



• ChevronTexaco in the Southern Highlands Province, Papua New Guinea

Environmental conservation and sustainable development in Papua New Guinea's rain forests

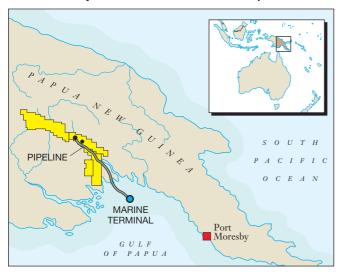
Protecting people and the environment is at the cornerstone of ChevronTexaco's corporate policy. Chevron Niugini has made this commitment integral to the design and operation of the company's Kutubu Petroleum Development Project in Papua New Guinea. This case study describes Chevron Niugini's efforts to conserve the environment, preserve cultural diversity and promote sustainable community development, while exploring for and producing oil in an ecologically-sensitive rain forest.



Background

The Kutubu Petroleum Development Project is the first successful attempt to produce commercial oil in Papua New Guinea (PNG). Flow lines bring the hydrocarbons to a central production facility and are then transported by pipeline to a marine terminal consisting of a platform and a single point mooring buoy located in the Gulf of Papua. The Project is operated by Chevron Niugini Ltd. as a joint venture on behalf of affiliates of Santos, ChevronTexaco, ExxonMobil, Cue PNG Oil Company, Minerals Resources Development Corporation,

A 264-kilometre pipeline transports crude oil from the onshore Central Production Facility to a marine terminal in the Gulf of Papua



Southern Highlands Petroleum, Merlin Petroleum Company Japan PNG Petroleum and Oil Search Ltd. The government of Papua New Guinea and local landowners are also stakeholders in the project.

Project area description

The project area encompasses Lake Kutubu, a pristine lake in the Southern Highlands Province and extends south to the Gulf of Papua through the Kikori River Delta (see map). Rainfall averages more than 5000 mm/year and the surrounding mountains are covered by tropical rain forest. This ecosystem consists of a biologically highly diverse community of plants and animals including more than 700 species of birds, 15,000 species of flowering plants, and more than 300 species of fishes, amphibians and reptiles. The Kikori Basin is home to some of the planet's rarest wildlife. Many species are found nowhere else. Approximately 20,000 of the country's 4 million people use the rain forest as a subsistence base for gardening and hunting, and the Kikori River Basin for transportation and food.

Project planning and design incorporates stringent environmental standards

The Kutubu Project was designed to meet or exceed the most stringent of environmental standards. In 1992 the Kutubu Wildlife Management Authority was founded in collaboration with the Department of Environment and Conservation, the landowners and the joint venture to declare Lake Kutubu a





Lake Kutubu-a pristine lake in the Southern Highlands Province

protected area. Chevron Nuigini implemented extensive measures to protect the environment and avoid disturbing tropical rain forest areas. These included burying project pipelines, reinjecting produced water, minimizing road construction, eliminating spills, and comprehensively managing wastes, among many others.

Environmental plans enhanced by integrated conservation and development

In 1994, a new partnership was established to help protect the Kikori River System by working with local people throughout the area to establish a model of ecologically sustainable development. The partners included Chevron Niugini, Kutubu Joint Venture partners, PNG national and provincial governments, and World Wildlife Fund (WWF).

WWF has ranked the Kikori area as one of the earth's 200 greatest treasures. The partnership believed that environmental concerns and economic interests should be considered together and that a long-term strategy would be necessary to ensure economic and environmental viability for the area. With input from the partnership WWF designed the Kikori Integrated Conservation and Development Project (KICDP). The KICDP has focused on four areas: conducting extensive biodiversity surveys in the area; raising community awareness about the negative impacts of industrial-scale logging; helping local residents develop a sustainable fisheries strategy; and establishing environmentally friendly, locally developed businesses.

A World Bank report called the project 'a model for other resource developers operating in ecologically sensitive environments.' Pulitzer Prize-winning environmentalist Jared Diamond has visited the company's facilities several times. He said he 'found PNG's most endangered bird and mammal species much more abundant here than outside the area

leased by Chevron.' Seven years after its beginning, the KICDP still represents perhaps the most significant attempt at collaborative biodiversity protection ever undertaken by a group of oil companies and an environmental organization.

Community development a major project focus

Kutubu Joint Venture participants considered the social impact of the project on local communities from the beginning. The Joint Venture established a Community Affairs section devoted to working with the community on key issues. Its mission was to promote self reliance of the local people in their dealings with government, outside agencies and non-governmental organizations (NGOs). Village Development Committees were established and, as a result, local personnel were trained to assist village residents. For example, health workers provided information on sanitation and malaria control measures, and agricultural officers assisted farmers in improving subsistence gardens.

On 1 January 2001 Chevron Niugini and WWF took another significant step. They formed The CDI (Community Development Initiative) Foundation to promote sustainable social and economic development amongst rural communities in southwestern PNG while contributing to conservation of biodiversity surrounding these communities.

CDI's stated goal is 'to improve the quality of life in rural communities and achieve a lasting legacy of sustainable development.' In support of this goal, six primary programmes have been designed around the following objectives:

- To support and assist primary healthcare providers and members of the community to improve health conditions.
- To facilitate improvements to the quality and availability of education services in the community.
- To foster balanced agricultural development in the community, improving food security and generating income.
- To improve the community's capacity for planning and implementing rural development.
- To promote the sustainable use of natural resources amongst rural communities.
- To promote capacity building, networking and research in support of sustainable development.

An operational entity with its own staff and facilities, CDI is a unique NGO intended to help protect PNG's fragile rainforests—and support the communities within them—for generations to come. Besides creating a model that other companies are already emulating, the new organization arguably marks the first time a major environmental group has helped an oil company create a foundation for promoting sustainable development. In 2001 the CDI received



international recognition through an award from the prestigious Institute of Petroleum in the U.K.

In addition to assuming responsibility for Chevron Niugini's existing health, education, agriculture, skills development and cultural programmes, the new foundation also helps WWF carry the work of KICDP forward. CDI integrates WWF's efforts to protect natural resources and supplements their community outreach components. New initiatives strengthen local development agencies and bolster conservation.

Drawing on WWF's examples of community sustainability, CDI replaces traditional company models for community assistance with a separate non-profit entity that develops increasing independence from the company. The new organization is designed to survive eventual petroleum project closure and mitigate its impact on community that have become dependent on project benefits.

Establishment of the CDI Foundation builds on collaborative efforts of many companies and institutions over a number of years. Core funding comes from a joint venture of oil companies that have invested in producing fields in PNG. Chevron Niugini provides communications and logistic support as well as initial management of the Foundation. Implementation of programmes is carried out in partnership with several institutions in addition to WWF. These include the University of Utah's Department of Family and Preventive Health working with CDI on improving primary healthcare, HOPE Worldwide on improving literacy, and Rossing Foundation of Namibia on programme evaluation and organizational development.

Local communities and the PNG government are the most important participants in the CDI Foundation. Community members and government officers at the local level participate in all of CDI's field programmes, while government officials at the provincial and national level also participate in the planning, monitoring and evaluation of these programmes.

Commitment and partnership—keys to conservation and sustainable development

Edward O. Wilson, Professor of Science, Harvard University, in the *Diversity of Life*, notes that 'the rescue of biological diversity can only be achieved by a skillful blend of science, capital investment and government: science to blaze the path by research and development; capital to create sustainable markets; and government to promote the marriage of economic growth and conservation.'

The CDI Foundation is a prime example of ChevronTexaco's commitment to communities expressed in *The ChevronTexaco Way*, the company's statement of values. In creating CDI, Chevron Niugini and its joint venture participants are transforming KICDP into a legacy. CDI contributes to a growing international dialogue about how to approach the social and environmental impacts of petroleum operations on local communities in a sustainable way, by building on the collective resources of many partners, including the government and communities themselves. In so doing, they have forged a more promising future for project area communities and greater protection for an ecosystem as delicate as a jungle flower.