobs for unskilled workers. However, Chadian economy should invest on the agriculture and livestock sector which employs 80% of the population. Reforms need to be implemented in the agriculture sector. First, the government of Chad should support rural farmers and give subsidize to increase output. Second, production technique such as irrigation, chemical fertilizer should be used to increase productivity. Third, agriculture productivity can be improved by developing new pesticides, yield technologies, and in-vitro cell culture techniques. Finally, the government should build manufacture industries to process these agriculture products and utilized them for local consumption and export. As a result, the agriculture sector would improve GDP growth in the economy. Thus, the Chadian population would experience an improvement in their socioeconomic development.
Multinational corporations

The multinational corporations of ExxonMobil, Shell and Petronas operating in the oil production in Chad should put more pressure on the actual government of Chad to demand true democracy and be accountable to their people. Oil revenues should be used to improve the socioeconomic condition of the Chadian people. Consequently, the success of the oil project in reducing poverty in Chad will improve the image of multinational corporations in developing countries.
International Community

Chad is highly dependent on foreign assistance from France, the European Union, China, and the United States for aids. The international community can put pressure on the Chadian government to be more transparent and accountable to their people in the management of the oil revenue in order to eradicate poverty in Chad.

The World Bank should collaborate with the United States, France, China, United Nations and Europeans union to make the oil project in Chad a success and a model for future developing countries. The success of the oil project in Chad can be beneficial for all parties involved because it would increase direct foreign investment in mineral-rich countries in Africa.
Conclusion

The purpose of this paper was to demonstrate that oil production from 2003-2010 in Chad has had a negative impact on socioeconomic development. Oil production brought billions of dollars to the government of Chad. However, eighty percent of the Chadian population continues to live in extreme poverty. There are several reasons why oil revenues did not reach the population, namely because of corrupt leadership and the complexities of managing such an important project. The most important reason is that oil revenues were used on military expenditures and thus, this money did not improve the standard of living of the Chadian population.

Oil production in Chad was supposed to be a model by the World Bank for developing countries wishing to invest in similar projects to improve the living conditions of their people.