



USAID
FROM THE AMERICAN PEOPLE

Increasing Journalists' Understanding of Energy and Environmental Issues



Journalists trained through USAID's media program interview village elders.

Five South African Journalists win a competition to attend a workshop on Southern African Trade: Low Cost Power and HIV/AIDS in Gaborone, Botswana in June.

The first step in engaging stakeholders and individuals in the energy sector is to increase public understanding of how the industry or sector operates, how it is regulated or governed, and the decision-making process regarding tariffs, electrification, new power plants and other matters important to communities and stakeholders. A workshop, sponsored by USAID, set out to do this by enhancing the specialized knowledge in energy/environmental issues of journalists in this region. Already the participants responded with a number of articles written on energy, a much greater interest in the subject and understanding of the connections to other important social sectors of these economies. What follows, we hope, is a greater interest in the citizenry to educate themselves on the subject and a greater willingness and ability of consumers

to participate in their nation's energy sector decision-making and thus take an active role in their future economic development and opportunities for an improved quality of life. Time will tell what the real impact on citizens will be, but for now, only a few weeks after the workshop has ended, there has been tremendous communication between the participants and increased submission of energy related articles.

Thirty-four (34) media professionals from eleven of the Southern African Development Community (SADC) participated in this workshop. Judging by their evaluations and subsequent articles and discussion through the internet, we can safely say they gained a much greater understanding of and appreciation for, energy issues and how they impact society and economic development in the region.

To encourage a real life experience for the group, the workshop included a one-day trip in the field to interview villagers who had participated in a pilot solar project for agriculture, schools and water pumping. A variety of presenters shared their knowledge, experience and different viewpoints of energy development so that reporters could appreciate the complexities and the potential difficulties in judging too quickly policy and technology decisions in their countries. This was certainly revealed in the animated discussions that were a daily event in the course.

To inspire a greater willingness to focus and write on the issues they have been learning about, the workshop included a writing contest in which six winners were selected, five of which to be sponsored by USAID to participate in a conference on Southern African Trade, Low Cost Power and HIV/AIDS, to be held in Gaborone in early June. The stories were judged by local and international media experts using reporting thoroughness, accuracy, interesting and readable

style and effective use of sources and facts, as criteria for selection. In addition, the winner's articles were provided to one of South Africa's most prominent and outspoken newspaper and on-line news source, the Mail & Guardian. The M&G has indicated its interest in publishing a special energy section and stories were submitted to them following the completion of the workshop for this purpose. Since the end of the workshop, the reporters have set up their own distribution list and have been sending many emails to each

other about the stories they are writing and the energy concerns of their country. They are very interested in keeping the momentum going and developing their specialized expertise in energy reporting.

Below are examples of two of the winning stories, one from the Democratic Republic of Congo (translated from French) by Esther Banakayi and one by Charles Mangwiro of Radio Mozambique:

For more information, contact Ellen Dragotto, USAID's Office of Infrastructure and Engineering, email: edragotto@usaid.gov

Despite having one of the largest hydroelectric dams on the continent, the Democratic Republic of Congo remains shrouded by darkness.

By Esther Banakayi

For years, Kinshasa, a metropolis of more than 7 million inhabitants, has been frequently plunged into darkness at night.

According to semi-official figures, between 60 and 65 % of the districts of Kinshasa have only sporadic electric power, both by day and night. From the business districts such as Gombe, to the industrial areas of Limete and Kingabwa, no area is spared the blackouts with all their consequences.

The remainder of the DRC is no better off. In Mbuji Mayi, a major town of the province of Eastern Kasai and a center of diamond mining, the city and even the province are only occasionally electrified. In Kananga, capital of the province of Western Kasai, the city and province are often without electricity. A few privileged people use small electric generators powered by fuel. Where power exists, it is shut off by 10 p.m., not only Kananga but also Tshikapa, another diamond-mining city. The examples extend across the DRC. Electricity lights up only a few pockets in the vast darkness.

Ironically, DRC has a rich power resource. The Congo River drains a vast area of more than 3 million square kilometers and contains about 6% of world the hydroelectric potential.

It is curious in such a country that the requirements in energy are not satisfied in spite of construction at Inga, starting in 1972, of the one of biggest hydroelectric dams in Africa.

Studies have estimated that more than 370 billion kWh (kilowatt-hours) of raw energy flow in the Congo River each year past the village of Inga, about thirty minutes by air from Kinshasa. One study estimated that a hydroelectric dam at Inga could harness about 30,000 Megawatts of it. The dam was built, but today stands as a major disappointment.

Regarded as a model project in the triumphal years of the President Mobutu, the Inga dam today is crippled. Only 6 of its 14 turbines continue to function. Though its generating capacity is estimated at 2,473 MW, it is producing only about 650-750 MW.

The massive dam is a victim of aging infrastructure. Both the hydroelectric power plant and the distribution system have suffered from decades of mismanagement by the SNEL (National Electricity Company), which has a monopoly of electric production and distribution in DRC. The decades-old infrastructures have not been maintained. Despite the genius of the Congolese engineers, Inga can no longer satisfy the national demand for energy.

What power emerges from Inga feeds power to neighboring countries. A high-voltage line called "Inga-Shaba," crosses the country to the mining industry in the southern DRC province of Katanga. The line passes cities and villages that remain plunged in the darkness.

Still, demand for electric power keeps increasing. In the cities and villages new appliances appear. In many houses, one finds a television set, a radio, a stove, a freezer or a refrigerator. Power is also sought to run commercial printing shops, bakeries, and factories. But many cities and villages crossed by the power lines remain in the dark.

How to understand such a paradox? Thanks to its hydroelectric potential, the DRC has never explored other sources of energy such as solar energy. DRC has developed some small hydroelectric dams across the country. But their power falls far short of demand, and the distribution system is in shambles.

One sees scattered efforts by the public to tap into the power distribution system to run businesses without proper transformers, cables, fuses, and the like. Some people buy equipment, but often their wiring leaves much to be desired. Live wires poke out of the ground and litter streets. Connections are wired carelessly. The result is frequent fires and electrocutions.

For local companies, this situation does not fail to generate missed opportunities. What can a company produce without such a basic raw material as electric power? What can the State expect to produce if its production is always behind schedule? What internal or international bank will loan money to a business that can never meet its production schedule?

Botswana Electrification Plan

By Charles Mangwiro

GABORONE -- Botswana Power Corporation, BPC, has embarked on an ambitious plan to electrify more than 400 villages by 2009 as part of its effort to reduce deforestation.

Rural Division Manager Alban Motsepe said the plan includes the installation of alternative energy sources such as solar panels in the scarcely populated villages across the county.

"We want our people to have modern energy at least by 2009," Motsepe told a group of journalists attending an Energy and Development Workshop for Southern African media in the capital Gaborone. The weeklong workshop was organized by the International Institute for Education, Washington, D.C., and sponsored by the U.S. Agency for International Development, the Media Institute of Southern Africa Botswana office, and the University of Botswana Media Studies Department.

BPC is a parastatal body formed by the government to expand and develop power potential in the country. The government-sponsored rural electrification program has covered 233 villages since 1991. The initial plan has been reshaped to cater to the needs of lower income households, Motsepe said. "We have opted to use both the power solutions, the power grid and solar," he said. The government has set aside some P8 million for the initial phase of the solar energy project rural scheme in the form of a revolving loan fund.

Local economic observers say the move is important as attaining reliable, affordable energy is one of the major challenges for rural populations. Energy consultant Peter Zhou said



Solar powered home in Manyana, Botswana.

the wider provision of electricity would help alleviate poverty through the increased access to commercial and modern technologies including renewable energies.

"This reduces the burden of women who are traditionally subjected to walk long distances in search of firewood," he said.

A member of the recently established Gender and Energy Network in Gaborone, Nozipho Ditlhale, said African women are major decision makers when it comes to cooking and using fuels, therefore, the time used in walking long distances and searching for wood could be used in generating income. "If they have energy, they could sell cool drinks in tuck shops," she said. The Botswana government funded a pilot project to install solar energy units in households in Manyana, a village about 48 kilometers south of Gaborone. Gerrit Jacobs, president of Solar International Botswana, said the project has not proven its economic viability because the

government did not provide for proper maintenance of the units. “They moved in and installed PVs but people were not properly taught how to maintain them so they became inoperational after a short while,” he said. “This plan was drafted only for installation and there are no methods for people to maintain the system and buy batteries. It’s not economical and this is just a failure.”

Manyana residents are gradually abandoning the solar units and are attaching to the power grid. A local school abandoned the solar-generated energy some four years ago and connected the power grid before opting for the use of wood and mineral coal to reduce energy costs.

Dorcus Selohilhe says the school has introduced night studies for distance education and the solar system just couldn’t cope. “We are happy with the power grids because we failed to maintain the solar due to technical capacity,” she said.

Botswana, which is democratically ruled and known as the largest exporter of beef and gemstone diamonds in the world, is in southern Africa, nestled between South Africa, Namibia, Zambia and Zimbabwe. It has an estimated population of 1,6m people and has some Africa’s last great wildness including the famous Okavango swamps and the Kalahari Desert.