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Assessing the Bui Dam Salvage Archaeology Project and Cultural Heritage of Impact Communities

Abstract

The Bui dam resettlement program is one of the best documented resettlement programs in Ghana in recent times. Historically Bui was known for „hosting“ a famous geographical feature – a gorge which became known as Bui Gorge, created by the saddle Banda Hills in mid-western Ghana. In contemporary terms Bui is associated with the 400MW hydro-electric dam (Bui Dam) built by the government of Ghana. Bui is also known to have veritable attachment to the natural environment such as the immediate ecology, the Black Volta and the nearby saddle mountains; all have been appropriated into the belief systems of the relocated communities who formerly inhabited the area. However, the construction of the Bui Dam and the associated relocation of the settlements have permanently changed the natural and the social landscape of these affected people. This assesses the salvage archaeology carried out at the Bui dam reservoir area between 2009 and 2011. We situate the discussion on the effects of the Bui dam on the current social transformations that have resulted from the construction of the Bui Dam.

Keywords: Bui Dam, relocation of heritage, salvage archaeology, resettlement

Anmerkungen zum ‚Bui-Dam‘ Rettungsarchäologie-Projekt und zum kulturellen Erbe der betroffenen Gemeinden

Zusammenfassung

Das ‚Bui Dam‘-Umsiedlungsprogramm ist aktuell eines der am besten dokumentierten Umsiedlungsprogramme in Ghana. Einst verband man mit dem Bui-Nationalpark ein berühmtes Naturdenkmal – die Bui-Schlucht, geschaffen vom Sattel der Banda Hills im mittelwestlichen Ghana, heutzutage denkt man eher an den Staudamm, der dort von der Regierung Ghanas zur Stromgewinnung gebaut wurde. Der Bui-Nationalpark ist auch bekannt für seine Artenvielfalt, den Schwarzen Volta und die nahegelegenen Bergketten – sie alle gehören zur Glaubenswelt der dort lebenden Menschen. Jedoch hat die Errichtung des Staudamms und die damit verbundene Verlegung von Siedlungen die natürliche und auch ‚soziale‘ Landschaft dauerhaft verändert. Das bestätigen auch die Rettungsgrabungen, die zwischen 2009 und 2011 im Bui-Damm Reservoir durchgeführt wurden. Der vorliegende Beitrag fokussiert auf die Auswirkungen gegenwärtiger sozialer Transformationen, die auf den Bau des Damms zurückzuführen sind.

Schlüsselwörter: Bui-Damm, Umsiedlung von kulturellem Erbe, Rettungsgrabungen, Wiederansiedlung

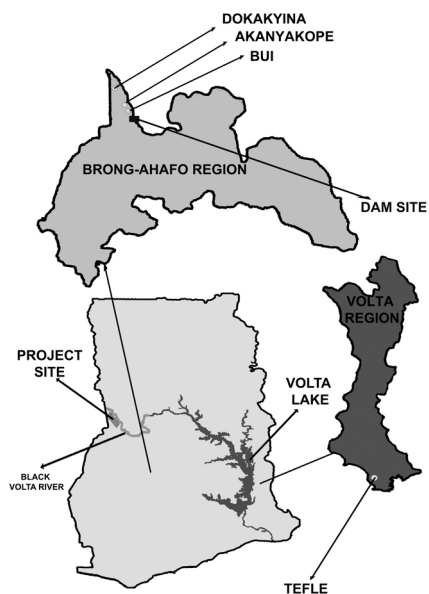
Introduction

Between 1961 and 2012 three hydro-electric dams have been constructed in Ghana on the Volta River. These include the Akosombo Dam, the Kpong Dam and the recent Bui Dam. These dams are meant to harness the waters of the Volta River to produce hydroelectric power within Ghana and for export. In all the three cases, people were displaced and resettled. The Akosombo reservoir displaced nearly 84,000 people, while 6,000 people were sent into resettlement during the Kpong Dam Project (Asthana 1996, 1472). In the case of the Bui Dam Project, 1216 people were displaced and subsequently resettled. Notably, the resettlement experience at Akosombo and Kpong guided the planning and execution of Bui resettlement program. The construction of the 400 MW hydro-electric Bui Dam and the associated relocation of the settlements have permanently changed their natural and social landscape. There is now a new settlement and a new built environment, broken social ties and disintegration and realignment of formerly closely-knit communities. The destruction of both sacred and secular spaces by the dam waters has permanently changed how their history is kept and remembered. The relocation of few ancestral burials and few movable shrines in addition to findings from the painstaking salvage archaeological works undertaken by a team of archaeologists from the University of Ghana before the inundation were the most useful interventions that can best serve as commanding mnemonics of their lost-escape. This paper assesses the scope of work carried out under the salvage archaeology project at sites of the Bui dam impact communities between 2009 and 2011. We connect our assessment of the Bui Project with the tenets of the World Commission on Dams which advocates best practices in the event of dam construction. We also examine the implications of the salvage exercise on heritage preservation and the current social transformations of the resettled communities.

The Bui Dam Project

The planning for the construction of the Bui Dam Project has been on the drawing table for a long period. The feasibility studies have been under discussion since 1966 when this was undertaken by J. S. Zhuk Hydroprojeckt of the USSR and Snowy Mountains Eng. Corp (SMEC) of Australia in 1976, and by Coyne et Bellier of France in 1995. The study of 1995 was subsequently updated by Coyne et Bellier in October 2006. Based on the study, the project's feasibility and economic viability were confirmed. The sod was cut for the commencement of the Bui Hydroelectric Project on August 24, 2007. After completion, the project is expected to add 400 MW of electrical power to the existing capacity of the country, improve the security of energy supply to Northern Ghana, and have the potential for the export of power to Burkina Faso, La Cote d'Ivoire and other nations within the West African Power Pool (WAPP) arrangement. In addition, the project has multiple use potential for the development of fisheries, tourism and irrigation.

Fig. 1: Maps showing the Bui Dam Project site and the three affected communities (map by the authors).



The irrigation potential is about 30,000 ha. of farmlands in the downstream reaches of the dam site (Gavua/Apoh 2011).

The construction of the Bui dam led to the resettlement of three project-affected communities, Bui, Akanyakrom and Dokokyina (fig. 1), and the Bui Power Authority (BPA), the managers of the dam. These communities had protested against the BPA for their insensitivity to their spiritual concerns in terms of their inability to make provisions for the relocation of the „souls“ of their communities, including deities and ancestral remains. The BPA eventually engaged archaeologists to intervene since the threat of the community members not to relocate until their shrines and ancestors were also relocated could have halted the power-generating process and project schedule (Apoh/Gavua 2016). A team of archaeologists from the University of Ghana led by Prof Kodzo Gavua and Dr Wazi Apoh and a representative of the Ghana Museums and Monument Board (GMMB) intervened and successfully undertook a survey to study and salvage some archaeological and ethnographic remains in 2009–2010 (fig. 1). We also negotiated with the BPA to exhume and relocated ancestral remains as well as shrines of deities and other features identified as vital heritage properties by elders of the communities in 2011.

We tried to better understand the dynamics of the lifeways of the impacted communities from both archaeological and contemporary contexts. We documented their local technologies, cosmologies, ideologies, traditions and subsistence practices. These topics were explored in the three communities so as to provide them with materials on their heritage and to enable them to engage with them even after their resettlement. Such a deed will assist them to pass down information about the past to the next generation through the use of the tactile evidence collected about their submerged past. Our salvage activity at the impacted communities has enabled a deeper and richer engagement between the

community members, the Bui Power Authority and members of the salvage archaeology team. It has also fostered collaboration and stronger relationship between the research team and the community.

The Dams Debate and the socio-cultural effects of the Bui Dam

Today, the ubiquitous role of rivers throughout the history of humankind continues as people around the world derive their physical and spiritual needs from them each day. Having played such a vital role in the everyday life of the people of Bui, Akanyakrom and Dokokyina, it is not surprising that the Black Volta and its bounty became central to the religion and customs of the people. The people revered the Black Volta and the different species of fish that swim its waters as they provided an essential element to their diet. Just as people depended upon and revered rivers for their natural bounty, they have also sought to exploit rivers by harnessing their power with dams for commerce and industry. Dams among other things have reduced flood perils and allowed humans to settle and farm productive alluvial soils on river floodplains. Large dams also reduce dependency on rainfall, enabling and providing more water for irrigation (Duflo/Pande 2007, 602). Humans have also created reservoirs to enhance the supply of water during periods of drought (Lawrence 2006; Poff/Hart 2002; WCD Report 2000).

While dams have had substantial progressive effects on the lives of many people in terms of the provision of energy to power domestic and industrial spaces, they have also had devastating effects on the cultures and landscapes of living communities. These negative impacts are however the by-products of development (Cerne 1996, 1515). The contrasting perspectives of dams are what the World Commission on Dams (WCD) describes as „the dams debate“. The WCD was formed in response to growing remonstrations against the construction of large dam projects in different parts of the world. As we assess the contribution of the varied methods of salvage archaeology in managing the negative impact of the Bui Dam Project on the heritage of the impact communities, we also attempt to evaluate how this project fits into the WCD best practices and recommendations. We briefly assess the World Commission on Dams (WCD) 2000 report which recommends best practices in the event of dam construction vis-à-vis cultural resource management.

It is an undeniable fact that large dams are capable of producing pronounced benefits and spreading those benefits across large sections of the population. For instance, the construction of the Akosombo and Kpong dams in Ghana have facilitated irrigation and navigation locally, as well as provided electricity to residents and industry across the country. When measuring the costs and benefits of large dams from a purely economic point of view (a „balance sheet“ approach), the benefits of the two major dams since the late 1960s tells us that, when it comes to dams, the bigger, the better because of its benefits to the people.

The increased benefits that large dams offer to the general population, however, usually come at the expense of those who live close and rely on the river for their livelihood and culture. All over the world, what is often missed in the „balance sheet“ approach to dam development is the impact on societies who have lost access to natural



Fig. 2: The reservoir behind the Bui dam which has submerged former Bui and Akanyakrom settlements (A) and the Bui Dam edifice (B) (Photo by the authors).

resources and cultural heritage. In particular, the effect of large dams on the livelihoods and cultural resources of indigenous and tribal peoples is frequently negative and sometimes devastating (Lawrence 2006; Modi 2009). Large dams inundate large areas of land, regularly submerging traditional lands, burial grounds, and sacred sites (cf. fig. 2). Moreover, large dams alter entire ecosystems, severely impacting fisheries and other means of sustaining traditional livelihoods. These negative effects, in turn, disrupt the basic social and political organizations of these cultures (Colsen 1971; Namy 2007, 12). Worst still, history shows that indigenous cultures do not receive a proportional share of a dam's benefits and usually do not receive adequate compensation for their losses.

Massive technological development hurts, but this is a fact largely ignored by economic planners, technicians and political leaders. In designing severe alteration in the environment, in the name of development, that uproots populations, destroys heritage resources and built environments, project stake holders only count the engineering cost and neglect social costs (Colsen 1971; Heming et al. 2001, 195; Sukhan/Sleigh 2000, 233). These social costs are not addressed in routine project economic analysis. Concrete empirical evidences have shown that in most cases, these overlooked and little understood social costs result in socio-cultural displacements, cumulated deprivations and severe impoverishment in the impacted communities (Cernea 1999, 2149). Such displacements, according to Scudder (1976, 4), results in „multi-dimensional stress“ including physiological, psychological and sociocultural stress. Such stresses lead to major disruptions in their wellbeing and further places new difficulties in their way such as separation from kinsmen and their natural environment (Lawrence 2006).

In view of these negative impacts, it is important to ensure that the resettled people benefit from the opportunities generated by dams in order to improve their livelihoods in the short and long-term (Diop/Diedhiou 2009, 16). Furthermore, the use of the methods of salvage archaeology and visual anthropology enables heritage experts to identify and document both tangible and intangible cultural heritage remains at a project site before they are destroyed by the earth disturbing activities. Salvage archaeology being an integral aspect of cultural resource management is meaningful in the sense that it helps in the preservation of the cultural legacies of project communities which could have been inundated and lost to the current and future generations of these communities.

The World Commission of Dams was formed in 1998, and after two years of study, the temporary Commission published its milestone report entitled „*Dams and Development: A New Framework for Decision-Making*“ (WCD Report 2000). Although the WCD Report deliberates on all aspects of the large dam debate, many of its findings and recommendations directly concerned the rights of indigenous people and the protection of their cultural heritage. The WCD Report challenges those responsible for dam-building around the world to truly account for the costs and benefits that large dams impose on all people (Lawrence 2006; WCD Report 2000). In general, the WCD Report describes the development of dams worldwide as skewed. The report begins by explicitly stating that „dams have made an important and significant contribution to human development, and the benefits derived from them have been considerable“. However, the report eventually finds that the benefits of dams have too often been imbalanced in distribution and, in many cases, have produced disadvantageous effects on certain segments of society, particularly indigenous people.

The WCD found that, in the past, proponents of dam projects have not fully considered all of the economic, environmental, and associated social and cultural impacts for all parties affected by dams. In particular, the negative outcomes of dam construction and operation often outweigh the benefits received by local cultures (Colsen 1971). These harms include „impacts on the lives, livelihoods, cultures and spiritual existence of indigenous and tribal peoples“ (WCD Report 2000). Dams displace people which in turn affect the functioning of their society (Lawson 1982). Additionally, dams disrupt ecosystems and adversely affect fish habitats, often resulting in diminished fish populations and occasionally, the endangerment or extinction of the species and, consequently, foreclosing on indigenous peoples' subsistence (WCD Report 2000, 112–113). Furthermore, dam construction may demolish sacred sites. Reservoirs may inundate culturally significant landscapes and artefacts, and erosion caused by reservoir fluctuations may expose ancestral remains (WCD Report 2000, 116–118). Thus, dams produce negative effects on indigenous cultures through the loss of cultural heritage identified by the WCD as „archaeological resources“, „cultural landscapes“, and „cultural practices and resources of current populations“ (Brandt/Hassan 2000; WCD Report 2000, 285).

The WCD Report (2000, 114) emphasized that, because of the gender-blindness of the planning process, large dam projects typically build on the inequities in existing gender relations in most dam areas and were largely oblivious of the gender aspect of resettlement. The report further argues that gender relationships and power structures are all too often detrimental to women. While women in affected communities bear a disproportionate share of the costs, they have often had less access to the benefits generated by dams. The employment created during the construction of large dams generally benefits men. In the affected communities, dams have amplified gender inequalities either by imposing a lopsided share of social costs on women or through an inequitable distribution of the benefits accrued from dam building. In the view of the WCD Report, women have suffered more than men from the disruption of their social life resulting from involuntary dislocation from their ancestral land, which disconnected their relationship with water, forests and other natural resources. At the Bui dam area mention can be made of the loss of local edible plants like Shea nuts due to the inundation of large tracks of land and vegetation which has resulted in loss of income and sources of subsistence. This has

affected women disproportionately, as they are responsible for collecting and processing of the Shea nuts into Shea butter for domestic use and or sale in local markets.

The influx of immigrants (construction workers) during the construction period of the Bui dam resulted in a social canker of teenage pregnancy. The dam workers who were mostly men mounted undue sexual pressure on the few teenage girls in the area which resulted in teenage pregnancies and subsequent drop-out from school. Some of the men have also left the area without trace, leaving the girls as single parents. The historical antecedent of general impoverishment resulting from involuntary displacement associated with the Akosombo dam led to increased male migration to urban areas and an increase in households headed by women. The recurrence of this scenario is well pronounced in Bui area as most of the able-bodied men have migrated to cities in other parts of the country.

Nevertheless, the WCD Knowledge Base has also endorsed that dams have the advantage of serving as opportunities for reducing gender disparities, primarily among women in households or communities that receive access to project services. There is no gainsaying that the Bui dam has not improved the general supply of services in the resettled communities. The increased availability of potable water (borehole) for domestic uses, school block, market, private and public latrines, electricity and more durable housing structures are likely to have benefited women by reducing time spent on chores and improving general wellbeing. The provision of these social services as part of resettlement programs, represent an improvement compared to the pre-displacement era. These improved living conditions in the impact areas of Bui can have a positive spillover effect on gender equity. For example, improved education facilities will enable the inhabitants to give both boys and girls basic education and subsequently higher education and reduce illiteracy. The resettlement arrangement executed by BPA might have also truncated traditional land tenure system that might not be in favour of women thereby giving both men and women equal access to land. The proposed irrigation scheme from the dam will likely improve food production. This is likely to benefit women as a result of improved family income and nutrition.

The WCD Report (2000, 112) has also identified that downstream impacts can extend for many hundreds of kilometres and well beyond the confines of the river bank. Dam building processes such as water diversion, exploitation of groundwater aquifers, stream channelization, and inter-basin water transfer in the world today are so large that these hydrological alterations are having global-scale environmental effects especially reduction of fish resources.¹ The implications began manifesting long before the Bui dam was completed. Downstream communities of the Bui dam face some of the most drastic impacts of the dam. Particularly the change of the hydrological regime of the Black Volta has adversely affected plains that supported local livelihoods through flood recession agriculture and fishing.

Bui dam downstream communities like Gbelikame No. 1 and No. 2 as well as Bamboi are mostly affected. There is a substantial loss to downstream fishery production as a result of constriction in the dam upstream and reduced volume of the river water down-

1 Adams 1985, 292; Rosenberg et al. 2000; Fricke 1978, 383; Thomas/Adams 1997, 432; Tan/Yao 2006, 351.

stream. Along with subsistence agriculture, fishing constitutes an important livelihood activity as well as an important low cost source of protein among large downstream rural populations. To rob salt in the wound, the downstream communities lack social, economic, and political power to press their case for mitigation and development. While the people affected by the flooding of the reservoir could assert their right to mitigation by refusing to move, and demand compensation, those affected downstream have no such leverage. This is mainly because guidelines specific to impact assessment of tropical dams have not been properly developed, particularly as regards hydro-biological and ecological impacts (Freeman 1974, ii).

Overall, the WCD Report identifies the need to protect „cultural practices and resources of current populations“. These include people's „religions, languages, ideas, social, political and economic organizations, and their material expressions in the form of sacred elements of natural sites, or artefacts and buildings“ (WCD Report 200, 166; 285). Cultural practices of current populations need greater attention at the construction phase. It therefore stands to reason that protecting cultural resources from the development of new dams is more effective than attempting to save cultural resources after a dam is built. In most cases, such as the three large hydroelectric dams in Ghana, large dams are generally not built with an eye towards cultural resource protection. Dam builders are therefore obligated to give equal consideration to the preservation of aspects of cultural and environmental quality instead of merely looking toward the production of power.

Because dam construction is a big business venture, salvage archaeology must also be conducted with the same alacrity as engineering and environmental studies (Schmidt 2000, 21). In the case of cultural resources, the WCD Report suggests that the effect of dams on cultural resources must be taken into account from the very early stages of the process. They must also be given as much priority as economic and political concerns, including the allocation of funding and employment of experts in the field. If the decision is then made to proceed with the dam project, effects on cultural resources should be mitigated through planning, preservation, and excavation. To the aforementioned, the WCD Report specifically suggests the incorporation of cultural heritage impact assessments initiatives into dam development projects. These assessments are supposed to address impacts on three vulnerable categories of cultural heritage identified by the WCD. These include *archaeological resources*, *cultural landscapes*, and *cultural practices and resources of current populations*. Essentially, the WCD recommends the inclusion of all affected indigenous people in the decision making process and particularly addressing cultural resource protection and according it the same weight as all other factors in the dam building process.

Dam Development and Salvage Archaeology in Ghana

In the view of Posnansky (2003), the Volta Basin Research Project in Ghana from 1963–1969 was the largest and the most ambitious salvage archaeological project ever conducted in Ghana. This project was executed to salvage remains from areas that were to be inundated by the Volta floods following the construction of the Akosombo dam. The project unearthed archaeological and historical data on the forest fringes and parts of

the ‚Middle Belt‘ of Ghana. One of the most positive results of the Volta Basin Research Project was the integration of ethno-archaeology methods as well as the examination of the salvaged material culture remains. Some of these remains have been preserved in the Ghana National Museum and the Museum of Archaeology, University of Ghana. Recommendations were also suggested by the key scholars for improving dam archaeology in the future and integrating such research into the broader practice of West African Archaeology. Such recommendations provided the roadmap that undergirded the Bui salvage work carried out by the team of archaeologists.

Whereas archaeological resources have received little protection in general, the frenzy of Ghanaian dam construction is yet to produce a „movement“ backed by legislations toward salvaging archaeological resources before they are destroyed by dam construction activities. The more archaeologists keep silent, the more they contribute to the cultural and human rights abuses of dam affected communities (Schmidt 2000, 13). Currently, consideration and funding for the protection of archaeological resources have never been incorporated into the planning of government and private projects in Ghana.

The Bui Dam salvage archaeological work for example was made possible through the lobbying activities of the NGO, *Heritage and Site Save Africa* (HaSSA). It is a cultural heritage management organization based in Accra. The core objective of HaSSA is to advocate for the preservation and restoration of historic and heritage sites and monuments. The idea of conducting salvage archaeology at Bui was mooted by HaSSA. The organization then approached Bui Power Authority (BPA) with the aim of conducting salvage work before the dam was constructed. HaSSA's initial encounter with BPA was characterized by long drawn-out haggling over the importance of the salvage archaeology. BPA in the end concluded that the project's budget had no provision for salvage archaeology and for that matter they were not in the position to fund the salvage work. HaSSA then proceeded to seek the intervention of the Society of Africanist Archaeologists (SAfA) before BPA felt compelled to make provisions for funds and logistics. This enabled archaeologists from the University of Ghana, The Ghana museums and Monuments Board and HaSSA members to conduct this all-important mitigation work.

The Stance of the Impact Communities on the Dam Project, Resettlement and Salvage Archaeology Projects

Large dam construction produces social upheavals and exacts excessive human and environmental costs. Large dams, long viewed as beneficial and essential to development, have become sites of major social conflict (Goulet 2005, 881). Particularly, it has always been the case that it has marginalized ethnic minorities who are most likely to lose their land and livelihood through displacements caused by dam construction (McCully 1996, 70). For example, the greatest price for the Bui dam was paid by the people of Akanyakrom and Bui communities. They had to relocate to a new settlement as a consequence of the dam which led to the wiping out of their homeland and their beautiful landscapes along the Black Volta. Dokokyina is also one of the three main villages earmarked for relocation by the Bui Dam project; however, they were the least severely affected by the Bui Dam. According to the projections and the studies by the dam officials, the entire

Dokokyina settlement was going to be encircled by the dam waters thereby making the village an island. Because of this, the people were not ready to be resettled.

At the time of the relocation exercise in 2012, about 10 % of the people of Dokokyina defied the call for resettlement and remained in their settlement. As a result, some of the people who were farmers have now become fisherfolks. The people in Dokokyina who have resisted resettlement were denied financial compensation and new housing units provided by BPA in the new resettlement township. Their existence is now even more marginal than before. Because of their precarious living conditions, the remnants of the community in connivance with outsiders have taken to illegal surface gold mining (popularly known as Galamsay) posing a threat to the existence of the dam. The numerous threats warnings and deadlines issued by the BPA and the security forces have all gone unheeded. Their refusal to relocate has also posed special policy dilemma to BPA perhaps due to lack of socio-anthropological understanding of life ways of the people of Dokokyina whose voices were silenced by the existing structures. According to oral accounts a new community has emerged in the area called „Dollar Power“ giving home to about 20,000 illegal gold miners. This new township being a product of the Bui power project in the area has started recording consequent socio-economic and political problems in the area.

Analytically, the people were to evacuate their remote Dokokyena Village to be resettled among two other villages (Bui and Akanyakrom) in the resettlement township. The relocation exercise comprised *relocation and rehabilitation* (R and R). Asif (2000) points out that the ultimate objective of the R and R process is to rebuild and develop the social and economic life of the displaced. However, the manner in which it is carried out shows that state representatives often use it more as a mechanism of power over the people than a process of development. Assisted by the police, the BPA, for instance, once stormed the village with the intention to flush out remnants of the people who were still leaving in the remote inaccessible Dokokyena village, but the inhabitants still defied the new evacuation order. When the trucks arrived to convey the people to be resettled, some of them disappeared into the bush whilst others also sat stubbornly unresponsive to the BPA officers who had gone there to carry out the evacuation exercise. In some instances, those inhabitants who complied with the relocation exercise were accused of being turncoats who had betrayed the spirit of the village. Verbal altercations ensued between the two groups who shouted down and pelted each other with stones and sticks.

Notably, a number of Dokokyina residents were determined to resist resettlement from the outset. The salvage archaeological team faced a fair share of the resistance as they ill-understood the whole salvage exercise. The first day we appeared in the village we introduced ourselves to the chiefs and the people in the community as archaeologists who were there to document their history and culture for posterity as their relocation was highly imminent. Initial approval was therefore granted. However, as we began excavations and mapping of the settlement, word went around that we were working in collaboration with BPA and so we were no longer welcomed in their village. They considered us to be ignorant of their sufferings at the same time saw us as contributing to the legitimization of the dam project. The source of the suspicion emanated from the fact that we arrived in the village in BPA branded vehicles. We had to explain our neutrality by reemphasizing the fact that we were just archaeologists working to record their

history and culture for the future and that it was wrong for them to implicate us in the resettlement program.

In some areas of the world, Salvage Archaeology has sometimes been used by developers and governments to legitimize the destruction of cultural landscapes (Hafsaas-Tsakos 2011, 68; Shoup 2006, 252). This however was not the case during the building of the Bui Dam. As mentioned earlier, the archaeology team actually forced its way into the project in order to salvage the impending lost cultures. This was partly facilitated by the Society of Africanist Archaeologists (SAfA). In some other instances, like the case of the Merowe Dam in Sudan, the foreign archaeologists were accused of complicity in human rights abuses, forced resettlement, and violations of international environmental standards as a result of uncritical participation in salvage archaeological projects (Hafsaas-Tsakos 2011).

We were thus mindful of the ethical dimension of archaeological fieldwork and we did not hide behind research agendas and scientific objectivity (Meskell 2002, 280) to push our agenda. In the views of Hafsaas-Tsakos (2011, 68; Marquardt 1994, 205) there is a need for archaeologists to become more involved with the present in order to help transmit and promote a historical-ecological perspective to both policymakers and the public. And our work should not be seen as the elements used to legitimize particular socio-political agendas, such as dam building. The final authority to build dams should not necessarily come from government declarations but follow the recommendations from the World Commission on Dams for ‚gaining public acceptance‘ and ‚sustaining rivers and livelihoods‘ (WCD Report 2000, 214), and also „securing free, prior and informed consent“ of indigenous and tribal peoples (WCD Report 2000, 219; Garikipati 2002, 2263).

According to Kwame Nkrumah (1966, quoted from www.ccrh.org, accessed on 20/07/16) „The story of the Volta River Projects will not be completed without reference to the 80,000 people who had to be moved from their villages and resettled in other areas, because of the formation of the Volta Lake“. Development of large dam projects often causes involuntary resettlement, and this has affected millions of people who had to be relocated in all parts of the world (Cerneia 2000, 3659; Scudder 1993, 126; 2005). In-



Fig. 3: Evictees loading their belongings into a truck (A) to go and occupy new homes (B) at the resettlement township (Photo by the authors).

voluntary resettlement, according to Asthana (1996, 1468), consists of two closely related yet distinct processes: displacing people and rebuilding their livelihoods.

Dam induced resettlement is termed as *two-fold resettlement* which comprises the loss of housing and land (Croll 1999, 468). The number of affected people can be substantial depending on the extent of land inundated. In the view of scholars (e. g. Mohanty 2005, 1318; Rogers/Wang 2006, 42) dams are the principal agents of displacement. Large dams, in particular, create victims of development – mainly indigenous groups (Goyal 1996, 1463; Thomas 2002, 339) who never share the gains of development. And in most cases the process of resettlement and rehabilitation of up-rooted people have not been very successful. These resettlements have always been involuntary because the majority of the people do not wish to move (cf. fig. 3). In the view of Scudder (1989, 28; 1976), their opposition is well founded since, without exception, the relocation process is stressful, and the stress can last several years after the move.

Relocation of ancestral burials and shrines

It is an undeniable fact that African communities are composed of both the living and the dead, and that each of them has a particular role to play within that community (Gachuruzi 2000, 25). According to the elders of the three affected communities, the dead are not dead; they still reside with the living population in the communities. For this reason, it is out of the question for them to abandon their ancestors who lie in cemeteries, in house compounds and in rooms where they are venerated. The various shrines which were located in rivers, rocks, stone boulders, mountains and the woods and were believed to be guarding spirits of the communities were equally venerated. When the inhabitants were forced to leave their ancestral lands without the hope of return, most of them, principally the elderly insisted that they would never relocate without their ancestors and shrines (Apoh/Gavua 2016).

On the day of the relocation, the salvage archaeology team was once again in the communities to witness the relocation process. The day was a difficult day for the people of Akanyakrom who could not easily turn their backs on their beloved village. They burst into tremendous wailing amidst the calling out the names of their ancestors. Deafening noise from wailing and firing of musketry characterised the entire duration of the relocation exercise. As the selected ancestral burials were dug out and carried in miniature coffins, the wailing intensified. The sobering spectacle threw us into state of self-reflection. We questioned ourselves whether we needed more hydroelectric dams in Ghana. It was unanimous affirmation that due to painful social disorientation of „innocent“ people we don't have to support construction of more dams in the country. After all other alternatives to obtain electricity abundantly exist in many parts of Ghana. However, at that moment of introspection we realised that nothing could have been done to reverse the construction of the Bui Dam as well as the relocation exercise.

Immediately, after the trucks that carried the people arrived at the new settlement sites, each of the three communities made different forms of ritual sacrifices by slaughtering sheep, goats and bulls to consecrate their shrines. The chiefs had earlier on insisted that the rituals were important exercises that were meant to propitiate their ancestors

and deities. Each community presented to BPA a list of items that were relevant for the rituals. After careful scrutiny of the list BPA approved and provided all the items. The items were mainly sheep, goats, bulls and varied volumes of *Akpeteshie* (local gin).

Even though most of the affected people have been resettled, compensated and rehabilitated in line with acknowledged international standards, there are still cultural crises impinging on the history and culture of Bui communities today. The first being the sudden disappearance of sacred places such as ancestral shrines and burials that once sustained their ancient histories. This was the kind of change that the people were not prepared for. Generations and hundreds of their ancestors are now under water. Huge shrine trees and rocks that once played a powerful role in indigenous myths, oral traditions, and political life of the people have disappeared. The river deity (Black Volta) known as *Nana Adre* has overflowed its banks to become a lake, which is no more accessible and relevant to the people for ritual purposes. It is these people – some of the poorest and most deprived citizens of Ghana – who paid the price for implementing the Bui dam project. This is because they lost so much of what their forebears and they themselves have established in their previous land and cultural scapes.

Implications of the Dam project on Social memory of the Impact Communities

During our interview session at Bui Village in 2012, the elders of Bui expressed profound social memories and narrated their clan histories (as far back as 10 generations). They extolled the supremacy of their deities and kings. They pointed out impending loss of their mnemonic devices such as, landscape features, ancient shrine trees, and shrine hill (Bodani) which are vital parts of their local identities since the establishment of their settlement over five hundred years ago. The fact that these monumental entities could not be moved to their new settlements signifies a transformation in how their historical narratives of such sites are going to be expressed. This is likely to open new ways of seeing and understanding how distorted social memory affects their oral traditions (Schmidt 2010, 256).

True to the fears allayed by the elders, a visit by the salvage archaeology team in 2013 to Bui to preview a video documentary on the salvage archaeology with the resettled communities brought feelings of nostalgia and bewilderment to the crew. We considered the findings from the Salvage archaeology work at Bui too important to be consigned to a book shelf. A documentary video was made of the process of the salvage archaeological work. This we believed would disseminate the findings to a wider and more popular audience. Apprehensive that the most important audience had been denied participation in these renderings of the Bui lost scape we returned in April 2013 to the new communities to screen the video at a key venue; the newly built community centre. As dusk passed and night fell, only a few children had gathered at the community centre to view the film. We and the elders grew concerned that a small turnout might result, but the community centre began to fill quickly once the film was underway, mostly with children, teens, young adults, and a modicum of older women and few older males – all from the three

communities that were relocated. By the time the film was midway, much of the village had filled up the Community Centre.

The whole community centre erupted in loud cheerful shouts as known faces crossed the screen. The elderly citizens and the younger ones who were filmed during interview sessions all appeared on the screen. It proved a great success. As the people saw their vanished socio-natural landscape on the screen, they became emotionally charged. Entities such as rivers, hills, and dips between hills, footpaths, food-ways and their former settlements evoked their deepest cultural sentiments. This further demonstrates that natural, economic and sociocultural factors are all involved in the production and distribution and consumption of material culture (David/Kremer 2001, 4). The chiefs and the elders of the community called for a repeat of the screening which we obliged. This enabled all the people present to watch the full length of the video.

Immediately after the video, the elders of the three communities gathered in a circle intimating that we do something to help them preserve their history. This reignited the discussion about setting up of a memory centre which was suggested long before. Materials from archaeological and ethnographic collections together with the video would be the first items to be curated in the memory centre. We suggested that the establishment of the memory centre could attract tourists to visit this important place. The young people could be employed to take them around the site and they could also be trained in the oral traditions that were once told about Bui. The memory center proposed by the chiefs and people of the affected communities will serve as a kind of therapeutic healing by espousing their heritage, rekindling their fading mental maps as a result of the inconvenient change. However, until funds are made available from BPA and other stake holders the memory centre continues to be a dream.

After the preview of the video, we made an effort to visit the old Bui settlement but our first disappointment was that we inadvertently missed the entry path to the former settlement. Apparently, stone boulders had been heaped on the access road to make room for the construction of a saddle-dam. The official in charge of community relations of Bui Power Authority (BPA), Mr. Wumbilla Salifu only managed to pin-point a place, about a kilometer away from one of the boulders on which we stood as the exact location of the famous Bui village which is now under Lake Bui (cf. fig. 4). Our initial disbelief was exacerbated when a local fisherman also confessed that they can vaguely describe the location of their former village after only a year of the inundation. The flood waters from the Bui hydroelectric Dam had overwhelmed the village. Identifiable markers of the village like luxuriant mango trees under which people relaxed and held meetings as well coconut trees/fruits that quenched the thirst of weary travelers to the village have all been reduced to river bed vegetation. The clay/mud houses that once dotted the Bui settlement have most likely disintegrated. The handful of concrete and cement block buildings in the village could enjoy some longevity as artificial reef but will eventually be crumbled under water. Terrestrial fauna and tall vegetative cover that used to inhabit farmlands and part of the Bui National Park have vanished without a trace.



Fig. 4: Former Bui settlement, now under water (Photo by the authors).

Conclusion

It is pertinent that today's archaeological practice addresses the need for archaeologists to engage local communities as collaborators (see Silliman/Ferguson 2010). This is where community members initiate activities that they see would be in their best interests. However, it is always a delusion that the initiative will always emanate from the community stakeholders. This is so because the greater majority of such collaborations and partnerships flow from the initiatives of archaeologists (see Schmidt 2010). As postmodern ethnography espouses *Commitment*, we are still committed to the communities' cultural development and promotion of their heritage. We continue to examine together several issues that compellingly arise out of the local desire to invigorate social memory, including the building of the memory centre and the ways to sustain its maintenance through modest heritage tourism aimed at local people as well as foreign visitors. We did not wait for the ideal circumstance (which was not going to come anyway). The ideal situation is certainly the one in which the archaeologist responds to a community request for assistance, for guidance in how the community members might fabricate a project that meets their historical goals and perhaps economic or social needs simultaneously (see Kuwanwisiwma 2008; Schmidt 2010).

As concerned archaeologists/anthropologists we drove the initiative to undertake salvage archaeological work at Bui Dam catchment areas before the inundation of the floodable areas. Initially we did not enjoy the collective buy-ins as BPA did not want to fund the salvage work. Society of Africanist Archaeologists (SAfA) made an important

intervention which crystallised the collaboration between the archaeologists, BPA and the communities. The collaboration brought positive results to the three parties.

The relocation exercise was given further impetus by the inclusion of the archaeological research team from the University of Ghana who acted as cultural brokers for the relocation program. Our inclusion in the project largely enabled BPA to carry out the relocation exercise without any hindrance. The archaeological and anthropological research was run in parallel with livelihood empowerment programs instituted by the BPA. These comprised empowerment, education and sharing of a monthly stipend of GH¢100 to each member of the resettlement communities for a period of one year after relocation. One fundamental importance of the relocation exercise was the provision of modern accommodation units, potable water, electricity, school building, community center and lorry park at the resettlement township.

It is obvious that there are conflicting needs of various governments. On one hand, there is a compelling need to meet increasing energy demands to continue development. On the other hand, there is need to preserve and protect history for the future generations (Komurcu 2002, 236). But should acute energy shortage and necessity to economic development justify the destruction of cultural heritage of humankind?

It is also apparent that the building of a dam across a river and the resultant artificial lake often times generate deleterious ecological and socio-cultural effects. In spite of the benefits that may result, the creation of dams continues to be a controversial matter (Obeng 1977, 46), just as was witnessed in the case of Dokokyena at the Bui dam project site. Arable lands, fauna and flora as well as indigenous cultural practices are lost in the event of dam constructions. In the nut-shell, the most severe social problems caused by dam schemes are those which have caused the livelihoods of innumerable number of resettled people to suffer (Diaw/Schmidt-Kaller 1990, 17). This is a typical case of the Akonsombo dam built in 1966; up to date most of the evictee communities of the Volta River Resettlement Scheme are still grumbling of unfair treatment such as limited compensation, poor arable lands, strange maladies, untimely death of their elders, and loss of their 'spirit landscape'. Pre-relocation trauma and post-relocation living difficulties as a result of limited social support services characterized the Volta River Resettlement Scheme.

The understandings of how people differently engage with the world around them and with the past are embedded in their landscape (Bender 2002). But as the resettled communities of Bui look back to old familiar but lost ancestral home landscapes and former ways of doing things it engendered the anxiety that the comforts of the past may be vanishing before their eyes due to the construction of the Bui Dam. However, the video documentary, which has been aired several times on all TV stations in Ghana served and continues to serve a useful purpose of not depriving the people of an intimate living history. The documentary serves as a tangible reminder of things they did in their former settlements, places they have been and views they have seen. The shrines and the ancestral graves that were relocated serve as physical legacies that embody their communal spirit and they ensure retention of traces of their past that safeguards their enduring identity.

It is refreshing that WCD advocates that cultural heritage impact assessments should be incorporated into at least two areas of the project development process. Primarily, as part of a *strategic impact assessment during the initial phases of planning and options*

assessment. A cultural heritage impact assessment ensures that the „cultural implications of all options are considered at an early stage in the planning“ (Lawrence 2005/2006, 254). The strategic impact assessment, in general, provides for timely recognition of the rights and assessment of the risks of all stakeholders for the purpose of screening out „inappropriate or unacceptable projects at an early stage“. However, at the time archaeologists were mandated to carry out the salvage exercise at the Bui Dam area two communities located at the Bui dam site had already been moved out without any cultural assessment of how their culture can be remembered. If cultural heritage impact assessment during the initial phase of dam projects can serve „as a criterion in selecting options and avoiding impacts“ then there would not be any wailings and lamentations during any dam induced relocation exercise as was witnessed during Bui Dam relocation exercise.

References

- Adams 1985: W. M. Adams, The Downstream Impacts of Dam Construction: A Case Study from Nigeria. *Transactions of the Institute of British Geographers* 10/3, 1985, 292–302.
- Apoh/Gavua 2016: W. Apoh/K. Gavua, „We Will Not Relocate Until Our Ancestors and Shrines Come with Us“. *Heritage and Conflict Management in the Bui Dam Project Area, Ghana*. In: P. Schmidt/I. Pikirayi (Eds.), *Community Archaeology and Heritage in Africa: Decolonizing Practice*. New York: Routledge 2016, 204–223.
- Asif 2000: M. Asif, Why Displaced Persons Reject Project Resettlement Colonies. *Economic and Political Weekly* 35/24, 2000, 2005–2008.
- Asthana 1996: R. Asthana, Involuntary Resettlement: Survey of International Experience. *Economic and Political Weekly* 31/24, 1996, 1468–1475.
- Bender 2002: B. Bender, Time and Landscape. *Current Anthropology* 43, 2002, 103–112.
- Brand/Hassan 2000: S. A. Brandt/F. Hassan (Eds.), *World Commission on Dams: Working Paper „Dams and Cultural Heritage Management“*. Cape Town: World Commission on Dams Secretariat 2000.
- Cernea 1996: M. M. Cernea, Public Policy Responses to Development-Induced Population Displacements. *Economic and Political Weekly* 31/24, 1996, 1515–1523.
- Cernea 1999: M. M. Cernea, Why Economic Analysis Is Essential to Resettlement: A Sociologist's View. 34/31, 1999, 2149–2158.
- Cernea 2000: M. M. Cernea, Risks, Safeguards and Reconstruction: A Model for Population Displacement and Resettlement. *Economic and Political Weekly* 35/41, 2000, 3659–3678.
- Colson 1971: E. Colson, *The Social Consequences of Resettlement: The Impact of the Kariba Resettlement Upon the Gwembe Tonga*. Manchester: Manchester University Press 1971.
- Croll 1999: E. J. Croll, Involuntary Resettlement in Rural China: The Local View. *The China Quarterly* 158, 1999, 468–483.
- David/Kremer 2001: N. David/C. Kremer, *Ethnoarchaeology in Action*. Cambridge: Cambridge University Press 2001.
- Diaw/Schmidt-Kaller 1990: K. Diaw/E. Schmidt-Kaller, *Effects of Volta Lake resettlement in Ghana: A Reappraisal after 25 Years*. Hamburg: Institut für Afrika-Kunde im Verbund der Stiftung Deutsches Übersee-Institut 1990.
- Diop/Diedhiou 2009: M. D. Diop/C. M. Diedhiou, Sharing the Benefits of Large Dams in West Africa: The Case of Displaced People. *The Global Water Initiative* 2009, 1–39.

- Duflo/Pande 2007: E. Duflo/R. Pande, Dams. *The Quarterly Journal of Economics* 122/2, 2007, 601–646.
- Freeman 1974: P. Freeman, *The Environmental Impact of a Large Tropical Reservoir; Guidelines for Impact Assessment Based Upon a Case Study of Lake Volta, Ghana in 1973 and 1974*. Washington, D.C: Smithsonian Institute 1974.
- Fricke 1978: W. Fricke, Man-Made Lakes in Africa – Their Benefits and Problems. *GeoJournal* 2/4, 1978, 382–385.
- Gachuruzi 2000: S. Gachuruzi, Large Dams and the Destruction of Cultural Heritage in Africa. In: S. A. Brandt/F. Hassan (Eds.), *World Commission on Dams: Working Paper „Dams and Cultural Heritage Management“*. Cape Town: World Commission on Dams Secretariat 2000, 25–26.
- Garikipati 2002: S. Garikipati, Resettlement Sites of Narmada Valley Project: Some Revealing Insights. *Economic and Political Weekly* 37/23, 2002, 2257–2266.
- Gavua/Apoh 2011: K. Gavua/W. Apoh, *Report on Salvage Archaeology at the Bui Dam Project Site*. Accra: Report prepared for Bui Power Authority 2011.
- Goulet 2005: D. Goulet, Global Governance, Dam Conflicts, and Participation. *Human Rights Quarterly* 27/3, 2005, 881–907.
- Goyal 1996: S. Goyal, Economic Perspectives on Resettlement and Rehabilitation. *Economic and Political Weekly* 31/24, 1996, 1461–1467.
- Hafsaas-Tsakos 2011: H. Hafsaas-Tsakos, Ethical Implications of Salvage Archaeology and Dam Building: The Clash Between Archaeologists and Local People in Dar Al-Manasir, Sudan. *Journal of Social Archaeology* 11/1, 2011, 49–76.
- Heming et al. 2001: L. Heming/P. Waley/P. Rees, Reservoir Resettlement in China: Past Experience and the Three Gorges Dam. *The Geographical Journal* 167/3, 2001, 195–212.
- Komurcu 2002: M. Komurcu, Cultural Heritage Endangered by Large Dams and its Protection Under International Law. *Wisconsin International Law Journal* 20/2, 2002, 233–296.
- Kuwanwisiwma 2008: L. J. Kuwanwisiwma, Collaboration Means Equality, Respect, and Reciprocity: Conversation About Archaeology and the Hopi Tribe. In: C. Colwell-Chanthaphonh/T. J. Ferguson (Eds.), *Collaboration in Archaeological Practice: Engaging Descendant Communities*. Lanham, MD: AltaMira Press 2008, 151–170.
- Lawrence 2006: M. P. Lawrence, Damming Rivers, Damning Cultures. *American Indian Law Review* 30/1, 2005/2006, 247–289.
- Lawson 1982: M. L. Lawson, *Dammed Indians: The Pick-Sloan Plan and the Missouri River Sioux, 1944–1980*. Oklahoma: University of Oklahoma Press 1982.
- Marquardt 1994: W. H. Marquardt, The Role of Archaeology in Raising Environmental Consciousness: An Example from Southwest Florida. In: C. L. Crumley (Ed.), *Historical Ecology: Cultural Knowledge and Changing Landscapes*. Santa Fe, NM: School of American Research Press 1994.
- McCully 1996: P. McCully, *Silenced Rivers: The Ecology and Politics of Large Dams*. London: Zed Books 1996.
- Meskell 2002: L. Meskell, The Intersections of Identity and Politics in Archaeology. *Annual Review of Anthropology* 31, 2002, 279–301.
- Modi 2009: R. Modi, Resettlement and Rehabilitation in Urban Centres. *Economic and Political Weekly* 44/6, 2009, 20–22.
- Mohanty 2005: B. Mohanty, Displacement and Rehabilitation of Tribals. *Economic and Political Weekly* 40/13, 2005, 1318–1320.
- Namy 2007: S. Namy, Addressing the Social Impacts of Large Hydropower Dams. *The Journal of International Policy Solutions* 7, 2007, 11–17.

- Obeng 1977: L. Obeng, Should Dams Be Built? The Volta Lake Example. *Ambio* 6/1, 1977, 46–50.
- Poff/Hart 2002: N. L. Poff/D. D. Hart, How Dams Vary and Why It Matters for the Emerging Science of Dam Removal. *Bioscience* (American Institute of Biological Sciences) 52/8, 2002, 659–668.
- Posnansky 2003: M. Posnansky, The Volta Basin Research Project in Ghana 1963–70 and other West African Dam Projects-Learning From Experience. In: F. A. Hassan/S. A. Brandt (Eds.), *Damming the Past: Dams and Cultural Heritage Management*. Lanham, MD: Lexington Books 2003.
- Rogers/Wang 2006: S. Rogers/M. Wang, Environmental Resettlement and Social Dis/Re-articulation in Inner Mongolia, China. *Population and Environment* 28/1, 2006, 41–68.
- Rosenberg et al. 2000: D. M. Rosenberg/P. McCully/C. M. Pringle, Environmental Effects of Hydrological Alterations. *Bioscience* (American Institute of Biological Sciences) 50/9, 2000, 746–751.
- Schmidt 2000: P. R. Schmidt, Human Rights, Culture, and Dams: A New Global Perspective. In: S. A. Brandt/F. Hassan (Eds.), *World Commission on Dams: Working Paper „Dams and Cultural Heritage Management“*. Cape Town: World Commission on Dams Secretariat 2000, 13–14.
- Schmidt 2010: P. R. Schmidt, Social Memory and Trauma in Northwestern Tanzania: Organic, Spontaneous Community Collaboration. *Journal of Social Archaeology* 10/2, 2010, 255–279.
- Scudder 1976: T. Scudder, Social Impacts of Integrated River Basin Development on Local Population. In: I. Budapest (Ed.), *River Basin Development: Politics and Planning* (Proceedings of the United Nations Interregional Seminar on River Basin and Inter basin Development). Delft: Institute for Hydraulic Documentation and Education 1976, 204–223.
- Scudder 1989: T. Scudder, Conservation vs. Development: River Basin Projects in Africa. *Environment: Science and Policy for Sustainable Development* 31/2, 1989, 4–32.
- Scudder 1993: T. Scudder, Development-induced Relocation and Refugee Studies: 37 Years of Change and Continuity among Zambia's Gwembe Tonga. *Journal of Refugee Studies* 6/2, 1993, 123–152.
- Scudder 2005: T. Scudder, *The Future of Large Dams: Dealing with Social, Environmental, Institutional and Political Cost*. London: Earthscan 2005.
- Shoup 2006: D. Shoup, Can Archaeology Build a Dam? Sites and Politics in Turkey's Southeast Anatolia Project. *Journal of Mediterranean Archaeology* 19/2, 2006, 231–258.
- Silliman/Ferguson 2010: S. Silliman/T. I. Ferguson, Consultation and Collaboration with Descendant Communities. In: W. Ashmore/D. T. Lipert/B. J. Mills (Eds.), *Voices in American Archaeology*. Washington, D. C.: The SAA Press 2010, 48–72.
- Sukhan/Sleigh 2000: J. Sukhan/A. Sleigh, Resettlement for China's Three Gorges Dam: Socio-Economic Impact and Institutional Tensions. *Communist and Post-Communist Studies* 33, 2000, 223–241.
- Tan/Yao 2006: Y. Tan/F. Yao, Three Gorges Project: Effects of Resettlement on the Environment in the Reservoir Area and Countermeasures. *Population and Environment* 27/4, 2006, 351–371.
- Thomas/Adams 1997: D. H. L. Thomas/W. M. Adams, Space, Time and Sustainability in the Hadejia-Jama'Are Wetlands and the Komodugu Yobe Basin, Nigeria. *Transactions of the Institute of British Geographers* 22/4, 1997, 430–449.

Thomas 2002: K. J. A. Thomas, Development Projects and Involuntary Population Displacement: The World Bank's Attempt to Correct Past Failures. *Population Research and Policy Review* 22/4, 2002, 339–349.

WCD Report 2000: World Commission on Dams (WCD), Dams and Development: A New Framework for Decision-Making (Vol. Final Report). London: Earthscan 2000.

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