

The Lesotho Highlands Water Project and Sustainable Livelihoods

Policy Implications for SADC

Vusi Mashinini

Dams have become an increasingly contested terrain in development discourse, prompting the United Nations (UN) to establish the World Commission on Dams (WCD) and adopt its Report in 2000. The bone of contention is whether dams promote or hinder sustainable development and livelihoods of the dam impacted areas and communities; and what needs to be done as mitigation of the dam impacts.

This paper uses desktop methodology to explore the experiences of the Lesotho Highlands Water Project (LHWP) on sustainable livelihoods of its dam impacted areas and communities, and suggests policy implications for sustainable development in the Southern African Development Community (SADC). The paper concludes that the project failed to promote sustainable livelihoods in the dam impacted areas and communities, and proposes that SADC member states should not only make dam policies but enforce them, in order to guarantee that dam impacted areas and communities have better livelihoods.

Introduction

Shortly after conducting a coup d'état in 1986, the military government in Lesotho unilaterally signed the Lesotho Highlands Water Treaty (LHWT) of 1986 with the then apartheid ruled Republic of South Africa (RSA). Central to this treaty was the agreement that Lesotho would sell water from its mountain areas to the then RSA in return for

financial gain. This treaty and the LHWP, which it proposed, were to create profound economic, environmental, social and political ramifications in Lesotho, and between Lesotho and South Africa. Since its conception and inception, up until today, the LHWP has remained a controversial and heatedly debated development project in Lesotho.¹

On its part, the government of Lesotho has relentlessly maintained that the LHWP is the key

Vusi Mashinini is an Associate Professor in the Department of Geography and Environmental Science at the National University of Lesotho.

to Lesotho's economic development. The Sixth National Development Plan, for instance, argues that since the beginning of its implementation, the LHWP has contributed about 75% of the total investment of the country annually.² However, some analysts have also relentlessly demonstrated the disastrous impacts of the LHWP on Lesotho's economic, social, environmental and political landscapes for sustainable development and livelihoods.³

This paper examines some of the different ways in which Phase IA and B of the LHWP impacted on the livelihoods of the communities in Lesotho, and how these impacts have policy implications for sustainable development and livelihoods for SADC member states. The paper is divided into five sections: section one is the introduction; section two presents a conceptual overview on dams and sustainable development and livelihoods; section three presents the impacts of the LHWP on communities and their livelihoods; section four is a critical interrogation of the impacts of the LHWP and their policy implications for sustainable development for SADC member states; and section five provides the conclusion.

Dams and Sustainable Development and Livelihoods: A Conceptual Overview

Since the release of the Report of the WCD in 2000,⁴ dams and their impact on sustainable development and livelihoods have become a highly contested terrain in development discourses and practice. Protagonists for the construction of dams argue that they facilitate the provision of water for domestic and industrial use; irrigation for sustainable agriculture; generation of hydro-electricity; the creation of infrastructure and employment; the improvement of the accessibility of the regions where the big dams are constructed; the promotion of eco-tourism through fishing, canoeing and sight-seeing; and enable the sale of water to thirsty regions and communities within and outside the national boundaries, all of which are considered a big boost to local and national government revenues and incomes.

Antagonists, on the other hand, challenge the usefulness of dams for sustainable development and livelihoods by pointing out the problems that they bring about, such as involuntary resettlement; loss of land for food and livestock production; loss of housing and related property; loss of social and physical infrastructure; loss of bio-diversity; promotion of seismic activity and changes in the

local environment; and loss of social morality and social networks, all of which disrupt the lives and livelihoods of the dam impacted communities and subject them to risks and high vulnerability for sustainable livelihoods.

Sustainable development as used in this paper and debate is understood to refer to development that meets today's needs without sacrificing those of future generations. It is further understood to be composed of the economic, financial, social, environmental and political facets. Sustainable livelihoods is itself understood to refer to the ability of the present generations to effect their access to basic needs and entitlements efficiently and sufficiently from their livelihood web, now and in future, without jeopardising the ability of future generations to do so. It entails the ability to minimise shocks, stresses and vulnerabilities, and convert assets into positive livelihood outcomes.⁵

Within the context of SADC, the SADC Water Policy of 2005 provides the policy framework for the regulation of dams and development in the region. Section 8.5 of the SADC Water Policy is on dams and development. Sub-section 8.5.1 is the first policy on dams and development and it focuses on the need to identify positive and negative aspects of dam projects, and recommends that SADC member states should adopt integrated water resource management as the strategy for the harmonisation of the positive and negative aspects. Sub-section 8.5.2 is on community participation and the need for full involvement in all aspects of dam projects by all the multiple stakeholders so as to promote full ownership. Sub-section 8.5.3 discusses issues of upstream and downstream impacts of dam projects, and argues that special care is needed to ensure that the latter are not negatively impacted.

Section 8.6 is on affected communities by the dam projects. Sub-section 8.6 is a policy statement that emphasises the need for member states to put the proper legislation in place to ensure that there is correct compensation of the affected communities, such that they are not left worse off than before the project.⁶

In order to ensure that this SADC water policy becomes more articulate on specific dam policy issues that need to be adhered to by member states as they promote the development of dams, reviews of country experiences are necessary as a starting point to provide lessons of experience for SADC policy consideration. This paper attempts to provide an overview of one such experience, with respect to the LHWP.

Impacts of the LHWP on Sustainable Development and Livelihoods

The major objective of the LHWP is to assist Lesotho to harness its mountain water resources in order to sell the water to the Gauteng Province, which is the industrial heartland of South Africa. Minor objectives of the LHWP are to assist Lesotho to generate its own hydro-electricity from the 'Muela Dam in the Butha-Buthe district; to provide water for irrigation; to generate national income for Lesotho through the water royalties and taxation on imports related to the project; to generate employment for Basotho; and to boost infrastructure and tourism.⁷

Implementation of the LHWP takes place in four phases. Phase 1 was divided into two sub-phases in which Phase 1A was composed of the construction of the Katse and the 'Muela dams from 1987 to 1997. Phase 1B consisted of the construction of the Mohale Dam and started in 1997. Phases II, III and IV will be the construction of Mashai, Tsoelike and Ntoahae dams respectively. Delivery of water to South Africa started in January 1998. The funding of all costs of the LHWP was borne by South Africa, except the cost of hydro-electric power generation at the 'Muela dam, which was paid for by the Lesotho government. The international community supported both Lesotho and South Africa differently to meet their financial obligations to the project.⁸

The administration of the LHWP is the responsibility of four institutions. In South Africa, the LHWP is administered by the Department of Water Affairs and Forestry, and the Trans-Caledon Tunnel Authority (TCTA), whilst in Lesotho it is administered by the Lesotho Highlands Development Authority (LHDA). The Joint Permanent Technical Commission (JPTC), which was later called the Lesotho Highlands Commission (LHC), in which both countries are equally represented, was the supreme body that oversaw the entire administration of the LHWP.

The LHWP has had tremendous economic, social, environmental, infrastructural and political impacts on the livelihoods of the communities living in and around the dam areas. In the case of positive impacts, the following were achieved. The LHWP Treaty is valid for 50 years from 1986, when it was signed, to 2044, and during that time it remains mandatory to Lesotho and South Africa. The LHWP itself is designed to take 30 years, as of 1986. At the time of writing, only Phase 1A and B are complete. Moreover, although the quantitative data used in this paper are mainly extracted from LHDA reports, it should be treated as indicative

rather than exhaustive because there is a forest of hard data on the LHWP and most of it is unreliable because different sources mention different figures on achievements.⁹

In terms of economic impacts, the LHWP generated US\$55 million per annum for Phase 1A, which was equal to 25% of Lesotho's annual export revenue and 3-5% of its Gross Domestic Product (GDP). The project accounted for 18% of import tax revenue; a 10-14% annual growth rate of the economy; 14% of government revenue; about 3-5% of capital development projects; and some R134 million investment into the Lesotho Development Fund responsible for community development projects throughout the country. Croucamp estimates that the LHWP multiplier on GDP in 1994 was 0.530, while the multiplier on household consumption was 0.201 in 1994, and was expected to rise to 0.596 in the year 2002.

The impact of the LHWP on employment generation was estimated at more than 7 000 jobs for Basotho in construction activities of Phase 1A, and approximately R380-R400 million in income. The contracts won by Basotho in the project were worth about R87 million, some 8% of all consultancies in Phase 1A of the project. A more moderate employment estimate of

4 000 rough labourers in Phase 1A is provided by Hoover. Ramaili and Cloete provide an estimate of 9 000 jobs, of which 40% was held by people from the adjacent highlands communities between 1998 and 2004, worth an income of R630 million provided by the LHWP Phase 1B Mohale dam.¹⁰

Another important impact was on infrastructure promoted through the Lesotho Highlands Water Development Fund (LHWDF), which received R40 million per annum for community development projects throughout Lesotho. This infrastructure development in Phase 1A consisted of 1 040 km of rural roads, three road bridges, 30 footbridges, 208 water ponds, ten water diversion canals, ten gully reclamation projects, two clinics, one market place, 20 soil conservation programmes, and 32 328 trees planted. Further infrastructure development was achieved through the creation of a 100 km tarred north access road from Pitseng to Katse dam, and a 63 km road from Katse village to Thaba-Tseka town. In Phase 1B, Ramaili and Cloete argue that some of the infrastructure development achieved in 2005 included, inter alia, 56 water systems out of a total of 106 proposed; 1 862 VIP latrines out of 2 505 proposed; 1 719 soak aways out of 2 505 planned; and 1 048 refuse disposals out of 2 501 planned. There were also feeder roads and bridges linking the Mohale dam communities; the Maseru by-pass;

and the mountain road to Mohale. Water systems improved access to safe drinking water supplies, sanitation improved environmental health, and the roads increased accessibility of and within the Mohale dam mountain communities.¹¹

The LHWP also had direct negative impacts on the communities living in the mountain areas. The project had, however, developed a compensation scheme for all categories of assets affected. During Phase 1A, the Katse and 'Muela dams led to the loss of about 1 900 hectares of arable land jointly, which affected some 2 345 households; while, during Phase 1B, the Mohale dam added a further loss of about 1 000 hectares of arable land, which affected 1 000 households. The lost grazing land as a result of Katse, 'Muela, and Mohale was 5 000 hectares jointly. Other losses during Phase 1A were 3 000 trees and 17 hectares of garden land. Maize and pulses were mainly given out as compensation for lost arable land during Phase 1A, while cash could be considered during Phase 1B. The criterion used was to give out 970 kg of maize and 30 kg of pulses for every hectare of arable land lost each year for 15 years. Compensation for lost grazing land was calculated on the basis of the provision of 560 kg of fodder for every hectare of grazing land lost. Lost garden land was compensated with cash amounting to R5.44 per square metre. In terms of lost trees, five seedlings and R1.30 for every fruit tree was provided for 15 years whilst, in the case of non-fruit trees, five seedlings and R65 were provided.¹²

The LHWP also impacted on the mountain communities through the loss of their houses and homes, and the subsequent need for their resettlement. Twenty-five households were resettled compulsorily, while 46 households opted for voluntary resettlement. All the 71 resettled households lost property in the process, composed of 40 hectares of arable land, 2.15 hectares of garden land, 0.03 hectares of stables, 0.25 hectares of kraals, 450 trees, and 110 graves. Estimates are also that, between 1988 and 1996, a total of 152 villages at Katse and 'Muela lost some 16.5 hectares of garden land and were given R799,173 as cash compensation. Moreover, 1 872 households lost some 89 hectares of arable land, less than 1 000 m² in the same period. These households were given R558,404 as cash compensation. In terms of resettlement, 150 new houses were constructed for 87 households in 32 villages affected in the same period. About R8,665,999 was used to effect the construction. More than R53,770 was used as compensation for the loss of kraals, stables, toilets and fencing by some households between 1988 and 1996. Some 239 households were affected by

the construction of high tension electricity lines in 1990/91, and had to be resettled. At the end of Phase 1A, 200 houses had been built to resettle the affected households. In the case of Phase 1B, the Mohale dam resulted in the resettlement of an estimated 510 households. The LHWP failed to provide land for land compensation for all the resettled households, and thus promoted household food insecurity among them. Moreover, other losses were access to alternative income sources such as dagga, medicinal plants and social networks.¹³

The impact of the LHWP extended to other areas of public concern in the communities, such as health, education and communal natural resources. The Rural Development Programme (RDP) coordinated mitigating programmes on these impacts. With regard to health, there was a widespread prevalence of Sexually Transmitted Diseases (STDs) and an increased likelihood of HIV/AIDS in the communities since the project started. In Phase 1A, the LHDA had a health unit which ran a network of clinics to provide primary health care to the mountain communities and a trauma unit based at Hlotse while, during Phase 1B, there was a hospital built at Mohale and some clinics as well. Education and training were encouraged and promoted by the RDP through the provision of training by the Thaba-Tseka Technical Institute. LHDA estimated that from 1988-1996, the institute had trained 157 participants in basic literacy, 75 on brick making and laying, 43 on sewing, 31 on knitting, 39 on weaving, 67 on poultry, and 69 on village water minding. During Phase 1B, estimates are that up to 2005 there were 17 schools upgraded and two newly built at Mohale.

The Environment Unit coordinated programmes on natural resource management, such as in the area of archeology, paleontology, flora and fauna, and integrated catchment management. It promoted sustainability by prohibiting the communities from further use of these resources and making efforts to rehabilitate the few remaining ones.

Another issue of importance relates to the negative impact of the LHWP on local politics, administration and governance. Before the advent of the LHWP, the chiefs and the lekhotla elders played an important governance role in the communities. However, their power and rule of law within the communities and natural resources governance were tremendously damaged by the introduction of new structures. This led to lawlessness and poor governance of natural resources after the project when the new structures failed to become sustainable.¹⁴

Critical Discussion and Policy Implications for Sustainable Development in SADC Member States

According to the LHDA, the LHWP is heralded as “a world-class project in terms of its scale of planning and its scope of activities.” However, controversies, tensions and conflicts surround the LHWP and its activities. While wide consultations were held with the riparian states of Namibia and South Africa, including the then Liberation movements, South West Africa People’s Organisation (SWAPO), African National Congress (ANC), and Pan African Congress (PAC), no such consultations were done with the Basotho nation. Instead, the then military government took a unilateral decision on the matter and subsequently imposed it onto Basotho by force. This totalitarian approach denied Basotho the right to express their opinions on the LHWP and the fate of their mountain water resources – *the white gold*, as the water resources are fondly referred to by the Basotho. The result was disapproval of the LHWP by Basotho which caused controversy, tension and conflict between them and the military government. This resulted in lack of popular support of the LHWP by the Basotho and the communities which were to be affected right from the onset. For example, the government ruthlessly stamped out a demonstration by university students against the signing and celebrations of the LHWT in 1986 and, after that, it became the normative practice of government to whip, maim, batter and kill any serious participants in contestations and conflicts within and around the LHWP, be it workers, civilians and, in the infamous massacre of the Lesotho Defense Force (LDF), members on patrol guard of the Katse dam by the SADC forces in the post 1998 electoral contestations in Lesotho.¹⁵

With regard to the mountain communities which were directly affected by the LHWP, little prior consultations were made to tell the communities that the government had decided to embark on the LHWP and they were expected to be cooperative. The chiefs of the communities too were treated similarly and, therefore, uninformed as their communities about the details on the LHWP. The lack of knowledge and information were compounded by the secrecy and lack of community participation in matters pertaining to the LHWP in Lesotho during the military rule and apartheid rule in the RSA; and the lack of field personnel of the LHDA among the mountain communities, especially during the early days of Phase 1A. As a result, controversy and tension arose because the communities did not like the introduction of changes in their midst about which they knew very little and which they belatedly recognised would destabilise their long established livelihood systems. Moreover,

the mountain communities had very little trust of the government and the people ‘from Lesotho’ (meaning people from the lowlands), whom they suspected of being too ready to sell out on them. Their protests were met with force by the government and the LHWP was implemented amidst contained public resentment. As Moeti argues “who would be bold enough to constructively criticise the project in a country that was ruled with an AK 47? The political climate surrounding the planning and implementation of the LHWP certainly did not favour community participation in the process.”¹⁶

Later, the LHDA attempted to rectify the information and consultation problem within the communities through the creation of regional offices at ‘Muela, Katse and Mohale operation areas, and also through the formation and use of field operations staff called Community Liaison Officers and Community Participation Officers. The former are elected from the communities and are meant to represent their views in the LHDA management, while the latter are direct lower level employees of the LHDA. While the LHDA commends the use of these two field cadres for enabling community participation in the project, the TRC, however, criticises this approach for its failure to involve the communities at higher level decision-making and, therefore, only promoting partial instead of full community participation in the project.¹⁷

A policy implication and challenge for sustainable development in SADC member states is how to ensure that public participation is successfully and peacefully done in the conceptualisation and planning, long before implementation of dam projects. This process would need to go beyond public consultation only, but it would entail doing a full ‘buy-in’ process of the project idea from its inception stage, continue through the design, planning, implementation and post project evaluation phases in order to solicit and promote public ownership.

In the case of royalties gained by Lesotho annually through sales of the water to South Africa, controversies abound concerning lack of transparency in the use of the monies by the government. There is no clear statement to the public on how this is used other than to refer to payment for free primary education and old age pensions. The irony is that these programmes are also known to be supported by some donors. Meanwhile, poverty continues unabated despite this large sum of royalties. As observed by Hoover, “Lesotho currently receives approximately \$25 million annually in royalties from the project. Yet, the country’s rural poor have benefited little from this windfall. Lesotho still has one of the top ten greatest income

disparities in the world, and socio-economic data from the LHWP-affected areas suggest that they have not done any better than other parts of the mountains, where levels of poverty remain high.”¹⁸ A closely related problem is that the LHWP involved the participation of multiple companies and people, some of which resorted to the use of corruption in their service delivery, with negative impacts for sustainable service delivery and good governance.

A policy implication and challenge for SADC member states is how to ensure that there is transparency, public accountability and more impact commitment of royalties gained from water projects to promote poverty reduction and sustainable livelihoods, especially for the poor and the more directly project impacted areas. This would reduce possibilities of corruption and financial mismanagement of the royalties. Another challenge is how to ensure that the royalties from dam water are re-invested in the national economy in a manner that would generate multiplier effects for sustainable development. Concerning how to deal with corruption on dams and development, SADC member states might want to learn from Lesotho’s experience, which is now widely applauded by the world to handle this issue.

Yet another area of controversy and tension around the LHWP concerns the questions of who controls the project? According to the Treaty, the LHWP is controlled by the LHDA under the supreme guard of the JPTC. Concern has been expressed by some Basotho that the equal representation of both Lesotho and South Africa in the JPTC undermines Lesotho’s sovereignty, self-determination and right of control and decision-making on the project which deals with its own water resources. Instead, it empowers South Africa to share this right with Lesotho, which should not happen since South Africa is a mere buyer of the water. It is feared that this position enables South Africa to exercise leverage over Lesotho because of its might. This tension and controversy over who controls the LHWP reached its peak in September 1998 when the South African National Defense Force (SANDF), purportedly acting on behalf of SADC, massacred 17 LDF members in their sleep, while on duty to provide security of the Katse dam, and continued to stay there until their withdrawal at the end of May 2000. The SANDF’s attack and continued stay at Katse dam is thought, by some analysts, to have been in the interests of South Africa rather than peacekeeping in Lesotho because there were no political riots in 1998 at Katse dam. Neither were the massacred LDF members committing mutiny, like some of their counterparts in Maseru. More

controversy, tension and conflict on this issue were fuelled by the demand for the compensation of the LDF soldiers massacred by the SANDF at Katse dam by their families from the government of Lesotho.¹⁹

The policy implication that arises from this issue for sustainable development in SADC member states is how to depoliticise dam related projects in the interests of public accountability and acceptability.

A further issue of discontent is in whose interests the LHWP operates. The fact that all the water from the LHWP is transferred to South Africa in accordance with the Treaty, leaving Basotho thirsty and without access to its use for irrigation, is pointed out as a weakness and impediment to sustainable livelihoods of the Basotho. This has prompted the Lesotho government to undertake the alternative Lesotho Lowlands Water Supply Scheme at high cost to supply water for domestic and industrial uses.

The policy implication for sustainable development among SADC member states is how to ensure that dam projects serve multiple purposes rather than serve limited objectives. This would help to minimise the need for alternative complementary water projects at equally high costs, and maximise the multiple gains and expectations of the communities involved. It would also ensure that other livelihood strategies, such as irrigated agriculture, are linked to the dam projects to boost the livelihoods of the impacted communities and areas, unlike in the case of the LHWP, where this is not the case.

As far as employment and income generation are concerned, their positive impacts on sustainable development and livelihoods are undermined by the poor backward and forward linkages that the dam has with the local economies in the regions, and the weak multiplier effects that result from this situation, except for home brews, dagga and prostitution, all of which were also limited to the construction phase mostly. The dams have failed to be integrated into the local economies but continue to be nested in and service external economies and consumers. This is aggravated by the failure of the rural development programme of the LHWP, which mainly focused on the rural economy independently instead of forging its links with the dam as an integrated rural development programme. For instance, all forms of irrigated agriculture by the communities using water from the dam are excluded and forbidden; and fishing is highly regulated and inaccessible to small fishermen. Even the tourism business in the area remains externally driven and oriented, with very

poor community participation in the supply of inputs, decision-making and planning. The challenge for the government and the LHDA remains how to link the dam to local economies to generate regional economic linkages and multiplier effects for sustainable development and livelihoods in the LHWP impacted areas, and promote community participation.²⁰

A policy implication for sustainable development in SADC states arising from employment and income generation issues raised here is that, unless carefully planned, dams often remain white elephants with respect to the livelihoods of the communities in the areas where they have been built. Therefore, deliberate policies have to be put in place and implemented to link the dams into the local livelihood web of the impacted communities in order to make a positive impact on their sustainable development and livelihoods.

In the case of infrastructure development, while the successes are noted there remains the challenge of lack of access to adequate basic services within the communities affected by the Katse, 'Muela and Mohale dams. This is partly caused by the disturbances to crossing points formerly used by the communities to go to basic service points and effect social networks, and whose replacement has been through new points that are few and far apart. This has reduced access to basic service points and relatives and friends, affecting social networks deemed necessary for social safety nets among the communities now divided by the dams. On the other hand, it would appear that the assumption was that the supply of these services would be largely private sector driven. While this was so during the construction phase, which brought economic boom to these regions and, therefore, attracted private entrepreneurs, most of these private sector service providers left when the construction phase came to an end, resulting in economic doom in the regions. The challenge for the government of Lesotho is that it should step in and use part of the royalties to improve sustainable service delivery in the LHWP impacted mountain areas.

The implications for sustainable development for SADC member states that arise from these infrastructure and service provision issues are that any crossings that are disturbed by dams need to be re-instated after construction in order to bring back social flows and networks among the communities on either side of the dam. Moreover, the paradigm of private sector led infrastructure and service provision to dam impacted communities needs to be carefully re-considered in the region. Instead, governments have to intervene

and plough back part of the royalties gained into the dam impacted communities for infrastructure maintenance and sustainable service provision, in order to minimise the incidence of the areas' collapse into being downward transitional regions at post dam construction phase.

With regard to education and training, the schools facilities built have indeed brought this service closer to the communities and enabled them to benefit better from the policy of free basic education pursued by the government since 2000. However, the Thaba-Tseka Technical Institute continues to operate using a modified syllabus since 2002.²¹ Therefore, the challenge for the government remains how to keep the doors of the Institute open for learning and training to more students through funding, which is a continuous process in the facilitation of sustainable livelihoods, especially in the empowerment of the youth.

The policy implication for sustainable development in SADC member states arising from education and training issues is how to ensure that education and training facilities are made to provide sustainable and continuous service to the dam impacted communities, so as to empower them through skills and knowledge for sustainable development.

In the case of health, the dam impacted areas have retained a high scourge of STDs and HIV/AIDS during and after the dam construction phases.²² Therefore, on these issues, the policy implications for SADC are how to protect dam impacted communities from imported diseases brought about by dam operations and immigrant workers. In cases where these diseases might have slipped through into the impacted communities, what policies and strategies do government and its development partners put in place to facilitate coping mechanisms of the communities against them?

Concerning impacts due to resettlement of households due to Katse, 'Muela and Mohale dams, it is noted that the resettlement programme was a failure as far as reconstruction of the livelihoods of the resettled communities and households were concerned. Studies confirm that households are in a worse state than they were before resettlement. They have lost food, security, access to income sources, free communal resources, adequate housing, social networks, and 'ubuntu' rooted in the spiritual and ancestral connection that re-settlers had with their homesteads, all of which were formerly used as coping and survival strategies in their livelihood web and are now exposed to risk and uncertainties of a new life and hostile environments, which have promoted their vulnerability.²³

The policy implications for sustainable development in SADC member states that arise from the failed resettlement programme are that specific policies need to be made and implemented to ensure that dams should not result in loss of arable and range land, and thus promote food insecurity, as this is already a very serious problem in southern Africa. Moreover, alternative income sources, access to free communal resources, social networks, and 'ubuntu' need to be preserved by dam projects because they are coping support systems which can help the impacted communities face up to the risks and shocks, therefore reducing their vulnerabilities. In order for this to become successful, the resettlement and compensation programmes need to be a product of full participation of the communities affected. The dam authorities in SADC member states should have transparency and full commitment to its implementation, and must work hand in glove with the communities, government and civil society through networking and co-management for sustainable development and livelihoods.

Conclusion and Policy Recommendations for Sustainable Development in SADC

This paper concludes that the LHWP was successful in some cases and not so in others. Areas of success were in job creation; income generation; infrastructure development; social infrastructure; generation of hydro-electricity for non-Muela residents, especially Maseru; and sale of water to South Africa. The strongest failures were in the area of compensation of resettled communities. Lessons learned from the LHWP, which are identified as having implications for SADC member states and their policies on dams and sustainable livelihoods, are as follows:

- Community participation is necessary from conception, inception, planning and implementation of dams in order to ensure ownership by all stakeholders.
- Consensus building on likely impacts and mitigation via participatory Environmental Impact Assessments is needed so as to build dialogue and consensus on upstream and downstream impacts and their mitigation.
- De-politicisation of dam projects is important for consensus building and constructive engagement of all stakeholders without fear of possible political retribution by the state.
- It is necessary to integrate dams into the local economies by forging linkages and multiplier effects with the rest of the livelihood web of the dam impacted communities in order to ensure sustainable livelihoods of the impacted households.

- Policies must be made and enforced to make sure that dam construction for development should avoid negative impacts on agricultural land and food security.
- Range management policies are needed and must be enforced to ensure that negative dam impacts on rangeland are avoided because they have negative impacts on food self sufficiency and food security.
- Policies are needed to ensure that dam development projects should avoid negative impacts on the moral fibre, rule of law, social rubric and loss of social security.
- Environmental policies must be put in place and implemented with full political will to minimise loss of environmental security in the dam projects impacted areas.
- A hard and closer look at the temporal and inter generational aspects of compensation policies is mandatory so as to devise and implement policies that would make sure that the dam impacted communities are not left worse off today and in future than they were before dam projects.
- Specific policies are needed to ensure that dams do not precipitate conditions of helplessness, dependency and loss of the battle against poverty reduction in SADC states by fostering that the dams should promote the principles and practices of empowerment, multiple objectives and self reliance among the impacted communities using the dams as the development nexus.
- Policies to ensure that there is accountability and transparency in the financial management and governance of dam royalties are necessary to minimise corruption and promote the plough back of financial gains from the dams into the dam impacted communities and areas.
- SADC states need to ensure that local traditional governance is not displaced by 'modern' structures introduced by the dam projects because the former are known, 'established' and recognised over generations by the local communities, and they often act as the ambilical cord that links them with their livelihood web, as provided by their environment. This is necessary for the minimisation of the vulnerability context of the dam impacted communities.
- SADC states should ensure that there are policies to facilitate the participation of civil society and networking because they are crucial in order to promote advocacy for the project impacted communities and their participation in dams and sustainable development and livelihoods.

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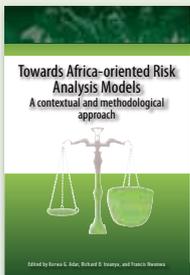
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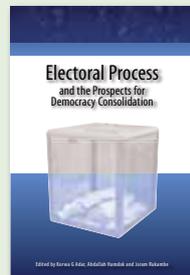
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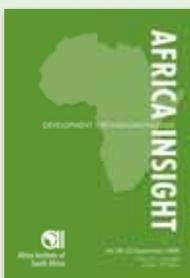
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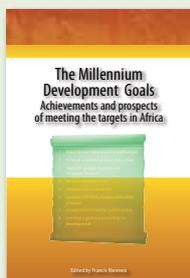
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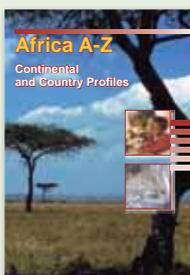
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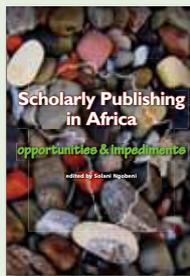
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