

# “INTERNATIONALLY PLANNED CORNER STONE” OF THE NEW NILE HYDROPOLITICS: GRAND RENAISSANCE DAM

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## **ABSTRACT**

*After higher growth rate of population during the second half of the 20<sup>th</sup> Century, the 21<sup>st</sup> Century has begun with new paradigms to find sustainable solutions for high number of population lives in deep poverty. Some international conflicts related to transboundary water has transmitted to the new century Africa is home to most of the world’s major transboundary watercourses, which cover more than half of its surface area and more than 90% of its surface water resources. Yet Africa uses less than 4% of the water available and less than 10% of its hydropower potential.*

*In this paper, we argue that due to the lack of consensus over the use of the Nile basin during 20<sup>th</sup> Century, most of the basin countries couldn’t developed. But the situation is not the same in 21<sup>st</sup> Century over the Nile river basin.*

*“Today cooperation arrangements are moving increasingly from a single focus on sharing waters to the sharing of multiple benefits from more optimal water arrangements within basins.”*

*Most significantly, during the past, the lack of political will to cooperate by riparian countries is the number one reason not to progress. Even it is not solved properly but rapid progress has been achieved since last ten years. Grand Renaissance Dam project which is a cornerstone of the Nile Basin water development has started and 60% completed. It has been turning point of the Nile Hydro Politics.*

*At the same time, this paper further contributes to define main drivers to this rapid change in order to analyze effect of external forces and new food geopolitics in the new transboundary challenges.*

**Key words:** Nile Basin, New Hydropolitics, Grand Renaissance Dam, Land and Water Diplomacy

**Cite this Article** Dursun YILDIZ, Dogan YILDIZ and Mehmet Samil GUNES, “Internationally Planned Corner Stone” of The New Nile Hydropolitics: Grand Renaissance Dam. *International Journal of Management*, 7(5), 2016, pp. 200–209.

<http://www.iaeme.com/IJM/issues.asp?JType=IJM&VType=7&IType=5>

## INTRODUCTION

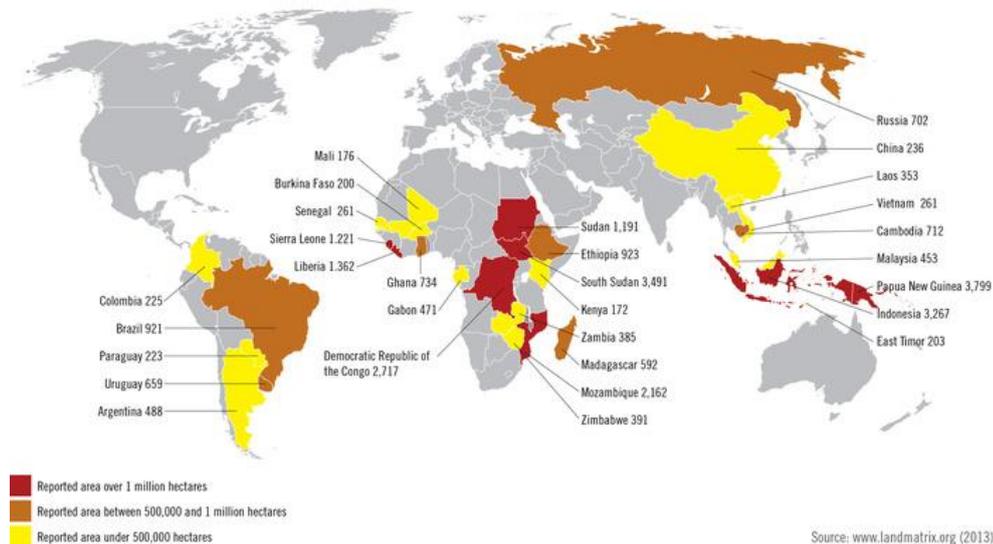
The world is changing not only fast but also faster than at any time in human history especially since the beginning of the 21<sup>st</sup> Century. The workforce is *changing*, international relationship, security paradigm, environment, climate, technology, education, health, eating habits, there is hardly anything in life that is not changing.

In this global village leading actors of the global political system is more powerful. Therefore in 21st Century, it seems that internal intentions of the riparian states will require extra international political dynamics to solve the transboundary river basin issues. In other words in addition to internal regional development will, progress in a transboundary river basin simply requires to consider external forces expectations on regional situation.

A Learning Journey to the Nile River Basin hold by Strategic Foresight Group – Nile Basin Initiative and in cooperation with Sida in August 8-10, 2016 in Entebbe/Uganda. Strategic Foresight Group (SFG) is a think - tank engaged in crafting new policy concepts that enable decision makers to prepare for a future in uncertain times.

25 water experts including one of author of this article, journalist, and academics from the Middle East Countries attended the program. On the first day, there was detailed sessions on the past and present situation of the Nile River Basin and exchanging of experiences from African other River Basin Organizations .It has been a great opportunity to learn a lot and exchange knowledge and experience between water expert from Middle East and responsible expert came from different Water Basin Authorities in Africa.

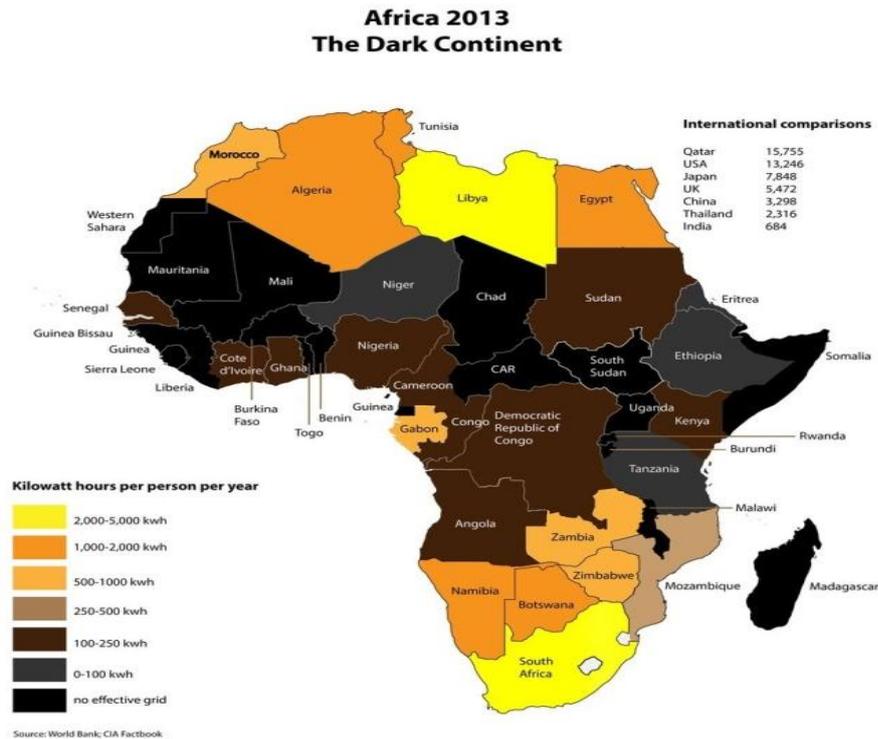
Large-scale land acquisitions (in 1000 hectares)



**Figure 1** Large-scale land acquisition (1000 hectares)

## Main Drivers

It is worthwhile to Mentioned that large part of the Africa Continent is still in dark and faces serious shortage in accessing to water and electricity.



**Figure 2** African Population without access to electricity

**Table 1** African Populations without access to electricity

<b>AFRICAN POPULATIONS WITHOUT ACCESS TO ELECTRICITY(MILLION)</b>	
<b>Nigeria</b>	82.4
<b>Ethiopia</b>	63.9
<b>D.R. of the Congo</b>	55.9
<b>Tanzania</b>	38.2
<b>Kenya</b>	31.2
<b>Sudan</b>	30.9
<b>Uganda</b>	28.5
<b>Mozambique</b>	19.9
<b>Madagascar</b>	17.8
<b>Burkina Faso</b>	14.3
<b>Niger</b>	14.1
<b>Malawi</b>	13.6

Source: World Bank, 2013

Apart from general information about Nile River Basin, the fast progress in construction of the Grand Renaissance Dam and rush land grabbing of the basin can lead us to define new Hydro Diplomacy of the Nile River Basin. Three major issues must be highlighted here;

1. Water, food energy and grabbed land security in the region
2. Climate change induced mass migration waves to developed world threat
3. Growing need for Regional Peace and Stability

21st Century brought with it two main hydro political disputes that are in the Central Africa and the Central Asia. The Nile River and Aral Sea transboundary River Basins Management disputes have transmitted to the international agenda of the 21st Century.

The complete dependence of water resources over the centuries have caused the Nile river basin to deplete, especially of essential material resources causing high rate of unemployment, diseases and hunger in the countries depending on the water resources

Without Nile River water development, Nile River Basin countries can't be in a political and economic stability in future.

### Land and Water Diplomacy Interrelation in Africa

Because of not having direct relation with Middle East case, Land grabbing was not mentioned in the program. Although it was not mentioned during the program land acquisition rush in Nile River Basin and will play very important role for the new Nile hydro politics.

The increase in the number of international land deals comes at a time of increasing global concern about land as a scarce resource.

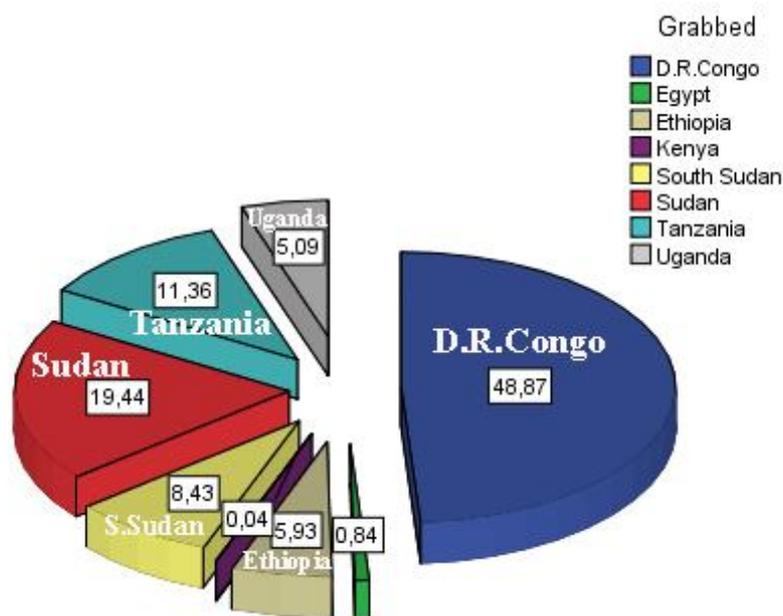
Following the global food crisis of 2007 and 2008, food insecure nations with surplus capital began to look towards Africa, and its unfarmed, arable land, in order to ensure a steady food supply for their citizens, rather than depends to global food market. But it brought a dangerous trend towards large-scale land acquisitions in the developing world.

**Table 2** Large scale agricultural lands grabbing as percentage of agricultural area in some of the Nile Basin Countries and DR Congo.

GRABBED	GRABBER	GRABBED AREA(ha)	TOTAL
<b>Dem. Rep. Congo</b>	Canada	110000	8.250.310
	China	3108310	
	Germany	25000	
	Australia	3000	
	Israelle	2000000	
	Unknown	3004000	
<b>Egypt</b>	Saudi Arabia	73000	141.500
	UAE	68500	
<b>Ethiopia</b>	China	140182	1.001.382
	Djibouti	5000	
	Dutch	1200	
	Egypt	20000	
	Germany	56000	
	India	609000	
	Italy	30000	
	Saudi Arabia	140000	
<b>Kenya</b>	USA	7000	7.000
<b>South Sudan</b>	UK	13900	1.422.400
	Canada	12200	
	Egypt	105000	
	Mauritius	24300	
	Saudi Arabia	105000	
	Sudan	162000	
	USA	1000000	
<b>Sudan</b>	Brazil	100000	3.281.429
	China	10000	
	Djibouti	4200	
	Egypt	531890	
	Philippines	25000	
	Qatar	100000	

GRABBED	GRABBER	GRABBED AREA(ha)	TOTAL
	Saudi Arabia	867239	
	UAE	1643100	
Tanzania	Germany	5000	1.917.749
	UK	122854	
	Sweden	866200	
	Rep. Of Korea	100000	
	Netherlands	26500	
	Belgium	10000	
	South Africa	7000	
	Indonesia	8000	
	USA	375117	
	Malaysia	40000	
	Kenya	10000	
	Unknown	347078	
	Uganda	China	
Egypt		800000	
Iceland		270	
India		14600	
Singapore		40000	
<b>Total</b>			16.880.640

**Source:** it was compiled with GRAIN and Land Matrix database  
 GRAIN (2010) Land Grab Deals dataset. (GRAIN 2012). <http://www.grain.org/article/entries/4479-grain-releases-data-set-with-over-400-global-land-grabs> (Accessed March, 2016).  
 Land matrix (2012). The Land Matrix Database.(Land Matrix 2012).  
<http://landportal.info/landmatrix> (Accessed July, 2016).



**Figure 3** Large scale agricultural lands grabbing as percentage of agricultural area in some of the Nile Basin Countries and DR Congo ( it was compiled with GRAIN and Land Matrix database)

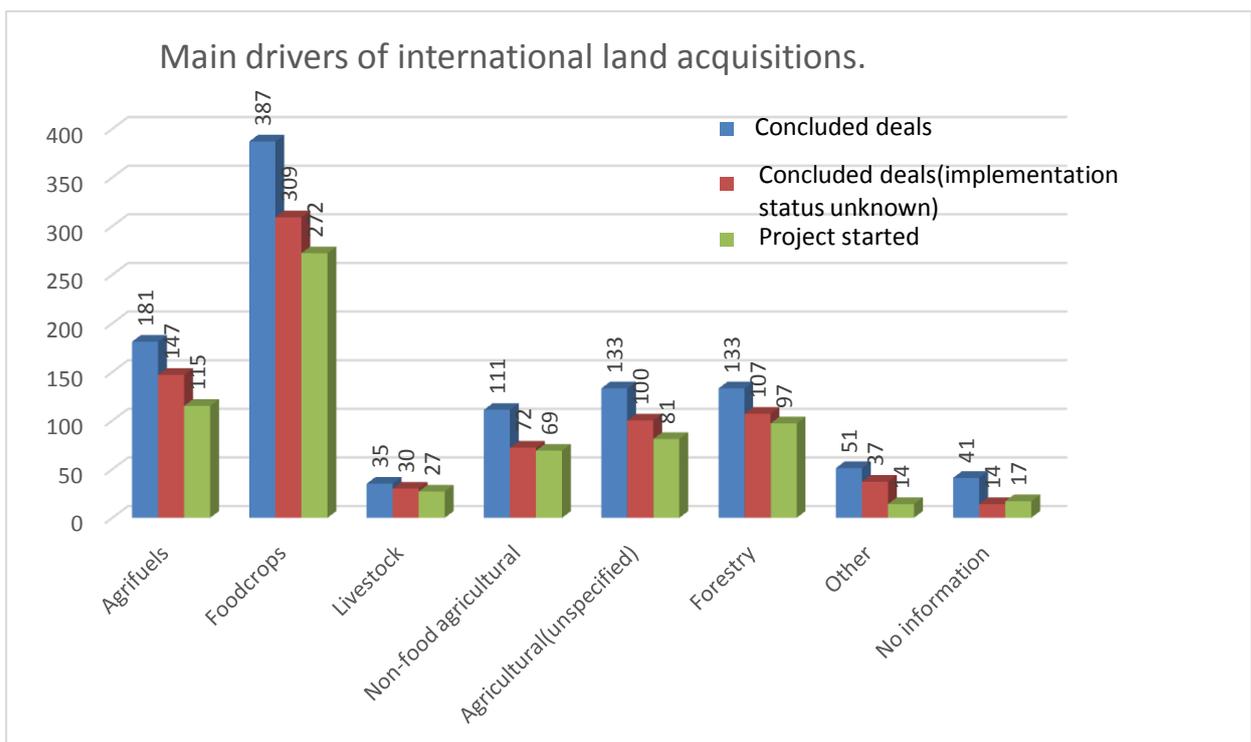
As shown in Table 2 and Figure 3, Democratic Republic of Congo has leased to 8,2 million hectares of land, the most on the Africa Continent . In the Nile Basin Countries Sudan has transferred closed to 3,3

million hectares to foreign entities. Sudan is the most prolific large-scale land transfer country among the Nile Basin states.

DR Congo and Sudan are the most prolific large-scale land transfer countries on the Africa Continent. Transboundary rivers ,Nile and Congo are the main water sources to these countries.

Due to the largest number of hectares already leased and their transboundary rivers , these two countries will meet land and water diplomacy interrelations much earlier than other land grabbed countries in Africa

According to the Online Public Database on Land Deals of the Land Matrix Initiative (LMI): as of August 2016 number of international contract signed has been more than 1250. About 44 million hectares agricultural land agreement has already been concluded(%64) and main drivers of international land acquisitions are food crops, agrifuels and unspecified agricultural respectively.



**Figure 4** Main drivers of international acquisitions (Source: Land Matrix Newsletter)

The 60% of global large-scale land acquisition takes place in Africa. Since 2006, more than 30 million hectares of African land have been acquired by investors. Countries in sub-Saharan Africa are particularly targeted because of the view that they contain a lot of land available, because of the favorable conditions to production of crops, because of the inexpensive labor and because of relatively cheap land.

There has been a massive investments mobilization by governments, multinational corporations and sovereign funds combined with other actors in acquisition and long-term leases of large lands in the Nile Basin states. The preliminary findings emerged that the estimated magnitude of the grabbed lands in the Nile Basin oscillates around 17 million ha (Mohamed 2014)

Percentage of agricultural land controlled by foreign interests for food production for export is in Uganda more than 14%, in Mozambique more than 21% and in DR Congo more than 48% of their own agricultural land (Table 3).

**Table 3** Land resources and land deals in Nile Basin Countries

Land resources and land deals in some NB countries						
Receptient country	FAO land resource data(1.000 ha)			Land deals as percentage of		
	Land area	Agricultural areas	Forest	Land area	Agricultural areas	Forest
Ethiopia	100.000	35.077	12.718	2.90	8.20	6.10
Sudan	237.600	136.773	66.358	1.30	2.30	1.60
Tanzania	88.580	34.200	34.433	1.90	5.00	2.50
Uganda	19.710	12.812	3.454	9.50	14.60	11.50
DR Congo	226.705	22.650	132.971	4.90	48.80	7.10

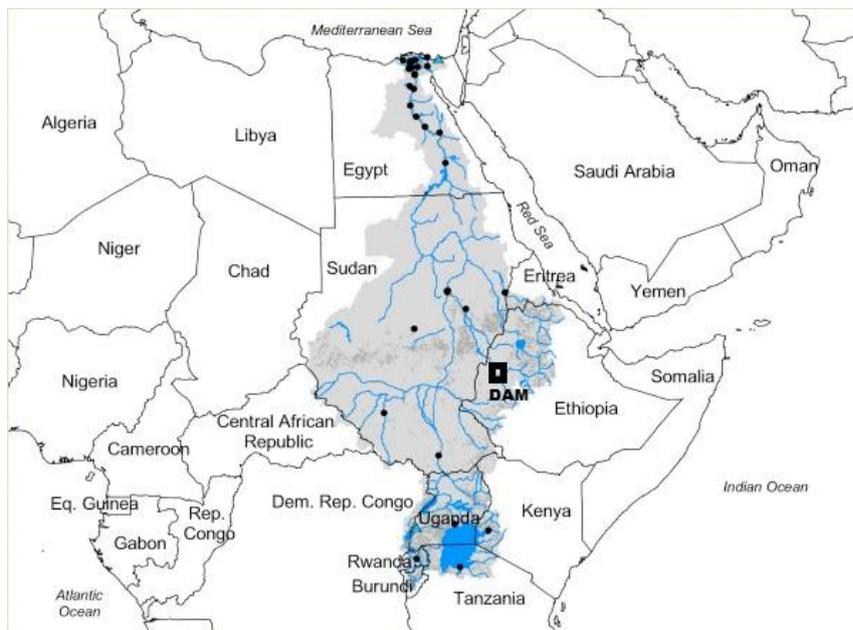
*The magnitude of the land deals as a percentage of the total land areas, the agricultural area and the agricultural are plus the forest covered areas in each of the 5 main recipient Nile Basin in countries. Areas as of 2007.*

**Source:** Land resource data from FAOstat, Land resource database (FAOstat, 2010)

Nile Basin Initiative (NBI) incorporates national sovereignty and regional cooperation principles. The Nile Cooperative Framework Agreement (CFA), a would-be multilateral water agreement, also integrates the principles in more legal and institutional terms. However none of these cooperative processes in the Nile River Basin is looking at the current and future water impacts of the new land acquisitions. The deals on land acquisitions in upstream riparian bring new aspects to the hydropolitical relations. Because of that Land and Water Diplomacy interrelation in Africa will increase in next decades.

**Balancing of existing water use and potential water uses is a challenging issue**

In Nile River Basin Management system, balancing of existing use and potential uses have been taken into account by Nile Basin Initiative. Nile Basin Initiative approaches the issue “try to make a balance between protecting the lower basin countries water rights and upper basin countries’ water use and projected demand keeping prior appropriation principle.



**Figure 5** Grand Renaissance Dam on Nile Basin

To me it will be the most challenging issue for the Nile Basin Initiative. Each of Nile Basin countries has a different plan for the river, from Ethiopia’s hydropower aspirations to Egypt’s cotton farming. And competition for Nile water is not limited to the countries of the basin. Some large scale international land owners in the basin will be involved to Nile river water management system as private or states originated

new actors. Will Nile Basin Initiative take into account their existing water use right like others or not .It will be an emerging issue when land acquisition has been rapidly growing in the Nile River Basin . It is evidenced that the phenomenon is expanding.

### **Completion of the two Large Dams will promote a New Hydropolitics Concept**

Two planned large dams in these two river basins in late 20th century had been created strong discussions and raised political tensions between riparian states in the basins. But it seems that they will be milestones of the new water diplomacy and would play very important role to make progress and paradigm shift. One of them is the Grand Renaissance Dam on the Nile River in Ethiopia. The other is the Rogun Dam on the Amu Darya River in Tajikistan.

In the case of Nile River Basin development progress, we can observe the importance of the external forces initiatives then internal intention when we heard that 60 percent of the Grand Renaissance Dam’s construction has already completed. This information was given by Dr. John Rao Nyaoro HSC executive director of the Nile Basin Initiative.

While Egypt, Sudan and Ethiopia are continuing technical and political negotiations about ways to reduce the potential negative impacts of the dam, construction at the site is continuing at a fast pace. Dr. John stated that However, water is not stored behind the dam yet but it is planned to start next year.

Construction at the Renaissance Dam site started in December 2010 after an agreement was reached with Construction Company Salini Impregilo of Milan, Italy, and Metals and Engineering Corp. of Addis Ababa. The project is expected to store 74 billion cubic meters (60 million acre-feet) of water and generate with 6,000 megawatt installed capacity.

### **Lessons Learned**

Lessons learned from the SFG Nile Basin program are as follows in brief.

1. Reality of changing climate may be taken as a golden opportunity by Transboundary River Basins States to shift their paradigm to collaborative approach
2. Long term hydro meteorological joint- measurements have been the first step to be taken for cooperation in the Transboundary River Basins. It is not only important to obtain long term reliable data but also start to develop confidence building that is vital for the next stage of collaboration .
3. Don’t leave from the table. Negotiations between riparian states must continue under every type of *unfavorable conditions*. Because no way out except for back to table.
4. Each year passed without a basin wide agreement brings more difficult situation to share a common goal and to create a unity of effort between riparian states to progress.
5. Transboundary ground water resources will be considered together with the transboundary surface water as the years go by.
6. Even if “political will is essential to start collaboration in the basins” is a common belief among experts, **“which mechanisms will drive it”** is still an unanswered issue.

### **CONCLUSIONS**

The situation related with transboundary water issues on the Nile River basin, it is worthwhile to say that it has been progressed rapidly since 21<sup>st</sup> Century. Statistics show that 70 % of the Sub-Saharan African Countries Citizens still goes without household electricity.

Overall, the population of Nile Basin Initiative countries is projected to more than double over the next 40 years, from 429 million in 2012 to 945 million people. In other words, over the course of the next four decades more people will be born into the region than currently live there now.

Of the 48 least developed countries in the world, 33 are located in Sub Saharan part of Africa. At the same time, this region stands out with the highest birth rates in the world. By the year 2050, the number of

people in sub-Saharan Africa may double and by the end of the century it may quadruple (Lilli at all. 2011).

Growing populations require more water, but so does growing affluence. While there is huge potential for development in the basin, lack of access to water and energy limit growth for upstream countries. But land grabbing is a new phenomenon especially in the Nile Basin. It will bring new hydropolitical issues to riparian states.

Large scale land acquisition rush will force native land owners to have their land irrigated. New international land owners will also force the governments. For instance; Sudan has leased closed to 3, 5 million ha. of agricultural land to foreign entities. Sudan as a country most heavily involved in large scale land transfer, may be a kingmaker in a new Nile Hydropolitics negotiating water to expand large scale irrigation.

Energy production is an essential component of continued development, and another point of contention between upstream and downstream states. The minimum structure to promote cooperation in the transboundary river basins can be taken as “*high level institutionalized joint secretariat structures strongly supported by riparian states*”.

The essential helpful elements for water cooperation in the transboundary river basins can be differs from one basin to another, but in general most helpful element can be taken as **creating political will**. It seems to be essential. Even if “*political will is essential to start collaboration in the basins*” “is a common belief among the experts ,which mechanisms will drive it is still lack of interest and little attention has thus far been given.

But it can be seen that the water dimension of agricultural land acquisition in Africa has yet to be widely acknowledged. More attention should be given to the potentially destabilizing effect of large-scale land acquisitions related with transboundary water issues in Africa and the resulting possibility of local and regional conflict prone to increase

In summary;

Nile hydropolitics has already been changed,  
Aral Lake Basin hydropolitics will be changed,  
Middle East hydropolitics is prone to change,

Grand Renaissance Dam has already been an “Internationally Planned Corner Stone” of New Nile Hydropolitics. With the completion of the Rogun Dam in the Central Asia these two dams will shape of the 21st Century hydro diplomacy framework.

## ACKNOWLEDGEMENTS

1. This work was funded by Yildiz Technical University under Scientific Research Projects number 2014-01-05-KAP01, named “Modeling, Forecasting and Estimation of Social, Economic and Hydrological Effects of Water Supply and Demand in Turkey on the Basin Level”.
2. The present study was part of a research project funded by The Scientific & Technological Research Council of Turkey (TUBITAK, Project no. 1649B021506912).

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