

Courageous Action. Selfless Spirit.™ Acción valiente. Espíritu altruista.™

# **Extractivism**

Curriculum Guide for the Sisters of Mercy Critical Concerns

# **Extractivism: Definition**

One of the Critical Concerns of the Sisters of Mercy is Earth. It is important that we all have the same vision of sustainability as every action impacts the future of all societies. Quoting St. Francis of Assisi, Pope Francis reminds us in Laudato Si' that it is Earth "who sustains and governs us" (1). Drawing from the work of Patriarch Bartholomew, Pope Francis emphasizes "the ethical and spiritual roots of environmental problems, which require that we look for solutions not only in technology but in a change of humanity" (9). Learn more about our Critical Concern for Earth on the Sisters of Mercy website.

Extractivism represents a development model with a limited vision of the future. It exploits natural resources, often at the expense of local communities.

#### **Characteristics**

- Genesis 1:31 says, "And God saw everything that he had made and behold, it was good." Then in Genesis 1:28 and 2:15, God specifically commanded humankind to take care of the earth. Humankind has abused the earth and continues to do so at an alarming and rapid rate. It is our moral obligation to care for the earth, and so if we neglect, abuse, and continue to spoil the environment, we are damaging something that is precious to God.
- What we do to nature will affect us in some way, be it good or bad.
- Extractivism leads to displacement of communities and loss of cultural identity.
- The demand for large numbers of cheap labour has led to child abuse through the practice of child labour.
- One extractive industry, fracking, leads to serious issues such as earthquakes, soil erosion, and pollution of both air and water.
- Those who suffer the negative impact of extractivism are the poor and vulnerable.
- Extractivism is a development model anchored in an economic model that is based on the export of commodities.
- Extractivism is part of a transnational economic model.
- Extractivism is a model supported by science and economics to support a productive system immersed in the throw-away culture.
- The indiscriminate exploitation of natural resources is concentrated in the peripheries.
- Extractivism is based on the search for resources at the lowest possible cost without worrying about the way it impacts sister earth.

### **Essential questions**

What relationship do we have with sister earth?

Do we consider the earth as a sister whom we must respect, or do we see it as a mere resource for our personal benefit?

Do we respect the cycles of the earth? Do we respect its times?

What impact does a system of production have on sister earth? Are there ways to produce that would be more earth friendly?

What relationship exists between the loss of biodiversity and extractivism?

Do natural resources have to keep up with rate of production?

Is garbage a serious consequence of the system of production? How much do we extract from the earth and then dispose of?

Is it natural to discard things? Why do we discard what we extract?

Is it necessary to continue extracting in order to keep production going?

Why is it the responsibility of people who are *discarded* to take care of waste? (poverty)

How does extractivism influence our culture? Is there a culture of extractivism?

Are there policies that are in line with the vision of Mercy?

Are there companies that carry out their activity in an earth-friendly manner?

Is there a relationship between extractivism and health, between extractivism and natural disasters?

How have developed countries contributed to the problems created by extractive industries?

### What do we want our students to learn?

- 1. Sustainability of our natural resources
- 2. Waste management
- 3. Substitution Producing and using safer products to replace those made from extractive industries

### **Lesson Plans and Links**

Lesson with Link and Source	<b>Lesson Topics</b>	Strategies for approaching content and connecting with different subject areas	Connection with Core Values and Profile of the Graduate Attributes	Connection with Critical Concerns
Care of the earth  Laudato Sí  Lesson Plans on Care for Earth: Extractives	Introduction to care of the earth  Laudato Si	Social Studies / Geography- To evaluate human, ethical, social, cultural, and legal issues  English Language- Reflective writing  Religious Education- Used when looking at Creation.	Principled Leadership Inspired By Faith Ethical & Moral. Following a personal code based on Gospel values that guides action and choices.	Nonviolence  Earth

Extractive Industries	Definition and	Social	Compelled By Mercy	Nonviolence
Content United Nations	classification of extractive industries  What are extractives?	Studies/Geography- Used when looking at human relationships with the environment.	Compassion. Having concern for the needs of all, including those	Racism- Respecting every person for who they are.
Extractive Industries and Conflict  Extractive Industries: Optimizing Value Retention in Host Countries	<ol> <li>Fishing</li> <li>Forestry</li> <li>Mining: oil, natural gas, bauxite, copper limestone, sand gravels</li> </ol>	History- When looking at Trans-Atlantic Slave Trade  Science-When looking at water quality, metals	outside our immediate circle.  Responsibility to Serve. Fulfilling the duty to not just care about others, but to act	Immigration- No one should be forced from their home.
Case Study Republic of Congo  Videos	4. Agriculture: Monoculture  Social Impact and Conflict	and minerals.	on their behalf.  A Voice for Dignity and Respect  Inclusivity. Going	
Extractive Industries  Activities  Extractives sector			beyond tolerance to embrace diversity, while accepting and serving with open arms.	

Esson Plans  Lesson Plan: Sustainable Fishing  Content  Notes: Negative Effects of Fishing on the Environment  Videos  Aquaculture  Movie-Seaspiracy  Most Destructive Fishing Practices  Ocean Alert: Over- Fishing  Articles  Aquaculture -A bad decision?	Types of fishing methods  Aquaculture  Impact on the environment  Sustainable practices	Social Studies/Geography- Used when looking at human relationships with the environment.  Business- When looking at types of primary industries and economic activities.  Science- When looking at water quality, sound waves, pollution.	Critical Thinking. Gathering and objectively evaluating and analyzing information through reflection and reason.  A Voice for Dignity and Respect  Advocate. Being a forceful defender, supporter and sometimes spokesperson for the values and people we hold dear.	Nonviolence- As the population continues to grow animal cruelty increases in order to meet food demand. A need to respect all living things.
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Activities  Activity 1: Small Group Discussion on Fishing (page 4)				
Deforestation  Lesson Plans  Carbon Cycle Poster  Deforestation Lesson Plans  Deforestation Research Assignment  Deforestation and Climate Change  Content  What are the drivers of deforestation  Powerpoints on Deforestation: 1 and 2	Impact of Agriculture Impact through mining Deforestation and climate change	Social Studies/Geography- When looking at migration, pollution, monoculture and soil erosion.  When looking at greenhouse gasses and global warming.  History- When looking at colonization in developing countries  Science- When looking at water quality, air pollution.	Empathy. Putting yourself in someone else's shoes to understand their feelings and perspectives.  Educational Courage  Critical Thinking. Gathering and objectively evaluating and analyzing information through reflection and reason.	Immigration- Citizens in a region have a right to live freely without forced relocation

<u>Videos</u>				
Why deforestation matters—and what we can do to stop it				
Preserving Our Forests: Solutions to Deforestation				
<u>Articles</u>				
The effects of extractive industries on deforestation in developing countries				
Extracted Forests				
Activities				
Quizzes on Deforestation: 1   2   3 (requires account)				
Extractivism: General Ideas	General ideas about extractivism  Linear production	Allow an understanding of the concept of	Compelled By Mercy Compassion. Caring for the needs of	Earth- It highlights the problems of the indiscriminate exploitation of natural

Lessons	system.	extractivism.	everyone, even those	resources.
A self-self-self-self-self-self-self-self-		E1-1 41 11664	outside one's	N
Actividades sobre		Explain the different	immediate circle.	Nonviolence- Shows
extractivism para		activities that		the violent relationship
trabajar en clase		encompass	<b>Empathy</b> . Putting	that we have with our
(Classroom activities about		extractivism.	ourselves in the place	sister earth.
extractivism)		G1 .1 .	of others in order to	T
,		Show the various	understand their	Immigration- Shows
<u>Videos</u>		environmental impacts	feelings and	the migration that is
		that extractivism	perspective.	generated by the
Reflexiones acerca del		generates.		exploitation of natural
<u>extractivism en</u>			<b>Educational Courage</b>	resources
<u>Argentina</u>		Allows for a reflection		
(Reflections concerning		concerning the	Curiosity. Being open	
extractivism in Argentina)		negative consequences	to other ways of seeing	
¿Qué es el		of extractivism in	the world and exploring	
extractivism?		environmental and	new ideas.	
Greenpeace Argentina		social terms.		
(What is Extractivism?			Critical thinking.	
Greenpeace Argentina)		Shows a knowledge of	Objectively gather and	
¿Extractivism a		the relationship	evaluate information	
cualquier precio?		between political and	using reflection and	
(Extractivism at what price?		economic powers.	reason.	
Home - La Earth.		This understanding can	Inspired By Faith	
Documental Completo HD		be useful in subjects		
(Earth our Home – complete		such as Geography,	Ethical and moral.	
documentary)		Economics, Politics,	Following a personal	
D 11		Biology, Chemistry,	code of ethics based on	
Empresas responsables		•	gospel values that	

y empresas no responsables - El Informe Kliksberg (Businesses responsible and those that are not responsible: Kilksberg Report)  Economía Circular (Circular Economy)		Physics, and Construction of Citizenship, among others.	guide actions and decisions.  Principled Leadership  Integrity. Standing up for/ doing the right thing, even when it's difficult or unpopular.	
Open pit mining: lime, gold and other metals  Classes  Actividades para trabajar en clase. (Classroom activities)  Content  Glaciares en Argentina: Cielo cerrado a la minería a cielo abierto (Glaciers in Argentina and Pit closed on open pit mining)  Impacto de la minería a cielo abierto	Open pit mining.  Environmental impact on the extraction of minerals in open pit mining.  Relationship between politics and the economy  Legislation for the care of natural resources.  The use of water.  Corporate Social Responsibility.	Allows for a knowledge of the different problems that open pit mining carries with it.  Demonstrates the environmental impact generated by open pit mining.  It allows for a reflection on the negative consequences of open pit mining in environmental and social terms.	Compelled By Mercy Compassion. Caring for the needs of everyone, even those outside our immediate circle.  Empathy. Putting ourselves in the place of others to understand their feelings and perspectives.  Responsibility to serve. Fulfilling our obligation not only to care for others but also	Earth- It highlights the problems of the indiscriminate exploitation of natural resources.  Women- It shows the exclusion of women in the field of Mining.  Nonviolence- It shows the violent relationship we have with our sister Earth.  Immigration- It shows the migratory effect generated by the

(Impact of open pit mining) It allows for an to act in their name. exploitation of natural understanding of the resources. La salud de diez **Educational Courage** relationship between millones de peruanos political and economic está en riesgo por el Curiosity. Be open to envenenamiento del powers. other ways of seeing agua con sustancias the world and exploring tóxicas It can be used in (Open pit mining in Peru) new ideas. subjects such as Geography, Mining y pueblos Critical Thinking. Economics, Politics, originarios en Objectively collect and Colombia Biology, Chemistry, evaluate information (Mining and indigenous Physics, and peoples in Colombia) through personal Construction of reflection and reason. Expertos de la ONU Citizenship, among piden cesar Mining others. **Inspired By Faith** (UN experts beg for a cessation of mining) **Ethical and Moral. Videos** Following a personal code based on gospel MegaMining en San values that guide one's Juan - CQC informe actions and decisions. periodístico 1-2 **Principled Leadership** MegaMining en San Juan - COC informe **Integrity.** Standing up periodístico 2-2 for or doing the right thing, even when it's (2 part series by a journalist on mega mining in San Juan) difficult or unpopular.

Ambiente y Medio -

Minería a cielo abierto: ¿Desarrollo económico o devastación ambiental? (News reports on mining as an economic advantage or environmental devastation)  Temor en Jáchal por el derrame de cianuro de la mina Veladero (Fear in Jáchal due to the cyanide spill from the Veladero mine)  Polémica por un nuevo derrame de cianuro en Veladero - Informe Periodístico 1-2  Polémica por un nuevo derrame de cianuro en Veladero - Informe Periodístico 2-2	A Voice for Dignity and Respect  Faithful Defender. Being a Faithful defender and, on occasion, a spokesperson for our values and those of persons closest to us.
(Controversy over a new cyanide spill in Veladero – 2 part report)	
No todo lo que brilla es oro: Informe sobre Veladero en Telefe Noticias (Not all that glitters is gold – report on TV about Veladero)	

10 Días como minero - Informe periodístico (News: 10 days as a minor)				
Mining: Lithium  Lessons  Actividades para trabajar en clase -Litio- (activities for the classroom - Lithium)  Content  Comunidades Aborígenes y James Cameron (Aboriginal communities – James Cameron)  Videos  ¿Cómo afecta la extracción de litio a las comunidades indígenas altoandinas? (How does the extraction of Lithium affect the Andean aborigine communities)  Científicos Industria Argentina - Litio:	Mining Lithium – and its impact on water.  Use of water.  Struggle of the native communities to protect their habitat.  Economy.  Exploitation of natural resources.  Relationship with sister Earth.	It allows for knowing the different problems that the exploitation of lithium entails.  It reveals the environmental impacts generated by lithium extraction.  It allows us to reflect on the negative consequences generated by the extraction of lithium both in environmental and social terms  It allows for a knowledge of the relationship between political and economic powers.  It can be used in	Compelled By Mercy Compassion. Caring for the needs of everyone, even those outside our immediate circle.  Empathy. Putting ourselves in the place of others to understand their feelings and perspectives.  Responsibility to serve. Fulfilling our duty to not only care about others, but also to act on their behalf.  Educational Courage Curiosity. Being open to other ways of seeing the world and exploring	Earth- It highlights the problems of the indiscriminate exploitation of natural resources.  Women- It shows the courage of women to face the struggle for the rights of their community.  Nonviolence- It shows the violent relationship we have with our sister Earth.  Immigration- It shows the migratory effect generated by the exploitation of natural resources.

Impacto ambiental 1-2  Científicos Industria Argentina - Litio: Impacto ambiental 2-2  (2 part series on the environmental impact of Lithium mining in Argentina)	subjects such as Geography, Economics, Politics, Biology, Chemistry, Physics, Construction of Citizenship among others.	new ideas  Critical Thinking.  Collect and objectively evaluate information through reflection and reason.	
Científicos Industria Argentina - Litio en		Inspired By Faith  Ethics and Morality.	
Argentina (scientists discuss the topic of Lithium mining in Argentina)		Following a personal	
Entirum mining in 7 i genuna)		moral code based on gospel values that	
		guide actions and	
		decisions.	
		Principled Leadership	
		Integrity. Standing up	
		for / doing the right	
		thing, even when it's difficult or unpopular.	
		difficult of unpopular.	
		A Voice for Dignity	
		and Respect	
		<b>Faithful Defender.</b> To be a Faithful defender and occasional	

			spokesperson of behalf of our values and those of all with whom we are close.	
Mining: Fracking (Oil and Gas)  Lessons  Fossil Fuels: Chocolate Chip Mining  Content  Movimiento social y cultural contra el Fracking (Social action against Fracking)  Videos  How does Fracking work? - Ted Talk  Fracking en Argentina - Observatorio Petrolero Sur Fracking in Argentina - South Oil Observatory	Unconventional extraction of oil and gas.  Environmental pollution.  Economy, exploitation of natural resources.  Politics: power dynamics.  The struggle/fight on the part of the different communities.  Corporate social responsibility.	This will show the different problems that the unconventional extraction of oil and gas entails.  It shows the environmental impacts generated by the unconventional extraction of oil and gas.  It allows for a reflection on the negative consequences generated by the unconventional extraction of oil and gas – considering both environmental and social aspects	Compelled By Mercy Compassion. Caring for the needs of everyone, even those outside our immediate circle Empathy. Putting ourselves in the place of others in order to understand their feelings and their perspective.  Responsibility to serve. Fulfilling our duty not only to care about others, but also to act on their behalf.  Educational Courage	Earth- It highlights the problems of the indiscriminate exploitation of natural resources.  Nonviolence- It shows the violent relationship we have with our sister Earth.  Immigration- It shows the migratory effect generated by the exploitation of natural resources.

Vaca Muerta: ¿La	
salvación Argentina?	_
Filo News	
	-

(Dead Cow: The salvation of Argentina)

<u>Científicos Industria</u> <u>Argentina - Fracking el</u> debate 1-4

<u>Científicos Industria</u> <u>Argentina - Fracking el</u> debate 2-4

<u>Científicos Industria</u> <u>Argentina - Fracking el</u> debate 3-4

<u>Científicos Industria</u> <u>Argentina - Fracking el</u> debate 4-4

(Scientists discuss the fracking debate in Argentina – 4-part series)

It reveals an understanding of the relationship between political and economic powers.

It can be used in subjects areas such as Geography, Economics, Politics, Biology, Chemistry, Physics and Construction of Citizenship, among others.. **Curiosity.** To be open to discovering other ways of looking at the world and exploring new ideas.

#### Critical thinking.

Objectively gather and evaluate information using reflection and reason.

#### **Inspired By Faith**

#### **Ethics and Morality.**

Following a personal moral code based on gospel values that guide actions and decisions

#### **Principled Leadership**

**Integrity.** Standing up for/ doing the right thing, even when it's difficult or unpopular.

			A Voice for Dignity and Respect  Faithful Defender. Being a Faithful defender and, on occasion, a spokesperson for our values and those of persons closest to us.	
Agriculture: Agrotoxins  Lessons  Actividades para trabajar en clase. (Classroom activities)  Content  Uso seguro de agrotóxicos (Safe use of pesticides  Videos  Informe: AGROTÓXICOS -	Agricultural production systems.  Methods of controlling "pests" in crops.  The economy of the exploitation of natural resources.  Corporate social responsibility.  Fight for the right to good health.	This will uncover the different problems caused by the use of agrochemicals in the agricultural production system.  This reveals the environmental impacts generated by the use of pesticides in the agricultural production system.  Opens up a reflective discussion on negative consequences	Compelled By Mercy Compassion. Having concern for the needs of all, including those outside our immediate circle.  Empathy. Putting ourselves in the place of others in order to understand their feelings and their perspective.  Responsibility to serve. Fulfilling our	Earth- It highlights the problems of the indiscriminate exploitation of natural resources.  Women- Shows the courage of women to face the struggle for the rights of their community. It shows the importance of women in a productive society.  Nonviolence- It shows the violent relationship

CQC Argentina (Report: agrotoxins CQC Argentina)	Environmental pollution.	including the negative environmental/social	duty not only to care about others, but also to	we have with our sister Earth
Fabián Tomasi - No Matarás Fabian Tomasi - You Shall Not Kill  Día Internacional de la Earth: recibimos a la UTT que cultivan sin agrotóxicos - Mañanas Públicas (International Earth Day: We heard from UTT that they are cultivating without agrotoxins. From Public mornings)		impact generated by the use of pesticides in the agricultural production system.  These resources can be used in subjects such as Geography, Economics, Politics, Biology, Chemistry, Physics, and Construction of Citizenship among others.	act on their behalf.  Educational Courage  Curiosity. Being open to other ways of seeing the world and exploring new ideas.  Critical thinking.  Objectively gather and evaluate information using reflection and reason.  Inspired By Faith	
			Ethics and Morality. Following a personal moral code based on gospel values that guide actions and decisions  Principled Leadership Integrity. Standing up for/ doing the right	

	thing, even when it's difficult or unpopular.	
	A Voice for Dignity and Respect	
	Faithful Defender. Being a Faithful defender and, on occasion, a spokesperson for our values and those of persons closest to us.	

# **Recommended Reading**

Why Should We Take Care of the Earth.

Ocean Friendly 2022

Sustainable Management of Bycatch in Bottom Trawl Fisheries

**Impact of Over Fishing** 

Sustainable Fisheries in the Caribbean

Negative Effects of Bauxite Mining

Case Study-Impact of Bauxite on Malaysia

#### **Deforestation in Mexico**

Frequently Asked Questions about Fishing in Argentina

Fishing Discards Are Illegal in Argentina

#### **Fiction**

How Beautiful We Were- Imbolo Mbue

The Word for World is Forest-Ursula Le Guin

The Overstory- Richard Powers

#### **Nonfiction**

The Uninhabitable Earth- David Wallace-Wells

Amazon Watershed- George Monbiot

### **Recommended Resources**

Lesson Plans on Care for Earth: Extractives

<u>Laudato Si Action Plan – Sisters of Mercy</u>

Sisters of Mercy.org/Fracking

<u>Transforming Extractive Industries for Sustainable Development</u>

## **Recommended Videos and Movies**

Home - documental youtube

**Impact of Coal Mining** 

**Impact of Mining** 

Gold Mining in Myanmar

**Deforestation in the Amazon** 

Artifishal- The Movie