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Gesundheit und Menschenrechte

The Chad-Cameroon petroleum and development project **Health and human rights issues of a large energy infrastructure development in Africa**

Von Jürg Utzinger

There is rapid expansion of both on-shore and off-shore oil and gas development in West and Central Africa. A recent example is the Chad-Cameroon petroleum development and pipeline project. This project has prompted considerable discussion from the planning stages through implementation. Private citizens, civil society, non-governmental organizations (NGOs) and academia put forth concerns, particularly on environmental and human rights issues. Critical appraisal of potential health impacts received less attention.

In my contribution, I provide a summary of the project history and development, including some details about the main construction components. With an emphasis on human rights issues, I review relevant World Bank policies and procedures the project must comply with, and shed light on the two requests for inspections that were submitted during project implementation. Next follows a selection of health indicators for the countries involved, and health issues that were considered for the workforce and the communities affected by this project. Finally, conclusions are drawn from this case study that is likely to have validity for other energy infrastructure developments in the developing world.

The Project

The US\$ 3.7 billion Chad-Cameroon petroleum development and pipeline project is one of the largest energy infrastructure developments in the history of sub-Saharan Africa. One selected figure from the labour statistics highlights this fact: during the project's peak of construction in November 2002, over 13,000 workers were employed. Implementation of the project is facilitated through a public-private partnership between a consortium of three oil companies, namely ExxonMobil (project operator; equity share of 40%), Petronas (35%) and Chevron (25%), the governments of Chad and Cameroon, and the World Bank. The genesis and development of the project can be summarized as follows:

- 1969** ExxonMobil begins with oil exploration in Chad and neighbouring countries.
- 1975** Discovery of oil deposits in the Doba basin of southern Chad.
- 1981** Interruption of oil explorations due to a civil war that lasts several years.
- 1988** Establishment of the legal foundation for the energy infrastructure development.
- 1993** Formation of a petroleum development consortium and preparation of the project.
- 1999** Presentation of environmental documentation package (i.e. environmental assessment and management plans, compensation and resettlement plans, results from public consultations, health and socio-economic surveys).
- 2000** Project approval by the World Bank (July) and start of implementation (October).
- 2001** Request for inspection submitted by private citizens living near the oil fields, Chad.
- 2002** Request for inspection put forth by a local NGO based in Yaoundé, Cameroon.
- 2003** Inauguration of project (October) and first oil sold on the world market (December).
- 2004** Production of oil approaching peak capacity of 225,000 barrels per day.
- 2005** Development of two new oil fields that were not part of the original project plans.

Some have argued that the project comprises several innovative features, such as the public-private partnership configuration, the 6-year long environmental assessments, the commitment for capacity building and transparency, and the development of an oil revenue management plan. The consortium successfully lobbied for the World Bank's involvement. The Bank, in turn, viewed the project as an opportunity for Chad to escape its poverty. Since the project was classified as a 'Category A' development, it required full environmental assessment and accompanying environmental management plan procedures. They were subject to the Bank's Operational Directive (OD) 4.01. There was a strong felt need to implement the project in an environmentally and socially sound way, so that it could become a role model for future

petroleum developments in West Africa. This need received additional impetus, justified on two grounds. First, insufficient attention paid to environmental and social aspects is an important factor of the escalating conflicts in the other petrostates of Africa, notably Angola and Nigeria. Second, the 2003 invasion of Iraq further increased the strategic value of West Africa's oil reserves. It is predicted that African oil imports into the US will increase from 15% currently to 25% by 2015.

The project consists of three main construction components:

- Development of three oilfields in the Doba basin in southern Chad. This includes the construction of 250 exploration wells, an oil gathering system with underground pipes, a central treatment facility and a pumping station. Offices, accommodations for workers, and infrastructure improvements were also necessary.
- Construction of the cross-country pipeline which stretches 1,070 km stretching from southern Chad to Cameroon's Atlantic coast near Kribi. The pipeline is lowered into a 1-2 m trench and covered with earth. Two pumping stations, a pressure reducing station, several temporary or permanent worker camps, and new roads and bridges were constructed and existing infrastructure was improved.
- Construction of the off-shore floating storage platform, including an 11 km long submarine pipeline connecting the platform with the cross-country pipeline. Oil is pumped from this marine export terminal into large tankers bound for world markets.

Human Rights Issues

World Bank policies and procedures. The full environmental assessment, adhering to the Bank's OD 4.01, was carried out from 1993-1999. The issues covered in the environmental documentation included biological diversity, coastal and marine resources, cultural properties, hazardous and toxic materials, indigenous peoples, induced development, industrial hazards, involuntary resettlement, land settlement, occupational health and safety, ports and harbours, tropical forests, watersheds, and wildlands. Human rights considerations form an integral part of these issues. Compliance was monitored over the entire course of project implementation by a specially designated body, i.e. External Compliance Monitoring Group. Their reports are made available to the public. The International Advisory Group and the Bank's Inspection Panel also fulfil monitoring activities. The latter is an independent mechanism that the Bank created in 1993 to ensure its accountability with respect to policies and procedures.

Project preparation. On the one hand, it has been stressed that the consultation efforts made by the project with affected communities and local NGOs are among the most extensive efforts ever conducted in Africa. This is made transparent by almost 900 village-based meetings held in the oilfield areas and along the pipeline during project preparations prior to 1999. On the other hand, the Inspection Panel has acknowledged that some of the early public consultations were done in the presence of armed security forces. This approach clearly is

incompatible with the Bank's policies and procedures, and is likely to have hindered free expression of communities' opinions. There was one issue which hit the newspaper headlines in December 2000; some sources claimed that US\$ 4.5 million of the Bank's first loan disbursement to Chad was used for the purchase of military equipment.

Requests for inspection during project implementation. Two requests for inspection were submitted to the Inspection Panel and both were granted full investigation. The first request was put forth in March 2001 by a member of parliament of Chad's National Assembly acting for himself and on behalf of over 100 residents living in the surrounding areas of the oil fields of southern Chad. Among other issues, the request alleged that the project comprises a threat to the environment and cultural properties of the local communities, and that the consultation process and disclosure of information was flawed. The second request was submitted in September 2002 by the 'Centre for Environment and Development'. This local NGO acted on behalf of several people living along the pipeline route in Cameroon and some former project employees. Allegations included a lack of information, an inadequate consultation and compensation process, non-respect of workers' rights, an outbreak of sexually-transmitted infections, including HIV/AIDS, respiratory tract problems associated with excess dust due to construction work, pollution of water sources, and a host of other specific claims. In response, the Inspection Panel issued extensive solutions with details given on how the various allegations were dealt with. The requests for inspection and the Panel's responses have been made available on the web.

Health Issues

Selected health indicators. Chad and Cameroon are among the poorest countries in the world. In 2003, their gross national income per capita was 62-160-fold below Switzerland's. The table below clarifies the vast differences of some selected health indicators (i.e. life expectancy, under-5 mortality, number of health staff, per capita expenditure on health) between the two project countries and Switzerland. During project appraisal, HIV/AIDS and malaria were identified as the most significant public health problems, with the former representing a particularly challenging issue.

| Economic and health indicator | Chad | Cameroon | Switzerland |
|---|-------------|-----------------|--------------------|
| Gross national income per capita in 2003 (US\$) | 250 | 640 | 39,880 |
| Life expectancy at birth in 2002 (years) | 46.1 / | 47.2 / 49.0 | 77.7 / 83.3 |
| Males/Females | 49.3 | | |
| Under-5 mortality rate (per 1,000 live births) | 202 / | 162 / 158 | 6 / 5 |
| Males/Females | 180 | | |

| | | | |
|--|------------|------------|---------------|
| Number of health staff in 2004 (per 100,000 people) Nurses/Physicians | 15.1 / 2.5 | 36.7 / 7.4 | 834.2 / 351.6 |
| Per capita total expenditure on health at average exchange rate in 2001 (US\$) | 5 | 20 | 3,779 |

Worker health. Critical appraisal of available project documents revealed that a sharp distinction had been made between health considerations of the workforce and local communities in the vicinity of the project. Within the fence line of the project, health was basically defined as the absence of illness and disease, which was justified also on economic grounds. A healthy workforce is a key asset to ensure effective and timely project implementation. Thus, all employees were provided with health education upon enrolment, rigorous measures were endorsed for prevention of work-related accidents and injuries, malaria and sexually-transmitted infections, and efforts were made to ascertain access to high-quality health care. The success of these measures is shown, for example, by significantly lower malaria rates in the workforce when compared to the local communities surrounding the project area, and by excellent occupational health records.

Community health. Appraisal of public health issues beyond the fence line was done in a much coarser way than for the work force and health profiles were primarily based on existing data. An important feature of the project, however, is the design and implementation of a community health outreach programme. Its aim is to target selected health issues in communities potentially affected by the project, primarily through awareness campaigns and health education. Local NGOs were designated for implementing these tasks and their focus of activities was prevention of HIV/AIDS and malaria. In 2002, a year-long multi-village prevention and education programme for HIV/AIDS was done along the pipeline route through Cameroon. In Chad, 370 malaria education sessions were conducted in 141 villages, reaching over 120,000 people, and 37,000 insecticide-treated nets were distributed for malaria prevention. In the following year, similar malaria awareness and control campaigns were done in Cameroon with a total of 29,000 nets distributed there. A critical review of available project documents identified tuberculosis as another significant public health issue. However, the project failed to address this issue.

Concluding Remarks

I argue that the Chad-Cameroon petroleum development and pipeline project is quite unique and shows a path towards social cooperate responsibility for extraction of natural resources in impoverished countries. The model is not yet perfect, but is an important step in the right direction of transparency, equitability, and respect for local communities. The World Bank's assistance in developing an oil revenue management plan with revenues targeted for poverty alleviation is of particular interest and should be followed by other countries. Careful consideration has been given to occupational and public health issues, and first attempts have

been made, so that surrounding communities can be reached and their health improved. With this integration of both the private and public sectors, the corporate world has a new model for international development.

**Jürg Utzinger works at the Department of Public Health and Epidemiology of the Swiss Tropical Institute, Base., Contact:juerg.utzinger@unibas.ch. Thanks are addressed to Dr. Gary R. Krieger and Mr. Isaac I. Bogoch for comments on this manuscript. The author is most grateful for financial support from the Swiss National Science Foundation (Project No. PPOOB-102883).*

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Kontakt

Deutschschweiz

Medicus Mundi Schweiz
Murbacherstrasse 34
CH-4056 Basel
Tel. +41 61 383 18 10
info@medicusmundi.ch

Suisse romande

Medicus Mundi Suisse
Rue de Varembe I
CH-1202 Genève
Tél. +41 22 920 08 08
contact@medicusmundi.ch

Bankverbindung

Basler Kantonalbank, Aeschen, 4002 Basel
Medicus Mundi Schweiz, 4056 Basel
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BIC: BKBBCHBBXXX