Pipe Dreams

The World Bank's Failed Efforts to Restore Lives and Livelihoods of Dam-Affected People in Lesotho

By Ryan Hoover





Map of Lesotho

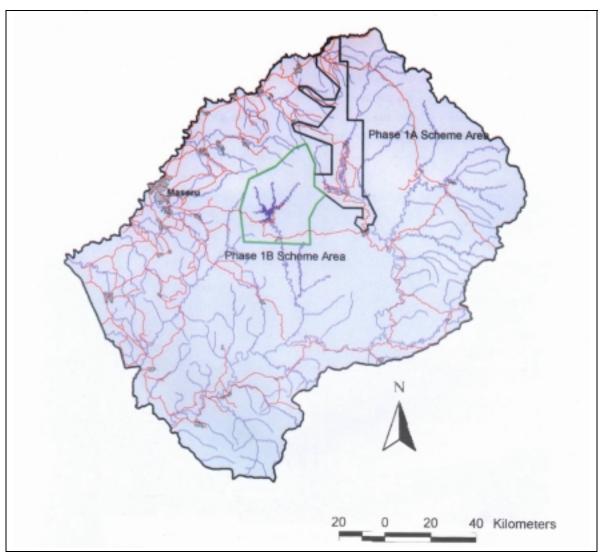




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Introduction

"A giant economic baby is in the process of being born."

M.M. Lebotsa, Minister of Lesotho Highlands
Water and Energy Affairs

The Lesotho Highlands Water Project (LHWP) is the most massive infrastructure project ever constructed on the African continent. It involves six large dams, which, if completed, will transfer the equivalent of one swimming pool full of water every second (over 70 cubic meters) to South Africa's industrial center, Gauteng Province, and supply 72MW of hydroelectricity to Lesotho. Katse Dam, the first dam to be completed in the scheme, is the tallest dam in Africa at 186 meters – the size of a 52story building. The second completed dam, Muela, is 55 meters high, and is the only hydropower dam in the scheme. Currently, construction is well underway on Mohale Dam, which will be a looming 146 meters. The project also involves 260 kilometers of water delivery tunnels; hundreds of kilometers of access roads and bridges, electricity transmission lines, and large base camps for the thousands of laborers and foreign contractors working at the construction sites. Companies from at least nine different nations are involved in the project's construction. The World Bank and numerous other financial institutions from three different continents provided the more than US\$4 billion worth of financing that the LHWP has already required.

Ironically, this enormous project is being built in one of Africa's smallest countries. Lesotho is approximately the size of Belgium, and the project's dams have altered watersheds that account for over 40 percent of the country's total area.

Not only is Lesotho a small country, it is also one of the world's poorest. Lesotho is landlocked and totally enveloped by its large, economically powerful neighbor, South Africa. Its geographic position, combined with the relative dearth of natural resources within its borders and its long history as a South African labor reserve, make Lesotho almost completely economically dependent on South Africa. The country has one of the ten highest income disparities in the world, which means the majority of its 2.1 million citizens (called Basotho) subsist on far less than the GNP per capita of \$550 per year. In 1993, the wealthiest 10 percent of Basotho households enjoyed 44 percent of the national income whereas the poorest 40 percent of households survived on just 8 percent of the national income. Basotho mineworkers have in recent years been laid off from South African mines in droves, adding to already staggering unemployment rates, and the HIV/AIDS epidemic is driving down the 55-year average life expectancy.

Placed in this context, the economic impact of the multi-billion dollar LHWP is profound. In 1998, it accounted for 13.6 percent of the value of Lesotho's Gross Domestic Product (GDP). Over one third of all construction in the country is LHWP-related. Royalties from the project make up 27.8 percent of all Government revenue.² Some 4,000 Basotho got temporary jobs at the Katse

Dam construction site and hundreds more flocked to the area to service the workers as food vendors, shopkeepers, and prostitutes. A thousand more local people will work at Mohale Dam. The World Bank uses statistics like these to argue that the LHWP "provides the only source of development for Lesotho."

While the project has increased the fortunes of the nation's elite, the majority of Basotho were not able to cash in on the LHWP. Katse and Muela alone dispossessed nearly 20,000 people of land and resources, while Mohale will similarly affect approximately 7,000 more while displacing hundreds of households. In total, approximately 1.5 percent of Lesotho's citizenry is directly affected by the project. It weakened local economies and severely strained the social fabric of nearby villages. Despite a long-term compensation program, huge amounts of resources devoted to "rural development", and many good intentions, the welfare of affected people has been compromised – perhaps irrevocably.

Have the millions of dollars invested in compensation and development programs lent credence to proponents' claims that the LHWP is global "best practice" and "Africa's biggest ongoing success story," or is the scale of the impact so great that Highlands communities will never fully recover? This paper focuses on the current situation of the people who sacrificed so much to allow this "giant economic baby" to be born and describes the outcome of the efforts taken to prevent them from becoming victims of "development."

Expert opinion concerning large-scale resettlement projects posits that

successful resettlement requires sufficient political will, institutional capacity, and funding. All three of these elements are present in the LHWP scenario, but the restoration of livelihoods is undeniably far from being achieved. In fact, the World Bank itself even admitted that, "The results on the social side...are clearly distressing. Despite the fact that LHWP was prepared with professionals covering socio-economic and environmental issues which resulted in a high quality environmental action plan, despite professional advisers and close supervisions over the years, the production of resettlement plans and the satisfactory implementation of compensation and rural development programs have been dangerously delayed."⁵ The experience of the LHWP suggests that "best practice" may look good on paper, but is insufficient to prevent and offset significant harm to affected communities.

¹ World Bank, *Lesotho Poverty Assessment*, 1995, pp. iv-ix, 9.

² Sechaba Consultants, *Poverty & Livelihoods in Lesotho*, 1999, April 2000, p. 40.

³ World Bank, "Lesotho Highlands Water Project to Benefit Lesotho, South Africa," *World Bank News*, June 4, 1998, p. 3.

⁴ Trans-Caledon Tunnel Authority, *Lesotho Highlands Water Project*, Vol. 5, May 2000, p. 2.

⁵ World Bank, *LHWP Back to Office Report*, April 4, 1994, p. 4.

A Lesotho Snapshot

A walk through the streets of Lesotho's capital, Maseru, reveals the extent to which the Lesotho Highlands Water Project has become embedded in the daily life of Basotho. Scores of Toyota 4x4s ply the crowded streets, bearing the logo of the Lesotho Highlands Development Authority (LHDA), the parastatal charged with constructing the project. Bumper stickers proclaiming, "The Big Turn On! Lesotho Delivers Water To South Africa, 22 January 1998" adorn many private vehicles. Maseru professionals tote LHDA day planners. LHDA occupies space in the Lesotho Bank building, the post office, the Maseru Sun Hotel, and the Victoria Hotel. Basotho discuss the LHWP on the radio, debate it in the schools, and examine it in the courts. The LHDA public relations machine even extends into isolated Highlands communities. LHDA calendars full of glossy pictures of the project can be found in houses in the most remote villages. Men wearing "Highlands Water Venture" overalls and orange hard hats (obtained during stints of work at Katse Dam) plough the fields behind teams of straining oxen, and the ubiquitous white LHDA Toyotas zoom along unpaved mountain roads.

Lesotho's fledgling tourist industry often touts the Maloti Mountains as the "Roof of Africa." The rugged mountain range covers three quarters of the country and includes some peaks that reach higher than 3,300 meters. Temperatures in the Highlands frequently dip below zero degrees Celsius during the harsh winter nights. In addition to being home to tens of thousands of rural farmers and herders, this range supports fragile

ecosystems that, until the LHWP, were virtually roadless. The mountains are home to the threatened spiral aloe and scores of wildflower species. The endangered bearded vulture and a variety of other bird species roost in the steep gorges. Overhanging rock faces and caves shelter centuries-old San wall paintings.

Herds of cattle, sheep, and goats graze high up on the slopes under the mostly watchful gaze of young herdboys wrapped in wool blankets and shod in oversized gumboots. The large numbers of animals have taken their toll on the steep, communally grazed mountain sides. The brittle soil no longer supports healthy grasslands. Sheet erosion exposes the Maloti's basalt bedrock while woody, unpalatable weeds are rapidly choking out all their competitors in the remaining patches of soil. ¹

Trees are notable for their absence in these mountains. Many families manage to establish a few peach trees, but for the most part, trees grow only in riparian areas. The willows and poplar thickets growing along streambeds are an important source of fuel and building materials for highland households, and are carefully maintained for ongoing harvests.

In the mountain valleys, farmers sow maize, the staple crop, in terraced fields of relatively rich loam. However, even here, farmers report steadily declining yields. The over-exploited land is losing its fertility.² The region's erratic rain patterns compound the problem. Maize crops need regular doses of water

throughout their growth period, but rainfall in Lesotho rarely cooperates with this requirement. When the rain comes, it often falls in heavy, hail-laced downpours that can sometimes be more damaging to the soil and crops than no rain at all.

Villages are relatively small, consisting of perhaps 25 family compounds. Each compound includes at least one rondavel, a circular stone house with a thatched roof and a door facing east in order to catch the light of the morning sun. All of the buildings are surrounded by spaces of compacted bare earth that provides for the easy detection of intruding snakes. Stone cattle kraals holding cattle, donkeys, sheep and goats are situated nearby, close to gardens full of cabbage, maize and onions. A network of paths binds the village together, showing the centers of activity: the spring, the shop, the church, the chief's residence.

These villagers are very poor. As of 1993, nearly 80 percent of villagers living in LHWP project areas survived on less than \$15 per month. Most of them lived on far less.³ Almost one third of villagers in the project area do not have a basic education.⁴ Only 20 percent of adults have wage work. 5 Approximately 5-10 percent of mountain households have members who work in mines or on farms in South Africa. While this appears to be a relatively insignificant figure, the wages earned by these fortunate few account for 26% of all village income.⁶ This is a greater proportion of income than that from any other source, including the sale of crops and livestock. Because the young and talented tend to seek work across the border, those left behind in the villages

are old, sick, disabled, and/or unemployed. The remnants have been described as "a great mass of dependants, seeking to eke out a living through some combination of mining remittances, farming, beer brewing, and selling minor goods and services to those privileged ones with direct or indirect access to wage labor."

In this bleak setting, the Governments of South Africa and Lesotho constructed one of the most sophisticated – and expensive – water supply systems on the continent.

¹ Sechaba Consultants, *Lesotho's Long Journey: Hard Choices at the Crossroads*, 1995, p. 44.
² *Ibid.*

³ Robert Archer, *Trust in Construction? The Lesotho Highlands Water Project*, Christian Aid, 1995, p. 4.
⁴ Afridev Consultants, *Biological Monitoring in the Lesotho Highlands Water Project Phase 1A Area:* 1999 Monitoring Report, January 2000, p. 2.

⁵ Sechaba Consultants, *Poverty and Livelihoods in Lesotho*, 2000, June 2000, p. 81.

⁶ LHDA, Resettlement & Development Study: A Synopsis of Studies and Proposed Programmes, April 1997, p. 5.

⁷ James Ferguson, *The Anti-Politics Machine:* "Development," Depoliticization, and Bureaucratic Power in Lesotho, University of Minnesota Press, 1994, p. 126.

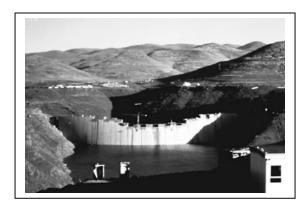
Setting the Stage

"Our people thirst for progress. Our land thirsts for water." Pik Botha, South African Minister of Foreign Affairs, at the signing of the LHWP treaty

General Metsing Lekhanya is an imposing figure. Often photographed in his military fatigues and a green beret, the man exudes confidence verging on braggadocio. His intimidating presence stems not only from his physical appearance and incendiary political speeches, but also from allegations that he once confronted a student he believed to be having an affair with his girlfriend and shot him to death. The High Court of Lesotho later acquitted him on grounds of "justifiable homicide." ¹

On January 20, 1986, he and his paramilitary soldiers toppled the government of Leabua Jonathan in a coup after a South African blockade crippled Lesotho's economy. Immediately following the coup, South Africa lifted the blockade. Lekhanya's opponents labeled him a puppet of the apartheid regime. He ignored their criticism, consolidated his power and, shortly thereafter, agreed to allow South Africa to build the LHWP.

Pik Botha, the South African Minister of Foreign Affairs, traveled to Maseru on October 24, 1986 to seal the deal that would reverse the flow of the Senqu/Orange River from the Lesotho Highlands to the booming, thirsty Transvaal (now Gauteng) Province. The project had been conceived nearly 30 years earlier when British economists noted Lesotho's high average annual



Katse Dam under construction

rainfall and recommended that it exploit this natural resource in exchange for valuable foreign currency. South Africa had spent much of the intervening period trying to negotiate an agreement, but problems with financing and Jonathan's growing intransigence had stymied any deal. Before Lekhanya deposed him, Jonathan had been insisting that Lesotho should be able to regulate the amount of water flowing to South Africa.² This demand was unacceptable to strategists in Pretoria. Now with Lekhanya's pliant military council in power, the demand was dropped, and Botha was set to sign his name on the treaty that would help slake his nation's thirst.

One wonders if either Botha or Lekhanya, as they scrutinized the text of the LHWP Treaty, paused at Article 7(18) and pondered its feasibility. The section states that the project will "ensure that members of local communities in the Kingdom of Lesotho, who will be affected by flooding, construction works, or other similar Project related causes, will be enabled to maintain a standard of living not inferior to that obtaining at the time of first disturbance." The Legal Order which created the LHDA in 1986 reiterated the commitment, stating, "the authority shall ensure that as far as is reasonably possible, the standard of living and income of persons displaced by the construction of an approved scheme shall not be reduced from the standard of living and the income existing prior to the displacement of such persons." In 1996, Kader Asmal, then the South African Minister of Water Affairs, upped the ante by guaranteeing that all affected people will be left "better off" as a result of the project. ⁵

The LHWP's principal funders also required that the project benefit affected populations. World Bank policy dictates "all involuntary resettlement should be conceived and executed as development programs, with resettlers... assisted in their efforts to improve their former living standards, income earning capacity, and production levels, or at least to restore them." The World Bank's stance is critical, because. although it contributes a relatively small percentage of the overall costs of the project, its support of the project attracts other investors and its policies are the project standard.

The commitments made to LHWP-affected people promise little more than the minimal obligations of human decency, but the worldwide record on fulfilling these obligations to the damaffected is one of failure and backpedaling. Thus far, the Lesotho case is no exception. Instead of improving the lives of affected people, the project has left many of them destitute.

² Kate Showers, Colonial and Post-Apartheid Water Projects in Southern Africa: Political Agendas and Environmental Consequences, Boston University, 1998, p. 17.

¹ Colleen Lowe Morna, "The King is Couped," *Africa Report*, January-February 1991, p. 59.

³ Treaty on the Lesotho Highlands Water Project, October 1986, p. 27.

⁴ Government of Lesotho, *Lesotho Highlands Development Authority Order*, Maseru, November 1986, No. 23, p. 429.

⁵ Kader Asmal, *Speech to GEM Workshop on Lesotho Highlands Water Project*, August 28, 1996.

⁶ World Bank, *Operational Directive 4.30: Involuntary Resettlement*, June 1990, p. 1.

The Damage Done

"There is nothing worse than working hard at something and then having something come and destroy it. We were satisfied with the way we were working. We were sowing maize and beans. We were eating fresh maize. We had trees. We had firewood, and people were buying it from us. We were getting money, and we were able to go to school. When LHDA came and destroyed everything that was important to my family, we started to become poor. The dam took our fields and our trees. That was the end of our money. We needed to look hard to find enough money for us to attend school... Now, when I look at the dam, I still get very angry. 1" Mpho, Sepinare Primary School, Standard 7

Lost Resources

A major impediment to restoring the livelihoods of affected people is the enormous impact of reservoir inundation and dam construction on the quantity and quality of natural resources in the area.

The project's first two dams, Katse and Muela, took approximately 1,900 hectares of cropland out of use (a significant amount in a small country where only 8 percent of land is arable).² Approximately 2,345 households owned fields in the submerged area, while many more sharecropped in it.³ Mohale Dam will take a further 1,000 hectares, affecting another 1,000 households.⁴ The loss of this much land causes a severe strain on local food security because two-thirds of the people living in project areas depend on locally produced crops

for food.⁵ Furthermore, the inundated land tends to be the best land. The alluvial soils in the mountain valleys are richer and deeper, producing higher yields. They are also usually located close to the villages, thus giving them a high convenience value to highland farmers who must depend almost entirely on human and animal traction. Another project-related threat to the precious remaining arable land comes from poor drainage systems along LHWP roads. The runoff from these culverts creates ever-widening gullies that have, in some cases, forced farmers to plough against the contour of the hillside, accelerating erosion even further. Side-spoil, left over from road construction, has ruined other fields, because the large rocks are too large to move and too numerous to plough around.

Katse, Muela, and Mohale dams decreased the highlands' pasturelands by a combined 5,000 hectares. Herds of cattle, sheep, and goats are now concentrated on a significantly smaller range, straining already over-stressed grazing land. The deterioration of the range has been quite rapid, with almost 90 percent of affected people reporting worsening conditions every year since the reservoirs filled. Many villages at Katse note that large numbers of livestock have starved as a result.8 The reservoirs also flooded ravines and valleys that formerly not only held the most palatable grasses, but also sheltered young livestock from the Maloti winter's icy winds. These winter pastures are extremely scarce in Lesotho, and their

loss makes cattle-rearing considerably more difficult. In some areas at Katse Dam, the scarcity of grazing "has created conflict and running battles between herders."⁹

Other communal assets were also severely affected (see chart below).

valley to provide a valuable nutritional supplement to their maize-based diet. People must now travel much further to compensate for the loss, or else eat fewer vegetables. The advantage of vegetables from the riparian zone is that they ripen earlier and in some cases can be harvested in winter.

Resources Harvested From Senqu Riparian Zones ¹⁰				
	Percent of	Average Amount	Market	Annual Cost
	Households	Collected	Value per	of Resource
	That Harvested	Annually per	Unit	Loss per
	Resource	Household		Household
Willow Trees	22.7%	5.5 trees	\$4.82	\$26.51
Poplar Trees	22.7%	14.6 trees	\$2.68	\$39.13
Woody shrubs	47%	190 bundles	\$1.12	\$212.80
Wild vegetables	43.1%	148 bags	\$0.35	\$51.80
Medicinal plants	19.8%	N/A	N/A	\$8.02
Thatch grass	24.7%	6.5 bundles	\$1.22	\$7.93
Craft grass (leloli)	17.0%	4.2 bundles	\$2.02	\$8.48
River sand	9.2%	N/A	N/A	\$63.98
Average Annual Cost of Total Resource Loss per Household				\$146.00

Scarce fuel sources, both trees and woody shrubs, were lost to inundation. causing economic hardship to affected families. Many households sold firewood to supplement family income. Because very few trees grow outside of inundation zones, affected people had to locate building material outside of LHWP areas and forgo important fuelwood sales. People must also now walk significant distances to gather heavy bundles of shrubs for cooking fires. Almost half of all households gathered shrubs and debris from riparian areas. With the submergence of the riparian zone, almost half the population must now locate over \$200 worth of brushwood elsewhere, or else substitute expensive alternative fuels.¹¹

Almost half of affected households gathered wild vegetables from the river

Over 175 species of medicinal plants grew in the flooded areas. 12 Local herbalists used them to treat everything from toothaches to digestive problems, and many were sold to traditional doctors in the lowlands. Traditional doctors especially valued the herbs that grew close to the river because they are thought to be more powerful medicine than herbs growing higher up the slopes. Some species disappeared from the area completely, or else became so scarce that it was no longer worth the effort to hunt for them. Almost 40 percent of dam-affected people reported that they were using fewer medicinal plants since the construction of Katse, while 10 percent have stopped using them altogether. 13 The loss of these plants also had cultural implications, because, in Basotho tradition, each plant and animal has "properties or powers associated

with it, and ... could be used for ... bringing good fortune or increased power to its possessor."¹⁴ The reservoir flooded areas where highlands residents once gathered thatching grass to roof their houses. With the loss of this resource, people either had to buy thatching grass from sellers in the lowlands or else roof their houses with poorer quality grass that would leak even during light rains. An increasing number of people now must also buy other construction materials like poles and posts, while almost onethird of the population, unable to afford the expense, has been forced to make do with less wood altogether. 15

Artisans in the affected region lost access to leloli grass, which was used in various traditional crafts. Few people in the area continue to produce leloli-based crafts, because the market value per bundle is now prohibitively expensive.

River sand was another resource that became scarce after the reservoir filled. In the affected areas, it is primarily used to make bricks, and affected a number of construction entrepreneurs in the project areas.

If figures gathered in the downstream socio-economic survey are held to be representative of pre-reservoir resource use, each household within a 5 km corridor of Katse was gathering an average of \$146 worth of renewable resources from the submerged zone annually (see chart, p. 8). This figure excludes the economic value of crop and grazing land. According to recent data, the income of the majority of mountain households is less than \$320 per year, meaning that the replacement cost of these resources alone could represent as

much as 45 percent of annual household income.¹⁷ The majority of the lost resources were gathered at little or no cost from communal lands. Replacement of the now scarce goods, however, necessitates increased economic cost, increased physical effort, and/or substitution of inferior goods. Unfortunately, an increasingly common choice is to stop using the resource entirely rather than spend the household's precious little income on previously free goods.

Construction impacts

Construction activity associated with the dams caused additional impacts. Springs dried up because of blasting, tunneling, and road construction. This forced many villagers to either travel long distances to collect water, or else collect water from less sanitary sources. LHDA dissuaded villagers from using water from the reservoirs, explaining that it may make them ill. Some villagers reported that they had been told that accessing reservoir water was illegal because it was South African property. 19

Before the reservoirs filled, affected people frequently traveled across the river valleys to shop, to visit friends and relatives, to receive medical attention, and to attend school. Many affected people crossed the Bokong and Malibamatso rivers at least once a week. Katse reservoir inundated seventy-eight of these crossings.²⁰ LHDA constructed four bridges to mitigate this disruption and, for several years, operated a small ferryboat service. Unfortunately, the ferry service has been discontinued because it was too "costly,"²¹ isolating hundreds of villagers between the reservoir branches and forcing many other villagers to pay significant fees for auto transport from one side of the dam to the other.

Dam Safety

The dams also presented safety hazards. A number of people drowned in the months following the inundation of Katse reservoir. A few livestock also died in the reservoir, ²² but livestock losses are more common downstream when periodic floodgate tests send surges of water downstream. Other safety concerns stem from LHWP contractors' failure to rehabilitate stone quarries and road cuts, posing a danger to nearby people and livestock. Staff of local NGOs have documented at least three cases of affected people drowning in flooded quarries and construction site pits.²³

Reservoir-induced seismicity caused one of the most remarkable threats to public safety. Villagers living along the Malibamatso branch of Katse reservoir experienced tremors of a magnitude of 3.1 on the Richter scale in 1996 soon after the reservoir filled. The quakes damaged more than 50 houses and left 11 more in serious structural jeopardy.²⁴ They also left a 1.5km-long crack through the village of Mapeleng. LHDA-hired seismologists believe that there is little danger of the land below the crack falling into the reservoir, but seismic activity may persist and it is thought to be a significant possibility when Mohale reservoir fills.²⁵ In the event of further seismicity, experts believe that "injury or loss of life cannot be excluded" because traditionally constructed rondavels will be damaged by even the smallest of tremors. 26 LHDA resettled many of the affected households at Mapeleng and smeared cement on the outside of other

affected houses in an attempt to reinforce them.

Downstream Impacts

Approximately 150,000 more people are affected by reduced river flows downstream of LHWP dams. These impacts were not officially recognized until an Instream Flow Requirement (IFR) study intended to predict long-term effects of reduced river flows described them in November 1999, long after the project began.²⁷ The report, heralded by experts as being one of the most comprehensive ever undertaken, warns that continuing with the project as proposed will reduce Lesotho's river systems to "something akin to waste-water drains." It recommends millions of dollars in compensation and mitigation measures for downstream communities – costs that may mean LHWP water is not as cheap as originally thought. Nevertheless, at the time this paper was completed, the IFR had still not been publicly released. Negotiations between Lesotho and South Africa on future LHWP dams continued in the meantime.

The downstream impacts are already "severe." Pests are on the increase. Among them are the blackfly, a cattle pest, and a poultry parasite. Water flowing in the reaches below Katse Dam is now too contaminated to drink, and local communities complain that it causes skin rashes after they cross or swim in the river.²⁹ The low flows also lead to higher algae levels in the river, which in turn create suitable conditions for disease-carrying liver fluke snails. Liver fluke disease affects livestock, resulting in reduced appetite and death. Moreover, most local people will not eat meat from animals affected by the disease, greatly reducing protein in the

local diet. Local people's diet is also affected by the reduction of certain wild vegetables that depend on higher river flows, and through declines in fish stocks that are an important protein source in certain villages.

Social Impacts

In addition to the natural resource losses caused by the waters rising behind LHWP's dams, the project brought a number of social traumas to people living in the region. Systems of authority were marginalized; family relationships were strained to the breaking point; belief systems were trivialized, and communities' sense of security was threatened. These disturbances could not be easily compensated. Their impacts were so far-reaching and had so many (frequently intangible) related effects that any attempts to mitigate them are all but futile.

The huge influx of construction workers and job seekers was a large part of this social disruption. Hearing that jobs were to be had, thousands of men from Lesotho's lowlands and other parts of the mountains converged on the previously isolated villages near LHWP construction sites. Some rented rooms from the villagers, but the majority bribed local chiefs to allow them to build small shanties on the village outskirts. The shanties soon outnumbered the homes of the original residents in villages nearest the construction sites. Ha Mensel village's 87 households hosted, on average, four outsiders each.³⁰ Shop owners used the boom to raise prices on essential goods, making it all the more difficult for local people to purchase household items.³¹

Every morning men would gather outside the gates of the construction sites, hoping for work. Many had previously worked in South African gold and coal mines and donned their old hardhats and overalls to demonstrate that they were no strangers to hard labor. Almost 4000 of these itinerant laborers were hired to work at Katse Dam. They moved into large, prefabricated dormitories adjacent to the new shantytowns. The unlucky ones, many without enough money to finance a trip back home, continued to lounge outside the project gates, playing dice games and hoping to land a "piece-job," a short stint of manual labor.

The presence of the workers caused severe social impacts in the villages they descended upon. Families broke up when men from the labor camps initiated affairs and often set up housekeeping with the wives of local unemployed men who could not provide steady cash. Ordinarily, village leaders would have dealt with any matters of sexual behavior that proved destructive to community relationships. The project workers however were not subject to the authority of local chiefs, and thus, acted as they pleased. Christian Aid's Robert Archer warned, "if the Chiefs and village leaders cannot modify behavior that is seen by their communities to be destructive and damaging, they will lose the authority they have over their own people."³² His prediction began to come true. Elders and village leaders complained of the insubordination and lack of respect shown to them by young people, and anecdotal evidence at Katse suggests that incidents of crime involving youth (particularly theft) increased significantly. Local police noted that theft in general increased

markedly.³³ One man at Mohale lamented, "the chieftainship is not respected at all, things are being decided freely."³⁴

While access to health services was improved, the project significantly increased the risk of sexually transmitted diseases. According to an August 7, 1995 report in Archives of Internal Medicine, "In the early years of the worldwide pandemic, there were no reported cases of AIDS in Lesotho." That all changed when HIV-infected construction workers arrived in the previously isolated LHWP areas. By 1992, HIV infection rates in villages around the dam were 0.5 percent, and infection rates in the dams' work camps were over 20 times higher (5.3%).³⁵ The town of Leribe, which is a sort of gateway to LHWP project areas, had a low HIV infection rate in the early stages of project construction. By 1993, it had the highest rate in the country. The rate among Leribe's 15-24 year olds skyrocketed from 3 percent in 1991 to 12.6 percent in 1993. 36 By the year 1999, tests of antenatal women living in the mountains around Katse Dam indicated 22 percent of them were HIV positive.³⁷

Shebeens (bars) sprang up throughout the area, supplying workers with a steady source of *joala*, Lesotho's sorghum brew. Alcohol fueled the animosity between the newcomers and the local villagers, and violent fights became commonplace. Empty beer cans littered the once quiet villages and plastic bags were strewn throughout roadside fields. The trash problem became so bad that it prompted the World Bank's Panel of Experts to exasperatedly wonder, "If the (LHDA) Environment Division can't get the

empty cans out of its own backyard, how will it ever be capable of looking after one of the world's largest water projects?"³⁸

Meanwhile, three kilometers away, engineers and construction supervisors from South Africa, the UK, Germany, France, and Italy moved into the gated community of Katse Village. The village very much resembles a Los Angeles suburb with its tidy bungalows, street lamps, carports, satellite TVs, swimming pools, tennis courts, restaurants, lawnmowers and security guards. Every evening young Basotho girls in lipstick and short skirts would linger outside the gates of the village, hoping to attract the attention of Europeans on their way home from work. The involvement of children with LHWP workers was a serious one. Many girls needed to walk past construction camps on their way to and from school, easy targets for the wage-earning workers.

Children were some of the most perceptive observers of the changes that occurred in local families. A 12-year-old girl living near Katse Dam wrote the following:

"Our sisters are out of control. They are pregnant. My mother left my father alone and stayed at Katse with another man. My father went to Katse Lodge, and he did not give us any money. He married and stayed there. We lived a difficult life after that. My mother came to see us and went back. Even today, the LHWP is still bad. Our brothers are drinking beer and making young ladies pregnant, and other girls sleep where their parents don't know. Girls are falling in love with men. Women are falling their babies. They throw them in

tins and in toilets. The LHWP is bad because girls were drinking beer and they were going in cars of the foreign engineers and contractors; especially my sister."³⁹

In sum, the labor influx brought nearby communities to a virtual social collapse. LHDA itself admitted that, "It is apparent that the impact of the Phase 1A construction workforce on local communities has been much greater than was originally anticipated. While many of the economic benefits have not materialized, most of the social disbenefits have, leaving the social fabric of these communities visibly disintegrating. It is common cause among the Phase 1A construction communities that Government's main interest lies in its agreement with South Africa and that its commitment to local people has been forgotten."40

The Ups and Downs of Roads
The LHWP's access roads were both a boon and a bane to affected people.
Before the roads, a trip to the lowlands to purchase supplies for shops, attend funerals, or visit family necessitated a difficult two-day journey on horseback.
After their completion, affected people could travel to Maseru by taxi or bus early in the morning and return home on the same day. The access to goods and services made life easier in many respects, but as will be explained in the section on development, it hindered local development.

Stock theft, already a problem, became rampant. Almost 30 percent of mountain households have lost animals to theft in 2000, and 5 percent were left with no livestock at all. Project roads certainly allowed thieves easier access to the

LHWP areas. However, some observers believe that rising theft rates are more an indicator of rising poverty levels than improved access, as there are an increasing number of desperate people willing to join stock theft gangs. 42 These gangs, more accurately described as syndicates, involve politicians, butcheries, police, and local chiefs. Armed with AK-47s and other weapons, the thieves attack the remote cattle posts at night, killing the young herdboys they find there if they fail to flee quickly enough. They drive the cattle to rendezvous points where they are taken to be slaughtered or sold outside the country. Members of the gangs reside in nearly every village, and are well known to the village's other residents. Their presence is tolerated because of a fear of reprisals. In addition to shattering the communities' sense of security, one of the effects of increasing stock theft has been that livestock owners now keep their cattle closer to the village in an effort to protect them. This compounds the range degradation problem. A more obvious effect of stock theft is a decrease in economic security: livestock is an important safeguard "against sudden adverse changes in the household's financial situation."43

Culture Clash

Affected people's belief systems and cultural practices were also impacted significantly by the construction of the dams. Project-affected people know Moikobane Mapanya as a rainmaker. In the years before the LHWP, he would receive visions, which commanded him to pray for rain on the banks of the Malibamatso River, close to the site of Katse Dam. After an intricate ceremony that attracted residents of many area villages, he would call for rain.

Participants in the ceremonies claim that more often than not, rain would fall within the next 24 hours. The reservoir destroyed all of the sacred places where Mapanya prayed for rain, and a project access road ruined the spring from which he collected water for use in healing ceremonies. Mapanya no longer receives visions, and he has given up praying for rain. "This dam has brought us nothing but trouble," he said. "It is changing us in ways that are difficult to see. Now we have all of this crime and fighting in our villages."

Other spiritual leaders have also suffered serious losses to the project. The Zionist congregation in Ha Theko, led by Daniel Khoaile, lost their baptismal sites in the Malibamatso River when LHDA impounded Katse Dam. "By tradition, I always baptized my people inside this river," said Khoaile, "LHDA should identify an alternative place where I shall baptize people without fear of drowning."

The reservoir inundated culturally significant objects. Before the dam, the people of Ha Tsepo believed that a

LHWP and Gender

Women in the affected areas, who already endured severe gender inequalities before the LHWP, bore the brunt of its social impacts. Typically, men's roles relate primarily to agriculture: plowing, planting, and harvesting. They are involved in politics and dominate decision-making at the village and household level. They also normally control all financial matters. Women, on the other hand, are responsible for the welfare of the family. They cook, care for children and the elderly, collect water, tend gardens, gather fuel, and search for wild vegetables for the household.

LHWP dams added to women's already considerable workload, and made it even more taxing and time-consuming. First, because the reservoirs flooded springs and many areas where women would collect fuel and food, they were forced to travel greater distances to find these resources. In order to justify the long journey, they would gather larger loads, making the task that much more difficult. Second, when local men took on full-time employment at the dams' construction sites (and only men were hired) most of their chores had to be taken on by the women. For example, women needed to be more involved in harvesting while still carrying out their normal duties.

Compensation programs intended to mitigate the project's adverse impacts also tended to be gender-biased. Compensation checks were always written to the head of the household, which is, in Basotho tradition, the eldest male except in the case of death or separation. This procedure failed to recognize women's involvement in crop production and resource collection. Whereas women may have had considerable input in determining the use of resources such as crops (e.g., marijuana, see page 26), garden produce, and fuel wood before the dam, men primarily determined the use of monetary compensation. This had severe impacts on the household. Women tend to invest their money in the welfare of the family (e.g., clothing, school fees, medicine), while men tend to invest in livestock, an asset with few immediate benefits for the family.

When men are not present in the household due to death or separation, women typically engage in sharecropping to survive. LHWP compensation policies failed to meet the needs of these most powerless households, as will be described in detail on page 31. Other gender impacts included the disproportionate exposure of local women and girls to HIV/AIDS and other sexually transmitted diseases introduced to the area by LHWP construction workers. Young women and girls are at greater risk of contracting HIV/AIDS for biological reasons, which are compounded by the prevalence of rape and coerced sex and the unpopularity of condoms.

certain stone below their village had the power to attract rain. When the reservoir submerged the stone, its power was diminished and villagers feel that drought is now prevalent in the area as a result.⁴⁶

According to Basotho tradition, the dead "gain additional power after death and continued to play an important role in the life of the family. They are remembered, feared, honored, and obeyed. As upholders of social harmony and morality, they intervene to communicate with and if necessary to punish their living children."⁴⁷ Ancestors are often the focal point of Basotho spirituality. Graves, therefore, are extremely significant because they are in effect the portal between the spiritual world of the ancestor and the physical world of the descendant.

Katse Reservoir submerged hundreds of graves and many more were disinterred because they rested under proposed access roads. Affected people did not know how to advise project consultants on what procedures should be used to relocate the graves because exhumation of graves is alien to cultural practice in the highlands. Nevertheless, affected people uncertainly agreed to allow the LHWP to let graves in the inundation zone be flooded, but asked the project to move graves that would be affected by road construction. The LHDA assumed the costs of exhumation and reburial in almost every case.

The issue of graves provoked severe psychological traumas for many affected people. Many were concerned about long-forgotten graves that nevertheless held the remains of ancestors. One man asked, "Does it ever happen that

graves...bob up and down in the water? And people will use this water? It will be water of what kind which has poison of graves inside it?"48 Dreams plagued a woman who had seen Katse reservoir flood her grandmother's grave. In the dreams, her grandmother cried that she is covered in water and confusedly asked how she could let this happen. People resettled from Mohale were happy to hear that graves would be removed, but found the decision where to relocate them problematic. Some households were moving to various locations in the lowlands while others were staying near Mohale, and all of them wanted to remain close to the graves.

Ash-heaps have special significance to Basotho (particularly women) because they are the burial sites of stillborn and miscarried children. Ash from the heaps is also used in medicines. LHDA has been reluctant to relocate ash heaps, and they are not recognized as graves in practice despite being classified as graves in policy.⁴⁹

It would be almost impossible to mitigate impacts such as these. The changes that they wrought were irreversible and fundamentally altered the way people perceived themselves and the world around them. The influx of construction workers indirectly posed a challenge to the authority of traditional leaders. The introduction of AIDS and roads threatened villagers' sense of personal and economic security. The destruction of graves and culturally important objects, in effect, questioned traditions and belief systems.

The following sections will detail the troubled attempts to mitigate these and other project impacts.

¹ Transformation Resource Centre, Since the Water Came... Kids in Lesotho Talk About Katse Dam. Save the Children Fund, Maseru, 1999, p. 9. ² Norwegian Water Resources and Energy Administration, Appraisal – Muela Hydropower Project, Lesotho, February 1993, p. 8. ³ Robert Hitchcock, John Ledger, Len Lerer, Michael Mentis, and Thayer Scudder, Report of the Panel of Environmental Experts, June 1996, p. 3. ⁴ Norwegian Water Resources and Energy Administration, Appraisal – Muela Hydropower Project, Lesotho, February 1993, p. 9. ⁵ M. Tshabalala and S.D. Turner, 1988 Socio-Economic Census of the Lesotho Highlands Water Project Phase 1A Areas, LHDA, September 1989, p. 32 and LHDA, Resettlement and Development Study: Task 3 Report, Executive Summary, May 1996, p. 17. ⁶ Norwegian Water Resources and Energy Administration, Appraisal – Muela Hydropower Project, Lesotho, February 1993, pp. 8-9. Afridev Consultants, Biological Monitoring in the LHWP Phase 1A Area: 1999 Monitoring Report, January 2000, p. 3. ⁸ *Ibid.*, app. 2, p. 1. ⁹ *Ibid.*, app. 2, p. 4. ¹⁰ Christian Boehm and David Hall, LHDA Contract 648: Socio-Economic Survey, September 1999, p. ii. ¹¹ *Ibid.*, p. i. 12 LHDA, LHWP Phase 1B Draft Environmental Action Plan, May 1997, p. 8. Afridev Consultants, Biological Monitoring in the LHWP Phase 1A Area: 1999 Monitoring Report, January 2000, p. 3. ¹⁴ Stephen Gill, A Short History of Lesotho, 1993, p. 52. 15 *Ibid.*, p. 3. ¹⁶ *Ibid.*, p. i-ii. ¹⁷ Sechaba Consultants, Poverty and Livelihoods in Lesotho, 2000: More than a Mapping Exercise, June 2000, p. 76. ¹⁸ LHDA Public Health Officer, pers. comm., 1999. ¹⁹ Pers. comm., 1999. ²⁰ LHDA. Planning and Design with an Option to Supervise Construction of Feeder Roads and Reservoir Crossings, November 1993, p. 1. ²¹ Field Operations Staff, pers. comm., 2000. ²² Afridev Consultants, Biological Monitoring of LHWP Phase 1A: 1999 Monitoring Report, January 2000, app. 2, p. 1.
²³ Sofonea Shale, "Community Condemns LHDA for Drowning of Villager," Mopheme/The Survivor, January 23, 2001. ²⁴ Lori Pottinger, Lesotho Highlands Trip Report, IRN, September 1996, p. 8. 25 Hunting-Consult 4 Joint Venture, Resettlement & Development Study: Housing & Infrastructure

Implementation – Monthly Progress Report No 2, May

²⁶ LHDA, Microseismic Activity At Mapeleng Village,

Katse Dam, March 20, 1996, p. 5.

1997, p. 4.

²⁷ One consultant hired to carry out impact studies at Mohale Tunnel actually identified downstream impacts as a major project obstacle in late 1995, but his contract was unilaterally terminated shortly thereafter. ⁸ Christian Boehm and David Hall, *LHDA Contract* 648: Socio-Economic Survey, September 1999, p. 20. ²⁹ *Ibid.*, p. 46. ³⁰ Ben Molapo, "Will LHWP Ever Benefit the Locals?" The Mirror, December 4, 1992, p. 11. 31 Malefane Maema and Norman Reynolds, LHWPinduced Displacement: Context, Impacts, Rehabilitation Strategies, Implementation Experience and Future Options. January 1995, p. 17. ³² Robert Archer, *Trust in Construction?* Christian Aid, 1995, p. 32. ³³ LHDA, Mohale Advanced Infrastructure: Draft Social and Environmental Impact Assessment, April 1995, p. 4-5. ³⁴ Panos Institute, *Interview with Mepa Mokhothu*, November 1997, p. 1. 35 Consortium for International Development, Baseline Epidemiological Survey: Phase 1A, May 1993. Robert Hitchcock, John Ledger, Thayer Scudder, and Derek Yach, Report of the Panel of Environmental Experts, August 1994, p. 22. ³⁷ Paray Hospital, pers. comm., November 2000. ³⁸ John Ledger and Thayer Scudder, *Report of the* Panel of Environmental Experts, April 7, 1995, p. 12. ³⁹ Transformation Resource Centre, *Since the Water* Came... Kids in Lesotho Talk About Katse Dam, Save the Children Fund, Maseru, 1999, p. 12. 40 LHDA, Mohale Advanced Infrastructure: Draft Social and Environmental Impact Assessment, April 1995, p. 6-1. ⁴¹ Sechaba Consultants, Poverty and Livelihoods in Lesotho, 2000: More than a Mapping Exercise, June 2000, pp. 107-108. ⁴² Some villages in the remote Qacha's Nek district have been left virtually bereft of cattle in recent years even though the district has only one pothole-ridden road. Qacha's Nek's rural areas are, however, some of the most poverty stricken-areas of the country, and the situation has worsened in recent years, perhaps causing an increase in thefts. (see Sechaba Consultants, Poverty in Lesotho, 1994, p. 22). ⁴³ Ibid. ⁴⁴ Pers. comm., November 5, 1999. ⁴⁵ Lesotho Council of Nongovernmental Organisations, Report of the NGO (Follow-up) Visit to Mapeleng, February 23, 1996, p. 6. ⁴⁶ AfriDev Consultants, Biological Monitoring in the LHWP Phase 1A Area: 1999 Monitoring Report. January 2000, Appendix 2, p. 2. Stephen Gill, A Short History of Lesotho, 1993, p. ⁴⁸ Panos Institute, *Interview with Sebili Tau*, November 1997, p. 5. ⁴⁹ LHDA, *Phase IA Compensation Plan*, February 21,

1990, p. 56.

Scattered by the Dam: LHWP Resettlement

"The LHWP is bringing Lesotho millions, but those who sacrificed their homes; their land, their suitable and accepted lifestyle and standards to give way to the project are despised and treated as if they were non-Basotho."

Morenakemang Tikoe, Chairperson, Community Liaison Committee

Resettlement Budget

Compared to other resettlement projects around the world, the LHDA resettlement program is extremely well funded. LHDA provided resettled households with a cinderblock house or houses of equivalent size to the floor area of their lost homes on a small site demarcated by a chain-link fence. They also provided a latrine, a disturbance allowance of about \$1,000, and, in some cases, water supply after significant delays. The cost of providing these resettlement packages at Katse Dam amounted to approximately \$5 million,² which translated into approximately \$62,500 per resettled household – a very high figure. In a 1999 survey of 17 World Bank-funded projects involving resettlement, only one project spent even half of the amount per household that the LHDA budgeted at Katse.³ Unfortunately, the large budgets have failed to translate into successful resettlement. Resettled villages at Katse still have not been supplied with water and other promised infrastructure such as roads, many replacement houses exhibit shoddy construction, and development programs directed toward resettled people have stagnated.

Several years later, LHDA budgeted roughly \$16 million⁴ for its Mohale resettlement program, approximately \$31,200 per resettled household.⁵ Even though this figure is only half the amount per household spent at Katse, it is still around three times as large as the average per-household resettlement cost found in the study of World Bankfunded resettlement programs.⁶ Therefore, the shortcomings of LHWP resettlement cannot be easily blamed on a lack of funding.

The reason Mohale resettlers were allocated about half the amount budgeted for Katse is the repeated underestimation of the numbers of people to be displaced. At Mohale, LHDA's initial 1993 resettlement estimate was approximately 210 households. This figure had already increased 150 percent by 1996, to 516 households. Budgets were based on undercounted resettlement figures, and households resettled in later stages faced a growing budget crunch.

The underestimation of displacement figures also contributes to overly optimistic resettlement target dates. In March 1995, the governments of both Lesotho and South Africa were anxious to keep target dates for water delivery to Gauteng and asked the World Bank for permission to proceed with filling Katse reservoir before all households had been removed from the basin. When this was denied, the Joint Permanent Technical Committee (JPTC), the project oversight body, disappointedly complained in a memo to the Bank that

resettlement prior to inundation was a "rather stringent requirement." ¹⁰

Target dates for the inundation of Mohale Reservoir have similarly rushed the resettlement of hundreds of households. Project consultants complained in 1997 that LHDA's resettlement section was "underresourced and not able to complete its work on time" and described the process as a "formidable bottleneck to the engineering of (the) project." One year later, the Panel of Experts characterized the Mohale resettlement as "a crash program." ¹² Experience has shown that when resettlement is rushed in this way. infrastructure at resettlement sites is often shoddy or incomplete, certain compensation measures are overlooked or delayed, and participation processes are compromised. LHDA moved the first group of resettlers from Mohale before water supply systems were in place in resettlement areas and before suitable skills training programs were devised.¹³ Compensation and development programs for other affected people also tended to suffer because staff from other departments were delegated resettlement responsibilities in order to meet project deadlines.

Lack of Land

The fact that Lesotho is extremely landstressed added another complication to the LHWP resettlement program. Villagers who once lived near the oxbow curve of the Senqunyane River enjoyed some of the most fertile land in Lesotho, and some 3000 people relied on food grown in Mohale Dam's inundation zone for subsistence.¹⁴ Therefore, when LHDA informed them that they would be resettled to make way for Mohale, they demanded replacement land. Some

even claimed they would refuse to relocate unless offered land of equal quantity and quality. 15 LHDA threatened that people who refused to move would not be compensated, and this broke their resolve. Said one, "At least we will get something if we agree to move. But if we stay, we get nothing. They are frightening us so we will agree with them." Access to arable land figured so prominently in affected people's survival strategies that the Panel of Experts claimed that "households who lose over 50 percent of their arable land should have the option of resettling" outside the project area, because "it will be difficult, if not impossible, to restore the living standards of a majority of such households if they remain in the catchment."17 This statement bodes ill for the 405 families at Katse and Muela who have already lost all of their fields and the hundreds more who lost over half of their cropland without any possibility of resettlement.

Noting that most of the future resettlers mentioned that access to agricultural land would be their main requirement in assessing possible resettlement sites, LHDA consultants investigated the possibility of resettling people on land in South Africa's Free State Province. 18 The consultants identified several farms that were for sale at a cheap price near the Caledon River (the Lesotho border) that would have been suitable resettlement sites. Many of the households facing the prospect of resettlement were excited about this possibility. A group of about 40 families hoped to establish a "self-sufficient agricultural community" on one or more Free State farms. 19 All of them were "serious" farmers, and some possessed skills in building, carpentry and mechanics.

Indeed land-for-land compensation is generally agreed to be "best practice" in involuntary resettlement programs throughout the world because it involves the least amount of disruption to livelihoods and allows resettlers to pass the land on to their children. In fact early project documents indicate that LHDA consultants also subscribed to this view: "the land for land option is essential in order to avoid impoverishment of substantial numbers of families in the project area." 21

Unfortunately for the potential homesteaders though, the LHDA dropped the Free State resettlement option for reasons that have never been officially explained. The move could have been politically difficult because the Free State is still considered "conquered territory" by many Basotho, and the return of even a few hectares to Lesotho may have been seen by some as a concession to that view. The newly elected ANC government in South Africa may also have been loath to offer land because it was in the middle of an extremely sensitive land redistribution program for its own landless citizens. It would have set off a political firestorm to give the impression that the South African government gave land to Lesotho before it gave land to those who bore the full brunt of apartheid, despite the fact that South Africa was in effect "taking" land in Lesotho for its water supply.

Access to fields and pastures continued to be the primary requirement in selection of resettlement sites. Nearly 40 percent of the resettlers based their decision mainly on this factor, and almost 70 percent of affected households indicated that agricultural activities

would continue to be their primary means of subsistence after resettlement.²² Without a land-for-land option available, most people chose to be compensated through annual cash payments with the hope that they would discover sharecropping opportunities or other means of restoring their livelihoods at their new resettlement site. In this way, they spread the risk across a range of survival strategies. Acquisition of land at the resettlement site offered only minimal returns. Many of the resettlement sites have only marginal land, and at some sites, only 40 percent of arable land is ploughed. The rest is too poor in quality to farm profitably.

Some resettlers possessed little or no land prior to resettlement, and relied almost entirely on sharecropping, or in the case of the sick and elderly, on support networks of relatives and friends. In this informal mountain economy, "repayment for some food at a crucial moment might be through an offer of labor, or when some seeds have germinated, or some livestock had produced offspring."²³ The Lesothobased Sechaba Consultants found that 27 percent of the people living in the region affected by Mohale Dam did not own fields.²⁴ These people were forced to relocate wherever their support network relocated. Over one third of the resettlers chose their destination based on its proximity to relatives and/or their chief, an indication that they were attempting to keep survival networks intact.²⁵ Many were unsuccessful in their attempt because households scattered to different resettlement sites. The Panel of Experts described the sad case of a landless woman who had been sharecropping on one of her brother's fields before the project started. When the time for

resettlement arrived, she relocated to another part of the mountains where sharecropping opportunities were not available; her brother moved to the lowlands. This left her without a vital source of support. One similarly affected person said, "We are dispersing like the young ones of a bird, others [here], others there! We are separating from our friends, these ones who were looking after us [saying] 'Grandmother, take some porridge.' It is cruelty."²⁷

Lowlands economy

The shock of adjusting to the lowlands economy is one of the most serious traumas experienced by people resettled from the Mohale area. Resettlers rarely possess skills that are marketable in urban and peri-urban environments, so few are able to earn living wages. The Transformation Resource Centre interviewed a single mother who had been resettled on the outskirts of Maseru with her invalid grandmother. She complained of the high cost of living at her new home, and noted that she has not received any skills training and was now trying to resell porcelain knickknacks to supplement her annual \$120 compensation check.²⁸ The extra expenses of living in the lowlands are difficult for highlands residents to predict, and often to cover. School fees tend to be considerably higher in the lowlands. The scarcity of fuel wood means that money must be spent on paraffin and a heater to burn it. People resettling to urban areas are billed for water. Added to these dilemmas are the pressures of "keeping up with the Joneses" amidst comparatively wealthy neighbors. Some resettlers spend significant portions of their disturbance allowance on new furniture to outfit their new Western-style dwellings. Staff of

the Transformation Resource Centre interviewed one household that bought a new kitchen cabinet set, table, chairs, and window drapes one week after being resettled from Mohale. They paid for the furniture with their disturbance allowance despite the fact that no member of the household was employed. They were not eligible for further compensation, and they had made no crop-sharing arrangements. ²⁹

For these reasons, project consultants encouraged resettlers to choose to relocate within the Mohale project area instead of moving to the lowlands. 30 The World Bank Panel of Experts did not approve of this. Their feeling was that this compromised affected people's participation in the project. They also feared that if people stayed, there would be more competitors for fewer resources on the banks of Mohale Reservoir. Finally, they believed that "more opportunities for restoring and improving living standards are available in the foothills and lowlands" and that domestic migration patterns demonstrated this fact.³¹ The conflicting viewpoints of the various project advisors illustrate the difficulty of planning a resettlement process that does no harm. In plain terms, there are no good solutions.

Host-Resettler Conflicts

Resettled people have frequently found themselves in conflict with their new neighbors. Chiefs of potential host villages are usually quite eager to attract displaced people because LHDA promises infrastructure development in the host community as well as in the resettlement site. During inspection visits before resettlement, the chiefs often assure representatives of Mohale communities that, even though there are

no fields, an adequate water supply or pastures, accommodating displaced people should not be a major problem. They assure the resettlers that they can find ways to sharecrop, that LHDA will develop the water supply, and that resettlers can either keep their animals at their cattle posts or reduce their herd sizes and begin commercial livestock enterprises.³²

In practice, the process rarely, if ever, happens this smoothly. Some host community members are hostile to the newcomers from the very start. One man in the process of resettling from Mohale said, "The host people (say) we are bigheaded because we have much money the project gave us."33 Resettlers are also commonly "concerned at being an easy target for thieves and swindlers – it was said some known thieves had been describing the villagers as their 'cheques.'"34 The perception that resettlers are rich with compensation money adds to their difficulties in finding sharecropping opportunities. Very few resettled households have been able to secure such arrangements. No households at the Nazareth resettlement site have succeeded in doing this.³⁵ One of the reasons for this is that landholders in the host community demand terms that are impossible for the resettling households to meet. 36

LHDA is notoriously sluggish about improving water supply. The resettlement sites of Makotoko and Nazareth still do not have adequate water supply systems. LHDA's failure to provide promised infrastructure like this also strains the host-resettler relationship, because the hosts' expectations are that the resettlers will bring benefits to their communities.

The additional strain on already limited resources also creates conflict. The resettlers must compete with the host community for overstressed pastures or else keep their livestock at cattle posts high in the mountains. Many resettlers opt to avoid clashes with their hosts, leaving their herds at the cattle post. However, this requires the owners to hire herdboys to keep watch over the animals, at a cost of approximately \$300 per year.³⁷ This is not only a significant expense – it also means that the family loses direct access to draft animals and milk, faces an increased risk of stock theft, and to a degree suffers a loss of cultural identity due to infrequent interaction with the animals.³⁸

Problems like these arise even when host communities are consulted and informed of the process. When prior consultation does not occur, it predictably leads to resentment from the hosts toward the resettlers. LHDA neglected to inform the Makhoakhoeng host village of the impending arrival of displaced people from Mohale Dam until earth-moving equipment started preparing the resettlement site. LHDA officials told the village that they had mistakenly assumed that there was not a chief in the area and that they had leased the land from Maseru City Council. This error led to extreme hostility toward the new arrivals. The Lesotho-based NGO Transformation Resource Centre regularly recorded examples of such hostilities:

"Soon after resettling in Makhoakhoeng, an older person from Molikaliko (the displaced village) passed away. The deceased person's family and friends gathered on the day of the funeral to find armed members of the host community blocking the way to the burial site. They threatened them with violence if they insisted on burying the deceased, saying that they did not recognize them as being part of the village. Intimidated, the people of Molikaliko desperately looked for another burial site, finding one in the neighboring village of Masianokeng, several kilometers away. When a second resettlee passed away several months later, both villages denied them access to burial sites. They were forced to bury the body on residential land which the host community says is near the source of their water supply."³⁹

Members of the host community (backed by LHDA) threatened to exhume the body, a move that drew threats of violence from the resettlers. The conflict became so charged that the deceased woman's daughter brought the case to the World Commission on Dams (WCD) at a hearing in Cairo:

"I'm sad to tell you, ladies and gentlemen, on the 20th October, the project authorities came to tell us we have to exhume the body of my mother. This is the saddest thing I've come across. They were all ready to exhume but my family refused. I'm not sure what is happening back home – I might find my mother is exhumed...the excuse that LHDA put across was that they were going to exhume because of the bad relationship between the resettlers and the hosts, but that site belonged to LHDA."

Tensions eased only after LHDA promised to address demands of the host community, including provision of water, roads, electricity, schools, and a clinic. All Sadly, the story does not end there. The one hectare of land allocated

to the resettled community coincidentally lay adjacent to property belonging to Lesotho's Minister of Foreign Affairs. The minister repeatedly fomented opposition against the resettlers in the community and apparently convinced the Minister of Natural Resources to announce in late 2000 that the community would be resettled yet again. He claimed that they would be relocated to the Free State or to other land in Lesotho. This announcement came against the wishes of the LHDA and World Bank, and the resettled community is unanimously opposed to the course of action that the Minister decreed. 42 One community representative warned project authorities and the government that "the affected and the would-be affected will not tolerate 'games' being played against Makhoakhoeng residents" and claimed that if the community is not allowed to "stay in peace, LHDA will never ever resettle any one in this area ",43

The Resettlers' Declaration
After having suffered through a poorly planned resettlement process, people who had been moved during the first phase of resettlement advised representatives of the soon-to-be-moved villages to demand that LHDA fulfill all of their promises regarding resettlement before they attempt to move anyone from their home. "If you wait until after you've been moved," they warned, "you will find that you have no more power than a toothless dog." The second group of resettlers heeded their call.

After the visits, representatives of the tobe-resettled communities composed a declaration containing 15 demands, which they said needed to be addressed before they would consent to leaving their homes. They demanded, among other things, to receive compensation prior to resettlement, lump sum compensation as opposed to an annual payment, the resettlement of culturally important sites, access to burial sites above the inundation zone, and the right to reject incomplete resettlement sites. The communities then signed the declaration and submitted it to LHDA.

LHDA and the World Bank responded swiftly, saying that local NGOs were imposing their views on affected communities and accusing them of "sowing confusion" and "fostering a complaint culture" in Mohale villages. The affected communities maintained their position, which led to a series of heated meetings with LHDA officials.

The issue came to a head in April 2000 during a visit of the World Bank's LHWP Task Team. The team had been notified of the resettlers' declaration by local NGOs, and decided to investigate the matter. During a meeting at Ha Takatso, a member of the Task Team held up a copy of an English translation of the declaration and asked the assembled resettlers if they were aware of a letter that their NGO allies had recently sent to the World Bank. The affected people were confused, not certain which letter the World Bank official was referring to. Having implied that local communities had no ownership of the declaration that he held in his hand, the official proceeded with his speech. At this, a member of the Transformation Resource Centre (TRC) interrupted and asked the official to read the letter in question. The official initially declined, saying that it was now time to proceed to "the real issues." TRC members insisted, however, and the

official reluctantly began reading the declaration. The affected people recognized it immediately and cheered as each of the declaration's points were read.⁴⁶

In the following weeks, LHDA stepped up their assurances that all resettlement infrastructure would be in place before the next group of households was forced to leave Mohale. They regularly took the affected people to the resettlement sites, so that they could observe the preparations for their eventual arrival. They saw little evidence of completed infrastructure, but the LHDA's promises were so convincing that three households dropped their objections and agreed to the resettlement on January 23, 2001. When they arrived at the resettlement site, they quickly discovered that water supply systems and toilets had not been installed. They were forced to walk a considerable distance to collect water from the host community's source, and had to ask permission to use neighbors' latrines.⁴⁷

¹ Sofonea Shale, "LHDA Celebrates With The Old," *Mopheme/The Survivor*, January 9, 2001.

² R.T. Mochebelele and O.M. Letsela, *LHWP* – Concerns and Benefits of Dams Including the Environmental and Social Impacts and the Associated Mitigation Measures for Sustainability, December 8-9, 1999, p. 25.

³ John H. Eriksen, "Comparing the Economic Planning for Voluntary and Involuntary Resettlement," *The Economics of Involuntary Resettlement: Questions and Challenges*, Ed. Michael M. Cernea, 1999, p. 90-91.

⁴ Figure adjusted for inflation.

⁵ R.T. Mochebelele and O.M. Letsela, *LHWP* – Concerns and Benefits of Dams Including the Environmental and Social Impacts and the Associated Mitigation Measures for Sustainability, December 8-9, 1999, p. 25.

⁶ John H. Eriksen, "Comparing the Economic Planning for Voluntary and Involuntary Resettlement," *The Economics of Involuntary Resettlement: Questions and Challenges*, Ed. Michael M. Cernea, 1999, pp. 90-91.

⁷ LHDA, Resettlement and Development Study: Task 1. Vol. 1 – Executive Summary, November 1995, p. 2. ⁸ Robert Hitchock, John Ledger, Len Lerer, Michael Mentis, and Thayer Scudder, Report of the Panel of Environmental Experts, June 1996, p. 17. 9 Now called the Lesotho Highlands Water

Commission (LHWC), the JPTC's is comprised of delegates from both Lesotho and South Africa. Its responsibilities include ensuring that Treaty requirements are upheld and approval of all contracts. It monitors and approves all LHDA activities.

10 John Ledger and Thayer Scudder, Report of the Panel of Environmental Experts, April 7, 1995, p. 11. 11 Hunting-Consult 4 Joint Venture, LHDA Contract 1012 VO#5, Monthly Progress Report No. 2, May 1997, p. 1.

¹² Len Lerer, Michael Mentis, and Thaver Scudder. Report of the Panel of Environmental Experts. March 1998, p. 19.

¹³ Transformation Resource Centre, "Makotoko: A New Home for Resettlees," Work for Justice, Issue 54, December 2000, p. 12

14 LHDA, Lesotho Highlands Water Project Phase 1B Environmental Impact Assessment: Executive Summary, May 1997, p. 21.

¹⁵ LHDA, Resettlement and Development Study: Task 1 Report, Volume 1 – Executive Summary, November 1995, p. 15.

¹⁶ Lori Pottinger, Lesotho Highlands Trip Report, International Rivers Network, September 1996, p. 10. ¹⁷ Robert Hitchcock, John Ledger, Len Lerer, Michael Mentis, and Thayer Scudder, Report of the Panel of Environmental Experts, March 1999, p. 11.

¹⁸ LHDA, Resettlement and Development Study: Task 2 Report, Volume 2 – Main Report, February 1996, p.

¹⁹ LHDA, Resettlement and Development Study: Task 2 Report, Volume 2 - Main Report, February 1996, p.

31. World Commission on Dams, *Dams and* Development: A New Framework for Decision-Making, November 2000, p. 107 and World Bank, Operational Directive 4.30: Involuntary Resettlement, June 1990, p. 2.

²¹ LHDA, Resettlement and Development Study: Task 1 Report, Volume 2 – Main Report, November 1995,

p. 95. ²² LHDA, Resettlement and Development Study: Task ² Main Report. May 1996, pp. 3-

4, 4-11. ²³ Olivia Bennett, "Tearing the Threads: The Social Costs of Forced Resettlement," Oral History, Spring 1999, p. 42.

²⁴ Sechaba Consultants, Poverty and Livelihoods in Lesotho, 2000: More than a Mapping Exercise, June 2000, p. 100.

²⁵ LHDA, Resettlement and Development Study: Task 3 Report, Volume 2 – Main Report, May 1996, p. 3-4. ²⁶ Robert Hitchcock, John Ledger, Michael Mentis, and Thayer Scudder, The Report of the Panel of Environmental Experts, November 2000, p. 24.

²⁷ Olivia Bennett, "Tearing the Threads: The Social Costs of Forced Resettlement," Oral History, Spring 1999, p. 41.

Transformation Resource Centre, "Not Even a Place to Bury Our Dead," Work for Justice, Nov/Dec 1999. No. 53, p. 8.

²⁹ Transformation Resource Centre, pers. comm., February 2001.

30 Robert Hitchcock, John Ledger, Len Lerer, Michael Mentis and Thayer Scudder, Report of the Panel of Environmental Experts, July 1997, p. 82.

³¹ *Ibid.*, p. 83.

Malefetsane John Lepele, Report on the Phase 1B Resettlement and Development Investigation Mission of the Thaba Bosiu Foothill Area, Sechaba Consultants, February 27, 1996.

³³ Olivia Bennett, "Tearing The Threads: The Social Costs of Forced Resettlement," Oral History, Spring 1999, p. 40.

³⁴ Ibid.

³⁵ Pers. comm., February 2001.

³⁶ Robert Hitchcock, John Ledger, Michael Mentis, and Thayer Scudder, Report of the Panel of Environmental Experts, November 2000, p. 17.

³⁷ Robert Hitchcock, John Ledger, Michael Mentis, and Thayer Scudder, Report of the Panel of Environmental Experts, March 1999, p. 28.

Ibid., p. 28. ³⁹ Transformation Resource Centre, "Not Even a Place to Bury Our Dead," Work for Justice, Nov/Dec 1999,

p. 9. ⁴⁰ Anna Moepi, *The Impact of the LHWP on the* Community Resettled from Molikaliko. December 8-9. 1999.

⁴¹ *Ibid.*, p. 9.

⁴² Transformation Resource Centre, pers. comm., December 12, 2000.

⁴³ Sofonea Shale, "LHDA Celebrates With the Old," Mopheme/The Survivor, January 9, 2001.

44 Transformation Resource Centre, "Lesotho Resettlers Demand Improvements in Resettlement Package," World Rivers Review, June 2000, p. 4. ⁴⁵ Transformation Resource Centre, pers. comm., April 2000.

⁴⁶Transformation Resource Centre, *Letter to Andrew* Macoun, LHWP Task Team Leader, May 18, 2000. ⁴⁷ Transformation Resource Centre, pers. comm.,

January 30, 2001.

Replacing What Was Lost: The Compensation Plan

"When the dam comes there will be nowhere where I will plough...And then it will be that I am that man who just sits... And then it will happen that I will change and will end up stealing, as a result of thinking too hard about this agriculture of my home area here. That is the thing which will remain there in this heart of mine." 1 Sebili Tau, Molikaliko village

The LHDA spent over \$20 million to compensate people who lost assets to the project. Compared with many other projects involving involuntary resettlement, the LHWP's compensation program is relatively generous.

The Original Policy

Initially, instead of replacing lost land with land elsewhere, LHDA substituted bags of grain for those displaced. The plan delivered maize in quantities that LHDA claimed equaled or surpassed the amounts that farmers could produce on the lost land. Agricultural records indicated that maize harvests in the mountains averaged less than 1000kg per hectare, so LHDA based its compensation rate on that figure. For example, a half of a hectare of arable land would be compensated with 500kg of maize every year. The table on page 27 lists other resources that were compensated by LHDA. All told,

	1990 Compensation Policy ²	1997 Compensation Policy ³	
Arable land above 1000 m ²	970kg maize + 30kg beans	1) 970kg maize + 30kg	
	per hectare lost for 15 years	beans per hectare lost for 50	
		years; or	
		2) \$300 per hectare for 50	
		years; or	
		3) a one-time lump sum	
		payment of \$6,000 per	
_		hectare	
Arable land below 1000 m ²	One-time lump sum	One-time lump sum	
	payment per m ²	payment of 50 cents per m ²	
Garden land	One-time lump sum	One-time lump sum	
	payment of \$1 per m ²	payment of \$10 per m ²	
Fruit trees	One-time lump sum	One-time lump sum	
	payment of \$22 + 5	payment of \$96 per tree	
	replacement seedlings per		
	tree		
Other trees	One-time lump sum	One-time lump sum	
	payment of \$11 + 5	payment of \$34 per tree	
	replacement seedlings per		
	tree		
Communal land	560kg of fodder per hectare	One-time lump sum	
	every year for five years	payment of \$1,800 per	
		hectare	

approximately 20,000 people were members of households who were due compensation, 1 percent of Lesotho's total population at the time. LHDA spent approximately \$13 million (1.3% of the overall project budget) to fund the compensation program at Katse and Muela.

Affected people and their NGO allies criticized the compensation policy. They felt the cash compensation rates were "grossly undervalued." They also pushed to have compensation payments continue until livelihoods had been restored, not for a set 15 years. Land is an asset that is passed down from generation to generation, they argued, and short-term compensation would mean the eventual impoverishment of their families and future generations. The LHWP had left nearly 25% of the project-area population landless⁷ and if development programs did not succeed (which they have yet to do), they would be left without a source of subsistence after the 15-year period.

Implementation of the compensation program was fraught with problems, too. Deliveries were frequently not on time, losses were overlooked, and compensation grain and fodder was often of inferior quality.⁸ Households that received lump sum compensation for trees usually spent the money "on things not connected with the replacement of the lost trees," and the replacement seedlings tended to "die because there (were) no suitable places to replant them." LHDA purchased compensation grain from South Africa. doing little for the local economy. It then transported the grain to the highlands at exorbitant costs that were often "greater

than the purchase price of the grains, pulses and fodder."¹⁰

Compensation for arable land was also far from adequate from a nutritional standpoint. The compensation maize may have closely approximated the cash value of crops grown on the lost land, but they did not replicate the diversity of crops that affected people produced in their fields and gardens. Basotho farmers grow wheat, beans, peas, and sorghum in their fields and a variety of vegetables in their gardens. The maize-only compensation package contributed to protein and nutrient deficiencies. LHDA modified the package in 1993 so that 3 percent of the compensation package was comprised of beans. It was a small move in the right direction, but the Panel of Experts has noted, "The compensation package still does not replicate completely the diet of people residing in the Highlands."11

Marijuana income

Another serious deficiency of the compensation plan resulted from the failure to compensate for Lesotho's most valuable cash crop, marijuana. Maize is the crop most commonly seen in Basotho's mountain fields, but the marijuana (dagga in Lesotho) that Highland people frequently plant in field margins is the real money-maker, despite its illegal status in Lesotho. LHWP consultants conservatively estimated that the crop is "cultivated on 10% of the arable area, and accounts for 60% of the arable crop net revenue."12 Unfortunately, much of the land where this valuable crop is grown will be inundated by reservoirs, a serious blow to the survival strategies of affected people. The loss of marijuana income has troubling gender implications too,

because "the income particularly benefits women. In an area that is otherwise heavily dependent for cash revenue on the declining receipts from labor migration, the earnings from dagga support essential expenditures on, for example, education and health." Teachers in Lesotho will back up this assertion, noting that many parents can only pay their children's school fees after they have sold their marijuana crop. One woman resettled from Mohale Dam testified to the World Commission on Dams that before the LHWP began:

"We were planting maize, wheat and everything that sustains our lives, including marijuana. We know this substance is illegal, but it enables us to send our children to school. In other words, we were planting money, literally. We were watering these plants with water which is found in abundance at our places. And then the project came." 14

In a country plagued by rapid soil degradation, marijuana is ideal for small farmers because it requires little investment, involves little risk, and pays big returns. Marijuana grows naturally in Lesotho, often on marginal land, so seed and fertilizer do not need to be purchased. Highland people also value the crop highly for its medicinal effects in both humans and animals. 15 The majority of marijuana is grown interspersed with maize in remote fields far from roads, but many households have a few plants growing outside their houses and larger plots in their gardens. According to some reports, a few households sow marijuana as a single crop in fields that are nearly the size of one hectare. 16 Fortunately for the growers, police pay little heed to

marijuana, and when they do, a timely donation of sheep or goats often appeases the authorities. Because of the infrequency of prosecution, the growth and sale of marijuana is not perceived to be an altogether illicit activity. In fact, one LHDA-funded video plainly shows villagers happily stripping the leaves from the plant and preparing it to be dried. LHWP access roads, though, have increased the frequency of police patrols thus increasing the risk of large-scale marijuana production, and marijuana traders have "indicated that they (will) no longer trade with those villagers who are moving closer to more populated areas."17

Revising The Compensation Plan In response to the mounting local and international criticism and in preparation for construction of the second LHWP dam, Mohale Dam, LHDA revised its compensation policy in 1997. The new policy (made retroactive to populations affected by Katse and Muela) extended the compensation time period to 50 years and included 80 percent increases in cash compensation rates for arable land. It allowed compensation recipients to choose to be paid in an annual cash payment; an annual grain payment; or through a one-time lump sum payment with the important proviso that people electing this option must first devise "viable" business plans. The revised plan discontinued annual fodder deliveries to affected villages but did provide for the compensation of communal assets through lump sum payments to villages. These villages, though, were also required to devise "viable" business plans before they received their payments. The LHDA budgeted approximately \$10 million to compensate affected households at

Mohale Dam, 2.1 percent of the total project budget. The table on page 27 outlines the revised compensation policy's rates.

Most affected people had little understanding of the policy, "concluding that the compensation scheme is nothing but a complicated morass of numbers." Said one, "You know, [the compensation scheme] has made our heads stop...as to [how it works]." Said another, "The affected people do not have a say in the compensation policy. It is created by LHDA, and we have no choice but to accept it."

Despite this lack of understanding (or perhaps because of it), the vast majority of people who lost arable land to Mohale Dam (84 percent) opted to be compensated in cash.²¹ They did so because cash payments could be easily used to cover expenses like school fees, medical bills, and household goods. Meanwhile, when LHDA presented the same compensation options to affected villages at Katse and Muela, the communities overwhelmingly chose the in-kind compensation.²² Affected people at Katse also based their decision on the liquidity of cash payments, but viewed this as potentially dangerous rather than an opportunity. They did not trust their ability to budget the payment throughout the year in a way that would ensure they could feed themselves. Cash could be spent frivolously whereas grain would most probably be used to fill hungry stomachs. This fear is borne out by global experience. The Panel of Experts notes that, in resettlement and compensation programs throughout the world, "annual payments alone do not provide sufficient income for even restoring living standards",²³ because

recipients often "expend their money very quickly" and "adult males in the household appropriate the cash for their own use" often neglecting the needs of women and children in the household.²⁴ Time will tell if similar problems occur among the Mohale-affected. Indications are that they will because local experts estimate that "an income of M500 per month is needed for a family of six (the average size of LHWP families) without access to arable land. That amount is double the amount that many resettler/relocatee households are currently receiving from their annual entitlements.",25

Compensation deliveries proceeded a bit more smoothly in the early stages of Mohale Dam construction than they had at Katse and Muela. The LHDA gave its field operations branches power to settle compensation claims on the spot without needing to receive approval from the Maseru office. It also attempted to improve its ability to verify compensation claims through more careful record keeping of project-affected assets using photographs and detailed lists.

Unfortunately, the revised compensation policy also had some serious gaps and its implementation ran into some significant snags. The following are the most serious and remain unresolved to the present day.

Lump sum compensation
Certain affected people selected the lump-sum compensation option, meaning they would receive a pro-rated amount of cash in a one-time payment.
LHDA staff frequently expressed concerns that these lump-sum recipients would "drink away" the money, be left

without any means of support, and become an all-too-obvious example of how affected communities have been left worse off by the LHWP. Therefore, the LHDA required that everyone who preferred a lump-sum payment devise a "viable" business plan as a condition of payment. This presented a serious complication. Because affected people have very little experience in drawing up business plans and the LHDA did not have effective criteria to evaluate them, only a handful of affected people have yet received lump-sum compensation after four years of waiting. A staff member of the Transformation Resource Centre said the plan was "ridiculous." "How can you expect a 50-year-old, ordinary villager to produce a business plan? Even for someone with a high school certificate, like me, it would be difficult to produce one."26 The delays became so protracted that they prompted the Panel of Experts to scold, "The funds... do not belong to LHDA but rather to the individuals who lost assets to the project. In effect, what (LHDA) is attempting to do is to make decisions for individuals after having given them the option of choosing a lump sum cash payment."²⁷ Today, the World Bank says this poorly conceived plan was based on "heroic assumptions" about local people's business skills and is being reevaluated.

Communal compensation

In addition to compensating individuals for the loss of assets, LHDA promised to compensate affected communities for the loss of communal assets. This became quite problematic. The LHDA ended its deliveries of fodder in 1997, citing unfairness to affected people who did not own stock but used grazing lands to gather vegetables and medicinal plants.

The fodder also encouraged livestock owners to keep too many animals on the crowded pastures. LHDA's primary concern, though, was the rising costs of transporting the fodder to the highlands. The cost for transport rose 450% in two years to an annual total of approximately \$100,000 in 1995 (and that was for 300 fewer tons of fodder than the amount delivered two years earlier).²⁸ The end of fodder deliveries caused no small amount of disquiet among affected communities whose ever-leaner cattle were forced out of reservoir grazing areas. In late 1998, they wrote a petition protesting the lack of compensation. (See box) The LHDA promised to compensate each community with a lump sum payment for their communal lands, but they again stipulated that the village must first devise a viable "development" project. None of the communities, even those who devised plans, have yet received their compensation after a delay of more than three years.

Residents of the village of Ha Nkokana lost considerable amounts of grazing land to an LHWP airstrip and rock quarries. They received fodder compensation until 1997, but it then abruptly stopped. After two years without fodder deliveries, LHDA staff incorrectly informed the village that they would receive a large sum of money each year as compensation for their lost grazing land and that they should discuss ways of using the money. Later, the LHDA returned and informed them that the annual payments would in fact only be delivered when the LHDA approved the community's development plan. Several weeks later, the LHDA again visited the village and said that the compensation would in fact only be one

payment. Undaunted, the villagers carefully devised plans for a community centre that would incorporate several income-generating components. They submitted the proposal to LHDA and waited for a response. None came. They visited LHDA repeatedly to ask about the status of their proposal and to ask the income generating officer to explain the procedures to their village. He did not accommodate the requests. The cause of the delay was that a method for assessing communities' development plans had not yet been devised. As a result,

affected people's resentment towards the LHDA grew. The village has still not received its promised compensation, and as of February 2001, an LHDA staff member had not officially visited the village for six months.²⁹

Letter sent to LHDA by villagers about lack of communal compensation.

11 September 1998

To: Mr. Makase Marumo, Chief Executive of the LHDA

Dear Sir:

We, as residents of Katse Local Catchment, have been stripped of the lands where our animals used to graze by the construction and filling of Katse Dam. In order to mitigate this loss, the project compensated us with fodder for the past five years.

We are now very surprised because just before the end of last year we were told by the project that we would be given money instead of fodder. Some of us began developing plans for how to use these funds. Unfortunately, we have not yet received any of this money, and it is now the end of 1998.

Mr. Marumo, our cattle are dying. Our oxen are becoming too weak to plough and sow the fields. Now we say the project should give us our fodder without any delay or unconditionally give us our lump sum payments within the coming month.

We thank you for your attention to this matter and we await your prompt action on it.

Sincerely,

[Signed by close to 100 villagers]

Compensation for sharecroppers As mentioned in the previous section, the LHWP presented severe difficulties to sharecroppers. The new compensation policy overlooked the thousands of landless people (3200 people at Katse alone - 16 percent of the area's population³⁰) who subsisted on food and income derived from working in other people's fields. Many owners of small plots of land also sharecropped to supplement their income. One man, later displaced by Mohale Dam said: "I have one field of my own, but then, truly I usually plough in partnerships. Right here with the old people here, or with people who do not have cattle, or those who are needy in the hands like the handicapped."31 These sharecroppers lost their means of livelihood when the LHWP's dams flooded their patrons' fields. The landholder received compensation for the lost land, and the sharecroppers, their services no longer needed, received nothing. Consultants who revised the compensation policy in 1996 noted that "the prospects for landpoor families under LHDA's existing compensation policy are not good,"32 but the final policy did not include a formal mechanism for compensating these households. The policy judges sharecroppers as not having land, when in fact they did have access to land. Access to land is not compensated by the policy.

Marijuana income

Increases in compensation rates were, in part, an attempt to reflect the economic value of marijuana to project-affected people. ³³ Unfortunately, they fall far short of compensating full value. A bag of marijuana can fetch \$100 from South African buyers, and farmers in the Mohale area commonly produce as

much as 10-25 bags per year. The buyers also pay the growers a significant sum to transport the marijuana to remote collection sites.³⁴ LHDA's compensation rates for arable land rarely cover more than a fraction of what affected people once derived in marijuana income.

Compensation for gardens

Another contentious issue concerned garden land. Many affected people grew vegetables in plots of land that approached the size of some fields. The compensation rate for a hectare of garden land is about 20 times as much as the rate for a hectare of arable land. Fearing to set a precedent which could call the compensation policy's land valuation into question, LHDA officials arbitrarily decided that no piece of land which measured more than 400 m² would be classified as a garden and would therefore receive the arable land compensation rate. Affected people and NGOs like TRC and HCAG complained about the capricious decision, but to no avail.

Garden compensation was also problematic for resettled people. The first stage of resettlement out of Mohale catchment involved 99 households and took place in 1998. They did not receive compensation for their gardens until the early months of 2000. This was in direct contravention of the World Bank's policy on involuntary resettlement, which requires that displaced people "be compensated for their losses at full replacement cost prior to the actual move." 35

Complaint culture

LHDA announced in 2001 that they would review the policy in order to address some of its weaknesses.³⁶ It is

clear from recent statements, however, that the compensation program is becoming tiresome for LHDA. Project officials frequently lament the "complaint culture" they feel is developing among affected people. "People have learned to simply complain and complain and complain and they do not even have an interest in starting projects that could improve their standard of life," said one. 37 LHDA's Compensation Division recently drafted a paper entitled, "Beyond the Compensation Boom: A Conceptual Framework for Implementation of Development Interventions in the LHWP-affected Communities." The document makes very clear that LHDA believes "affected households have begun to exhibit sustained symptoms of a dependency and complaints culture which weaken the ability of the LHDA to focus on broad-based sustainable development initiatives to enhance quality of life for impacted communities."³⁸ World Bank staff echo this opinion. "People have become dependent on LHDA. The problem is how to get them out of the projectaffected people category so they stop acting like project-affected people and just become citizens," said one Bank staff worker.³⁹

Comments like these place the blame for failed mitigation and development programs on the "laziness" or "apathy" of affected people. Project proponents' missionary-like zeal for development blinded them to their own responsibility in the impoverishment of affected people. They shake their heads in exasperation, hardly remembering that it was the LHWP itself that left affected people bereft of land and resources.

However, there may also be an element of strategy in all of this talk about a "complaint culture." If it can be demonstrated that affected people simply refused to take advantage of the opportunities that were presented to them, then LHDA can make the case that they did everything possible to "enable" affected people to improve their quality of life, thus fulfilling the requirements of the treaty and the promises of the politicians.

The next section will take a closer look at many of these new development "opportunities," demonstrating that the barriers to their success stem less from the lethargy of affected people, and more from the harsh social and economic realities of the Lesotho highlands.

¹ Panos Institute, *Interview with Sebili Tau*, November 1997, p. 7.

² LHDA, An Overview of the Lesotho Highlands Water Project, August 1996, p. 26.

³ LHDA, Compensation Policy, Rates and Procedures, November 1997, pp. 1-5.

⁴ LHDA, An Overview of the Lesotho Highlands Water Project, August 1996, p. 26.

⁵ R.T Mochebelele and O.M. Letsela, *Lesotho Highlands Water Project – Concerns and Benefits of Dams Including the Environmental and Social Impacts and the Associated Mitigation Measures for Sustainability*, December 1999, p. 25.

⁶ Scott Coverdale and Lori Pottinger, From Here to Eternity: Promises Versus Reality on the Lesotho Highlands Water Project, International Rivers Network, August 28, 1996, p. 2.

⁷ Robert Hitchcock, John Ledger, and Thayer Scudder, *Report of the 1991 Environmental Panel*, August 19, 1991, p. 16.

⁸ Lori Pottinger, *Lesotho Highlands Trip Report*, International Rivers Network, September 1996, p. 5 and Transformation Resource Centre, "How the LHWP Has Changed the Way My Family Lives," *Work for Justice*, Nov/Dec 1999, p. 3.

⁹ LHDA, Resettlement and Development Study, Volume 2, Task 2, February 1996, p. 12.

¹⁰ World Bank, *LHWP: Back to Office Report*, August 1995, p. 3.

¹¹ Robert Hitchcock, John Ledger, Len Lerer, Michael Mentis, and Thayer Scudder, *Report 11 of the Panel of Environmental Experts*, July 1997, p. 74.

¹² LHDA, Resettlement and Development Study, Volume 2, Task 2, February 1996, p. 57.

¹³ Robert Archer, *Trust in Construction*, Christian Aid, 1995, p. 28. ¹⁴ Anna Moepi, The Impact of the LHWP on the Community Resettled from Molikaliko, December 1999, p. 1. ¹⁵ Panos Institute, *Interview with Chief Mepa* Mokhothu, November 1997, p. 5-6. ¹⁶ Laurent Laniel, Cannabis in Lesotho: A Preliminary Survey. 1998. ¹⁷ Olivia Bennett, "Tearing the Threads: The Social Costs of Forced Resettlement." Oral History, Spring 1999, p. 43. ¹⁸ Panos Institute, *Interview notes*, 1998. ¹⁹ Panos Institute, *Interview with Sebili Tau*. November 1997, p. 5. ²⁰ Benedict Leuta, pers. comm., April 1999. ²¹ Sofonea Shale, "LHDA Celebrates With The Old," Mopheme/The Survivor, January 9, 2001. ²² Len Lerer, Michael Mentis, and Thayer Scudder, Report of the Panel of Environmental Experts, March 1998, p. 15. ²³ Robert Hitchccok, John Ledger, Michael Mentis, and Thayer Scudder, Report of the Panel of Environmental Experts, November 2000, p. 15. ²⁴ Robert Hitchcock, John Ledger, Len Lerer, Michael Mentis, and Thayer Scudder, Report of the Panel of Environmental Experts, March 1999, p. 30. ²⁵ Robert Hitchcock, John Ledger, Michael Mentis. and Thayer Scudder, Report of the Panel of Environmental Experts, November 2000, p. 15. ²⁶ Transformation Resource Centre, pers. comm., February 7, 2001. ²⁷ Robert Hitchcock, John Ledger, Michael Mentis, and Thayer Scudder, Report of the Panel of Environmental Experts, October 1999, p. 11. ²⁸ Robert Hitchcock, John Ledger, Len Lerer, Michael Mentis, and Thayer Scudder, Report of the Panel of Environmental Experts, June 1996, p. 2. ²⁹ Pers. comm., February 2001. ³⁰ M. Tshabalala and S.D. Turner, 1988 Socio-Economic Census of the LHWP Phase 1A Areas, LHDA, September 1989, p. 30. ³¹ Panos Institute, *Interview with Sebili Tau*. November 1997, p. 4. 32 LHDA, Resettlement and Development Study: Task 2 Report, Volume 2 - Main Report, February 1996, p. 33 LHWP consultants who were responsible for formulating the new compensation policy used the euphemism "cash crops" to refer to marijuana.

² Report, Volume 2 – Main Report, February 1996, p. 6.

33 LHWP consultants who were responsible for formulating the new compensation policy used the euphemism "cash crops" to refer to marijuana.

34 Laurent Laniel, Cannabis in Lesotho, 1998.

35 World Bank, Operational Directive 4.30:

Involuntary Resettlement, June 1990, p. 1.

36 Sofonea Shale, "LHDA Celebrates With The Old,"

Mopheme/The Survivor, January 9, 2001.

37 Pers. comm., March 2000.

38 LHDA, Beyond the Compensation Boom: A

Conceptual Framework for Implementation of

Development Interventions in the LHWP-affected

Communities, October 2000.

39 Pers. comm., December 2000.

Back to the Drawing Board: Experiments in Rural Development

In conjunction with the Compensation Plan, the LHDA unveiled a Rural Development Plan (RDP) in 1990 that outlined specific strategies to assist project-affected people restore their livelihoods. Required by the World Bank, such development plans are intended to restructure the disrupted regional economies that big projects leave in their wake. Academics and government officials lauded LHDA's plan, describing it as "outstanding" and one of the best in Africa. This response was not unanimous, however. One NGO representative working with projectaffected people remarked, "It is ironic that there needs to be a development program to repair the damage done by a development project."2

The plan originally budgeted \$54 million over 12 years for a wide range of development projects including animal husbandry and range management, mountain horticulture and field crops, community forestry, commercial trout rearing, rural training, rural feeder roads, tourism, village water supply, rural sanitation, and rural electrification.³ The program was supposed to begin in 1990. Unfortunately, the South African and Lesotho governments haggled over which country should foot the bill until 1993, when they finally agreed to divide the costs evenly and pay approximately \$18m each over a ten-year period. South Africa's overwhelming political advantage in these negotiations prevented Lesotho from insisting that the development budget was actually a compensation cost. The \$18m budget was far less than the amount project consultants had originally proposed, but it was still quite a large sum relative to other large dam projects around the world.

The Rural Development Plan had serious troubles apart from budget issues, which seemed immune to attempts to remedy them. Parts of the plan were ill conceived, and implementation ran into a series of snags. These troubles prompted the World Bank's Panel of Environmental Experts to warn as early as 1991 that it was "not confident that implementation of the RDP will actually enable a majority of the mountain people to significantly improve their living standards."⁵ In 1994, World Bank staff noted that it was "hard to detect any economical effects" of the RDP.6 Few affected people participated in the program's activities, and its successes tended to be overblown by LHDA. According to NGO representatives, "in one village where a dairy program is purported to have taken off, there are just seven cows, and villagers were told they will have to pay back LHDA for the animals. Another village was shown an RDP brochure, explaining livelihoods they might choose from. Later, another LHDA staff person told them they would be given nothing shown in the book, but would only be given loans to get started in the livelihoods depicted, which would have to be paid back with interest. Confusion and resentment were widely expressed." By 1995 (the fifth year of the program), the World Bank was calling the RDP the "sick man" of the entire operation.⁸ In 1996, it noted that the program had spent only 18 percent of its total budget⁹ and told the LHDA to "fully re-allocate the RDP fund" because "very little has been committed." In essence, they had told LHDA to start all over.

Ten years after LHDA devised the RDP, it is generally considered to have failed in meeting its objectives. ¹¹ The following are specific examples of programs gone awry.

Water Supply

The RDP made a commitment to "assure that all 3.770 households within the local catchments of Katse and 'Muela reservoirs have access to engineered drinking water from public standpipes by the year 1995." They further committed that all households would have access to standpipes "within 150" meters" and would be provided with 30 liters/person/day, 20 liters/person/day less than the international standard advocated by the World Health Organization. At the time, they estimated that this commitment would cost \$715,000 for construction and 50 years of maintenance.

Five years after the target date, only three villages have working water systems and at least five primary schools still have no water supply. 13 Many of the systems that were installed quickly failed and have not supplied water in almost three years. LHDA claimed that the systems had been vandalized by herdboys, and placed the blame on affected people. One official explained, "The people think that LHDA should be responsible for the maintenance of those standpipes, but if the people themselves don't demonstrate any initiative, the system will never be sustainable." However, a government inspection team reported seeing no evidence of vandalism -- but did remark on finding

taps constructed below the national standard and sourced to weak, intermittent springs. 14 In 1996, the village of Makhangoa was resettled from Katse Dam to an area without a clean water source. During the dry season, the Bokong River below the village is little more than a string of stagnant pools. Cows, donkeys, sheep and goats drink from them and crisscross them frequently in search of better grazing. This is where the resettled people were forced to collect water. In 1996, LHDA told the villagers not to worry because they would construct a water supply system. No system has been installed to date.

A high-ranking LHDA official who spoke under condition of anonymity explained the project's broken promise quite candidly: "We made major commitments without intensive assessment of the real water situation in the catchment area." Pumping water from the reservoir is apparently not a solution, because "the depth of (reservoir) drawdown makes pumping impracticable." Curiously, this was not enough of an obstacle to prevent the Katse engineers' village from pumping reservoir water into their homes, restaurants, and swimming pools.

Range Management

The RDP's experts on range management and animal husbandry concluded that pastures in LHWP catchment areas exhibited "a most severe state of overstocking" and noted that the formation of Katse Reservoir would exacerbate the situation. Overstressed pastures lead to poor quality livestock and increased sedimentation of LHWP reservoirs. Accordingly, the consultants recommended that range management associations be formed to undertake a

massive de-stocking exercise that would have slaughtered all livestock in the catchment and replaced every three slaughtered animals with "two good animals of improved productive capacity." These range management associations would then have exclusive grazing rights in certain fenced-off pastures and initiate a fodder production program.

To most highlands people, this proposal seemed absurd, and the de-stocking program in particular was pure madness. Approximately 80 percent of households affected by Katse and Muela owned animals and almost half owned between 1 and 10 head. 18 A 33 percent cull would impact these families severely. Livestock are essential in many aspects of mountain life – field cultivation, provision of wool and mohair, transportation of people and other heavy loads over difficult terrain, and for cultural celebrations and feasts. Most importantly, large numbers of animals are a valuable retirement plan or store of wealth that may be accessed only in times of emergency. Suggesting that Basotho cull their stock "is equivalent to asking a townsperson to withdraw savings from the bank and burn them."19 Large numbers of livestock also have a social function. One of the most revered figures in Basotho culture is the *morui*, a farmer who is blessed with many cattle who always has one to lend to his neighbor for plowing or to give for slaughter at feasts or funerals. A man with only a few, high-quality animals is less likely to allow them to be used for the communal good whereas "respect is due a man with livestock because livestock help the whole community."20 With this cultural rule in place, the

consultants' livestock plan was doomed to failure despite its \$10 million budget.

Ten years later, not a single animal has been culled as a part of the de-stocking exercise. Given the many decades of agricultural extension agents urging Basotho to decrease their herd sizes without success, it is amazing that LHWP consultants proposed culling at all. A short investigation would have revealed views similar to those expressed by a Thaba Tseka District Agricultural Officer who said of mandatory culling, "It is not a matter of education. There have been thousands of pitsos. People understand perfectly well what the issues are, what needs to be done – they just refuse to do it!"²¹

The effort to fence off certain pastures for exclusive access to members of Range Management Associations is not working well,²² and the fodder production program resulted only in "some minor grass plantations" along one short stretch of road.²³ Many villages declined to form grazing associations, and in villages where they were formed, many individuals refused to join.²⁴ Affected people resent the fenced grazing areas because they have reduced the amount of communal range. The cost to join the association is prohibitively expensive. Members are charged \$5 per animal for three months of grazing rights in the fenced pastures.²⁵

Horticulture

LHDA consultants correctly recognized the importance of agriculture as a survival strategy for highlands households and proposed \$1.6m worth of "improved cultural practices" that they hoped would lead to higher yields and "attractive gross margins on

vegetables and fruit" with the additional benefit of reducing erosion into dam reservoirs. ²⁶ The consultants believed the "stagnant" state of agriculture in pre-LHWP areas resulted from local people's "failure to innovate." ²⁷ To remedy this situation, LHWP determined to introduce hybrid seeds, improved tilling techniques, fertilizers, pesticides, soil conservation methods, and a pilot irrigation project.

A more accurate assessment of the state of highlands farming would have shown that strain on natural resources, which would be exacerbated by the loss of land to LHWP dams, were some of the most major constraints to improved yields. Presently, dung that could be used to fertilize fields must be gathered and burned because of a shortage in brushwood and trees. Additionally, crop residue, which could be ploughed back into the soil, is gathered and used as animal fodder to compensate for degraded pastures.

Predictably, like so many past agriculture projects in Lesotho, the RDP's program failed to make much of an impact. Hybrid seeds, fertilizers, and pesticides are expensive, and the costs of these measures (while perhaps increasing yields in some instances) made farming a losing proposition. While highlands farmers' yields are relatively low, their expenses are even lower because they use very few inputs. Before LHDA moved into the area, only 0.2 percent of fields near Katse Dam were fertilized, and only 8.1 percent were sown with purchased seed.²⁸ Because of the low inputs, farmers' profits in the area average nearly \$30 annually. This appears to be a small amount, but in the lowlands, where the

use of inputs is high, the average farmer's yield was a \$13 loss.²⁹ Predictably (and wisely), few farmers increased their use of inputs and the ones who did struggled to avoid operating at a loss. Nearly seven years after the project began, only 3.3 percent of the 2,345 households which lost arable land to Katse and Muela had participated in LHDA's improved seed multiplication project,³⁰ and the majority of these households could only participate because fertilizers and pesticides were provided by the LHDA.³¹

The horticultural program's irrigation project faced an even more dubious future. LHDA hoped its 2.1-hectare pilot scheme at Sentelina would encourage local farmers to begin irrigating small vegetable and tree plots to grow produce for sale in the lowlands and South Africa. The project document, however, was gloomy about irrigation's potential: "Few, if any, irrigation schemes have been successful in Lesotho, even when established on the best lowlands, within easy reach of markets and with adequate water supplies." It even admitted, "The project is not justified economically...

However, given LHDA's obligation to develop the area by the opening of new opportunities to its inhabitants, the project includes irrigated horticulture. Its implementation, however, can only proceed in the knowledge that it has a high risk of failure."³³ True to their doubts, only 62 households had participated in irrigation schemes by 1996, ³⁴ and many of these were involved in the heavily subsidized Sentelina pilot project. Small markets, high electric bills, and a lack of storage and processing facilities meant that the project could not achieve financial viability. ³⁵

Rural Training

Contrary to project officials recent claim that LHDA has "equipped (affected people) with the necessary skills to start their own enterprises in the rural villages" and that skills training "qualifies them for employment opportunities in the project's construction sites,"36 rural training programs for affected people have failed. The LHDA's Rural Development Centre in the Katse area was intended to train seriously affected people in skills such as woodworking, sewing, masonry, and poultry-raising. These areas offer, at best, limited opportunities for entrepreneurship. In 1998, the Lesotho NGO Highlands Church Action Group conducted a study of 23 Rural Development Centre training recipients from randomly selected villages around Katse Dam. The study found that only two of them had been able to generate any sort of income with their new skills, and none were able to use their skills to establish a new livelihood. They also reported that their training certificates failed to "open doors" with LHWP contractors, who claim the certificates are of low standard. "I took my training certificate to the LHWP three times, and each time they told me it is better for me to throw my certificate away," reported one.³⁷ Other training recipients repeatedly identified two impediments to putting their new skills to use: access to capital and the lack of a market for their goods and services. One of LHDA's rural training staff admitted privately that economic realities in the highlands meant the odds of a majority of affected people restoring their livelihoods was "virtually nil."³⁸

In January 2001, LHDA announced that the Rural Development Centre would be closed, and that skills training would henceforth be conducted in affected villages rather than off-site.³⁹ Representatives of the Transformation Resource Centre (TRC) believed this move to be "long overdue" and noted that, "the (Centre) has just been a money making play for foreign consultants who kept on proposing their continued presence." However, TRC staff noted with concern that all of the Rural Development Centre staff had been retrenched, hinting that the villagecentered approach required an accompanying reinforcement of the skills training role of LHDA Field Operations Branches. The success rate of Field Operation Branch Income Generation officers working in affected villages at Katse inspired little confidence.

The abandoned Rural Development Centre workshops, offices, dormitories, and living quarters are less than a mile away from another notorious failed development program: the Thaba-Tseka Project. James Ferguson, author of *The Anti-Politics Machine*, chronicles the troubled history of this project, paying special attention to the fact that, while the methods and means to achieve "development" are reviewed and reworked constantly, the belief in the possibility of "development" is rarely questioned.

Feeder Roads

LHDA undertook to build 53km worth of feeder roads around Katse Dam in order "to redress decline consequent on isolation, and to stimulate development." ⁴⁰ LHDA assumed the roads would allow people access to new markets and services and stimulate tourism. Affected people were skeptical, but welcomed the program because of the opportunity of securing short-term employment. A

1993 study of 28 villages along proposed LHWP feeder roads at Katse Dam found "that employment from road construction was considered more valuable than any of the other benefits that the roads would bring to the area. The people we interviewed saw the proposed access by vehicle as going to benefit outsiders who have vehicles who would bring their taxis and make shops, as well as employees of the Highlands Water Project, rather than the local people." They were correct.

Ironically, the isolation of the area may have been the only factor that kept the local economy afloat. LHWP access roads encouraged the spread of South African products. Because South African goods are cheap, of relatively high quality, and have a certain amount of prestige, they stifled the marketing of local commodities. Shops in the most remote villages surrounding LHWP dams are now stocked almost exclusively with South African goods.

In the formerly isolated LHWP areas, where local producers' only competitive advantage was their vicinity to their customers, the roads allowed distant competitors to corner the market. Farmers who managed to find buyers for their crops previously could no longer do so because imported products were often cheaper. One farmer interviewed by the Panel of Experts managed to compete for several years, but in 2000 "previous markets have ceased to be available. Fifty bags of potatoes remain unsold because a verbal commitment was not honored, while an entire planting of carrots and of early maturing cabbage has gone to waste because of failure to find a market." In a 1995 survey of villages in the Mohale area, researchers

found that villages located far from roads produced the most food while villages along the main mountain road "have generally done quite poorly." 43 The feeder roads had similar effects to those described by Ferguson after the construction of the main throughmountain road 15 years earlier: "The road did indeed reduce 'farm to market' transportation costs, but it soon became clear that, in the 'farm to market' scheme, the 'isolated' mountain villages were not the farm but the market. With the new road, imported South African goods could be brought in more cheaply than ever, and the grain-laden trucks of the planners' dreams ended up coming up the mountain road, not down it... Instead of providing a channel for the export of agricultural surpluses, the new road only lowered the price of cheap imported food, making it harder than ever for a local farmer to profitably produce for the market."44

Area Infrastructure

In several villages adjacent to dam labor camps, LHDA built community halls, marketplaces, communal latrines and village offices to offset the social disruption caused by the influx of outside workers. The community halls remain locked and little used in most villages. They do, however, receive lots of abuse. The doors of some have been stolen, windows have been broken, and in at least one case, have been used as toilets. The village offices are also scarcely used. Both the halls and the offices are less communal goods than prizes for powerful individuals within the community to fight over. A politically partisan school principal assumed exclusive rights of one community hall and uses it as a venue for speeches of ruling party politicians.

In another village, a chief has rented out the offices as living space.

The markets, an attempt to boost informal trade, had mixed results. Two of the five structures are unused. In the other three, women sell snacks to taxi passengers travelling to and from the lowlands. The communal latrines, far from contributing to village sanitation, are in fact a serious health hazard. Many of the latrines have been wisely locked. The others are filthy. Neither the villages nor LHDA feel it is their responsibility to clean them.

Rural Electrification

RDP consultants budgeted \$1m to complete a rural electrification program for 10 villages near Katse and Muela Dam. In brief, the plan was for LHDA to bear the cost of installing transmission lines in the selected villages and then have interested households pay for connecting their homes to the grid. The project was to be completed by 1995.

It appears that project authorities never had any intention of following through on this part of the plan. The economic realities in the target villages clearly indicated that the project would not be feasible, and the Lesotho Electrical Corporation (LEC) felt that investments in rural electrification represented "a misallocation of scarce financial resource(s)."45 At the time the plan was devised, the average monthly income for households in the project areas was approximately \$65, and only 7.3 percent of the households made over \$200 per month. 46 The average monthly income of LEC customers at the time was more than twice that amount. In the project document, the consultants concede that "given the monthly income of most

electricity consumers in Lesotho is known to be over \$400, the proportion of any community in the mountains likely to use electricity, in the absence of a large subsidy, will be low."⁴⁷ Undeterred, they suggested that a few households were spending more on wood fuel than they would spend on electricity costs and thus were potential customers. Unfortunately for the project, the average affected household spent only \$2 per month on fuel, far less than the \$12.29 per month that they would need to pay for electricity and appliances. ⁴⁸

The consultants concluded that rural electrification could take place only under the following circumstances: 1) if low-voltage distribution lines to the villages were grant-funded; 2) if the LEC changed its tariff structure to allow for load-limited, flat-rate usage; 3) if a credit facility was put in place to help consumers pay for connection fees and new appliances; and 4) if, in the interest of cost-efficiency, each participating household installed an expensive "heat storage cooker" (a pilot project to test the cooker estimated the cost at \$400 per unit). Unfortunately, the low density of the villages and the even lower density of people able to pay for the scheme increased connection costs prohibitively. The LEC had just cancelled its load-limit tariff scale in an effort to boost profits. The credit facility never materialized. In addition, the unfamiliar "heat storage cookers" were not popular with the highlands communities. The World Bank recognized the futility of the program, declaring, "The fact is that even if transmission lines were available, most people wouldn't be able to afford to pay for the connection."⁴⁹

Nevertheless, LHDA adopted the plan and in 1998 attempted to implement it in the village of Ha Kennan on the banks of Katse Reservoir. At great cost, project workers erected utility poles and strung transmission lines over rough terrain to a transformer on the outskirts of the village. That is where the project ended. LHDA officials told the village residents that they must now "take the initiative" and ask the LEC to connect them to the transformer. They told the village that each participating household would bear the costs of new appliances, the connecting fee, and additional \$2,000 utility poles. 50 Not surprisingly, the transformer stands unused amidst a sparse collection of thatched mud and stone huts while villagers continue to gather brushwood and dung to fuel their fires.

Project authorities admitted in December 1999 that the "rural electrification program has not yet been implemented." Nor will it ever be, barring an extraordinarily expensive, donor-funded electricity program. Now, eleven years after the pledge was made, affected people's hopes of electricity have dimmed.

Other programs

Other RDP projects also failed. The trout farms were a non-starter for a number of reasons – the contract to train subsistence fishers was not finalized until late 1999, and there is no credit program in place to help fishers obtain the necessary capital. Even without these constraints, though, any sort of fishing will be quite limited at Katse given its great depth, low temperatures, and lack of nutrients. One ecologist familiar with Katse reservoir remarked, "To put the matter bluntly, as far as fish production is concerned, there is

inadequate primary production to support natural feed production for even extensive, let alone intensive, trout rearing in Katse. So added feeds would need to be used. But the conditions around the farm would deteriorate and become suitable for closed-cycle transmission of all sorts of fish pathogens and parasites."⁵³

Tourism was another pipe dream. Few tourists visit Katse Dam, and those who do spend little time there. The RDP's authors optimistically predicted that the Katse Information Center would attract 10,000 visitors annually,⁵⁴ but in 1999, only 1,570 foreigners made the trip, and a significant percentage of those were residing in Lesotho or visiting for business reasons.⁵⁵ Plans for picnic sites, a recreation center, hiking trails, and a ski slope never materialized. The World Bank's Panel of Experts expressed skepticism at the LHWP's tourism potential, remarking, "Zonation, tenure, rights (including community rights), incentives, legislation, licenses, safety, attitudes, facilities, business opportunities and many other things have to be in place before tourism will provide any meaningful revenues."56

Practice Makes Perfect?

New and Improved RDP for Mohale

The Rural Development Program
experience was a bitter one for the
LHDA and its donors. Complaints and
pressure from affected people and NGOs
about the inadequate compensation
policy and failing development schemes
mounted to crisis proportions. The
problems even threatened World Bank
funding for the next phase of the
project. Therefore, when construction
began at Mohale Dam, the
Environmental Impact Assessment

included an entire section on "lessons learned" from the Katse experience and promised that similar mistakes would not happen again. The report states that: 1) the dam "introduced a number of social evils into the local community," 2) "compensation has been handled in a bureaucratic, slow and rigid manner," and 3) the RDP "has been slow to show any meaningful progress."58 The report then provides a set of "optimum" solutions to address these issues, including assurances that the LHDA 1) has now improved the relationship between its engineering and environmental and social divisions; 2) has introduced a "flexible" compensation policy; and 3) consults regularly with affected people and NGOs.

The "optimum solutions" for the LHWP's social and environmental woes were presented in the 1997 Resettlement & Development Action Plan (RDAP). This plan is comprised of tasks designed to mitigate the project's negative impacts and to "enhance specific resources and resource uses"59 for the benefit of project-affected people. Among the RDAP's commitments are the provision of water to all villages in the project area; the establishment of three "Rural Development Centers" to train project-affected people; the development of a credit facility to promote entrepreneurship; new crop, livestock production, fishery, and forestry programs; and the provision of health centers and mobile clinics. The plan also budgeted \$900,000 for monitoring and evaluation of the effects of Mohale Dam construction on local communities, which included a commitment to train the communities to assess their own situation. All told, the

RDAP's development plans called for approximately \$13 million over a six year period, much less than the 1990 RDP budget of \$36m over ten years. So far, the problematic design and sluggish implementation of Katse Dam's RDP has been replicated by the RDAP.⁶⁰ In 1999, the World Bank's Panel of Experts noted with alarm that "emphasis on physical removal and compensation activities continued to take precedence over development activities," and "only a small minority of households" had been involved in development programs a full year after they had been resettled from Mohale. 61 The next year, they said that LHDA's "Development Section is the weakest within (LHDA's) **Environmental and Social Services** Group" and that "the speed with which income generation projects are being implemented continues to be an area of concern."62 The following is a description of some of the projects contained in the program.

Crops and Livestock

LHDA designated almost 40 percent of the RDAP's development budget (approximately \$5 million) to a "Crop and Livestock Production" program that resolved to "provide average household's food requirements plus extra for cash sales."63 Unfortunately, the program's plans continued to prescribe interventions that failed to produce significant results at Phase 1A. For example, LHDA proposed that area farmers increase their crop inputs and reserve 10 percent of their land for potato production. ⁶⁴ As described earlier, hybrid seeds and other inputs make farming in Lesotho a losing proposition. Potato production requires very expensive inputs and is highly labor intensive. It remains to be seen whether

farmers who adopt the consultant's proposals will remain profitable.

Project officials also introduced paprika as a new cash crop. Unfortunately, they introduced it "on the basis of verbal interest of one entrepreneur in South Africa" without properly training people how to store and market it. The farmers were left with huge amounts of paprika peppers, a crop not used in Lesotho, without guaranteed buyers. Highlands farmers cannot afford to raise unwanted paprika peppers in fields that could produce maize, which would feed their families.

The RDAP's Livestock Production program hinges on affected households making "a conscious decision" to make a "modest" investment in poultry units ranging from 12 to 200 birds or dairy units comprised of one dairy cow.⁶⁶ While the program is well-intentioned, the risk of failure is too high for all but the wealthiest of households. The project document claims that small poultry units "should supply the household with eggs and have a surplus for sale, the proceeds of which could be used to purchase feed."67 In an ideal world, households would be able to pay for the feed, chicken houses, vaccinations against avian influenza, and still sell enough eggs to pay off their investment. (Many households do not clearly understand that their debt will eventually need to be repaid.) The system only works for a few families, though, before the local market experiences an egg glut. Thus far, only two households in the Makotoko resettlement community have attempted to invest in poultry production.⁶⁸ The Panel of Experts believes that some resettled people may be able to take advantage of a local poultry cooperative

that operates near the Maseru resettlement site. Local NGOs are skeptical, though, because the cooperative charges a high joining fee. Many poultry programs operate at a loss in Lesotho. The costs of feed outweigh the profits from egg sales. Dairy projects are even riskier investments. The major problem is finding a market and a way to transport the milk to that market. A pilot dairy project at Muela could not solve this problem, and it has failed to make a serious contribution to livelihood restoration to this day. ⁶⁹ If a household decides to invest in a dairy cow, they must build a stable or small barn in order to reduce the risk of theft (a serious problem in the Highlands). The cows must be kept at the homestead year round in order to allow households to collect milk. This puts additional strain on already overstressed pastures near the villages. Therefore, most households have no other option than to purchase fodder for the animal. Only the wealthiest families can buy enough fodder to keep the cow from becoming emaciated. At the Muela pilot project, numerous cows died from hunger.⁷⁰ Thus far, the dairy program is nonexistent at Mohale.⁷¹

Tourism

The consultants' overly optimistic ideas for "eco-tourism" on the banks of Mohale reservoir would be laughable if they did not cost hundreds of thousands of dollars to contrive. Confident that "tourism will be an important generator of local employment within the project watershed," the RDAP budgeted almost \$1.5 million to promote the establishment of adventure resorts and lodges throughout the catchment. The largest of the lodges is proposed to

accommodate 250 visitors, and is to offer activities like scuba diving(!), boardsailing, hot-air ballooning, mountaineering, and pony trekking. Promoting eco-tourism at an unnatural lake which dispossessed thousands of their livelihoods and left downstream river reaches with a fraction of their normal flow rate is unseemly, and the short-sightedness of promoting ballooning in a heavily mountainous area with high winds and few roads is unbelievable. A recent video commissioned by the LHDA and the Lesotho Tourist Board promoted the ridiculous notion of a "magnificent 18 hole golf course in spectacular settings" around Mohale Dam. 73 The construction of such a facility would involve enormous cost and would appropriate further tracts of land, increasing stress on already over-stretched resources.

Similar developments to these had previously been planned at Katse with nothing to show to date. It is not likely that tourism entrepreneurs will be able to attract enough visitors to make two separate, but almost identical, sites profitable. This will be next to impossible in a country with little tourist infrastructure in a region where relatively more spectacular and established holiday destinations abound. Perhaps LHDA has given up on promoting tourism at Katse, in which case, few ideas remain as to how to restore the livelihoods of people living there.

Other Programs

LHDA was slow to release funding for other Mohale development programs, too. LHDA failed to establish a credit facility for affected people despite having conducted several years of negotiations between the project and

financial institutions and after promising credit to a group of affected people.⁷⁴ The lack of such a facility contributed to affected people's continuing dependence on compensation payments. Training programs for village leaders concerning the design of development plans also fell severely behind schedule in part because of a lack of funding.⁷⁵ Promises to build extra classroom space and community facilities (such as those constructed at Katse) have gone unfulfilled to date. The RDAP's training programs, like those of the RDC before it, have not produced much in the way of entrepreneurship or other income generating activities. 76 "Development Teams" were to help affected communities set up small businesses, but the teams have yet to materialize.⁷⁷ In fairness, it is still relatively early in the project cycle, but most of these programs were slated to be fully implemented by 2003.

One of the most troubling indicators of the RDAP's ineffectiveness is that water supply systems have still not been installed at some of the Mohale resettlement sites. People who were resettled to the foothill village of Makotoko still do not have the promised water taps on their plots, so they must collect water from distant streams. The contract to construct the taps is currently mired in a convoluted bureaucratic approval process. LHDA also failed to install water taps in the urban resettlement site of Makhoakhoeng (near Maseru) for over a year. During that time, the resettlers collected water from large tanks that LHDA periodically delivered to the site. Maseru's Water and Sewerage Authority (WASA) connected the village to its distribution network in 1999. This became an unexpected

hardship. For several months after WASA installed the taps, the people of Makhoakhoeng were not billed for the service. Then, in late 1999, they received bills for their water usage that month and for the previously unpaid months. Some of these bills were for $$30-$60^{78} - a$ huge cost for resettled households who collected free water before resettlement. Some households receive only \$130/year in compensation.⁷⁹ The average monthly water bill is approximately \$7. "LHDA said we have to bear the cost of the water," said one resettler, "but we don't have money."80 Over 100 more households (approximately 550 people) will be forced to relocate to sites without water supply systems in 2001.81

LHDA has also not fulfilled its commitment to supply drinking water to the villages surrounding the Mohale reservoir, a project LHDA claimed it would complete this project by December 2000.⁸²

The LHDA declares that the RDAP's "ultimate goal is for communities to take direct responsibility for the development process." This is no simple task. Affected communities have been and continue to be much more concerned with compensation than development. While this may be a frustration to LHDA and World Bank staff, ⁸⁴ it is the natural response to dispossession, especially among poor, risk-averse communities.

Even without affected communities' resistance, though, the prospects for restoring livelihoods in project areas through rural development programs are bleak. Programs such as those described in the RDAP have failed repeatedly in Lesotho. S As Ferguson noted in 1990, "if Lesotho is poor it is not because no

one has ever tried such 'development' before." Therefore, decision-makers who propose more dams in Lesotho must acknowledge to the public and affected communities that they will inevitably leave many destitute. Development programs for displaced people, no matter how well intentioned or funded, may appease the consciences of project officials and funders, but will not satisfy the hunger of the dispossessed.

¹ Ben Molapo and Terry Jantzi, "Waiting for Water Royalties," *Africa South & East*, Jan/Feb 1993, p. 33. ² Terry Jantzi, *The Highlands Water Scheme*, August 29, 1990.

³ LHDA, Rural Development Plan Phase 1A, Volume 1 Summary, July 1990.

⁴ Robert Archer, *The LHWP: Visit by Robert Archer*, Christian Aid, January 10-21, 1994, p. 4.
⁵ Robert Hitchcook, John Lodger, and Theyer Soudde

⁵ Robert Hitchcock, John Ledger, and Thayer Scudder, LHDA Report of the 1991 Environmental Panel, August 1991, p. 10.

⁶ World Bank, *LHWP Back to the Office Report*, December 7, 1994.

Scott Coverdale and Lori Pottinger, From Here to Eternity: Promises Versus Reality on the Lesotho Highlands Water Project, August 28, 1996, p. 7.
 World Bank, Lesotho: Highlands Water Project Supervision Mission, October 4-18, 1995, p. 2.
 World Bank, Lesotho: Highlands Water Project Aide Memoire and Next Mission, June 4, 1996, p. 8.

Ibid., annex 16, p. 2.
 Robert Hitchcock, John Ledger, Michael Mentis, and Thayer Scudder, *Report of the Panel of Environmental Experts*. November 2000, p. 6.

¹² LHDA, Rural Development Plan Phase 1A, Volume 1 Summary, July 1990, p. 5.

¹³ Schoolchildren at Khohlontso Primary School draw water from an unprotected spring beside a road culvert.

¹⁴ Transformation Resource Centre, "Water, Water Everywhere and Not a Drop to Drink," *Work for Justice*, Nov/Dec 1999, No. 53, p. 6.

LHDA, Rural Development Plan Phase IA, Volume 3 Mountain Horticulture and Field Crops, July 1990, p. 41.
 LHDA, Rural Development Plan Phase IA, Volume

¹⁶ LHDA, Rural Development Plan Phase 1A, Volume 2 Animal Husbandry and Range Management, July 1990, p. 12.

¹⁷ *Ibid.*, p. 41.

M. Tshabalala and S.D. Turner, 1988 Socio-Economic Census of the LHWP Phase 1A Areas:
 Volume 1, Main Report, September 1989, p. 43.
 Robert Hitchcock, John Ledger, Len Lerer, Michael Mentis and Thayer Scudder, Report of the Panel of Environmental Experts, June 1996, p. 24.

²⁰ James Ferguson, *The Anti-Politics Machine:* "Development," Depoliticization, and Bureaucratic Power in Lesotho, University of Minnesota Press. 1994, p. 153.

²¹ *Ibid*., p. 183.

²² Afridev Consultants, *Biological Monitoring in the* LHWP Phase 1A Area: 1999 Monitoring Report, January 2000, p. 16.

²³ World Bank, Lesotho: LHWP Back to Office Report,

April 4, 1994, annex 5, p. 8.

²⁴ LHDA, Resettlement and Development Study: Task 2 Main Report, Vol. 2, February 1996, p. 12.
²⁵ Afridev Consultants, Biological Monitoring in the

LHWP Phase 1A Area: 1999 Monitoring Report, January 2000, app. 2, p. 7.

²⁶ LHDA, Resettlement and Development Study: Task 2 Main Report, Vol. 2, February 1996, p. 6.

²⁷ *Ibid.*, p. 2.

²⁸ *Ibid.*, p. 18.

²⁹ John Gay and David Hall, Poverty and Livelihoods in Lesotho, 2000: More than a Mapping Exercise, Sechaba Consultants, June 2000, p. 85.

³⁰ Robert Hitchcock, John Ledger, Len Lerer, Michael Mentis, and Thayer Scudder, Report of the Panel of Environmental Experts, June 1996, p. 2.

31 World Bank, Lesotho: LHWP Back to Office Report, April 4, 1994, annex 5, p. 8.

LHDA, Rural Development Plan, Vol. 3, 1990, p. 59. ³³ *Ibid.*, p. 6.

³⁴ Robert Hitchcock, John Ledger, Len Lerer, Michael Mentis, and Thayer Scudder, Report of the Panel of Environmental Experts, June 1996, p. 2.

35 World Bank, World Bank Supervision Mission, Aide Memoire, November 1996, p. 10.

³⁶ R.T. Mochebelele and O.M. Letsela, *Lesotho* Highlands Water Project: Concerns and Benefits of Dams Including the Environmental and Social Impacts and the Associated Mitigation Measures for Sustainability, Paper presented to the World Commission on Dams Regional Consultation, Cairo, Egypt, December 8-9, 1999.

³⁷ Highlands Church Action Group, *Training* Recipient Survey, 1998.

EHDA staff, pers. comm.

³⁹ Sofonea Shale, "LHDA Celebrates With The Old," Mopheme/The Survivor, January 9, 2001.

⁴⁰ LHDA, Rural Development Plan, Volume 7: Area Infrastructure, July 1990, p. 10.

⁴¹ Sechaba Consultants, *Poverty in Lesotho*, 1994, June 1994, p. 130.

⁴² John Ledger, Michael Mentis, and Thayer Scudder, Report of the Panel of Environmental Experts. April 2000, p. 32.

⁴³ LHDA, Mohale Advanced Infrastructure: Draft Social & Environmental Impact Assessment Report,

April 1995, p. 2-5.

44 James Ferguson, *The Anti-Politics Machine*, University of Minnesota Press, 1994, p. 230.

⁴⁵ Tumelo Tsikoane, The Contradictions of Project Approach to National Development: The Case of

LHWP, National University of Lesotho, 1991, pp. 16-

⁴⁶ Bureau of Statistics, *Income, Expenditure and* Consumption of Basotho Households, October 1988.
⁴⁷ LHDA, Rural Development Plan Phase IA, Volume

8 Village Infrastructure, July 1990, p. 7.

⁴⁸ *Ibid.*, p. 21.

49 World Bank, LHWP: Back to the Office Report, April 4, 1994, annex 5, p. 11.

LHDA official, pers. comm., 1998.

⁵¹ R.T. Mochebelele and O.M. Letsela, *Lesotho* Highlands Water Project: Concerns and Benefits of Dams Including the Environmental and Social Impacts and the Associated Mitigation Measures for Sustainability, Paper presented to the World Commission on Dams Regional Consultation, Cairo, Egypt, December 8-9, 1999, p. 15.

⁵² John Ledger, Michael Mentis, and Thaver Scudder. Report of the Panel of Environmental Experts, April

2000, pp. 8, 43.

⁵³ Doug Cross, pers. comm., June 30, 2001.

⁵⁴ LHDA, Rural Development Plan Phase 1A, Volume 7 Area Infrastructure, July 1990, p. 15.

55 John Ledger, Michael Mentis, and Thayer Scudder, Report of the Panel of Environmental Experts, April 2000, p. 8.

⁵⁶ *Ibid.*, p. 44.

⁵⁷ World Bank, Supervision Mission – October 4-18, 1995, Aide Memoire, January 19, 1996, p. 2.

⁵⁸ *Ibid.*, Chapter 2, p. 11.

⁵⁹ LHDA, Draft Environmental Action Plan, May 1997, p. viii.

⁶⁰ LHDA, Resettlement and Development Implementation Programme: Final Report and Stage 1 Evaluation, June 1998, p. 3.

61 Robert Hitchcock, John Ledger, Len Lerer, Michael Mentis, and Thayer Scudder, Report of the Panel of Environmental Experts, March 1999, p. 6.

62 Robert Hitchcock, John Ledger, Michael Mentis, and Thaver Scudder, Report of the Panel of Environmental Experts, November 2000, pp. 18, 23.

63 Robert Hitchcock, John Ledger, Len Lerer, Michael Mentis, and Thayer Scudder, Report of the Panel of Environmental Experts, March 1999, p. 44.

⁶⁴ LHDA, Resettlement and Development Study, A Synopsis of Studies & Proposed Programmes, April 1997, p. 23.

65 John Ledger, Michael Mentis, and Thayer Scudder, Report of the Panel of Environmental Experts, April 2000, p. 32.

66 LHDA, Resettlement and Development Study, Synopsis of Studies and Proposed Programmes, p. 24. Ibid., p. 25.

⁶⁸ Transformation Resource Centre, pers. comm., February 8, 2001.

⁶⁹ World Bank, *LHWP World Bank Supervision* Mission - Aide Memoire, November 1996, Annex 3D,

p. 2. $^{70}\ Ibid.$ and Highlands Church Action Group, pers. comm., February 8, 2001.

⁷¹ Transformation Resource Centre, pers. comm., February 8, 2001.

⁷² LHDA, *Draft Environmental Action Plan*, May 1997, p. 45.

⁷³ Robert Hitchcock, John Ledger, Michael Mentis, and Thayer Scudder, *Report of Panel of Environmental Experts*, March 1999, p. 8.
⁷⁴ *Ibid.*, p. 15.

⁷⁵ LHDA, Resettlement and Development Study, Executive Summary, Task 1, Vol. 1, November 1995, p. 18.

p. 18.

Robert Hitchcock, John Ledger, Michael Mentis, and Thayer Scudder, *Report of the Panel of Environmental Experts*, October 1999, p. 17.

⁷⁷ LHDA, Resettlement and Development Implementation Programme: Final Report and Stage I Evaluation. June 1998, p. 5.

⁷⁸ Transformation Resource Centre, pers. comm., April 18, 2001.

⁷⁹ Transformation Resource Centre, "Not Even a Place to Bury Our Dead," *Work for Justice*, Nov/Dec 1999, No. 53, p. 8.

⁸⁰ Anna Moepi, *The Impact of the LHWP on the Community Resettled from Molikaliko*, Paper presented to the World Commission on Dams Regional Consultation, Cairo, Egypt, December 8-9, 1999.

⁸¹ Transformation Resource Centre, pers. comm., October 2, 2000.

⁸² Hunting-Consult 4 Joint Venture, *LHDA Contract* 1012 VO#5: Monthly Progress Report No. 2. May 1997, p. 4.

⁸³ LHDA, Transformation Process of LHDA and Vision for Social and Environmental Issues, Presented at "Workshop on Socio-Economic Impacts of the Lesotho Highlands Water Project," November 11-12, 1997, p. 2.

84 LHDA and World Bank staff frequently refer to a "complaint culture" among affected people that they see as becoming problematic to development efforts. One frustrated World Bank staff member claimed in a meeting with LHDA and local NGOs that if he had lost his land to the LHWP, he would have been able to re-establish his livelihood and turn a profit because of the numerous development opportunities now available in the area.

available in the area. ⁸⁵ Among the rural development programs generally agreed to be failures are the Thaba Tseka Project (1975-84), the Hololo Valley Project (1983-88), the Lesotho Agricultural Production and Institutional Support Project (1986-91), and the Thaba Bosiu Project.

⁸⁶ James Ferguson, *The Anti-Politics Machine*, 1994, p. 37.

Selling the Dream: The Community Participation Strategy

"The custom of the tribe forbids the chief to do anything important, without assembling the people and giving them the opportunity of expressing their opinion."

Chief Moshoeshoe – Founder of Lesotho

For obvious reasons, the dismal failure of development programs and the troubles with the compensation policy provoked a significant amount of resentment towards the LHWP. Word of the project's negative social impacts in the Katse area traveled quickly to villages near the site of the proposed Mohale Dam, and, while some people welcomed the project and its promises of development, others living there were openly hostile toward project officials when they first appeared in the mountain communities near Mohale in 1994. So, at the World Bank's urging, the LHDA responded in March 1997 with a Community Participation Policy and Strategy intended to increase affected communities' "buy in" to the project.

The emphasis on community or "stakeholder" participation had little precedent in the LHWP's history. When the LHWP was initiated in October 1986, General Lekhanya's military council ruled Lesotho and brooked little dissent. Government censors designated the LHWP treaty "classified," and people living in the affected areas knew next to nothing about the project until representatives of the military council arrived in helicopters to inform them that the Government of Lesotho intended to build a dam on their land. The officials told the people little about the probable social impacts of the project or about

plans for compensation or resettlement. Community members complained: "They come and take and destroy whatever they please, then they compensate us in whatever way they please without asking for our agreement. We see that they don't care about us at all."

The LHDA enlisted the support of Lesotho's security forces to cow those who were critical of the project. According to one World Bank staff member, "the (LHDA) Public Relations Officer brought police and military to (Ha Mentsel) and told them, in a public meeting, that they will not get any more employment because they complain so much."⁴ Agents of Lesotho's National Security Service (NSS) routinely attended community meetings concerning the LHWP. The NSS was implicated in numerous extra-judicial killings in the late 1980s and early 1990s, and their silent presence at community meetings was nothing less than calculated intimidation.

Granted, the early years of the LHWP may have been a less enlightened time. More recently, "best practice" for large infrastructure projects has come to mean aiming for a high degree of meaningful participation from sectors of society who will be most negatively impacted. However, participation of affected people remained sorely limited when preparations for construction of Mohale Dam commenced in 1994. Neither the fact that Lesotho held democratic elections nor that Nelson Mandela held the presidency in South Africa significantly influenced the amount of community involvement.

LHDA's consultants did meet extensively with Mohale households to acquaint them to the many issues concerning resettlement. LHDA referred to this process as "consultation," but, to affected communities, it was little more than information sharing. One man complained, "They've consulted day and night, but problems are still not being taken care of. If they don't respect our decisions or meet our desires, why do they consult us?"⁵ Other affected people suspected that "the LHDA deliberately consulted people in their own homes, so that they were asked for their views or decisions in isolation, and not in...pitso, where they might have developed a more united front."6

LHDA admitted at the time that "the overall general feeling one gets in the encounters and meetings is that of mistrust the communities have of the LHDA field staff." Project authorities' goal appeared to be that of garnering affected communities' support of the project as opposed to entering into a fair negotiation process with them. In effect, the LHDA consultants tried "to explain the terms of compensation in a helpful way that (would) win community support because the terms (were) generous" rather than to set up an open dialogue where the two parties could come to mutually acceptable terms. Affected people had no forum to effectively negotiate how the dam would impact them, let alone influence the decision to build it. In fact, LHDA did not even devise its Participation Policy and Strategy until three years after construction at Mohale began.

Even if the participation policy had been implemented three years earlier, though, it would not have ensured a seat at the

bargaining table for affected communities. LHDA and its consultants drew up the plan without serious input from affected people or civil society. As a result, the policy's primary objective is less than ambitious. The policy intends only "to provide the affected population with the opportunity to participate, on an equal basis, in the planning, design, implementation, management and monitoring of programmes and projects to address the (positive and negative) impacts associated with the LHWP" (emphasis added). Construction of Mohale Dam, as designed, is assumed a foregone conclusion, while the participation of affected communities is restricted to planning how to repair the damage through participation in designing LHDA mitigation plans.

Many community representatives suspected the policy was an LHDA tactic to spread the blame when compensation and development programs failed to meet their objectives. Even so, by accident or design, the structures devised to achieve even the limited objective of allowing participation in mitigation planning were little more than expensive information-sharing mechanisms, which served to "lubricate decision-making in order to secure predetermined goals." ¹⁰

In brief, the participation strategy rested on the establishment of three new organizational structures: Field Operation Teams (FOT), Community Liaison Assistants (CLA), and Combined Area Liaison Committees (CALC).

The FOT participation responsibilities consist of ensuring grievances are attended to promptly and "that decision-

making processes ... include all relevant stakeholders."¹¹ This assurance of inclusive decision-making appears commendable on paper, but, in practice, FOTs have no power to carry out decision-making processes that involve policy or major budget allocations. Thus, the decisions facilitated by FOT leaders tend to concern relatively minor issues involving individual households. All major decisions must be made at LHDA's head offices, without meaningful input from stakeholders. A case in point is that of the still unresolved problems concerning compensation of communal assets. The problem appears to be an ideal scenario for negotiation between LHDA and affected communities. Instead, the decision to replace fodder compensation with community development projects was taken by LHDA and JPTC officials in Maseru. It then became the task of the FOT to convince local communities to support the plan.

The FOT also regulates contact between project-affected people and the outside world. The policy document makes clear that "the FOT Team Leader will hold a key position, since all LHWP-related access to the affected households should be co-ordinated through his/her office. This is a crucial issue, as uncoordinated movement visits (sic) to affected villages could seriously compromise the participation process." Attempting to "coordinate" outsiders' access to affected households is difficult to the point of being impractical, but FOT members have already instructed villages to refuse access to fieldworkers from the Transformation Resource Centre.

The World Bank has expressed disappointment with the performance of the FOTs. Rather than decentralizing decision-making, "the FOTs have tended to become field-level bureaucracies," said Andrew Macoun, the World Bank task manager for the project. 13

Another ill-conceived participation program was the appointment of approximately 30 Community Liaison Assistants (CLAs). LHDA selected the CLAs from affected villages¹⁴ and assigned each one to represent a different sub-region of the project area. Their primary role is to facilitate "effective" contact between LHDA and the affected villages. 15 In reality, the CLAs form an extra degree of separation between affected communities and the LHDA. Communities inform their CLA of their grievances and then expect him/her to advocate for their resolution by the LHDA. The CLA has absolutely no power to resolve the problems other than to repeatedly inform the FOT Leader. In some cases, the CLA is a lightning rod for conflicts over compensation. "I tell LHDA about the village's problems and they keep telling me that they will take care of it, but they still haven't done so. Now, people in the village are accusing me. They think that I'm not doing my job of telling LHDA about their problems," complained one Katse CLA. 16

LHDA compensates the CLAs handsomely for their trouble. They receive "honoraria" of approximately \$415 per month. ¹⁷ The monthly income of the vast majority of mountain households is less than \$70. ¹⁸ In effect, they are LHDA employees. Affected communities have no illusions of their objectivity and expect them to simply

recite the company line. NGOs also do not accept CLAs as legitimate representatives of affected communities, calling them "LHDA policy interpreters and nothing more." Nevertheless, CLAs' honoraria comprise almost half of the participation program's \$333,000 annual budget.²⁰

LHDA created another degree of separation between themselves and the concerns of affected communities in the form of Combined Area Liaison Committees (CALCs). These committees are to be the LHDArecognized voice of affected communities and are comprised of elected representatives from all affected villages and resettlement host communities. According to the project document, the committees are to 1) inform LHDA of the development needs of local communities; 2) exchange views/information on the LHDA's activities; 3) channel compensation complaints; 4) identify local candidates for skills training; and 5) identify vulnerable households who should receive special LHDA or government assistance. The role of CALCs is exclusively that of informationexchange, not negotiation.

Typical CALC meetings consist of community representatives repeatedly raising the same grievances often for three or four meetings in a row with LHDA officials repeatedly explaining the Byzantine bureaucratic processes that prevent them from being resolved. This did not aggravate the CALC members excessively because, like the CLAs, they are also paid by the LHDA. A typical CALC member attends three CALC meetings every month. The participation policy grants a "meeting

allowance" of almost \$7 per meeting. 21 Each member, therefore, receives \$21 per month, almost one third of the typical highland household's monthly income. 22 The participation budget called for almost one third of a million dollars for its first year of operation alone. 23 Honoraria and meeting allowances for CALC members comprised about three-quarters of this budget.

Villagers who were not fortunate enough to be ALC or CALC members became increasingly frustrated. As early as 1996, affected people expressed fears that their CALC representatives had been coopted, "People here have lost confidence in the committees—they seem to be part and parcel of the project authorities now."24 This sentiment continues to the present day. In some cases, affected villages wanted to remove their representatives because of their ineffectiveness. LHDA refused to allow this because they wanted the committees to maintain "continuity." When disenfranchised community members raised their grievances outside of the CALC through the help of local NGOs, LHDA cried foul, and CALC members called NGOs "perpetrators of discord." 25 They declared that community concerns should be raised through "recognized" community participation structures, structures that affected communities perceived to have been corrupted by being on the LHDA payroll.²⁶

Other problems with the CALC stem from the fact that the majority of CALC members come from host communities, not resettled communities. Transformation Resource Centre reports that the better-organized host community representatives effectively dominate the CALC. When the LHDA offers opportunities such as skills training through CALC members, resettled communities are often not aware of it because host community CALC members quickly scoop up all the available openings.²⁷ Resettled people, therefore, rarely receive training.

Local NGOs became increasingly critical of LHDA's participation plan, which they labeled "a donor appeasement undertaking." Said Transformation Resource Centre (TRC), "One of the strategies to silence the people is that of establishing structures purported to represent them. But it is obvious that in the meantime the structures are used to suppress and undermine the needs of the people they claim to represent." 29

The following are several recent examples of the restraints put on stakeholder participation.

- In September 1996, police opened fire on striking construction workers at Muela Dam, killing five and injuring 30, notching up the intimidation factor significantly. There was never a trial, and the killers went unpunished.
- Community representatives claim to have been offered gifts of alcohol and cash in exchange for speaking favorably of the project at public meetings.³⁰
- In 1999, when the Lesotho government staged a LHWP Treaty Review, only a handful of the hundreds of attendees were people who would be dispossessed of their land if further dams were built. Their

- presence appeared to be an afterthought, and they were given little opportunity to contribute at the one-day event.
- As recently as December 1999, NSS agents confiscated World Commission on Dams (WCD) materials from a community representative upon his return from NGO-sponsored hearings intended to gather input for the WCD from dam-affected people. 31

The LHDA announced in January 2001 that the Community Participation Strategy was under internal review.³² Local NGOs voiced their concern that this process, ostensibly intended to enhance stakeholders' involvement in project decision-making, remained outside public purview. A TRC staff member insisted the review "should be a mutual process to avoid past mistakes where LHDA involved NGOs at the eleventh hour when their input could no longer matter."³³ As of this writing, affected people and NGOs have not been granted official input into the review process.

The prospects for meaningful public participation in LHWP areas remain bleak. While the veneer of "consultation with stakeholders" may have improved the project's image, the voices of the most affected remain excluded from decision-making.

¹ Malefane Maema and Norman Reynolds, *Lesotho Highlands Water Project-induced Displacement: Context, Impacts, Rehabilitation Strategies, Implementation Experience and Future Options*, 1995, p. 5.

p. 5.
² Kate Showers, Colonial and Post-Apartheid Water Projects in Southern Africa: Political Agendas and Environmental Consequences, 1998, p. 21.

³ Scott Coverdale and Lori Pottinger, From Here to Eternity: Promises Versus Reality on the LHWP. August 28, 1996, p. 3.

⁴ World Bank, *Lesotho: LHWP Back to Office Report*,

April 4, 1994, annex 5, p. 6. ⁵ Lori Pottinger, *Lesotho Highlands Trip Report*,

September 1996, p. 10.

⁶ Olivia Bennett, "Tearing the Threads: The Social Costs of Forced Resettlement," Oral History, Spring 1999, p. 41.

⁷ LHDA, Resettlement and Development Study: Task 1 Volume 2 Main Report, November 1995, p. 74. ⁸ Robert Archer, Trust in Construction? Christian Aid,

1995, p. 37.

⁹ LHDA, Community Participation Policy and Strategy, March 27, 1997, p. 12.

10 Nicholas Hildyard, Comments on WCD Thematic

Paper – Participation, Negotiation and Conflict Management, March 2000, p. 3.

11 LHDA, Community Participation Policy and Strategy, March 27, 1997, p. 13.

¹² *Ibid*., p. 13.

¹³ Andrew Macoun, pers. comm., December 12, 2000.

¹⁴ TRC asserts that Hunting-Consult 4, a firm contracted to carry out the compensation and resettlement study, in fact recruited Mohale CLAs who were then hired by LHDA under unknown terms.

15 LHDA, Community Participation Policy and Strategy, March 27, 1997, p. 15.

¹⁶ Pers. comm., 1999.

¹⁷ LHDA, Community Participation Policy and Strategy, March 27, 1997, p. 49.

¹⁸ Sechaba Consultants, Poverty and Livelihoods in Lesotho, 2000: More than a Mapping Exercise, June 2000, p. 81.

¹⁹ Transformation Resource Centre, "What Does Community Participation Mean?" Work for Justice, December 2000, p. 13.

²⁰ LHDA, Community Participation Policy and Strategy, March 27, 1997, p. 22. ²¹ *Ibid*.

²² Sechaba Consultants, Poverty and Livelihoods in Lesotho, 2000: More than a Mapping Exercise, June 2000, p. 81.

²³ LHDA, Community Participation Policy and Strategy, March 27, 1997, p. 22.

²⁴ Lori Pottinger, Lesotho Highlands Trip Report, September 1996, p. 10.

Transformation Resource Centre, "What Does Community Participation Mean?" Work for Justice, December 2000, p. 13.

²⁶ Pers. comm., 2000.

²⁷ Transformation Resource Centre, pers. comm.. February 7, 2001.

28 Transformation Resource Centre, "What Does

Community Participation Mean?" Work for Justice, December 2000, p. 14.

²⁹ *Ibid.*, p. 13.

³⁰ Pers. comm., 1997.

³¹ Transformation Resource Centre, Letter to Kader Asmal, Chair of the World Commission on Dams. February 25, 2000.

32 Sofonea Shale, "LHDA Celebrates With The Old," Mopheme/The Survivor, January 9, 2001.

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Conclusion

On paper, at least, project proponents may not be wrong in calling the LHWP resettlement and compensation programs "best practice." Unfortunately, "best practice" was not enough. Compared with other large-scale dam projects, the efforts to restore people's lives and livelihoods were fairly extensive. The LHWP has likely hired more social and environmental consultants, has budgeted more money for social programs, and has made more promises of development than almost any other dam project in the world. An independent Panel of Environmental Experts investigated and monitored the project on a twice-yearly basis. Seemingly, LHDA and the World Bank took serious steps to prevent social fallout in the Highlands communities.

On the ground, however, LHWP resettlement plans have impoverished affected people. Compensation plans have failed to adequately replace lost assets and created a dole-dependent welfare class. Development plans have uniformly failed to meet their objectives. Participation policies have failed to increase affected community "buy in" to the project.

If this is the case, then what more could have been done to improve the situation?

Project proponents ask this question repeatedly. They perceive the problem to be simply with flaws in the resettlement and development plans, and believe that, after a period of trial and error, a workable solution will be discovered. This endless process of incremental modification, in effect, legitimates the project. It implies that the LHWP is a

sound project, and will be even better after the World Bank and LHDA finally solve the project's social problems.

The unfortunate truth, however, is that the barriers to true development among dam-affected people are virtually insurmountable. According to Panel of Expert member Ted Scudder, "forced resettlement is about the worst thing you can do to a people next to killing them." Therefore, while there is undoubtedly room for improvement on the LHWP's social policies, it is unlikely that further tinkering would have restored affected people's livelihoods, let alone improved their quality of life.

The World Commission on Dams (WCD) offers guidelines for project planning that may have prevented the havoc wreaked on highlands communities. The WCD was an independent body sponsored in part by the World Bank to review the performance of large dams and make extensive recommendations for future planning of water and energy projects. Its final report was released in November 2000.²

Had WCD guidelines been followed at the inception of the LHWP, a very different scenario may have emerged. In fact, the Lesotho dams most probably would not have been built. Below is an overview of how things might have gone according to WCD guidelines.

Needs Assessment

The WCD calls for a "needs assessment" to ensure that there is justification for a project. If this guideline had been

followed, the planning process would have first focused on determining the actual needs for the project. More specifically, does South Africa need water from Lesotho? The likely conclusion would have been similar to the one reached by planners at Rand Water, Gauteng's water utility, who stated in 1998 that Mohale Dam could be delayed as much as 17-20 years if system efficiency was increased through the employment of demand-side management (DSM).

The utility believes that demand projections for water use in Gauteng have historically been too high. This led to the construction of new water supply dams before they were actually required. Now, the horrific toll exacted by the AIDS epidemic is driving down figures on projected water demand even further. Rand Water estimates that the impact of AIDS will eventually reduce growth in water demand to zero percent. In fact, the South African Department of Water Affairs recently admitted that no new water supply is needed for Gauteng Province until 2025. Moreover, this projection does not include proposed DSM measures that would push the date back much longer, (at least 10-15 years).

Increasing Efficiency

Excessive water losses also led to the perceived need for more dams and the premature augmentation of Gauteng's water supply. Deteriorating infrastructure, lack of maintenance, low quality pipes, and poor workmanship cause these water losses, which are estimated to be 27 percent in Gauteng. Residents of Johannesburg's townships, like Alexandra and Soweto, collect water from apartheid-era systems that waste up to 70 percent of water piped to them.

This is a shocking figure. "Best practice" for levels of water loss is considered to be 10 percent. Recovering this waste would negate the need for additional supply and save the water utility \$62 million every year.⁷

Wastage also comes in the form of overwatering of gardens, long showers, and high-pressure fixtures. Retrofitting houses with efficient water fixtures alone could lead to an eight-year delay for new water supply.⁸

The WCD report states a priority should be to "increase the effectiveness of existing water...systems" before building new supply, and that "demandside options should be given the same significance as supply options."¹⁰ Unfortunately, at the time Mohale was being considered, the World Bank did not have staff that specialized in DSM, and it was eager to keep the project moving. As a result, the Bank decided to continue with the project without a thorough analysis of DSM's ability to delay the project. A Bank study on the economics of such a delay argued that postponing Mohale would drive up construction costs.

Today, planners thinking about further Lesotho dams have considered efficiency options more carefully. As the two governments consider the construction of the next big dam (Mashai), Rand Water claims that a \$300 million investment in DSM would deliver a yield equivalent to a \$2.5 billion investment in Mashai Dam. Simply put, the LHWP appears to have been unnecessary to meet South Africa's present water needs. Instead, the implementation of DSM should have been the preferred option to meet demand.

Risk

Before a decision is made on whether or not to build a dam, the WCD posits that risks "must be identified, articulated and addressed explicitly. Most important, involuntary risk bearers must be provided with the legal right to engage with risk takers in a transparent process to ensure that risks and benefits are negotiated on a more equitable basis." It further states, "Determining what is an acceptable level of risk should be undertaken through a collective political process." 12

This negotiation should take place in the form of a stakeholder forum comprised not only of government planners, but also of the people whose livelihoods, human rights, and property and resource rights would be negatively impacted by the project. Other stakeholders would include relevant NGOs and academics to further ensure that social and environmental risks are sufficiently discussed. If the stakeholder forum agreed that a dam was the preferred option to meet water demand, they would also negotiate resettlement and development plans for affected people. Finally, to ensure that affected people receive all of their negotiated entitlements according to agreed upon schedules, the WCD recommends that the developer be required to abide by a number of performance contracts, compliance plans, and performance bonds. In the sort of fair and informed negotiation recommended by the WCD, potentially affected people in Lesotho and their NGO allies could have insisted upon land for land compensation. They may have demanded significantly higher compensation rates. They may have negotiated to receive a percentage of project revenue. Downstream

communities may also have demanded to receive compensation. People living in inundation zones may have refused to move. All of these concessions would have lessened the economic advantage to South Africa of building water supply dams in Lesotho, and probably would have made it a more expensive option than either accessing supply elsewhere (e.g., South Africa) or reducing demand.

Sharing Benefits

The WCD states, "Adversely affected people are recognised as first among the beneficiaries of the project" and that "mutually agreed and legally protected benefit sharing mechanisms are negotiated to ensure implementation." ¹³

Lesotho currently receives approximately \$25 million annually in royalties from the project. ¹⁴ 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 LHWP-affected areas suggest that they have "not done any better than other parts of the mountains, where levels of poverty remain high." ¹⁵

The Lesotho Fund for Community
Development (LFCD) is intended to
distribute the project's royalties to the
nation's poorest. Instead, the World
Bank has already been forced to
restructure the LFCD in part because
corrupt local politicians were using the
money to reward supporters of the ruling
party. The LFCD also does not direct
project royalties toward dam-affected
people specifically. WCD guidelines
would have ensured that people affected
by the dam had the opportunity to
negotiate a share of these benefits.

Downstream Impacts

The WCD also calls for "an environmental flow requirement to maintain downstream species, ecosystems and livelihoods." It further states, "A basinwide understanding of the ecosystems functions, values and requirements, and how community livelihoods depend on and influence them, is required before decisions on development options are made." 17

The LHWP was begun without an environmental flow study. Belatedly, the governments of Lesotho and South Africa recently commissioned an Instream Flow Requirement study to assess the impacts of the LHWP dams (present and future) on downstream communities and ecosystems. The study found that continuing with the project as proposed will reduce Lesotho's river systems to "something akin to wastewater drains." This translates into "critically severe" social impacts (resource losses, increased pollutants) that will cost between \$2.8-\$4.2 million annually to address.

The New "Best Practice" The WCD guidelines are the new standard in "best practice." But unlike existing standards for mitigation of the impacts of harmful development schemes, the WCD guidelines start with the most basic questions – what is the need we are trying to address and what is the best way to meet that need? These guidelines call for modest investments in improved efficiency, instead of hundreds of millions of dollars spent on picking up the pieces of shattered communities. They call for meaningful participation of involuntary risk takers in decisionmaking, instead of boardroom deals that consign thousands to destitution. They

call for equitable benefit sharing instead of token compensation for lost livelihoods. The LHWP could not or did not rise to this challenge, and destroyed livelihoods as a result.

The World Bank and other multi-lateral investment banks continue to sell dams as development projects for poor countries. Dam-driven development in Lesotho, however, has proved to be nothing but an expensive pipe dream. The WCD calls for an awakening from this delusion to a new day of development decision-making that affords potentially affected people the right to determine their own destiny.

¹ Jonathan A. Fox, "When Does Reform Policy Influence Practice? Lessons from the Bankwide Resettlement Review," Jonathan A. Fox and L. David Brown, ed., *The Struggle for Accountability: the World Bank, NGOs, and Grassroots Movements*, Cambridge: MIT Press, 1998, p. 330.

² See www.dams.org for the final report.

³ Roy Thomson, *Financial Viability of Water Demand Management Within the Gauteng Province*, Rand Water Board, October 1999, p. 1.

⁴ Rand Water Board, pers. comm., February 6, 2001.

⁵ Roy Thomson, *Financial Viability of Water Demand Management Within the Gauteng Province*, Rand Water Board, October 1999, p. 3.

⁶ Rand Water Board, pers. comm., February 6, 2001.

⁷ Roy Thomson, *Financial Viability of Water Demand Management Within the Gauteng Province*, Rand Water Board, October 1999, p. 5.

⁸ *Ibid.*, p. 3.

⁹ World Commission on Dams, *Dams and Development: A New Framework for Decision-Making*, November 2000, p. 221.

¹⁰ *Ibid.*, p. 267.

¹¹ Rand Water Board, pers. comm., February 6, 2001.

¹² World Commission on Dams, *Dams and Development: A New Framework for Decision-Making*, November 2000, p. 237.

¹³ *Ibid.*, p. 243.

¹⁴ World Bank, pers. comm., January 11, 2001.

¹⁵ Sechaba Consultants, *Poverty and Livelihoods in Lesotho*, 2000: More than a Mapping Exercise, June 2000, p. 41.

¹⁶ World Commission on Dams, *Dams and Development: A New Framework for Decision-Making*, November 2000, p. 269.

¹⁷ *Ibid.*, p. 236.

¹⁸ Metsi Consultants, Contract LHDA 648 Final Report: Consulting Services for the Establishment and Monitoring of the Instream Flow Requirements for River Courses Downstream of LHWP Dams, November 1999, p. 28

About IRN

International Rivers Network (IRN) is a nongovernmental organization dedicated to protecting and restoring the world's rivers and watersheds for the benefit of the people and ecosystems who depend on them. Since 1986, IRN has worked to halt destructive river development projects, and to encourage equitable and sustainable methods of meeting needs for water, energy and flood management. We work to promote sound management of the planet's freshwater resources, to link environmental protection and human rights, to create a worldwide understanding of river ecology, and to reveal the interdependence of rivers' biological, physical and cultural aspects.

Through research into alternative energy generation, irrigation and flood management schemes, pressure for policy reform at international financial institutions like the World Bank, and active media and educational campaigns around the world, IRN works to discourage investment in destructive large-scale river development while encouraging strategies that are more environmentally, socially and economically sound.

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