

Research Paper

**Energy Security and Dispute Settlement:  
The Case of Ethiopia, Sudan and Egypt**

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## **Introduction**

Ethiopia, Sudan and Egypt have been involved in conflicts and wars at different times throughout their histories. Mostly, the main cause of their disputes is The Nile River. The Nile River flows in ten countries, crosses Egypt and ends in the Mediterranean Sea. 85% of the water comes from Blue Nile, Ethiopia and 15% from Lake Victoria.<sup>1</sup> Egypt needs to control and utilize it and doesn't want the upper countries to share it. Whereas, Sudan and Ethiopia together with the other seven countries demand their share.

Some countries want to develop hydroelectric power dams while others want to utilize it for irrigation. These plans and government policies created conflicts of interest among the three countries, in particular, and in the area, in general. The three countries have tried to solve the issue through negotiations, but later Sudan changed its mind and cooperate with Ethiopia whereas Egypt still took a firm stand and rejected any kind of development over The Nile River by any of the Nile Basin Countries. Why did all other countries agreed except Egypt? In particular, Egypt vehemently condemned Ethiopia and its Dam project over The Nile River.

On the one hand, some people think and say that the conflict is raised because of water shortage, on the other hand, others believe that the ever growing energy demand in these countries and their plans to build dams over the river is the main cause.

Egypt assumes that if Ethiopia and Sudan build a dam over The Nile River, its water share may reduce. However, Ethiopia and Sudan argue that the Dam, which Ethiopia is

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<sup>1</sup> <http://www.fao.org/docrep/w4347e/w4347e0k.htm>

building, will not reduce the water flow, rather it will keep the constant flow of the river throughout the year. They also argue *Great Ethiopian Renaissance Hydropower Dam* will solve the power shortage of these countries and secure the energy demand when it starts generating power. These are the main arguments so far. Are these assumptions and arguments valid and feasible or not? Or is there any reason behind this dispute? In this research paper, I will find out the facts to address these questions and come up with possible policy recommendations.

### **1. Brief Background Facts of Ethiopia, Sudan and Egypt.**

Ethiopia and Sudan are found in the Horn of Africa whereas Egypt is located in Northern Africa. These countries have ancient history and civilization.

Ethiopia has more than three thousand years of history. From the Axumite Civilization BC till now, it has passed through different kinds of political, economic and social transformations. From good economic progress in the ancient period to deep poverty and wars in the medieval and modern periods. Since May 28, 1991, the country is led by Ethiopian People's Revolutionary Democratic Party, which is a coalition of four ethnic based parties. (Bahru Zewde, 2002) The party established a parliamentary system and Ethnic Federalism. There are more than twelve Basins in the country. Most of these big rivers cross its boarder and flow to the neighboring countries.<sup>2</sup> Because of this fact, Ethiopia is considered and as one of *The African Water Tower Countries*.<sup>3</sup>

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<sup>2</sup> <http://www.mowr.gov.et/index.php?pagenum=3.1>

<sup>3</sup> <http://www.businessmonitor.com/blog/ethiopia-the-water-tower-of-africa>



The economy is dependent on Agriculture and more than 80% of the population is living in rural areas, according to the Ethiopian Statistical Agency. More than 30% of the population lives below the poverty line and the same figure of the population is unemployed. Its population size is estimated to at 90 million, the second in Africa next to Nigeria.<sup>4</sup>

Sudan is a neighboring country to Ethiopia and Egypt. The Nubia Civilization is one of the oldest civilizations in Africa. It has a population of 37 million people.<sup>5</sup> In August 2011, the South Sudan people held the referendum and separated from Sudan. Therefore, when I say Sudan, I am discussing North Sudan. The current government came to power in 1981, after President Al-Beshir overthrew the previous government by a coup d'état. Since then, General Omar Al Bashir is ruling the country. The country follows a presidential system and the government is implementing the *Sharia Law*.

Its Economy is dependent on Agriculture and exports semi-processed agricultural products. According to the World Bank, 46.5% of the population lives below the poverty line.<sup>6</sup> Its unemployment rate is 8.4%.<sup>7</sup>

Egypt is situated in the northeastern part of Africa along the Mediterranean Sea in the North and Red Sea in the West. Its existence is dependent on The Nile River, so Egypt is called the *Gift of Nile*. It shares a boarder with Sudan in the South. As I mentioned

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<sup>4</sup> Ethiopian Central Statistics Agency Census Report, 2007.

<sup>5</sup> <http://www.cbs.gov.sd/en/files.php?id=7#&panel1-4>

<sup>6</sup> <http://data.worldbank.org/country/sudan>

<sup>7</sup> <http://knoema.com/atlas/Sudan/Unemployment-rate>

earlier, Egyptians have ancient civilization dating back to early 3150 BC. Its population size is more than 83 million people, making it the third largest population in Africa after Nigeria and Ethiopia.<sup>8</sup> For almost 30 years, it was ruled by Hosni Mubarak and in January 25th, 2011, he was removed by a revolution, which was known as the Arab Spring.<sup>9</sup> After the revolution, it held the first democratic election in its history, but, it didn't last long. The elected president Mohamed Morsi was again removed by another revolution with the support of the military. Since then, it has had no political stability and peace.

The Egyptian Economy, like in most African countries, is dependent on Agriculture. But, it produces and exports crude oil and petroleum. According to the World Bank, 25.2% of the population lives below the poverty line. Its unemployment rate is nearly 14%.<sup>10</sup>

## **2. Research Background**

Energy Security is one of the biggest issues in any country as well as at the global level. Countries are taking different measures to mitigate their energy demand. Some are building nuclear facilities, others are shifting from nuclear to other sources. The increase in price on fossil fuel, the emergence of new economies, climate change, increase in population, etc. are urging governments and the concerned international institutions to find other possible alternative solutions to secure their energy demands.

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<sup>8</sup> <http://worldpopulationreview.com/countries/egypt-population/>

<sup>9</sup> <http://www.aljazeera.com/news/middleeast/2011/01/201112515334871490.html>

<sup>10</sup> <http://data.worldbank.org/country/egypt-arab-republic>

While they are looking for solutions, some are engaging into conflicts and disputes. Ethiopia and Egypt are the best examples for this. Their economies are growing; they are ranked second and third in population size in Africa respectively. To tackle their energy demand and to fill the gap, the ten Nile Basin countries, which includes Ethiopia, Egypt and Sudan, started negotiations in 1999, with the support of the World Bank. Their agenda was how to change the colonial era treaties and utilize the Nile River fairly.<sup>11</sup>

After ten years of negotiations, all countries agreed and signed on the frame work agreement except Egypt and Sudan. Immediately in March 2011, Ethiopia launched one of the biggest hydroelectric power dams in the world on The Nile River called the *Great Ethiopian Renaissance Dam* that can generate 6,000 MW. It costs USD 5 billion. Automatically, Egypt reacted and objected to it. (Michael Hammond, 2013)

However, Ethiopia argued that 85% of the water flows from its territory and 80% of the population has no access to electricity; therefore, as per the Nile Basin Agreement, it has all rights to build the dam to generate power. On the contrary, Egypt claimed that that dam will reduces its water share, which is the life line of Egyptians and secures its existence. Hence, this dispute drew all the regional countries to be involved over the issue.

The Africa Union, along with some International and regional organizations have also given attention to the case in an attempt to establish a consensus among all countries to

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<sup>11</sup> <http://cmsdata.iucn.org/downloads/nile.pdf>



resolve it. Even after the International Panel, which was established by Ethiopia, Sudan and Egypt, assessed and studied the impact of the dam and gave its recommendation, the issue has remained unresolved.

The assumption behind their disputes are, according to the Ethiopian government, Egypt needs to keep the colonial treaties that gave veto power and made it a major beneficiary over The Nile River. Whereas, according to Egypt, the dam will reduce its water share and put its sovereignty and existence in danger, someone must ask and dig deep. Are these the main factors that drive them to dispute? Or is there any other reason, which is not explained explicitly by both parties?

### **3. Objective of the Research**

In this research, I want to assess deeply and answer the following main questions. What are the real and root causes of their disputes? Is it shortage of water or distrust? What are the theoretical and practical approaches to settle this case? How can they secure their energy demand without a conflict? What kind of government policies are required to solve such kinds of conflicts? How can the concerned International Organizations play a constructive role? What kind of lesson can be drawn from and for other countries, which are still in the same situation and negotiations in the region and other parts of the world?

### **4. Statement of the Problem**

There is a dispute among Ethiopia, Egypt and Sudan in relation to energy security and water share, especially after Ethiopia started building the *Great Ethiopian Renaissance*

*Dam* in March 2011. There are clear tensions among these countries, particularly between Ethiopia and Egypt. Ethiopia claims that it has the right to build a dam to generate power and Egypt resists it and expresses its concern that the dam may reduce its water share. This problem has existed for so many years without tangible and practical solutions.

### **5. Significance of the Research**

The first and the main significances of this research is, it will bring innovative idea how Ethiopia, Sudan and Egypt can secure their energy and settle their dispute over the rivers that flow in The Nile Basin Countries. It also shows how these countries can utilize their comparative advantages to secure their energy demand and work together for their mutual benefits.

The second significance of the research is, it demonstrates how they can use their experts, technology, finance, and develop the river together to mitigate their dispute, which has not been well implemented in Africa so far.

The third significance of this research is, it will come up with practical policy recommendations that can be applied not only by the three countries, but also by the whole Nile Basin Countries. So far, different researches have been conducted by Egypt, Ethiopia and other countries independently and their recommendations focused on unilateral actions. However, this research differs in its approach and the recommendation will not be limited to political or legal actions, but focuses on common goals and multilateral actions,

## **6. Methodology**

To analyze the case, mostly, I apply qualitative analysis method mostly and quantitative, when it is necessary. I also use secondary data from books, websites and any material, which is related to this issue.

The content covers the sources of the dispute, bench marking from other countries, which were/are in similar situations, mechanism to settle this dispute in relation to renewable energy recourses, comparative advantages of the three countries based on their natural resources. It also covers its economic, political and social impacts on the countries as well as in the region.

## **7. Limitation of the Research**

Due to time constraint and lack of finance, I can't make site visit in these countries and interview the concerned experts and government officials to collect primary data.

Similarly, I don't go deep into analyzing the historical phenomenon in the past, rather this research focuses on how these countries can secure their energy demand and settle their disputes.

## Chapter one

### 1.1 The Nile Basin Initiative Agreement

Before I discussed other issues, it is better to see The Nile Initiative Countries Agreement and its purpose. The negotiations among the Nile Basin countries started in February 1999, to replace the colonial era treaties and to develop the river together. It has three big programs, such as; the Eastern Nile Subsidiary Action Program, the Nile Equatorial Lakes Subsidiary Action Program and The Shared Vision Program. It has ten member countries. These are Ethiopia, Egypt, Sudan, Tanzania, Burundi, Rwanda, Uganda, Kenya, DR Congo and Eritrea. But Eritrea has only an observer role so far.<sup>12</sup>

The above-mentioned countries started their discussions and negotiations with the support of the World Bank. The discussion was open to all member countries. After ten years negotiations in May 2010, Ethiopia, Kenya, Uganda, Rwanda and Tanzania signed the Cooperative Framework Agreement. The objective of this agreement was to seek more water from The Nile River, which the upper stream countries were denied for a long period of time due to colonial treaties.<sup>13</sup>

After one year, in 2011, Burundi signed the Agreement, whereas Egypt and Sudan are still resisting to sign and DR Congo is expecting to sign it soon. In general, out of the nine full member countries, six of them signed and it became an International Agreement.<sup>14</sup>

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<sup>12</sup> [www.nilebasin.org](http://www.nilebasin.org)

<sup>13</sup> <http://law.missouri.edu/melpr/recentpublications/Ibrahim.pdf>

<sup>14</sup> [http://nilebasin.org/index.php?option=com\\_content&view=article&id=70%253Aburundi](http://nilebasin.org/index.php?option=com_content&view=article&id=70%253Aburundi)



## **1.2 Energy Demand and Comparative Advantages of Potential Energy Sources in Ethiopia, Sudan and Egypt**

**1.2.1 Energy demand:** In Ethiopia and Sudan more than 80% and 60% of the population have no access to electricity respectively. But in Egypt, 98% of the population have access to electricity. In addition to this, their economic growth and ever increasing population, increased their energy demand. For instance, in Ethiopia, apart from the normal annual growth, there is 20% of additional energy demand in the industrial sector.<sup>15</sup>

The average economic growth of Sudan is 2.5%,<sup>16</sup> whereas, according to the Ethiopian Ministry of Finance and Economic Development, for the past nine years on average, Ethiopia has registered 9.4% GDP growth. Egypt has also showed 5% GDP growth, though it has been decreasing since 2011, due to political instability.<sup>17</sup> Egypt's energy consumption has also increased by 5% annually.<sup>18</sup> Therefore, the economic growth and increase in energy consumption have urged them to increase their energy demand and production.

**1.2.2 Comparative advantages of potential Energy Sources:** to address their current and long outstanding energy demand, they have various alternatives. They can generate power from fossil oil, hydropower, natural gas, solar, geothermal, wind and coal. However, the capacity and the natural resources that they have are quite different.

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<sup>15</sup> Ethiopian Ministry of Trade and Industry 2010 Report

<sup>16</sup> <http://www.afdb.org/en/countries/east-africa/sudan/sudan-economic-outlook/>

<sup>17</sup> <http://www.tradingeconomics.com/egypt/gdp-growth>

<sup>18</sup> <http://www.eia.gov/countries/cab.cfm?fips=eg>

One country is rich in hydropower and the other is rich in fossil or natural gas. For instance, Ethiopia has 122 billion cubic meters over and underground water capacity, and from its river, it can generate more than 45,000 MW electricity.<sup>19</sup> And also it has high potential to generate energy from wind. By contrast, Egypt is rich in oil and natural gas. It has 1.656 trillion cubic meters and 4.3 billion barrels capacity of proven natural gas and oil reserve respectively.<sup>20</sup> Likewise, Sudan is rich in natural gas, solar energy and oil. It has 3 trillion cubic meters, 8.8 billion MW, and 5 billion barrels capacity of proven natural gas, solar energy and oil reserve respectively.<sup>21</sup>

When we see their comparative advantage based on their natural resources, Ethiopia is enjoys more advantage than Egypt and Sudan to generate energy from its river than oil and natural gas. But Egypt has the best advantage to generate power from natural gas, while Sudan is rich in solar energy and it has also better potential resource in natural gas next to Egypt.

Even though, they are rich in natural resources to generate energy abundantly from hydropower, natural gas, oil, solar and wind, what they are producing is insignificant and under capacity.

Hence, from the above figure, we can clearly understand that these countries have huge potential and capacity of natural resources to generate energy and fulfill their demand without conflict. They can also sell it for to other countries and earn foreign currency.

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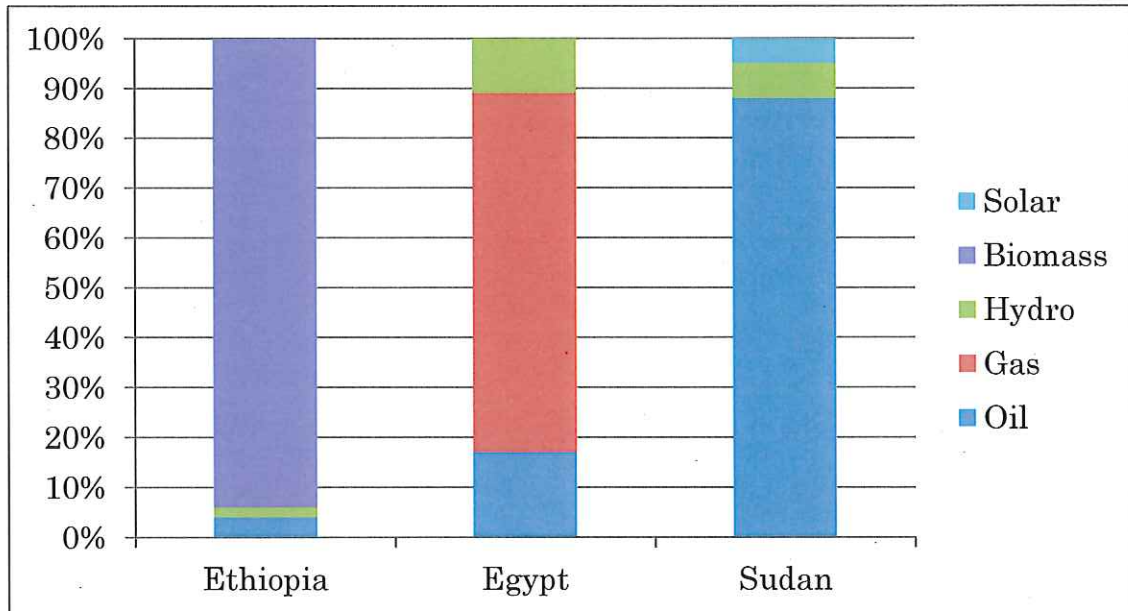
<sup>19</sup> Ethiopian Ministry of Mines and Energy 2011 report

<sup>20</sup> <http://en.openei.org/wiki/Egypt>

<sup>21</sup> <http://www.eia.gov/countries/country-data.cfm?fips=su>

### 1.3 Current Energy Sources in Ethiopia, Egypt and Sudan

Chart 1. Current energy sources of Ethiopia, Egypt and Sudan



Source: Sudan: <http://ssafta.org/wp-content/uploads/2011/05/Sudan-Energy-Profile.pdf>  
Egypt: <https://www.google.co.jp/search?q=energy+sources+in+egypt&biw=1366&bih=657>  
Ethiopia: <http://eneken.ieej.or.jp/data/3195.pdf>  
(for analysis purpose, I compiled and presented it by graph)

From this graph, we can see that 94% of Energy source in Ethiopia is Biomass, i.e. fuel wood, charcoal dung cakes. Unlike Ethiopia, Sudan generates 93% of its energy from oil, whereas Egypt generates 70% of its energy from gas.

This tells us that, though Ethiopia has a capacity to generate more than 45,000 MW electricity from hydroelectric power, still, it is dependent on biomass that has negative impact on its natural resources, especially on natural forests and trees.

The above graph shows us that, these countries are not fully utilizing their natural resources to generate energy and to fill the gap between their energy demand and supply.

## Chapter Two

### 2.1 Major Colonial Treaties on Nile River and the main causes of their dispute

Table 1. The major Colonial Treaties on Nile River Water utilization

Year	Signed Countries	Main Objective	Direct Beneficiary Countries	Excluded/partially excluded Countries
1902	Britain and Ethiopia	To restrict Ethiopia not to stop the flow the river	Britain, because it was the colonizer of Egypt and Sudan	All the upper stream countries
1906	France, Britain and Italy	To dealt with the allocation of water in Ethiopia	Britain and Italy	All the upper stream countries
1925	Britain and Italy	How to allocate the water	Britain and Italy	All the upper stream countries
1929	Egypt and Britain( Sudan was its colony	To give mandate for Egypt to monitors Nile relates activities.	Egypt 57% \$ Sudan 5% uses the Nile water	38% left for the seven upper stream countries
1956	Egypt and Sudan	To give veto power for Egypt to control Nile water	Egypt 66% \$ Sudan 22% use the Nile water	12% left for the seven upper stream countries

Source: <http://www.ethiopians.com/abay/engin.html> (for convince, I compiled and presented it by table)

For centuries, there have been different wars and conflicts among these countries, especially between Ethiopia and Egypt and between Ethiopia and Sudan. There have



been different reasons for their conflicts, but the main ones reason have been border issues with Sudan and The Nile River with Egypt. For instance, in 1879 Ethiopia and Sudan engaged in war over their boarder. (Bahru Zwedi, 2002)

Ethiopia, after the Nile Basin Agreement had been signed by most countries, it started building the *Great Ethiopian Renaissance Dam* over Blue Nile in March 31, 2011. The Dam is 170 meters high and contains 63 billion cubic meters of water. When it is completed in 2017, it will generate 6,000 MW electric power. It will cost 4 billion USD and according to the Ethiopian government the cost will be covered by Ethiopian government and fund raising by selling bonds and public contribution. The dam is the first in Africa and one of the biggest ones in the world.<sup>22</sup>

Immediately, Egypt and Sudan reacted and opposed the construction of the dam. Their concern is, the dam will reduce their water share and violates the colonial era treaties. Egypt also strongly argued that its existence is fully dependent on The Nile River and anything, which is constructed on the river directly affects its sovereignty. It also argued that currently, its water demand is 55 cubic meters per year and by 2050, it will need an additional 21 billion cubic meters of water per year for a 150 million estimated population.<sup>23</sup>

Sudan, first opposed the construction with the same reason, but later after detail negotiations with Ethiopia, changed its mind and supported the dam. The Sudanese

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<sup>22</sup> Ethiopian Ministry of Mines and Energy 2011 report

<sup>23</sup> <http://www.arabwatercouncil.org/administrator/Modules/CMS/Egypt-Country-Report.pdf>

government explained that the dam would not affect its water share. It also argued that it would keep the constant flow of the river throughout the year and avoid the flood, which creates disasters every year, when the Blue Nile overflows out of its bank.

Ethiopia also argued that the colonial era treaties, which excluded the upper stream countries, must be changed and all countries should benefit from The Nile River equally. It also insisted that 85% of the water comes from Ethiopia, but so far it didn't use 1% of it, which is unfair. The other reason, which Ethiopia provides as an argument, is that the dam doesn't reduce the water flow, rather it keeps the constant flow and preserves the amount, which is wasted in Egypt from the Aswan Dam by evaporation.

Moreover, Ethiopia is urging Egypt and Sudan to sign and abide by the Nile Basin Initiative Framework Agreement, which is signed by six countries out of nine to replace the colonial era treaties and to develop The Nile River together. Nonetheless, Egypt and Sudan are still not willing to sign it.

Therefore, here we can understand that their conflict is over the Nile River and how it is utilized. Neither water shortage nor lack of energy resources are not the main causes for their dispute. Because, they have enough natural resources to generate energy and the river has enough capacity of water, whether they develop it together or independently.

## **2.2. The Role of the Regional and International Institutions**

The roles of international institutions like African Union, The Eastern African Intergovernmental Authority on Development, International Energy Agency, World Bank, The concerned UN Agencies are vital to support or put pressure to solve such kind of problems. Even though, they have different missions, they have diplomatic and financial capacities to bring countries to the round table to have a constructive negotiation. However, so far, due to various reasons, their role is very passive and limited.

The Africa Union urges the three countries, particularly Ethiopia and Egypt to resolve their disputes peacefully. The World Bank long time ago clearly indicated that it doesn't finance hydroelectric power dams, except supporting the Nile Basin Initiative negotiation and agreement, but recently it is considering to support such kinds of projects.

Similarly, among the superpower countries, The United States and Britain asked Ethiopia and Egypt to sit and solve this dispute through negotiation. Except this, so far, there is no such a big and direct involvement or influence from international institutions or communities either positively or negatively.

## Chapter Three

### 3.1 Mechanisms to settle the dispute and secure their energy

From the above analysis, we can understand that there is a high energy demand in Ethiopia and Sudan and concern over shortage of water from Egypt. However, from the capacity and potential that they have naturally, there is enough natural resource to generate power and water resources. What they lack is trust and cooperation to work together.

Therefore, to handle this dispute and any future potential danger, they can use different mechanisms. But, based on the case and international experiences the following appliances would be most appropriate.

**3.1.1 Benchmarking from other countries:-** when countries are facing any kind of problems, they can learn lessons from other countries, which were/are in the same or relatively similar situations. For instance, in 1964, America and Canada made an agreement, which is called The Colombia River Treaty. The main objective of this treaty was to develop and use the river for common benefits. They agreed to build hydroelectric power dams to generate power and to control flood.<sup>24</sup>

The Colombia River is one of the six largest river basins in North America. It flows from Canada to America and ends in the Pacific Ocean. As per their agreement, they built four big dams, one in America called Libby Dam and three in Canada, called

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<sup>24</sup> [http://www.cbt.org/uploads/pdf/HydroPowerDams\\_Final\\_web.pdf](http://www.cbt.org/uploads/pdf/HydroPowerDams_Final_web.pdf)



Duncan, Keenleyside and Mica Dams.<sup>25</sup>

Therefore, from these best practices, the Nile Basin countries, in general, Ethiopia, Sudan and Egypt, in particular, can learn a good lesson to develop The Nile River together and utilize it for their common benefits.

**3.1.2 Establishing an independent organization:-** to address such kinds of complex disputes, which have the potential to draw the Nile Basin Countries into war, this cannot be overlooked as a simple case. The situation is not temporary, but as permanent as the River. Hence, if they establish an independent institution that consists of politicians, experts in the field of energy, water management, irrigation, environment, international relations, lawyers, economists, researchers, engineers, etc. from the member countries, they can handle it properly.

The institution will be funded by the member countries with annual contributions. It will have its own head office, organizational structure, administration law, etc. which will be decided by the member countries through successive negotiations.

This independent institution can manage the river and prepare different projects that can be implemented by member countries. At the same time, when disputes arise among the member countries, it will be able to verify and presents proposals for the concerned bodies. This approach will reduces the burden from individual countries to deal the issue individually with all member countries. It will also boost trust among governments

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<sup>25</sup> <http://www.crt2014-2024review.gov/Files/TreatyFactSheet.pdf>

of the Nile Basin member countries. It will reduce biased researches and recommendations, which have been done so far by each member countries.

**3.1.3 Develop their comparative advantage of energy sources:-** as we have seen in chapter one, the countries have their own natural advantages to generate power. Hence, if they focus and develop it, they can utilize it properly. For instance, Egypt and Sudan have more advantage on natural gas and oil; however, they built dams and they have also plans to construct additional dams to generate power. Nonetheless, if they use the water for agriculture, such as-irrigation, fishery, etc., it would be more appropriate.

On the other hand, Ethiopia is highly dependent on imported oil and biomass, which costs billions of dollars and its forests respectively. Thus, if it develops and utilizes its rivers to generate power, it is reasonable.

**3.1.4 Designing and Implementing Common Projects:-** if they design a new project that can be implemented soon, which allow them to collaborate, they can gradually reduce the distrust among them and avoid any potential conflicts in the long term. These new projects will bring them together and demand their commitments to invest their money and experts. It allows them to avoid any absurd and develop their mutual understanding and smooth relationship.

## **Chapter Four**

### **4.1 Conclusion**

Energy security is the key issue for any country in the same way shortage of water is becoming the concern of many countries. In the above explanation, I have seen this case mainly based on three questions. Is their dispute due to lack of energy resources? Or shortage of water? Or is there any reason behind their claim that pushes them in to disputes?

As we have seen, these three countries have enough energy resources and the capacity of The Nile River is beyond their demand. Therefore, practically there are enough resources to generate and secure their energy demand. Water shortage also cannot be the reason for their disputes. Thus, the fundamental reason of their dispute is the feeling of insecurity of from downstream countries, particularly Egypt and Sudan, not to lose full control over The Nile River versus the demand of the upper stream countries, precisely Ethiopia, to share and utilize the river fairly and equally.

The downstream countries, specially Egypt, fears that if Ethiopia builds this great dam over The Nile River, the geo-political power in the region would be shifted into Ethiopia, which Egypt has been enjoying for a long time. Egypt will also loses its veto power over The Nile River, which it has enjoyed for half a century, as per the colonial era treaties. However, if these countries can trust each other and work together like America and Canada, and apply what I suggested as solutions in chapter three and in the recommendation part, they can solve their dispute and settle the case.

## 4.2 Recommendation

In addition to the above mechanisms that I proposed to settle the case, the following policy recommendations can be taken as short and long-term policy recommendations.

**4.2.1 Open discussion as per the recommendation of the IEP:-** an International Panel of Experts was an independent Panel, which was formed by Ethiopia, Sudan and Egypt to study the impact of the *Great Ethiopian Renaissance Dam* and to report its findings and recommendations for them. It consisted of ten individuals, two from each country and four, who were selected by the three countries by consensus. These professionals were from the fields of Water Resources and Hydrologic modeling, Dam Engineering, Socioeconomic and Environmental Experts.<sup>26</sup>

The Panel Experts reviewed documents, visited the construction site in Ethiopia, interviewed concerning bodies from the three countries. Finally, after it had finished its study and analysis, the panel submitted its report for Ethiopia, Egypt and Sudan on June, 2013.<sup>27</sup>

In its conclusion, it stipulated clearly that the dam has no negative impact on the downstream countries i.e. Egypt and Sudan and it doesn't reduce the water flow of the Blue Nile River, which flows from Ethiopia that shares 85% of The Nile River.<sup>28</sup>

It also recommended the three countries sit down and discuss the technicalities and

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<sup>26</sup> <http://grandmillenniumdam.net/international-panel-of-experts-on-renaissance-dam/>

<sup>27</sup> <http://zenileabbay.wordpress.com/2013/06/17/the-international-panel-of-experts>

<sup>28</sup> <http://gulfnnews.com/news/region/sudan/panel-report-nile-dam-won-t-affect-egypt->



negotiate how to solve their disputes. I support its recommendation and concur that instead of engaging in oral wars, especially from Egypt's side, it is better to negotiate and agree on how to utilize and maximize their benefits from this and other future similar projects.

**4.2.2 Economic and Trade integration:-** this has a capacity to create mutual trust and benefits. The more countries are integrated by economy the less they involve in wars. For instance, we can see in the European Union case where there is high integration among European countries. Hence, if Ethiopia, Sudan and Egypt integrated by trade and economy, it would create a chance for them to work together.

**4.2.3 Infrastructure integration:-** currently, Sudan is connected with Ethiopia and Egypt only by road in the border area. Of course, Ethiopian Airlines, Sudan and Egypt Air Ways fly among these countries, but, if they build bigger high and railways, they can use them for trade, tourism, etc. At the same time it can promotes smooth relationships among themselves.

Sudan, later after changed its mind and supported the Ethiopian Dam; it agreed to buy power from Ethiopia. To facilitate it, they have started building a gird that can transmit power from Ethiopia to Sudan. If the Egyptian government decides and joins them, it will helps them to trust and focus on common goals that can hasten their economy than disputes.

**4.2.4 Ensure political stability and enhance good governance:-** it is one of the key factors to settle any disputes among countries. If the government of a given country is accountable for its citizens, mostly it will be responsible at the international level too. As we have seen in the introduction part, Egypt still has no legitimate government. It is in turmoil. In Sudan and Ethiopia, the governments are authoritarian; therefore, no one can be sure how long they can be in power. This instability negatively affects anything these countries.

If governments are not stable or if they don't exercise good governance, they can be removed by the people anytime. Similarly, if the governments are authoritarian, they may be hostile in their foreign policies and relations with their neighbors. This results in uncertainty among countries and in the international communities to work together.

Therefore, I suggest the governments of these countries to be sure for their people and international community to uphold democracy and good governance. If they change their current coercive policies and approaches and implement good governance, they can definitely bring practical positive changes among themselves and in the area.

**4.2.5 Various support from International Communities:-** as we have seen earlier, the role of the international community and institutions is very few and limited. Therefore, I suggest international institutions and governments, particularly The Eastern Africa Intergovernmental Authority on Development, African Union, European Union, World Bank, Africa Development Bank, The United States, Britain and China to support these countries to increase the capacity of their renewable energy resources, which have a

direct impact on environment and climate change.

Among the above-mentioned institutions and countries, the World Bank, Africa Development Bank, European Union, America, China and Britain are the main donors and lenders to Ethiopia, Egypt and Sudan. Therefore, they can play a positive role to hold a constructive dialogue among these countries to settle this dispute. They can also provide financial and non-financial support.

The International Energy Agency also has best experiences in the field of energy; thus, it can help and share its accumulated knowledge and expertise not only for these countries, but also for the Nile Basin Countries as a whole. It can support them through training and technical areas regarding how to secure their energy and establish an independent organization, which I have suggested above.

Japan can also play a significant role either in the negotiation or technical and financial support. Because, in the Fifth Tokyo International Conference on Africa Development /TICAD/, which was held last year from June 1 - 3, 2013, in Yokomaha, Japan decided to help the development of Africa and allocated USD5 billion for ~~the~~ consecutive five year.<sup>29</sup>

Therefore, through this aid, it can support Ethiopia, Egypt and Sudan to prepare common projects that can benefit them. It can also support the Nile Basin Initiative Countries in energy efficiency technologies, Gird Management, solar deployment, etc.

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<sup>29</sup> <http://www.ticad.net/index.html>

## Bibliography

Abidar M. Ibrahim(2012) **The Nile Basin Cooperative Framework Agreement: The Beginning of The End of Egyptian Hydro-Political Hegemony.**

Bahiru Zewde(2002) **A History of Modern Ethiopia From 1855 - 1991.** 2nd Edition  
Addis Ababa. Institute of Ethiopian Studies.

Christina Leb(2013) **An Inclusive Discourse - Stakeholder engagement in The Nile Basin.** IUCN Water Program.

Michael Hammond(2013) **The Grand Dam and The Blue Nile: discussion paper.**

Ministry of Mines and Energy(2010) **Ethiopian Energy Policy.** Addis Ababa.