## CHAD CAMEROON PIPELINE PROJECT

The Chad-Cameroon Project is a US\$3.5 billion development of an oil field in Chad and a 1,070 km pipeline extending through Chad and Cameroon to the Atlantic coast. At the outset of the Project the roles and responsibilities of the Government and the Project operators in managing the environmental and social impacts of the Project and its broader regional development impacts were defined in the Project Environmental Management Plan (EMP). Government assumed responsibility for managing broader regional development as well as the Project's indirect impacts including in-migration through development and implementation of a Regional Development Plan (RDP).

The Environmental Management Plan (EMP) required the Project to develop and enforce a hiring policy, one objective of which was to, limit the spontaneous influx of job-seekers In addition to job-seekers, the increase in local people's disposable income (through employment, compensation, etc) and the consequent increased demand for goods and services attracted large numbers of entrepreneurs, traders, etc to the area. While the Project fulfilled its obligations regarding its hiring policy, this policy and its implementation did not stem the flow of inmigrants, in part due to limited institutional capacity and delays experienced in the design and implementation of the RDP. Consequently, since the start of the Project significant numbers of people seeking employment and other economic opportunities entered into the Project area. This led to the development of new settlements or rapid expansion of existing settlements along the pipeline route and in the oil field development area.

The Project consortium implemented mitigation measures agreed upon in the EMP, including the hiring policy. As outlined in the EMP, further measures addressing inmigration and its impacts were deemed to

be the responsibility of the governments of Chad and Cameroon. It rapidly became clear, however, that institutional capacity (particularly in the oil field area) was limited. As a consequence, pro-active management of spontaneous settlements was non-existent, although the Project implemented a number of a posteriori mitigation measures.

The most significant consequences of inmigration are related to the development of the village of Komé Atan in the Komé oil field development area in southern Chad. The settlement, located opposite the exploration and construction base in the oil field development area, was created in 1994 by a number of Project workers who came to the area from Sahr (original exploration base) towards the conclusion of the exploration phase. The village stayed in a quasi-dormant, stable situation until construction of the oil field production infrastructure and drilling began in 2001. Although this spontaneous settlement had been present for more than seven years, the Project EMP did not include direct mitigation measures related to the village. These mitigation measures were expected to be developed in the broader framework of the RDP, as finalized and made operational through a World Bank capacity building project. At the beginning of the construction phase, the village started to grow. While the population totaled about 330 people in mid-2001, by early 2002, a census by the Project's socio-economic team documented a total population of 1,780 individuals. Later surveys indicated that the population continued to grow, reaching approximately 3,000 people in 2003. The spontaneous settlement was called Komé Atan, from the French for "on attend," i.e. "we are waiting," although residents used to call the village Komé Satan, in reference to its numerous bars, prostitution, and harsh living conditions.

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The rapid population growth in 2001 caused sanitary conditions in the village to deteriorate. Specifically, drainage was not controlled, very few latrines were available, and solid waste started to accumulate. A mid-2002 report by the independent environmental and social monitor raised sanitation and health concerns for Komé Atan inhabitants and the Project working community and also identified the fire risks posed by the uncontrolled growth and random location of dwellings and boutiques that were entirely made of thatch (sekko). The independent monitor also mentioned recommendations for the Government to prepare and implement a land use plan. Indeed, in December 2002, a major fire in the village destroyed 60 percent of the buildings. Another fire occurred in March 2003.

Although the Project placed considerable emphasis on occupational health and safety and achieved good results, the Project EMP did not include sanitation of Projectaffected villages, as this was identified to be a government responsibility. However, poor sanitation of villages close to the Project camp was identified by the Project as a source of disease vectors. The risk of disease proliferation among the work force increased as workers living in Komé Atan commuted between the village and work location.

Eventually, it became clear that the Project would have to assume a greater role in supporting the Komé Atan community and mitigating the negative environmental and social impacts associated with its rapid uncontrolled growth. Komé Atan village and Komé base were part of the same human ecosystem, and the Project started a constructive dialogue with the local authorities to develop mitigation actions (although an actual mitigation plan was never officially developed). Inspection, monitoring, and control of vectors (especially fogging for mosquito and providing treated mosquito bed nets to Komé Atan residents) and improving village sanitation became critical actions with a dual objective of limiting risks to the worker community and beneficially impacting local community health. Other actions implemented by the Project included: the creation of drainage (i.e., French drains to reduce maintenance needs and clogging) to improve run-off collection; construction of a parking area for trucks and other Project-associated vehicles; drilling of water wells equipped with foot pumps; garbage collection; and lighting of some common areas.

After the fire, the local government and the Project worked together, with community consultation and agreement, to open new streets and create a buffer zone void of building along the main road. Reconstruction assistance was provided by the Project, in conjunction with the local government, to villagers who lost their dwellings. More and more new houses were built using permanent materials, and Komé Atan started to evolve from



significant fire risk. A major fire occurred in December 2002, destroying 60% of the buildings, while another fire occurred in

March 2003. Photograph: Esso Exploration Production Chad, Inc.

Image 1. In-migration driven population growth in Komé Atan settlement, Chad, near the Chad-Cameroon Oil Pipeline Project led to uncontrolled growth of the settlement. The high density and random distribution of thatch (sekko) housing led to



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an informal (although long-standing) settlement to a new village. The local Government Service du Cadastre prepared a development plan for the village, and a commission was formed including the Chef de Canton, Sous-Préfet's representative and residents. A villagers' committee for water and sanitation was formed and some training was given to operate and maintain water points and the drainage network. A tariff for water was established to selfsupport maintenance of the water points. In 2004, the Prefecture became official, and Komé Atan was recognized as a village. The establishment of Komé Atan as the main commercial center around Komé base has induced permanent social and economic changes in the region, including the reduced influence of Komé, the canton capital, in the area, and the decline of local markets in nearby villages (e.g., Danmadja); while at the same time providing avenues for local commerce and convenient access to goods and services that were previously non-existent in the area.

The settlements of Komé Atan and Komé 5 Moudoudoigne (a new commercial village established quite independently from the local population in the vicinity of the oil field operations base) in the oil field area have become permanent physical footprints associated with the Project

while other spontaneous settlements, developed near construction camps in Cameroon and Chad during the pipeline construction, generally disappeared when the construction camps demobilized. Of these short-lived communities, the case of Bemboyo in northern Cameroon may be the most significant. In 2001, during the construction of the permanent national road, which was opened by the Project to transport equipment and supplies through northern Cameroon across the border with Chad to Komé oil field area, the population of the village grew to approximately 5,000 people in less than 10 months. The small town became a very active marketplace with several businesses for transport, accommodation, bars, and restaurants. However, in mid-to-late 2002, following the completion of the road works and workers' retrenchment, the population sharply decreased back to a level similar to preconstruction conditions.

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