



Standing on Sacred Ground

Episode 2: Profit and Loss

2013 • Running time 57 minutes • Directed by Christopher McLeod •
Distributed by Bullfrog Films

From New Guinean rainforests to Canada's tar sands, *Standing on Sacred Ground: Profit and Loss* exposes industrial threats to native peoples' health, livelihood, and cultural survival. In Papua New Guinea (PNG), a Chinese government-owned nickel mine violently relocated villagers to a taboo sacred mountain, built a new pipeline and refinery on contested clan land, and is dumping mining waste into the sea.

TEACHER'S GUIDE



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Standing on Sacred Ground: Profit and Loss



Curator

David N.M. Mbora
Associate Professor of
Biology and Environmental
Science, Whittier College

Indigenous peoples' territories cover about 20% of the earth's landmass and hold over 80% of its biodiversity along with vast amounts of mineral wealth.

WHY I SELECTED THIS FILM

I chose this film because it makes an important point about the high cost that native peoples have to pay to provide the industrial raw materials and fossil fuel energy that drive the economies of industrialized countries. The high costs, in the form of lost livelihoods and nasty health effects on the indigenous people, are often invisible to the residents of industrialized countries. In addition, the film highlights important grassroots efforts by the indigenous peoples to hold governments and industry accountable. Such environmental activism, I believe, is important because it empowers local peoples to pursue environmental justice.

SUGGESTED SUBJECT AREAS

Anthropology	History
Environmental Science	Media Studies
Ethnography	Political Science
Geography	

SYNOPSIS

From PNG rainforests to Canada's tar sands, *Profit and Loss* exposes the industrial threats to native peoples' health, livelihoods, and cultural survival. In PNG, a Chinese government-owned nickel mine violently relocated villagers to a taboo sacred mountain, built a new pipeline and refinery on contested clan land, and is dumping mining waste into the sea. In Alberta, First Nations people suffer from rare cancers as their traditional hunting grounds are strip-mined to unearth the world's third-largest oil reserve. Indigenous peoples tell their own stories—and confront us with the ethical consequences of our culture of consumption.

—Excerpted from the *Standing on Sacred Ground* website

THE ENVIRONMENTAL JUSTICE FOCUS OF THE FILM

This film is about environmental justice: as a result of the exploitation of resources on their traditional lands, the indigenous communities that are the subjects of this documentary are suffering the effects of environmental degradation and pollution. Further, the communities in PNG were not involved in making important decisions about the mining happening on their land, and the government does not seem to take their concerns seriously. For the communities in Alberta, Canada, mining companies and the government are most likely breaching an established treaty.

Standing on Sacred Ground: Profit and Loss



“The first thing they did was order us to move out.”

—Peter Kepma

BACKGROUND

The film *Standing on Sacred Ground: Profit and Loss* is the story of two groups of indigenous peoples who are threatened by the exploitation of rich mineral and petroleum reserves found on their land. The film also shines a light on how these communities are organizing to fight back and demand accountability and environmental justice.

The first part of the film is an account from PNG. We learn that the indigenous peoples of PNG have such strong connections to the land that their land rights are guaranteed and protected by the constitution. Even so, this connection is seriously threatened for the people who live on the Kurumbukari plateau, which holds a rich deposit of nickel that is being mined by the Metallurgical Corporation of China (MCC). For the mining company to extract the resource, one thousand villagers must abandon their homes and their age-old way of life. What’s worse, the villagers are despondent because the site they are moved to is sacred to their people. As they say in the film, “wild natural spirits roam there.” Meanwhile, at Basamuk Bay, where the nickel ore is refined before being loaded onto ships, the MCC is allowed to dump mine tailings into the ocean, which will surely ruin the fishing grounds and affect the livelihoods of the people.

The second part of the film takes us to the boreal forests of Alberta, Canada, where the First Nations (native peoples) have hunted and fished for millennia. Although the First Nations gave up the land to Canada in an 1899 treaty, they retained access rights to the fishing and hunting grounds. However, the land beneath the forests holds the third-largest oil deposit in the world, in the form of tar sands. Billions of barrels of oil can be extracted and shipped to American refineries by an oil industry that provides numerous job and business opportunities. But these benefits come with steep environmental costs—which the oil companies and the Canadian government deny—and the local people are paying the price.

To extract the oil, the land is first stripped of all vegetation. Then the oil, which has the consistency of tar, is heated by steam to separate it from the sand and soil. Contaminated water produced during this process is pumped into holding ponds. This energy-intensive process is said to be sustainable, but, as the film shows, high levels of pollution are emitted, surrounding forests are dying, extensive hunting and fishing grounds are lost, and the air and water quality are affected. Indigenous communities believe that high levels of toxic pollutants released by the process are to blame for clusters of fatal and non-fatal illnesses, including 20 types of cancers.



Standing on Sacred Ground: Profit and Loss



KEY LOCATIONS AND PEOPLE

Locations in PNG

Basamuk Bay
Bosmun village
Kurumbukari plateau and village
Mindere village
Rai Coast
Ramu River

Locations in Alberta, Canada

Athabasca River
Boreal forest
Fort Chipewyan
Fort McKay
Lake Athabasca

People featured in PNG

Melchior Ware Bosmun – village leader
Poin Caspar – Bismarck Ramu Group (BRG) activist
John Chitoa – BRG activist
Peter and Christina Kepma – resident couple of Kurumbukari village
Rosa Koian – BRG activist
Mama Lucy – relocated person from Kurumbukari village
Benny Mangua – person relocated to Snake Mountain village
Sam Mellemba – Mebu clan elder
John Nimambo – resident of Kurumbukari village
Powes Parkop – governor of Port Moresby
Sir Michael Somare – four-time prime minister of PNG
David Tigavu – chairman of the Kurumbukari Landowners Association
Tiffany Twivey – attorney for the Mebu clan, Basamuk Bay

People featured in Alberta, Canada

Athabasca Chipewyan First Nation

Jim Boucher – chief of the Fort McKay First Nation
Raymond Ladouceur – Métis fisherman
Lionel Lepine – Athabasca Chipewyan environmental coordinator
Mike Mercredi – Athabasca Chipewyan cartographer, formerly employed by Syncrude
Kim Nordbye – stakeholder relations officer at Suncor
Dr. John O'Connor – family physician

Standing on Sacred Ground: Profit and Loss



David Schindler – professor of ecology at University of Alberta

Ida Stepanovich – Métis employee at Suncor

Clayton Thomas-Müller – member of the Mathais Colomb Cree First Nation

Don Thompson – president of the Oil Sands Developers Group

Kevin Timoney – ecologist

Cherie Wanderingspirit – Mikisew Cree mother

Simon Waquan – member of the Mikisew Cree First Nation



FILM CHAPTERS OR SEQUENCES

00:00–02:23

Introduction to and overview of the film

02:23–08:10

Historical overview of PNG and an introduction to the peoples' connection to the land

08:10–15:32

Displacement from the Kurumbukari plateau by the operators of the nickel mine

15:32–21:00

The threat of deep-sea tailings placement in Basamuk Bay

21:00–26:30

Government corruption in PNG and environmental degradation

26:30–33:27

Introductory overview of the tar sands of Alberta, Canada

33:27–39:00

Environmental degradation due to the extraction of tar sands oil

39:00–46:26

Environmental pollution, laxity in oversight, impact on fish and wildlife

46:26–49:06

Environmental pollution and negative health effects

49:06–55:40

Conclusion: reflections by local people on the tar sands oil exploitation



Standing on Sacred Ground: Profit and Loss



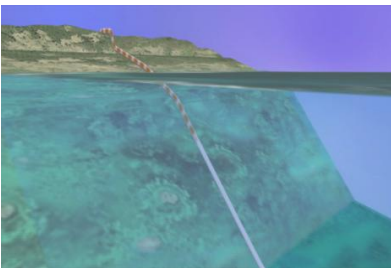
DISCUSSION QUESTIONS

A. Who are indigenous peoples?

The United Nations adopted the Declaration on the Rights of Indigenous Peoples in 2007 (read it [here](#)). This is a very important declaration because it is estimated that indigenous peoples' territories cover about 20% of the earth's landmass and hold over 80% of its biodiversity along with vast amounts of mineral wealth. You can learn more about who the indigenous peoples are [here](#) and how the functioning of their societies is tied to biological diversity [here](#). Unfortunately, indigenous societies everywhere face numerous challenges associated with the ongoing exploitation of the resources found on their land. You can find out more about these challenges [here](#).

Please use the information you have learned from the resources provided above to answer the following questions:

1. What *active external threats* do the indigenous peoples of PNG face compared with those of the peoples of Alberta, Canada?
2. What *passive external threats* do the indigenous peoples of PNG face compared with those of the peoples of Alberta, Canada?
3. What FIVE end-user products are made of nickel? Who are the primary end users of the products manufactured from nickel?
4. Who are the top THREE importers of tar sands oil?
5. Who do you think are the main beneficiaries of the tar sands oil wealth of Alberta, Canada, and the nickel mined from PNG?



B. What are the environmental and health costs of mineral exploitation?

The Rai Coast of PNG

Review the film from 15:00 to 21:00. This section provides an overview of the environmental degradation and disturbance caused by the MCC refinery at the sacred site on the Rai Coast of PNG. Next, conduct some research on the subject of deep-sea mine tailings disposal to learn more about the problems associated with the practice and to answer the following questions.

1. What environmental costs are associated with the exploitation of the nickel from PNG? Please distinguish between the short- and long-term costs.
2. Who do you think bears the environmental costs associated with the mining of nickel in PNG?
3. Why are deep-sea tailings disposal and its shallow-water counterpart, submarine tailings disposal, a growing global concern?
4. What are the ecological impacts of large-scale disposal of mining waste in the deep sea?

Standing on Sacred Ground: Profit and Loss

Here are two sources to help you answer the preceding questions.

- a) D.J. Hughes, T.M. Shimmield, K.D. Black, J.A. Howe. "Ecological impacts of large-scale disposal of mining waste in the deep sea." *Nat. Sci. Reports*, 5, article number 9985 (2015).
<http://www.nature.com/articles/srep09985>
- b) Lindsay L. Vare, Maria C. Baker, John A. Howe, Lisa A. Levin, Carlos Neira, Eva Z. Ramirez-Llodra, Amanda Reichelt-Brushett, Ashley A. Rowden, Tracy M. Shimmield, Stuart L. Simpson, Eulogio H. Soto. "Scientific considerations for the assessment and management of mine tailings disposal in the deep sea." *Frontiers in Marine Science*, 5 (2018).



Alberta, Canada

Review the film from 35:00 to 38:00 and from 42:00 to 49:00. These segments give an overview of the presumed effects of pollution on the health of people and wildlife in the tar sands area of Alberta, Canada.

1. What environmental costs are associated with the exploitation of the oil sands? Please distinguish between the short- and the long-term costs.
2. Who do you think bears the environmental costs that are associated with the exploitation of the oil sands?
3. Does the film really provide any evidence of the connection between pollution and the "clusters of fatal and non-fatal illnesses" that the people are suffering?
4. Do you think there is any connection between the "clusters of fatal and non-fatal illnesses" that the people are experiencing and the reported environmental pollution?
5. What steps, such as research or other actions, should the government of Canada take to address the concerns of the indigenous peoples of Alberta?

Related background information

Mercury and lead are mentioned repeatedly as possible pollutants from the processes of extracting oil from the tar sands of Alberta. You can learn more about the effects of mercury in ecosystems [here](#) and about the effects of lead [here](#).

Standing on Sacred Ground: Profit and Loss



C. How are indigenous peoples empowering themselves?

The communities featured in this film have worked to empower themselves so they can protect their natural resources and force their governments to be accountable. Please review the film from 14:30 to 15:45 and from 22:30 to 24:10 for an overview of how the Bismarck Ramu Group (BRG) is fighting back on behalf of the local people. Also, consider the implications of this quote from the Constitution of the Independent State of Papua New Guinea, which reads, “We declare our fourth goal to be for Papua New Guinea’s natural resources and environment to be conserved and used for the collective benefit of us all, and be replenished for the benefit of future generations.” You may also read the whole relevant section of the constitution [here](#).

1. What specific actions are the BRG taking, and what do they hope to achieve through these actions?
2. Given the provisions of the constitution of PNG, what legal protections are there for the people represented by the BRG?

SELECTED EXCERPTS

Where time is limited, the following two excerpts may be assigned or screened in class.

1. **14:35–24:25** This 10-minute excerpt provides an overview of the work of the BRG, which is a grassroots organization in PNG. It also highlights some of the reasons why grassroots efforts are necessary.
2. **34:00–49:00** This 15-minute excerpt provides an overview of the impact of environmental pollution on people, fish, and wildlife in communities in Alberta, Canada.

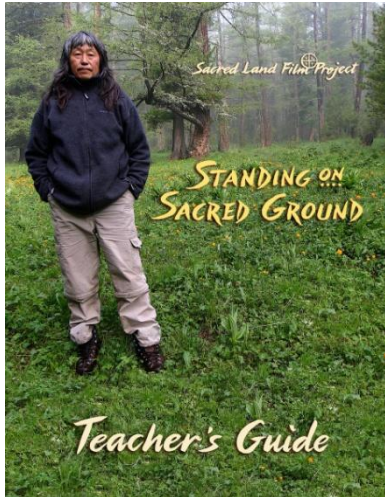
ACTIVITIES

Visit an indigenous community.

There are many compelling reasons to arrange a visit, but it primarily offers a way to learn more about the world in which you live, meet new people, and experience how others live. According to the United Nations Development Program, there are an estimated 370 million indigenous people in the world living in 90 countries. Indigenous communities are present in all geographic regions and represent 5,000 different cultures. So why not plan a trip and visit an indigenous community near you?

When you visit, please do so in an ethical, respectful manner so that your experience is educational and meaningful to both you and the people you visit. Please read this [article](#) to learn more about what to consider when making contact and planning a visit.

Standing on Sacred Ground: Profit and Loss



ADDITIONAL TEACHING GUIDES AVAILABLE

A 136-page teaching guide that covers all four films in the series has been prepared by the film's producers. The guide can be downloaded from the program website at standingonsacredground.org/teach.

A 55-page teaching guide that focuses on *Profit and Loss*, the second of four episodes in the series, can also be downloaded from the same site.

SUPPLEMENTAL MATERIAL

Detailed information about Canada's First Nations communities and where they live is available [here](#). Similar information about Native American tribes that are recognized by federal and state governments can be found [here](#), along with links to many other sources of information. For groups outside the United States and Canada, much useful information is readily available on the internet. There is also an international non-governmental organization, or NGO, called Survival International, which advocates tribal peoples' rights. You can learn more about these efforts on their [website](#).

Hughes, D.J., Shimmield, T.M., Black, K.D., Howe, J.A. (2015). "Ecological impacts of large-scale disposal of mining waste in the deep sea." *Nat. Sci. Reports*, 5, article number 09985. www.nature.com/articles/srep09985

Vare, Lindsay L., Baker, Maria C., Howe, John A., Levin, Lisa A., Neira, Carlos, Ramirez-Llodra, Eva Z., Reichelt-Brushett, Amanda, Rowden, Ashley A., Shimmield, Tracy M., Simpson, Stuart L., Soto, Eulogio H. (2018). "Scientific considerations for the assessment and management of mine tailings disposal in the deep sea." *Frontiers in Marine Science*, 5.

