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Dam Development in Africa and International Peace: A Second Look at Lagdo Dam in Cameroon

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Abstract

The purpose of this work is to look closely at how Lagdo dam in Cameroon could operate efficiently while ensuring that its impact on its neighbor Nigeria is not adverse and confrontational. Dam construction is undertaken for various reasons including irrigation agriculture and hydroelectricity. Theoretical approaches and literature are replete with necessary background and other preparations for dam constructions. Data here were collected from secondary sources and the impact of Lagdo dam on its immediate communities and its down streams in Nigeria was considered. It was recommended among others, that Nigeria should build a complimentary dam, the Dasin Hausa dam in Adamawa State to mitigate the effect of the water release from Lagdo dam.

Keywords:
Dam development, International peace, Neighbor and Lagdo dam

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Background to the Study

Construction of large dams in Africa and beyond affects people living in such project areas and even beyond in various significant ways. A dam is an intended barrier constructed to hold back water and raise its level to form a reserviour for use to generate electricity or for water supply (Modo, 1986). Every major dam construction should have clear objectives and steps set for the fulfillment of its objectives at all stages. It is essential that those to be relocated from the dam lake side and their erstwhile economy should be handled effectively in order to make them more productive than before the relocation exercise (Cernea 1988). There are thousands and millions of people downstream of the dam that could be affected by seasonal flood water as occasionally released from such dams. Such people must be taken into consideration in the dam construction initial plans.

Lagdo dam in Cameroon is an outcome of planned efforts to improve the lot of the people living around the Benue river valley located in the North Cameroon administrative region. The Benue river valley is one of the poorest regions in the country, highly populated and with history of immigration pressure from the extreme North and the North region. The area lies within the Sudano-Sahel in Savannah agro-ecological zone. Out of all the five agro-economical zones of Cameroon, the Sudano-Sahelian (North and extreme North) is the one with the shortest rain-fed season (March to September). It is therefore clear that the project becomes an opportunity to change the relationship among different stakeholders including institutions, farmers associations and service providers. (World Bank, 2017).

Statement of the Problem

Lagdo dam like any other dam in Africa has the objective of constructing a barrier to hold back water through raising its level to form a reserviour for use to generate electricity or to supply water to the people for irrigation and other purposes. Dam authorities normally ensure that people displaced for the purpose of creating the reservoiur are properly settled. They also ensure that those downstream within the flooding areas are also protected with regard to their cropping and habitation (Cernea, 1988). The issue of concern here is that there must be proper consultation with the communities downstream either within the nation or even outside the nation to prevent conflict, with attendant schism and feuding. This paper focuses on the Lagdo dam authority's negative flood impacts that were not intended but have far reaching consequences on its downstream neighbours.

Some questions are very pertinent especially as the flood waters of Lagdo dam have caused serious problems in neighbouring country Nigeria:

(i) Did the dam authorities take into consideration the possible effect on all communities downstream that are linked to the Benue river?
(ii) Was there any serious discussion with Nigeria at the various stages of the dam construction on the Benue river between 1978-1992?
(iii) Could flooding of neighbouring states in dam management be seen as aggressive acts?

Contemporary Literature

Dams and their Preparations

Throughout the world, involuntary resettlement of those affected by dam construction, has remained the most unsatisfactory component of such projects (Cernea, 1988;9). Authorities handling such projects have more often than not failed to improve on the social and economic well-being of the displaced people (Brokensha and Scudder, 1968, Seudder, 1985). There are visible lapses during project preparations in carrying out social surveys of those to be relocated as well as of the host area populations; and other organizational arrangements like making adequate plans for people in the flood plains downstream of the dam. Most dam authorities are preoccupied with only the economic cost and possible gain from the project (Cernea, 1988).

Africa has witnessed very many dams constructed for hydroelectric and water supply purposes. For example, the Grand Renaissance dam in Ethiopia is currently the biggest dam in Africa. It is located close to border with Sudan on the Blue Nile. However, the dam has very serious negative impact on Egypt's water needs. Ahmed (2017) observes that the dam which is located in the Benishangul Gumuz region of Ethiopia, 45km East of the border with Sudan when filled at its 74 billion cubic meters floccus height of 50 meters did not take into account the interest of downstream countries. Indeed, Nile river basin covers about 11 African countries. All these countries are facing rapid changing economies and population, strong socio-economic dependency in water and more so absence of basin wide management.

Another dam of interest is Katse dam in Lesotho. It is seen as the second largest dam in Africa. It was completed in 1996 and meant to supply water and generate electricity. Of recent, studies have shown that its economic focus appears to sideline the communities around Katse dam. Skefu (2018), observed that the dam has a negative impact on people as it poses multiple hazards including landlessness for crops production, inaccessibility to common goods including forests together with indigenous plants, lack of burial sites, grazing areas for animals and isolation of relatives at the other side of the dam.

Akosombo dam in Ghana was constructed on the Volta River primarily for the generation of hydropower. This dam made from 1962-1980 could be said to be one of the greatest manmade lakes; and produces 912 MW of electricity at its maximum operating capacity. It has however been criticized for its negative impact on its surrounding communities. It increased incidence of myriads of water borne diseases including Schistosomiasis, malaria and onchocerciasis in lake side villages and dam's downstream. It also has increased salinity in water supply for some towns downstream of the dam (Gyan-Boakye, 2001).

Another notable dam of importance is the Kariba dam which is located in the river basin of the Zambezi. This dam is shared between Zambia and Zimbabwe. At the Zimbabwe end it attracts tourists due to it being the home of some interesting wild life species. It was built in the 1950s out of necessity for hydroelectric energy for both Zimbabwe and Zambia (Reeves 1960, Hughes, 2006).

Dams in Africa have been set up for the socio-economic development of the immediate communities and their downstream. However, Scudder (1985) Modo (1986) and Cernea (1988) have observed that most resettlement projects in Africa occasioned by dam construction do not put people first. Most dam projects within the community are just a mechanism for removing the people who are on the way of the project. This is one reason why proper care is not taken to plan for the welfare of those communities that are downstream of the dam. At a meeting of world commission on dams (WCD) held in Egypt, basic flaws on dam construction in Africa were discussed, (Work and Justice, 2000). Dam construction if not well handled between nations sharing rivers such as Nile, Benue, could trigger an international mistrust, hence the issue should be handled properly to prevent economic warfare.

Method

The work was based on secondary data. It is mainly a comparative review of some selected well known dam projects in Africa. The theoretical undertone here is Development Approach as opposed to mere Welfare Approach. In Africa, involuntary resettlement of people has been treated in the past as a salvage and welfare operation, rather than as one pursuing development objectives.

> *"Resettlement can be bureaucratically dealt with by some planners or administrators as a mere and hasty, physical removal of people out of the path of the flooding reserviour water or of the coming highway. But it may also be approached as a multisided opportunity for the reconstruction of systems of production and human settlement that would represent a development in the standard of life of those affected as well as in the regional economy of which they are a part" (Cernea 1988:19).*

This methodology goes beyond the mere development processes of resettlement that involve initial ethnographical study of the culture of people at the dam site and the processes of relocating them elsewhere with the objective of making them economically better than they were (Shale and Modo, 2002). Most of the rivers requiring dam constructions stretch from one country to the other or transcend international boundaries. This paper argues that such dam constructions require international cooperation for the actualization of such projects. The argument here is that any community involved or is to be affected by the dam through flood plain et cetera must be well developed to become a beneficiary of the positive gains of the project.

Large Dams and Conflict Management

The method and processes nations take unilaterally to Dam Rivers that transverse their territories call for caution. Many nations have reached the height of conflict management in dam development. Conflict management is a process of reducing the negative and destructive capacity of conflict through a number of measures and by working with and through the parties involved in that conflict (Best, 2005). We all agree with Sodaro (2001) that resources such as land, natural resources (crude oil diamond, uranium, water etc) have all helped in causing conflicts within states or between states in Africa.

With regard to water resources and dam constructions that cut across nations there are bound to be cooperation between the nations that are touched one way or the other. The World Bank (1988) stipulates that meetings, dialoguing, agreements should be reached in all operational procedures in the project cycle such as project identification, project preparation, project pre-appraisal and appraisal, project supervision and monitoring. During these processes bilateral sessions are held on resource utilizations, contributions of each involved countries not mainly financially but in ideas and agreements. There are serious considerations given to how the project will affect not only the benefiting farmers, industrialists, ordinary citizens but also people living down streams of the dam in the other affected country. Some of these are the yardstick for measuring the successes of the Lagdo dam in Cameroon especially with the flooding disasters in Nigeria's North Central State (specifically Kogi State) of Nigeria.

Findings

Dam projects are developmental as conceived but there are omissions and planning errors that if neglected could have very lasting effect on its successes. The renaissance dam when filled at its storage capacity of 74 billion cubic meters, floccus height of 50 meters will certainly affect at its downstream the nile usage by Egypt (Ahmed, 2017). In Lesotho some scholars see Katse dam and mohale dam authorities as more interested in the economic gain from water supply to South Africa than the immediate communities that complain of landlessness for crop production, food insecurity, inaccessibility to common goods including forest with indigenous plants which support livelihoods and grazing areas for animals (Shale and Modo, 2002, Skefu, 2018). Gyan-Bsakye (2001) observes that Akosombo dam is not all just a story of its successes in Ghana. There are incidences of water borne diseases including schistosomiasis, malaria and onchocerciasis in lake side villages and dam stream.

The kariba dam developed in the 1950s is located in the River Basin of the Zambezi and shared between Zambia and Zimbabwe. This is a shining example of how a dam of a river that transverses other countries should be used (Reeve, 1960). Some may argue that it was the colonial government of the then two countries: Southern and Northern Rhodesia that built it but in this postcolonial era of the independent countries the benefits are immense. For example, at the Zimbabwe end, it attracts tourists due to its being the home of some interesting wildlife species. Little wonder Skinner, Niasse and Haas (2009), have written extensively on the advantages of sharing the benefits of large dams in West Africa.

Lagdo Dam in Cameroon

Its construction started in 1977 and was completed in 1982. The project area covers part of the Benue River, valley located in the Northern Cameron Administrative Region. This Benue river valley, highly populated and with history of immigration pressure from the extreme North and Northern region. It lies within Sudano-Sahelian Savannah agro ecological zone. As said earlier, of the five ecological zones of Cameron the Sudano-Sahelian (North and Extreme North) is the one with the shortest rain fed season (March to September). There is therefore the need to improve the socio-economic position of the

communities of the zone (World Bank, 2017). The Lagdo dam is an opportunity to change the relationship among the different stakeholder's farmers, Educational Institutions, service providers et cetera. In the zone improved water storage, water harvesting and irrigation are critical to improving farm production. World Bank (2017), argues also that its improved water management also enhances the ability to withstand climate shocks and is in line with a strategy whereby the production of staples is promoted in rain-fed systems and production of high value cereals, horticultural crops and industrial crop in irrigated system. With this dam project on the Benue valley there is a significant impact and improvement on the lives of hundreds and thousands of people of the zone.

Relationship with Nigerian Authorities

It was obvious that while Lagdo dam was being constructed, Nigeria was also in the process of building the Dasin Hausa dam in Adamawa State (a supposedly larger dam) that would probably have been mitigating the effect of flooding from the Lagdo dam. Nigeria experienced some engineering concern which slowed down the Dasin dam project. During a budget defence on Wednesday 19th October, 2022, the Nigerian Minister of Water Resources debunked reports that Nigerian entered into an agreement to build a dam in Nigeria that will mitigate flooding when water from Lagdo dam is released (Channel TV, 2022). This clearly shows that every country in dam construction should take its citizens and people first. It also stresses the necessity for nations to share the benefit of large dams that transverse different nations (Skinner et al., 2009). Over 600 people have died so far from the September – October flooding in different States in Nigeria.

Fig. 1: A Typical Flooding of Villages as Spillover from Lagdo Dam

Sources: Channels TV 10pm -19th October, 2022

The Nigerian Minister of Water Resources, Hon. Suleiman Adamu accused Cameroon of not informing Nigeria about its authorities release of water from Lagdo dam. He said it was 24 hours after the release that Nigeria was informed. However, the Honourable Minister said Lagdo dam contributed only about 1% of the flooding in Nigeria. It was however, obvious that the effect of Lagdo dam water release affected Kogi State as Lokoja environ was submerged. In all there is immense benefit in sharing information in matters of dam project, spill, since most adverse effects could be avoided or mitigated through such information sharing (Schultz and Skinner, 2022).

In answer to some pertinent questions asked earlier in this paper, it is possible that the Lagdo dam authority did not take into consideration the possible effect of the release of Lagdo dam water on all the communities in and outside Cameroon that are linked to the Benue river. It could also not be ruled out that there was a discussion between Nigeria and Cameroon at some stages during the construction of lagdo dam on Benue River. If not how did Dasin Hausa dam in Adamawa State come to be started almost same time even though it along the line had some engineering challenges? Also, the third question, could flooding of neighbouring states in dam management be seen as as an aggressive act? It could be erroneously discontinued as aggressive act especially if the two countries involved had had a previous political misunderstanding.

Summary

Dams of different types are constructed to improve the lot of the communities and neighbors downstream. Dam project should normally adopt Development Approach in that the lot of every community and people should be positively impacted for what ever purposes the dams serve. Lagdo dam is well known for the transformation of the lives of the peasants of Cameroon's Benue River valley. It is expected that neighbouring country Nigeria should by now be sharing the benefits of this Lagdo dam rather than experiencing the negative aspect of its water release.

Based on these facts, it is recommended that Nigerian government should endeavour to complete its Dasin Hausa dam in Adamawa State to enable over flows from Lagdo dam to be absorbed by it and instead of causing havoc, be harvested for irrigation and water supply. It is also important that River Niger at Asaba be deepened to enable it absorb excess rainfall rather than allowing such rain to destroy people's houses.

The Bayelsa State flood is perennial and is worst with the climate change. A large dam should be constructed by the Federal government of Nigeria in Bayelsa and other rivers should be channeled into this dam, River Niger here should also be dredged to absorb excess coming from Lagdo dam. The question of blame game of Nigeria on Cameroon for lagdo water spill is not necessary but rather Dasin Hausa dam in Adamawa State should be completed for the benefit of all and for existing peace and tranquility to be maintained. Also there should be a little modification of Lagdo dam's spill way to allow small amount of excess water to be flowing down and spilling gradually and become useful to downstream areas rather than to become a destructive flood.

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