THE REJECTION OF EGYPT TOWARD GRAND ETHIOPIAN RENAISSANCE DAM IN ETHIOPIA (2011-2016)

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ABSTRACT

Egypt has rejected the construction of Grand Ethiopia Renaissance Dam (GERD) on the Blue Nile in Ethiopia. GERD was launched unilaterally by Ethiopia. The GERD will be largest dam in Africa which can storage huge amount of water. Egypt sees GERD as a threat to their stability because it has a capability to control the Nile water flow to Egypt. In Ethiopia perspective, the dam would not cause harm to Egypt's Nile water share. Still, Egypt believes that the dam would negatively impact the country's water share from the Nile. The question emerged in this research is why did Egypt reject the GERD in Ethiopia.

The objective of this research is to analyze the reason of Egypt rejection toward Grand Ethiopian Renaissance Dam (GERD). Furthermore, the method that was used by the writer was qualitative method by using secondary data such as article, journals, e-news, e-book and other literary sources.

As the findings, from analysing the perspective of Egypt and Ethiopia this research found that there was possibility of the share of Nile water to Egypt will reduce and that will affect to Egypt stability. Other than that is the economic interest of Egypt over Nile water as supporting factor.

Keywords:

Egypt, Ethiopia, GERD, Nile water

INTRODUCTION

Since Egypt lies near the banks of the Nile River, Nile is their source of life and is important for their livelihoods. Nevertheless, Nile River is an important water resource for almost all of the Middle East and African countries such as Rwanda, Kenya, Uganda, Ethiopia, Sudan, South Sudan and Egypt. Since they are only relying on the same river, conflict over the water resources often happened and could not be avoided.

Water as a natural resource has increasingly become a source of conflicts in Africa and Middle East. In an ideal world, water is supposed to be uniformly distributed and easily accessed by all parties involved. In reality there is a challenge in water sharing because of the increasing demand for water which results from an increase in population especially in Africa and Middle East. Due to that reason, they need to share water equitably. According to the book of Introduction to the Middle East Region, if a state has a water resource, or takes control over water resources of other countries, then the water will be a tool of conflict (Jatmika, Pengantar Studi Kawasan Timur Tengah, 2014).

In the Nile Basin region there are eleven riparian countries with nine upstream countries; Burundi, DRC Congo, Ethiopia, Kenya, Rwanda, Eritrea, South Sudan, Uganda, Tanzania and two downstream countries; Sudan and Egypt. Among those nine upstream countries, the tributary in Ethiopia namely Blue Nile contributes the most water to the Nile River which is the vital sources of water for the two downstream countries. Furthermore, Nile River for Egypt as a downstream country is the most important water resource but its control is in the

hands of other countries that live in the upstream countries, such as Ethiopia. (Valentine, 2015)

In 2011, Ethiopia under the Prime Minister Meles Zenawi came out with a project to build Grand Ethiopian Renaissance Dam (GERD) in the Blue Nile River, near its border with Sudan. GERD construction is located in Benishangul-Gumuz Region of Ethiopia, on Blue Nile River, which is located about 40 km east of Sudan. At the end of the works, the Grand Ethiopian Renaissance Dam will be the largest dam in Africa: 1,800 m long, 155m high and with a total volume of 74,000 million m³ and is supposed to generate 6,000 MW of hydroelectric power (Salini Impregilo). However, the Ethiopian government did not give a prior notification or even holding preparatory discussion to Egypt about the project commencement. Egypt found out the construction commencement from the media, not officially from the Ethiopian government (Malone, 2011). That was the starting point of the war of words between Egypt and Ethiopia.

The Ethiopian government declared that the GERD would not harm the downstream countries – Egypt and Sudan. They also claimed it would bring benefits not only for Ethiopia, but also for the downstream countries (Federal Democratic Republic of Ethiopia Ministry of Foreign Affairs). Knowing that 85% of water flow passes through Egypt from the Blue Nile, the GERD construction in upstream Ethiopia has become a great threat to Egypt water resource. Other than that, according to the historical rights Egypt should be involved in any claim done by the other riparian countries. Those became the main arguments of Egypt in conducting the protest against the project.

In response to the Egypt protest, Ethiopia conducted pre-feasibility study to assess the environmental, social and economic effectiveness of GERD. However, in fact the actual size of the GERD was larger than negotiated in the pre-feasibility plan. Even though Ethiopia made a unilateral decision without prior notification to Egypt, they still argue that the dam would not cause harm to Egypt because that dam is constructed according to international standards. However, Egypt thinks that there are other harmless alternatives for the Nile countries, instead of the GERD (Riet, 2014).

Furthermore, during the conference on the issue of the Grand Ethiopian Renaissance Dam (GERD) and its effect on Egypt's share of Nile water on June 10, 2013, Mohammed Morsi stated that if the GERD proven can harm Egypt, blood will be the alternative (El-Behairy, 2013). Even though in 2013 Morsi was being overthrown by a coup, there was no change of heart from the Egyptian. New elected President Abdel Fatah Al-Sisi tried to use different approach in more diplomatic ways to respecting the decision of the Ethiopian than Morsi. He also led Egypt to join the further negotiation regarding the GERD construction. However, Al-Sisi stated that Nile water is a matter of life and death for Egypt (El-Gundy, 2014). Moreover, Egypt Minister of Agriculture under Al Sisi administration, Adel Al Beltagy said that from the totals of 55 billion cubic meters its share of Nile water, Egypt will not give any single drop of its share of water (Shady, 2014).

THEORETICAL FRAMEWORK

Kalevi Holsti assumes conflict can emerge if there are more than one party, which each side has different perspective in certain issue or problems, there is hostility, then undertake diplomatic action or military. In other words in a conflict there are parties, field of issue, tension and action (Holsti, 1994).

Firstly, the warring parties here can be a state or non-state, which each party try to achieve a certain target which is not in line with the interests of other parties. In this research both of the parties are states; Egypt and Ethiopia. Ethiopia tried to build the GERD, meanwhile Egypt had a different interest that is not in line with Ethiopia goals.

Secondly, issue or problem is an object or position that is being contested. In this case there are conditions in which the actions that need to be taken by one of the parties can harm other parties. The Source of problem in this research is the GERD, a dam located in the upstream of the Blue Nile River build by Ethiopia to secure their water resource. Meanwhile, the action that has been taken by Ethiopia was considered as a threat to their water resource by Egypt.

Thirdly, tension or hostility, it refers to the behaviour and perspective that is embraced by one of the parties to the other parties. Tension is not solely the cause of the conflict, but tension encourages each party to get into conflict situation. The tension started since Ethiopian government did not give a prior notification or even holding preparatory discussion to Egypt about the project Those actions encouraged the parties to get into conflict situation.

While the last is action, a step taken by one of the parties addressed to the other parties. Negotiation and assessment to the effectiveness of GERD were the actions that have been conducted between Egypt and Ethiopia.

The Kalevi Holsti theory of conflict will be use to analyse the perspective of Egypt toward GERD construction initiated by Ethiopia and its potential that can harm Egypt which lead to the rejection of Egypt. Other than that, it is also to analyse the importance and its interest of Egypt toward Nile River.

INHERENT CORRELATION BETWEEN EGYPT AND THE NILE RIVER IN EXERCISING STATE'S INTEREST

Since a very long time ago, the Nile River has served as the main water resources for almost all of the Africans countries. As what have been discussed in the previous chapter, Egypt is more dependent on the Nile than other riparian countries, which enjoy heavy rainfall and able to access to the sources of the Nile. In fact the foreign policies of Egypt have centred on the objective of securing the continuous consumption of Nile waters. This reality has made the issue of sharing of Nile waters intolerable phenomenon and compelled Egypt to secure its influence over Nile. The colonial agreements; 1929 and 1959 have been the main legal basis for Egypt in an attempt to perpetuate its influence over Nile.

The 1929 treaty signed between Egypt and Sudan which gave Egypt the right to 48 BCM of water per year, complete control over the Nile during the dry season, and veto power over any upstream countries water projects (Wolf & Newton, 2007). From the 1929 treaty, Sudan received rights to 4 BCM of water, and Ethiopia was not consulted at all about this matter. Three decades later, Egypt

and Sudan – newly independent, signed the 1959 Nile water agreement. The 1959 was more comprehensive than the former by providing legal framework for complete control over the waters. Sudan given the right to utilize the waters amounted to 18.5 BCM, and Egypt which allowed building the High Aswan Dam got 55.5 BCM (Abu-Zeid & El-Shibini, 1997).

As of today, for Egypt, water resources development and its management remain at the heart of the struggle for growth and sustainable development in their country. Egypt water resources consist of two types water resources; Conventional and Non-Conventional.

The conventional water resources in Egypt are limited to the Nile River, ground water in the Delta, Western deserts and Sinai, rainfall and flash floods. Each resource has its limitations on use. These limitations relate to quantity, quality, location, time, and cost development. The average annual quota that Egypt got from the Nile River as stated in the agreement is 55.5 BCM. This amount of annual quota is guaranteed by the High Aswan Dam. From the other conventional resource, groundwater provided 2.0 BCM per year (Ministry of Water Resources and Irrigation of Egypt, 2014). Another 3 BCM per year is utilized from rainfall along the coastal area and flash floods occurring within short-period heavy storms in the Red Sea and Southern Sinai that are directly used to meet part of the water requirements or used to recharge the shallow groundwater aquifers (Ministry of Water Resources and Irrigation of Egypt, 2014). In fact, rainfall occurs only in the winter season in the form of scattered

showers. Therefore, it cannot be considered a dependable source of water due to high spatial and temporal variability.

The non-conventional resources include the renewable groundwater aquifer underlying the Nile valley and delta, the reuse of agricultural drainage water, and the reuse of treated sewage water. The amount of the groundwater in the Nile valley & delta is estimated at 6.1 BCM per year, the reuse of agriculture drainage water is about 3.5 BCM per year and the reuse of treated sewage water is about 1.4 BCM per year.

Water demands in Egypt are continuously increasing due to the growing population and the increasing of living standards as well as the governmental policy to encourage industrialization. Currently, water demand for the agricultural sector is the largest consumer of the total water demand in Egypt.

Annually, agriculture sector which depends on Nile water consumes more than 85% of Egypt share of Nile water which make the largest component in the Egypt national water use is the agricultural sector (Ministry of Water Resources and Irrigation of Egypt, 2002). Furthermore, the municipal water demands accommodate the water supply for major urban and rural villages in Egypt. Portion of the water supply comes from the Nile, either through canals or direct intakes on the river. Moreover, the other portion comes from groundwater resources. The estimated water demands in 2013 were 10 BCM. Other than that, the development of the quality and productivity of the industrial sector are vital for the economic, social progress and growing rates in Egypt. During the year of

2013, (Ministry of Water Resources and Irrigation of Egypt, 2014) data showed that the water demand for the Industrial sector was 2.50 BCM per year.

To sum it up, currently, the available water resources that used by Egypt are 55.5 BCM per year, and 1.3 BCM per year effective rainfall on the northern strip of the Delta, non-renewable groundwater for western desert and Sinai. Meanwhile, the demands of water needed for different sectors are estimated about 79.5 BCM per year. As we can see from the data above, it shown that Egypt demand of water are quite high, and the availability of water still do not reach the needs of water. Furthermore, the Nile is the most contributors of Egypt water about supplies 55 BCM per year, so it is makes Egypt almost totally dependent on Nile water supplies.

ETHIOPIA'S GERD CONSTRUCTION

In 2011, Ethiopia under the Prime Minister Meles Zenawi unilaterally announced the construction of the Grand Ethiopian Renaissance Dam (GERD) which did not give any prior notification or even holding preparatory discussion to Egypt about the project commencement. Egypt found out the construction commencement from the media, not officially from the Ethiopian government. The unilaterally decision of Ethiopia has created great worry on the part of Egypt which is 97 percent dependant on the Nile waters.

GERD is located on the Blue Nile just upstream of the Ethiopian-Sudan border, in Benishangul-Gumuz Region of Ethiopia. The GERD has an active storage capacity 60,000 Mm³. At the end of the works, the GERD will be the largest dam in Africa: 1,800 m long, 155m high and with a total volume of 74,000

million m³ and is supposed to generate 6,000 MW of hydroelectric power (Salini Impregilo).

It is said that the primary objective of GERD is to generate an electric power of 6000MW, with an annual energy production of 15,130 GWh/year to cover the power supply demand in the Ethiopia as well as in the East Africa region. Beside that the dam construction is expected to create up to 12,000 job opportunities and had to resettle approximately 20,000 people (Kable, 2017). The Ethiopian government believe that the benefit of GERD is not limited with power supply solely, but it will also benefit the downstream countries mainly Egypt and Sudan. Ethiopian also claimed that GERD would not harm the downstream countries; Egypt and Sudan (Federal Democratic Republic of Ethiopia Ministry of Foreign Affairs).

RESULTS AND ANALYSIS

Egypt Consideration toward Ethiopia's GERD as a Threat to Country's Stability

Egypt has been very cautious in any development on the Nile that could threaten their main water supply. However, Ethiopia has made an aggressive move to construct their largest dam on the Blue Nile, namely GERD. GERD construction is project that unilaterally launched by the Ethiopian government, even Egypt has been put in a shock because Ethiopia does not give a prior notification first. The unilateral construction of Ethiopia's GERD has put Egypt in a great worry because Egypt feel threaten by this construction.

Ethiopia's renaissance dam on the Blue Nile, have ability to controlling the Blue Nile water flow to Egypt. Egypt sees that when GERD completed, the possibility of Nile water supplies to Egypt will decrease is quite high especially during the filling process of the dam and drought season. (Jameel, 2014) Argued that, Egypt should concerned about the amount of water releases by the GERD during the filling and periods of drought happened, because Egypt need water released from the GERD to meet their minimum water requirements, however Ethiopia may prefer to increase the quantity of water stored in the GERD reservoir. This argument reinforces Egypt's view that GERD will threaten Egypt's water supply because it can reduce the amount of Nile flows to Egypt.

In contrast with Egypt, Ethiopia declared that the dam would not cause harm to the share of Egypt Nile water. Ethiopia former Prime Minister Meles Zenawi in his opening speech of the Hydro-power for Sustainable Development 2011 conference in Addis Abba expressed that:

We have therefore been guided by the principle of doing no appreciable harm to downstream users when we build dams. In any case hydropower dams use water to generate electricity but do not consume it. Hence they cannot possibly do any appreciable harm on downstream users. Indeed in the case of Ethiopia's dams downstream users benefit a lot. Dams in Ethiopia prevent flooding in lower- riparian countries. They prevent siltation of dams downstream. They generate clean energy that would be used by downstream countries. Last but not least our dams actually increase the flow of water in the rivers. This is so because our dams built as they are in deep gorges of our cool and wet highlands lose a lot less water to evaporation as the surface of water exposed to the sun is much lower than in the lower riparian countries and as the rate of evaporation here is much lower than in the hot and arid environments of the lower riparian countries (Berhane, 2011).

So, the Ethiopian think that the dam construction would not cause harm to the lower riparian countries, since the dam will regulate the Nile water flow and actually will increase the flow of water in the rivers because the location of the reservoir dam is located in much cooler place which will lot less water will be evaporate than in Egypt which have hot and arid environments. Other than that, the dam ability to regulate the Nile water flow will also help to control the seasonal floods. The capability of the dam will handle a flood 19,370m per second (Josephs, 2017). The Ethiopian government hope that the regulated flow of will improve agriculture in Ethiopia and in addition it will help to reduce about 40 km of flooding in neighbouring Sudan (Josephs, 2017). Aside from that, Ethiopia's purpose in building the dam is not to harm other countries, but it is to improve the life of the people, provide drinking water to increase agricultural productivity and food security and above all to produce electricity to generate power for domestic use and export to earn badly needed foreign exchange for Ethiopia's economy (Minas, 2014).

Egyptian Minister of Irrigation, Hossam El-Moghazy clarify in a press conference that "Egypt is not against development in any county but there are main important concerns for Egypt, among them is keeping our share of Nile River water" (Awramba Times, 2015). Thus conclude that actually Egypt is not against with Ethiopia in constructing the GERD, but their main concern is that the impact of the dam that will reduce the share of Nile water to Egypt. Furthermore, Egypt also has serious concerns regarding construction of the dam, as it fears possible drought resulting from the dam. Egypt also concerns on how Ethiopia will manage the filling process of their huge dam reservoir, whose the capacity of the dam is equal to more than a year's flow of the Blue Nile. In contrast with the

concerns of Egypt, Ethiopia still believes that even though they drew significant amount of Blue Nile water, the availability of water for downstream countries would not be affected (Schoeters, 2013).

From the Melez Zenawi speech before, it is clearly that Ethiopian government sees the dam will greatly reduce the problems of slit and sediment that consistently affect dams in Egypt and Sudan (Berhane, 2011). However, it is mean that the GERD will decrease the amount of sediment transported to dam reservoirs in Egypt. However, in reality, sediment that transported to the Egypt is helping in the annual renewing soil. So, it is means that the loss of sediment will be followed by the loss of soil fertility in Egypt. Furthermore, the decrease amount of sediment will increasing the erosive force, riverbanks field and bed will be eroded. The erosion of riverbanks will decrease the amount of riverbanks field and impact food security as well (Schoeters, 2013).

In the previous section has been explained that agriculture sector is major economic activity and the key sector in the Egyptian economy. Apart from the Nile being a symbol of the ancient country's identity, the Nile also exclusively supports Egypt's agriculture production. According to the (IFAD, 2014) data, Egypt agricultural sector contribute 13 percent GDP and 20 percent of total exports. Currently, 85 percent of Egypt's water is consumed by agriculture, and this is because Egypt's agriculture is entirely dependent on irrigated land.

Egypt believes that the renaissance dam would negatively impact the country's agriculture. The Egyptian Minister of Agriculture, Adel Al Beltagy also said to the Al-Mal Business Daily before that "Egypt will not give away a single

drop of water of its share of Nile Water, which totals at 55 billion cubic meters" (Shady, 2014). That is stressed because if the shares of Nile water to Egypt reduce, it wills absolutely affect Egypt agricultural sector. The renaissance dam will lead to severe droughts because of the water flow from the Blue Nile is contained or controlled by the renaissance dam.

Furthermore, the research conducted by Group of Nile Basin on the impact of Renaissance Dam on Egypt has draws Egyptian government attention and has convinced Egypt even more that the GERD will negatively impact their share of Nile water. The research notes that the Ethiopian dam will mean Egypt will have no control to their share of the Nile water which means the High Aswan Dam will not be able to secure the future water supply to Egypt as well. They also notes that the decline of Egypt's share of Nile water will result in abandoning huge areas of agricultural lands and scattering millions of families (Hussain, 2013). Those effect will lead to the production from the agriculture will reduce and force the country to raise food imports which would weaken the country's fiscal position.

In the past decades, Egypt has suffered from lacks of self-sufficiency in many food products. So, to meet the lack of self-sufficient production, Egypt imports food to meet the need of Egyptian people. According to the data from (Ministry of Water Resources and Irrigation of Egypt, 2014), Egypt's total imports bill has reached 6000 million US\$ in 2013 against 2905 million US\$ in 2004. Meanwhile only US\$ 1110 million for exports with the main export crops were cotton, rice, potatoes and citrus. From the total imports bill, cereals contributed the largest share of the bill with 49%, and wheat alone accounted for

approximately 32.6% of the total. The agricultural imports bill in the country that rapidly increases from 2004 to 2013 has putting a substantial burden on the country's foreign exchange resource.

The decreasing in Egypt's self-sufficiency has increased its dependence on import to meet food demand. Now, with the expected deficit in the waters supplies from the Nile because of GERD, it will forces Egypt to increase the food imports even more. The high current account deficit and low currency reserves will only be put under greater strain if Egypt has to increase food imports. Other than that, according to Professor of agricultural resources at Cairo University, Nader Nour al-Din told Al-Bawaba News that Egypt also will face major economic losses from the dam, which could reach up to 20 billion EGP (Shady, 2014). At that point it will destabilize the economy of Egypt.

The Economic Interest of Egypt and Ethiopia over Nile Water

As the population grow, the demand of water will grow for the household and industrial use and in the agricultural to grow the food compulsory to guarantee the food security of the country. In the previous section has been explained that Egypt is relied on food import. The reliance of Egypt on food imports makes the country vulnerable to global food price hikes and supply shortages. To stabilize the economics of the country which currently the food import burdening Egypt's economy, according to (Nunzio, 2013) Egypt has begin on land reclamation scheme in desert areas, which require the huge amount of water and will increasing the strain on the shares of agricultural, industrial and

municipal water consumer. In the end, Egypt also need more share of water from the Nile to implement it.

Egypt has built the High Aswan Dam on the Nile in order to secure their share of water from the Nile – 55.5 BCM as stated in the 1959 agreement – which serves as almost the whole of Egypt. The High Aswan Dam is economically benefited for the country. Since the dam operates, the floodwaters to Egypt can be controlled. The dam impounds the floodwaters on the reservoir, and throughout the year, the dam has provides a supplies water for irrigation to run the economic activity in the agricultural sector, industries and other related sector. The High Dam since has increased the agricultural land and the food production in the country. Other than that the Nile water used by Egypt to generate electricity produced by High Aswan Dam. The availability of electricity from the hydropower also has increased the industrial activities and industrial diversification (Biswas & Tortajada, 2012).

The importance of the High Aswan Dam on the Nile to Egypt's economic survival was clearly demonstrated during the drought season in ten consecutive years starting in 1978. The High Aswan Dam has managed to safeguard and supply water during drought season and compensate the deficit in the Nile flow. At that time the High Dam has managed to safe guard the water supply for Egypt to keep run their economic activity.

Meanwhile on the other side, Ethiopia still underutilised the potential of the Blue Nile which represents 68 percent of Ethiopia's water supply and now Ethiopia is building the GERD on the Blue Nile set for completion by 2017. The construction of GERD is reflecting Ethiopia's determination to exercise its rights to use its own rivers, and its willingness to bear the heavy financial cost (Zenawi, 2013). At the beginning, one of the factors the potential of Blue Nile within Ethiopia territory is still underutilised is because Ethiopia's economic underdevelopment. However, in the late 2013, Ethiopia showed an economic growth of that has averaged 7.5 per cent a year in the last three years (Nunzio, 2013). The consequence of such growth is an ability to fund major project such as GERD. The construction of GERD which the estimated cost US\$4.8 billion is a proof to its economic improvement. While the 30% of the cost of the construction about US\$ 1.8 billion is covered by the international fund that China gave, the rest of it is funded by the Ethiopian government. It is said that the GERD is represents a leap out of Ethiopia's dark ages of underdevelopment.

The intention to building the dam is due to Ethiopia growing energy needs. Ethiopia has no other choice of meeting its growing energy need. Aside from utilize the available hydropower in Ethiopia, hydropower is the best options because it is cheaper source of energy rather than importing hydrocarbon fuel or fossil fuel which is too expensive and not affordable the more the economy grows. It is said that GERD is intended to boost the economic development in Ethiopia. The Chief Executive Officer of Ethiopia Electric Power, Azeb Asnake said that "When this hydropower dam project goes fully operational, it will contribute a lot to addressing the local energy demand and enhancing ties with neighbouring countries," (Ethiopian Broadcasting Corporation, 2017). Moreover, the dam is

expected to be Africa's largest hydroelectricity dam that will transform Ethiopia into a major energy exporter.

Ethiopia's purpose in building the renaissance dam is to improve the life of the people, provide drinking water to increase agricultural productivity and food security and above all to produce electricity to generate power for domestic use and export to earn badly needed foreign exchange for Ethiopia's economy (Minas, 2014). To meet the expected demand of power in Ethiopia, GERD has a vital role, because its potential that will generate an electric power about 6000MW, with an annual energy production about 15,130 GWH per year. The hydropower generation produced by GERD is roughly 50% more than the average hydropower generation from the High Aswan Dam over the past decades and equal to the entire current national electricity consumption in Ethiopia. From the surplus of electricity produced by the GERD, Ethiopia intended to sell the electricity to the neighbouring countries as well. When the construction of the GERD is completed Ethiopia expects that the hydropower produced by GERD will be sold as soon as it can be generated and at a good price. According to (Jameel, 2014), the hydropower revenues involved are substantial, if the 15,130 GWH of power were sold for US\$0.07 per KWH, the annual revenue of that Ethiopia will get would be approximately about US\$1 billion or can be even more.

The interest of Ethiopia in building the GERD to secure the Nile water and harness its hydropower potential to produce sustainable electricity might be beneficial for their economic. However, it is not in line with Egypt's interest,

because the impact of the dam could reduce the share of Nile water saved by the High Aswan Dam. Then the High Aswan Dam built by Egypt to support the water needs for Egypt's economic activity in various sectors will not be able to secure the future water supply from the Nile to Egypt. Like what have been explained in the previous section that Nile water is supporting the economic activity in Egypt, mainly on the agricultural food production. The reduce share of water will also affect to the reduction on the food production. If that happen it will be catalyst to Egypt's economic because it will increasing food import bill that already put a great strain to the country's then will lead to weakening Egypt's fiscal position.

Conclusion

The impact of the Ethiopian dam is not line with Egypt economic interest and will disturb Egypt economic stability which economically Egypt needs the Nile water to run its economic activity. Even so, Egypt could not lose its share of Nile water that is saved in High Aswan Dam, because the main purpose of High dam is for safe keeping the country's economy which needs water supplies to sustain the country stability.

References list

- Abu-Zeid, M. A., & El-Shibini, F. Z. (1997). Egypt's High Aswan Dam. *International Journal of Water Resources Development*, *13*(2), 209-217. Retrieved March 6, 2017, from http://www.dfpd.edu.uy/cerp/cerp_norte/cn/Biologia/ECOLOG/l6.pdf
- Awramba Times. (2015, November 18). Egyptian PM expresses concerns on impacts of GERD; Amid ongoing Assessments by Tripartite Technical Committee. Retrieved April 26, 2017, from awrambatimes: http://www.awrambatimes.com/?p=14090
- Berhane, D. (2011, April 1). 'Hydropower extrimists borderline criminal' Text of Meles Zenawi speech at Hydro-power Conference. Retrieved April 26, 2017, from Horn Affairs: http://hornaffairs.com/2011/04/01/hydropower-extremists-borderline-criminal-text-of-meles-zenawi-speech-at-hydro-power-conference-un-eca/
- Biswas, A. K., & Tortajada, C. (2012). Impacts of the High Aswan Dam. Retrieved April 27, 2017, from http://www.thirdworldcentre.org/wp-content/uploads/2015/04/sprchap17.pdf

- Derbew, D. (2013, June 22). Ethiopia's Renewable Energy Power Potential and Development Opportunities. Abu Dhabi, UAE. Retrieved April 17, 2017, from https://irena.org/DocumentDownloads/events/2013/July/Africa%20CEC%20session%203_Ministry%20of%20Water%20and%20Energy%20Ethiopia_Beyene_220613.pdf
- El-Behairy, N. (2013, June 11). *Morsi: If our share of Nile water decreases, our blood will be the alternative*. Retrieved December 28, 2016, from Daily News Egypt: http://www.dailynewsegypt.com/2013/06/11/morsi-if-our-share-of-nile-water-decreases-our-blood-will-be-the-alternative/
- El-Gundy, Z. (2014, May 23). *El-Sisi and Sabahi speak on key issues: A virtual debate*. Retrieved January 17, 2017, from ahramonline: http://english.ahram.org.eg/NewsContent/1/64/101501/Egypt/Politics-/ElSisi-and-Sabahi-speak-on-key-issues-A-virtual-de.aspx
- Ethiopian Broadcasting Corporation. (2017, April 2). *GERD said to catalize economic dev't of Ethiopia*. Retrieved April 27, 2017, from EBC: http://www.ebc.et/web/ennews/-/gerd-said-to-catalize-economic-dev-t-of-ethiopia
- Federal Democratic Republic of Ethiopia Ministry of Foreign Affairs. (n.d.). Egypt's Perspective towards the Ethiopian Grand Renaissance Dam Project (GERDP). Retrieved December 24, 2016, from http://www.mfa.gov.eg/SiteCollectionDocuments/Egypt's%20Prespective%20Web%20Si te.doc
- Federal Research Division Library of Congress. (1991). *Egypt a country study* (Fifth ed.). (H. C. Metz, Ed.) Washington D.C.: Library of Congress. Retrieved from https://cdn.loc.gov/master/frd/frdcstdy/eg/egyptcountrystud00metz/egyptcountrystud00metz.pdf
- Holsti, K. J. (1994). *International Politics: A Framework for Analysis (7th Edition)*. New Jersey: Prentice Hall.
- Hussain, S. (2013, September 9). *Ethiopia's Nile dam project leaves Egypt with headache*. Retrieved April 27, 2017, from ZAWYA: https://www.zawya.com/story/Ethiopias_Nile_dam_project_troubles_Egypt-ZAWYA20130909074659/
- IFAD. (2014, November). Investing in rural people in Egypt. Retrieved April 22, 2017, from https://www.ifad.org/documents/10180/efe6c7c0-298c-4646-b7f6-4d2e7440f164
- International Hydropower Association. (2016). *hydropower status report*. International Hydropower Association. Retrieved April 17, 2017, from https://www.hydropower.org/sites/default/files/publications-docs/2016%20Hydropower%20Status%20Report_1.pdf
- Jameel, A. L. (2014, November 14). The Grand Ethiopian Renaissance Dam: An Opportunity for Collaboration and Shared Benefits in the Eastern Nile Basin. Retrieved December 24, 2016, from https://jwafs.mit.edu/sites/default/files/documents/GERD_2014_Full_Report.pdf
- Jatmika, S. (2014). Pengantar Studi Kawasan Timur Tengah. Yogyakarta: Maharsa.
- Jatmika, S. (2016). Hubungan Internasional di Kawasan Afrika. Yogyakarta: Samudra Biru.
- Josephs, J. (2017). *GRAND DESIGNS NORTH AMERICA: IMPACT OF ETHIOPIA'S RENAISSANCE DAM.* Retrieved April 26, 2017, from Water World:

- http://www.waterworld.com/articles/wwi/print/volume-29/issue-1/regional-spotlight/ethiopia-impact-of-renaissance-dam/grand-designs-north-africa-impact-of-ethiopia-s-renaissance-dam.html
- Kable. (2017). *Grand Ethiopian Renaissance Dam Project, Benishangul-Gumuz, Ethiopia*. Retrieved from water-technology.net: http://www.water-technology.net/projects/grand-ethiopian-renaissance-dam-africa/
- Malone, B. (2011, April 18). Ethiopia Keeping Egypt in Dark on Nile Dam. Retrieved December 23, 2016, from Reuters: http://www.reuters.com/article/2011/04/18/us-ethiopia-nileidUSTRE73H59220110418
- Melesse, A. M., Abtew, W., & Setegn, S. G. (2014). *Nile River Basin: Ecohydrological Challenges, Climate Change and Hydropolitics*. Springer. doi:10.1007/978-3-319-02720-3
- Minas. (2014, June 20). In Defence of Ethiopia's Dam and Its National Interest. Retrieved April 24, 2017, from http://aigaforum.com/articles/In-Defence-of-Ethiopias-Dam.pdf
- Ministry of Water Resources and Irrigation of Egypt. (2002, September). Adopted measures to face major challenges in the Egyptian Water Sector. Egypt. Retrieved March 14, 2017, from http://www.ircwash.org/sites/default/files/824-EG02-17850.pdf
- Ministry of Water Resources and Irrigation of Egypt. (2014). Water Scarcity in Egypt. Egypt. Retrieved March 13, 2017, from http://www.mfa.gov.eg/SiteCollectionDocuments/Egypt%20Water%20Resources%20Paper_2014.pdf
- New World Encyclopedia. (2016, June 13). *Blue Nile*. Retrieved April 12, 2017, from New World Encyclopedia: http://www.newworldencyclopedia.org/entry/Blue_Nile
- Nunzio, J. D. (2013, November 25). Conflict on the Nile: The future of transboundary water disputes over the world's longest river. Future Directions International. Retrieved April 20, 2017, from http://futuredirections.org.au/wpcontent/uploads/2013/11/Nile Conflict Potential.pdf
- Riet, H. v. (2014). Egypt vs. The Grand Renaissance Dam Egypt's position in the international right. Retrieved December 25, 2016, from http://ucwosl.rebo.uu.nl/wp-content/uploads/2014/10/Van-Riet.pdf
- Salini Impregilo. (n.d.). *Grand Ethiopian Renaissance Dam Project*. Retrieved December 24, 2016, from Salini Impregilo: http://www.salini-impregilo.com/en/projects/in-progress/dams-hydroelectric-plants-hydraulic-works/grand-ethiopian-renaissance-dam-project.html
- Schoeters, M. (2013, August). An Analysis of a big dam project: The Grand Ethiopian Renaissance Dam, Ethiopia. Retrieved April 24, 2017, from http://lib.ugent.be/fulltxt/RUG01/002/064/448/RUG01-002064448_2013_0001_AC.pdf
- Shady, A. A. (2014, June 19). *New strategy to keep Nile Water and boost agriculture: Min. of Agriculture.* Retrieved January 17, 2017, from The CAIRO post: http://thecairopost.youm7.com/news/115525/business/new-strategy-to-keep-nile-water-and-boost-agriculture-min-of-agriculture
- Stanley, J. D., & Clemente, P. L. (2017, February 14). Increased Land Subsidence and Sea-Level Rise are Submerging Egypt's Nile Delta Coastal Margin. *GSA Today*, 27(5). Retrieved

- March 4, 2017, from https://www.geosociety.org/gsatoday/archive/27/5/pdf/GSATG312A.1.pdf
- Tvedt, T. (2010). *The River Nile In the Post-Colonial Age: Conflict and Cooperation in the Nile Basin Countries.* New York: I.B.Tauris.
- Valentine, O. (2015, August). An Analysis of Hydropolitics of the Nile: The Role of South Sudan As An Additional Riparian State. Retrieved December 22, 2016, from http://idis.uonbi.ac.ke/sites/default/files/chss/idis/OPANGA%20VALENTINE.pdf
- Wolf, A. T., & Newton, J. T. (2007). Case Study of Transboundry Dispute Resolution: the Nile waters Agreement. Retrieved from http://www.transboundarywaters.orst.edu/research/case_studies/Documents/nile.pdf
- Zenawi, M. (2013, March 5). Ethiopian PM Meles Zenawi Speech On Launching GERD (Text and Videos). Retrieved April 20, 2017, from meleszenawi: http://www.meleszenawi.com/ethiopian-pm-meles-zenawi-speech-on-launching-gerd-text-and-videos/