How "globalized" are our lives?

Critical Challenge

Critical questions

- A. Rate the relative level of globalization of selected contemporary events.
- B. Which category of typical activities (i.e., social, political/legal, environmental, or economic) is most globalized?

Overview

In this two-part introductory challenge, students learn to recognize the complexity and widespread incidence of globalization. Students begin by sorting newspaper articles according to the level of international activity they contain. Students examine definitions of globalization and develop criteria for distinguishing globalization from events and issues that are merely international or domestic in scope. They place various hypothetical scenarios along a continuum representing global connections. In the second part, students consider everyday events in their own lives and look for evidence of globalization in these activities. They rate the extent of globalization in four categories of activity—social, political/legal, economic, and environmental—as a way to determine which of these categories is most globalized.

Objectives

Broad understanding

Many activities in our daily lives are globalized to varying degrees.

Requisite tools

Background knowledge

- knowledge of events in the world and in student's lives that have international connections
- knowledge of the meaning of globalization



• criteria for a globalized event or issue (e.g., involves other countries, creates dynamic interactions, blurs national boundaries)

Critical thinking vocabulary

Thinking strategies

- continuum
- rating scale
- data chart

Habits of mind











Suggested Activities

Pre-planning

Decide on topics and approach

Select the topic or topics that students will examine in their study of globalization. These may be drawn from the five topics supported in this print resource (catastrophic diseases, water use, food supply, human migration, and communication), the three topics supported on the TC² website (disaster relief, culture, and environmental protection), or other topics you choose. You may want to involve the entire class in an examination of a common topic or invite students, individually or in groups, to work on a variety of topics.

Gather newspapers

➤ In Session One, students examine the contents of various sections of a daily newspaper. If the newspaper has five sections, then approximately three complete newspapers will be needed for a class of 30 students.

Session One

Blackline Master #1

Examine newspapers

- This activity is the first of several tasks intended to develop student awareness of the myriad ways in which society and their own lives are globalized. You may skip some of these activities if students already understand that many everyday events are linked to each other globally. Distribute one section of a daily newspaper to each pair of students. Instruct students to skim the articles appearing on the front page and sort them into two categories:
 - domestic events: articles that describe events or issues that concern only Canada;
 - **international events:** articles that describe events or issues with international implications.

Invite students to share their findings and list the two sets of topics on the chalkboard. Point out that the international topics may involve just a few countries or they may have global implications.

Introduce globalization

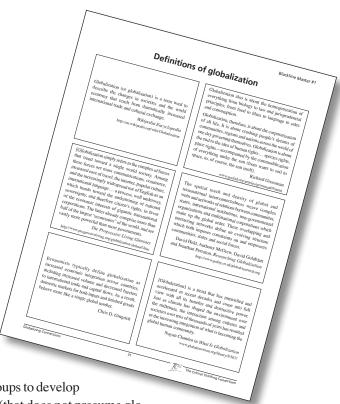
Introduce the concept of "globalization"—the process by which human activities are becoming increasingly global in scope. According to Nayan Chandra, the term was first coined in 1962. The Economist calls it "the most abused word of the 21st century." Invite students to share any ideas about globalization that come to mind. After some discussion, ask whether "globalization" has the same meaning as "internationalization." Can an event be international but not global in scope? (Is going to visit a cousin south of the border an example of globalization? What about the prime minister attending the funeral of a foreign dignitary?) Try to stimulate uncertainty in students' minds about when an event or phenomenon has become globalized. Ask students to identify which of the newspaper articles they listed as international are also global in scope.



Explore definitions of globalization

Distribute to each group of three or four students an envelope containing the various comments about globalization found on *Definitions of globalization* (Blackline Master #1) or that you have assembled from elsewhere. (A Google search of "globalization" generates millions of references.) Invite students to determine whether each statement reflects a positive, negative, or balanced (neutral) view of globalization. Ask students to highlight words or phrases that describe globalization and its implications—both positive and negative. Arrange for students to discuss their observations about the scope and nature of globalization initially with others in their group and then as a whole class. Help students see globalization as a vaguely defined, controversial phenomenon that presents a range of opportunities and challenges.





Agree on a balanced definition

Ask students to work in their groups to develop
a balanced or neutral summary (that does not presume globalization is inherently desirable or undesirable) of the key elements,
aspects, or features of globalization. As a class, reach consensus on the
defining features of globalization that you will use for the remainder of
the unit.

Session Two

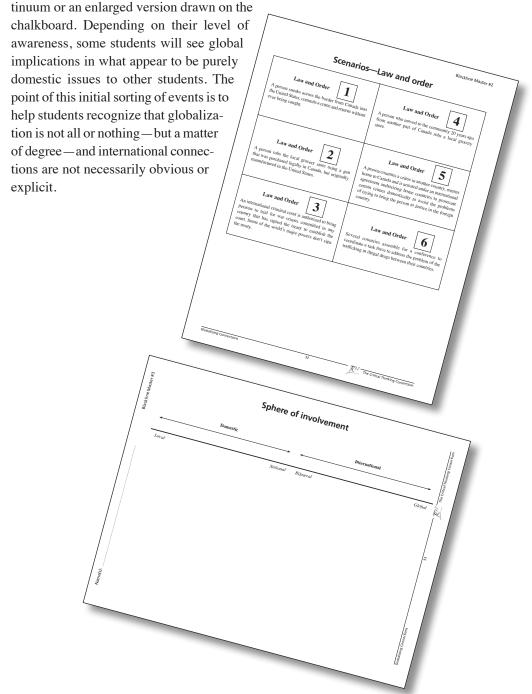
Present the first critical challenge

Distribute to each group of three or four students cut-out sets of *Scenarios—Law and order* (Blackline Master #2) and a ledger-sized copy of the continuum found on *Sphere of involvement* (Blackline Master #3). Present the critical task:



Rate the relative level of globalization of selected contemporary events.

Ask each group to arrange the six scenarios along the continuum according to the degree of domestic/international involvement. Invite members from each group to indicate to the class where their group placed a particular event using an overhead transparency of the con-



Develop criteria for "globalized"

Use the discussion of students' placement of the scenarios to help them identify indicators or criteria for recognizing an event as "globalized." In addition to the scenarios, draw students' attention to the newspaper articles and their definitions of globalization. Invite them to suggest three or four essential features or characteristics of globalization. You may want to add to or modify the list, but for the rest of the unit we will focus on three features of a globalized phenomenon:



- *involves multiple countries:* has implications either directly or indirectly for a number, if not many, countries or regions;
- *creates dynamic*, *multifaceted interactions*: leads to an interaction of interdependent forces that often have implications for other aspects of society; these implications are difficult to control or predict;
- has supranational implications: blurs national boundaries and sovereignty to some degree.

Encourage students to review their decisions about the extent of globalization of the hypothetical scenarios and the newspaper events in light of these criteria.

Identify evidence of globalization

- As illustrated below, list the three recommended criteria and other suggested indicators of globalization across the top of on an overhead transparency or chalkboard. Next to the list, write "buying a pair of Nike sports shoes" and ask students to share ideas about how each indicator or criterion of globalization might be present in this activity:
 - How does buying Nike sports shoes have implications for multiple countries?
 - In what ways does it represent multifaceted interactions?
 - In what ways might it blur national boundaries?
 - How might other indicators of globalization be present?

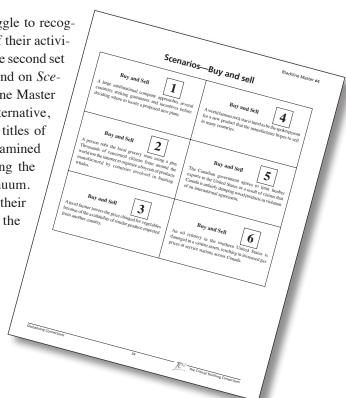
Repeat this process with several other examples drawn from typical student activities or from previously identified events.

Extent of globalization

	multiple	dynamic,	supranational	other indicators
	countries	multifaceted	power	of globalization
buying a pair of Nike sports shoes	Nike produces and markets in many countries around the world	Nike factories brings jobs and social services to poor com- munities; international boycotts have been organized	national com- panies often play one nation off against the other; inter- national labour	

Sort additional scenarios

OPTIONAL: If students struggle to recognize the global implications of their activities, repeat this activity with the second set of six hypothetical events found on Scenarios—Buy and sell (Blackline Master #4). In addition, or as an alternative, invite students to cut out the titles of the newspaper articles they examined earlier and arrange them along the domestic/international continuum. Arrange for students to share their conclusions with others in the class.



Session Three

Blackline Master #5

Explore globalization in students' lives

Invite students to explore how many aspects of their own lives seem to be globally connected. Ask students to identify typical activities undertaken by a teenager (e.g., eating food, surfing the internet, listening to music, using electronics, taking part in or watching sports, and using various modes of transportation). List their responses on the chalkboard.

As a class, look for global connections in these activities (e.g., consider the country of origin of their clothing, the creators of the music they listen to, or the content of programs they watch).

Introduce typical activities assignment Distribute a copy of Typical activities (Blackline Master #5A-B) to each student. Ask students to read each of the commonplace activities listed on these sheets and to consider and record the possible global implications of each. Alternatively, you may prefer that students create their own list of typical activities. In this case, invite students over the next several days (or overnight in consultation with their families) to identify five typical activities for each

Typical activities of the four categories (economic, social, political/legal, and economic) and to think of and list

global implications. To help students understand these categories, invite them as a group to divide the list of activities reported on the chalkboard among them:

- **social:** dealing with interactions among people and actions of a social or cultural nature, including meeting with or contacting friends, entertainment, athletics, music and dance, and studying in school;
- **political/legal:** dealing with family or civic rules or laws, enforcement, policy making (at any level from school to government), world affairs (e.g., discussion of news events), and basic rights;
- **environmental:** dealing with the impact of humans and nature on the land, atmosphere, and water, including weather, pollution, and recycling;
- **economic:** dealing with the buying and selling of goods and services, including shopping online or in person, using or wearing consumer products, watching pay-for-view television, and eating at a restaurant.

Assemble evidence of globalization

Direct students in small groups to consider one of the four categories and look for evidence of globalization in the five typical activities listed, as was done with the Nike example. Ask students to record their evidence in the relevant box on Blackline Master #5. Encourage students to use the internet or other resources to identify evidence of globalization for the activities in their assigned category.

Session Four

Which category of activi-

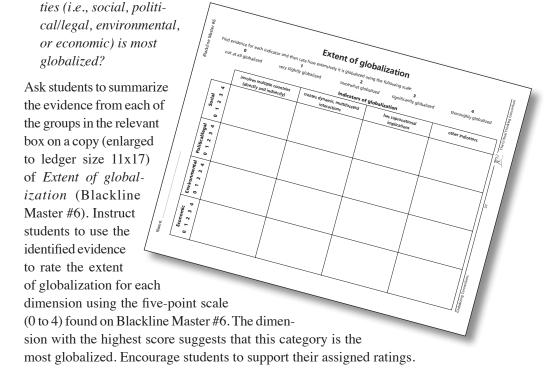
Blackline Master #6

Introduce the second critical challenge

➤ Before students present their finding to the class, introduce the critical question:



rating scale



Discuss conclusions

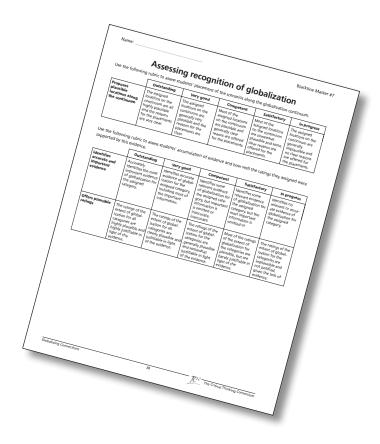
➤ Invite students to share their findings and discuss the ways in which globalization affects their own lives.

Evaluation

Blackline Master #7

Assess students' recognition of globalization

- Assess students' ability to detect evidence of globalization using the rubric found in *Assessing recognition of globalization* (Blackline Master #7).
 - Use the first criterion to assess students' placement of the scenarios along the globalization continuum as recorded on *Sphere of involvement* (Blackline Master #3).
 - Use the final two criteria to assess students' ability
 - to identify evidence of globalization for the assigned category as recorded on *Typical activities* (Blackline Master #5);
 - to rate the extent of globalization for each category as recorded on *Extent of globalization* (Blackline Master #6).



Definitions of globalization

Globalization (or globalisation) is a term used to describe the changes in societies and the world economy that result from dramatically increased international trade and cultural exchange.

Wikipedia Encyclopedia http://en.wikipedia.org/wiki/Globalization

Globalization also is about the homogenization of everything from biology to law and jurisprudential principles; from food to films to language to sales and consumption.

Globalization, therefore, is about the corporatization of all life. It is about crushing people's dreams of communities, regions and nations across the world of one day governing themselves. Globalization is about the end to the idea of human rights ... species rights, place rights—accompanied by the commodification of everything under the sun (from water to soil to space, to, of course, the sun itself).

Richard Grossman www.poclad.org/articles/grossman09.html

[G]lobalization simply refers to the complex of forces that trend toward a single world society. Among these forces are mass communications, commerce, increased ease of travel, the internet, popular culture, and the increasingly widespread use of English as an international language ... a process, well underway, which trends toward the undermining of national sovereignty, and therefore citizen's rights, in favor of the economic interests of gigantic transnational corporations. The latter already comprise more than half of the largest "economies" of the world, and are vastly more powerful than most governments.

The Progressive Living Glossary http://www.progressiveliving.org/globalization-defined.htm

The spatial reach and density of global and transnational interconnectedness weave complex webs and networks of relations between communities, states, international institutions, non-governmental organizations and multinational corporations which make up the global order. These overlapping and interacting networks define an evolving structure which both imposes constraints on and empowers communities, states and social forces.

David Held, Anthony McGrew, David Goldblatt and Jonathan Perraton, *Researching Globalization* http://www.polity.co.uk/global/research.asp

Economists typically define globalization as increased economic integration across countries, including increased volume and decreased barriers to international trade and capital flows. As a result, domestic markets for both inputs and finished goods behave more like a single global market.

Chris D. Gingrich

[Globalization] is a trend that has intensified and accelerated in recent decades and come into full view with all its benefits and destructive power. Just as climate has shaped the environment over the millennia, the interaction among cultures and societies over tens of thousands of years has resulted in the increasing integration of what is becoming the global human community.

Nayan Chandra in What Is Globalization www.globalenvision.org/library/8/567/

Scenarios—Law and order

Law and Order

1

A person sneaks across the border from Canada into the United States, commits a crime and returns without ever being caught.

Law and Order

4

A person who moved to the community 20 years ago from another part of Canada robs a local grocery store.

Law and Order

2

A person robs the local grocery store using a gun that was purchased legally in Canada, but originally manufactured in the United States.

Law and Order

5

A person commits a crime in another country, returns home to Canada and is arrested under an international agreement authorizing home countries to prosecute certain crimes domestically to avoid the problems of trying to bring the person to justice in the foreign country.

Law and Order

3

An international criminal court is authorized to bring persons to trial for war crimes committed in any country that has signed the treaty to establish the court. Some of the world's major powers don't sign the treaty.

Law and Order

6

Several countries assemble for a conference to coordinate a task force to address the problem of the trafficking in illegal drugs between their countries.

Name(s): _____

Blackline Master #3

Local **Bilateral**

Domestic

Sphere of involvement

International

Scenarios—Buy and sell

Buy and Sell

1

A large multinational company approaches several countries seeking guarantees and incentives before deciding where to locate a proposed new plant.

Buy and Sell

4

A world famous rock star is hired to be the spokesperson for a new product that the manufacturer hopes to sell in many countries.

Buy and Sell

2

A person robs the local grocery store using a gun. Thousands of concerned citizens from around the world use the internet to organize a boycott of products manufactured by countries involved in hunting whales.

Buy and Sell

5

The Canadian government agrees to limit lumber exports to the United States as a result of claims that Canada is unfairly dumping wood products in violation of an international agreement.

Buy and Sell

3

A local farmer lowers the price charged for vegetables because of the availability of similar produce imported from another country.

Buy and Sell

6

An oil refinery in the southern United States is damaged in a violent storm, resulting in increased gas prices at service stations across Canada.

Name:			

Typical activities

Social

Activity	Possible global connections
Watching a feature movie on television	
Going to a major league or high profile sports event	
Downloading music on-line	
Using a science textbook	
Using Facebook or YouTube	

Political/legal

Activity	Possible global connections
Watching the CBC national news	
Signing a petition about superstores in the community	
Getting a passport	
Raising money to support an international human rights group	
Writing a letter to the prime minister about global warming	

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Name:		

Environmental

Activity	Possible global connections
Recycling pop cans	
Experiencing an unusual storm	
Planting trees in a provincial park	
Conserving water at home	
Walking to school instead of driving	

Economic

Activity	Possible global connections
Buying a pair of Nike sports shoes	
Eating at a McDonalds restaurant	
Shopping on e-Bay	
Using a credit card	
Buying locally manufactured products	

Name:			
ivallic.			

Economic	Environmental	Political/legal	Social		Find e
0 1 2 3 4	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4	involves multiple countries (directly and indirectly)	Extent of globalization Find evidence for each indicator and then rate how extensively it is globalized using the following sca not at all globalized very slightly globalized somewhat globalized signific
				creates dynamic, multifaceted interactions	Extent of globalization how extensively it is globalized using the following scal globalized somewhat globalized signification
				has supranational implications	alization g the following scale: 3 lized significantly globalized
				other indicators	4 thoroughly globalized

Assessing recognition of globalization

Use the following rubric to assess students' placement of the scenarios along the globalization continuum.

	Outstanding	Very good	Competent	Satisfactory	In progress
Proposes plausible locations along the continuum	The assigned locations on the continuum are all highly plausible and the reasons for the placements are very clear.	The assigned locations on the continuum are generally very plausible and the reasons for the placements are clear.	Most of the assigned locations on the continuum are plausible and generally clear reaons are offered for the placements.	Most of the assigned locations on the continuum are somewhat plausible and some clear reasons are offered for the placements.	The assigned locations on the continuum are generally implausible and no clear reasons are offered for the placements.

Use the following rubric to assess students' accumulation of evidence and how well the ratings they assigned were supported by this evidence.

	Outstanding	Very good	Competent	Satisfactory	In progress
Identifies accurate and important evidence	Accurately identifies the most important evidence of globalization for the assigned category.	Identifies accurate evidence of globalization for the assigned category, including most of the important information.	Identifies some relevant evidence of globalization for the assigned category, but important information is is omitted or inaccurate. inaccurate.	Identifies some relevant evidence of globalization for the assigned category, but the most important information is omitted or	Identifies no relevant or accurate evidence of globalization for the assigned category.
Offers plausible ratings	The ratings of the extent of global-ization for all categories are highly plausible and highly justifiable in light of the evidence.	The ratings of the extent of global-ization for all categories are clearly plausible and justifiable in light of the evidence.	The ratings of the extent of global-ization for the categories are generally plausible and somewhat justifiable in light of the evidence.	Most of the ratings of the extent of globalization for the categories are plausible, but are barely justifiable in light of the evidence.	The ratings of the extent of globalization for the categories are implausible and not justified, given the lack of evidence.

Globalizing factors in the history of culture

We are surrounded by cultural influences from around the globe. Going out for supper: should it be Thai, sushi, Chinese, or pizza? Later, when you settle on the couch to watch TV, will you watch a Hollywood movie, the multicultural channel, or maybe a British comedy? You can use the Internet to read a newspaper from Pakistan. Satellite TV and phones connect you to the opposite side of the globe. These are clear examples of the globalization of culture. In our everyday lives, cultures from all over the world influence us daily through music, consumer goods, food, trends, the media, and the Internet.

Many people feel that globalization allows for beneficial cultural sharing. We can learn from each other's diverse experiences and knowledge. Countries such as Canada and Switzerland have embraced a cultural mix, called **multiculturalism**. This is an official policy. Other people argue that globalization is actually leading to cultural **homogenization**, a movement toward cultural sameness. Rather than creating multiculturalism, they argue that globalization will benefit only a few dominant cultures. Others will become extinct. As cultures disappear, a region or country becomes more **monocultural** (dominated by a single culture).

Some of the major factors in the globalization of culture are:

- migration
- trade
- ideology and ideas
- mass media
- political and legal intervention

Migration

Migration has a powerful impact on culture. Some migration occurs voluntarily. Other migration is forced by natural disasters, persecution, slavery, or war. Migrating people inevitably carry with them their customs, ideas, and arts. These are passed on to groups they encounter. Modern nations are made up of immigrants from diverse cultural backgrounds. Minority and dominant cultures influence each other in a globalized context.

Spanish colonization of Peru

When the Spanish arrived in Peru in the 16th century, they encountered indigenous (aboriginal) people with vibrant cultural traditions. Among them were the powerful Inca, who inhabited the Andean mountains and surrounding area. People of European heritage inter-mixed with people of indigenous heritage like the Inca. People of mixed descent—European and indigenous—are referred to as mestizo. Incan descendents are named after their traditional language, Quechua. Modern Peruvian culture includes Christianity and European values, as well as many traditions of indigenous culture.

Quechuan people traditionally lived in large family communities that engaged in mutual exchanges called *ayni*. This way of living still exists, but the Quechua and mestizo have adopted governing councils and religious brotherhoods of European origin. They use European domestic animals, plows, and new crops. Many modern Quechua work for money as laborers on European style farms. The Quechuan language remains strong. In the highlands of Peru, 80% of people can speak Quechua. However, many families consider Spanish to be a more important language for their children to learn, especially in they city.

Immigration to Europe after World War II

As the countries of Europe recovered from World War II, they opened their doors to immigrants to help rebuild their economies. Also, technological improvements to travel made it cheaper to migrate during the post-war period. As soon as they earned enough money, many people in developing countries and former colonies emigrated to Western countries.

Germany encouraged Turkish immigrants to come as "gastarbeiten" or "guest workers". Between 1961 and 1973 to provide labour for Germany's economic rebuilding. Today, Turkish people form the largest ethnic minority in Germany, numbering about 3 million. Forty years after the first workers arrived, Berlin is considered the largest "Turkish" city outside of Turkey. The most popular fast food in Germany is the Turkish döner kebab.

Workers from former colonies of European powers migrated to Europe in search of work. Migration was easier because of ties between the colonial countries and their former colonies. Indians, Pakistanis, and West Indians moved to England. Vietnamese, Cambodians, Algerians, Tunisians, Moroccans, and other Africans migrated to France. The immigrants brought new cultural traits to their European homes. For example, West Indian immigrants to London England have a strong cultural presence. They celebrate their heritage during the Notting Hill Carnival, now the second largest street festival in the world.



Notting Hill Carnival, London, England. Credit: Chris Croome 2002: GNU Free Documentation License

Trade

Trade brings groups together. With each good or service traded a cultural exchange occurs. Trade began as a quest for silks, spices, and other treasures that foreign societies possessed. Today, goods, services and even people travel rapidly around the world as part of a global trade network.

The slave trade

On the coast of North Carolina in the United States, you can hear a language called Gullah, a blend of tribal African dialects and English. Gullah (also called Geechee) stems from the Transatlantic slave trade. From 1600 to 1800, the migration of 450,000 Africans to the US during the slave trade shaped American culture. Today, Americans of African descent number more than 40 million. The migration of their ancestors was fundamental to the country's economic and cultural development.

The black presence in America has influenced legal systems, the practice of Christianity and many other social norms. In addition, black migrants have had an extraordinary impact on American cuisine, clothing, and crafts. African rhythms transformed American music. Jazz, blues, funk and soul were created. Along with African music came new styles of dance. The most popular forms of music and dance in the US today derive from the traditions of African migrants.

Indo-British trade

Trade between Britain and India brought about significant cultural change in both countries. Exchanges originated with Britain's desire for exotic spices. Beginning in the late 15th century, Portugal, Spain, the Netherlands, and Britain sent explorers to the Far East to trade for rare spices as well as tea and other novel items. Known to have exciting flavours and medicinal properties, some spices gained a value comparable to precious metals. The sea routes discovered in the 15th and 16th centuries were easier than overland routes, allowing for increased trade and cultural diffusion.

British traders concentrated on India, where they gained a trade monopoly. Prolonged business partnerships and immigration between the two countries allowed for inter-cultural mixing. One important cultural import to Britain was Indian cuisine. In modern day Britain, the average person eats Indian-inspired food twice a week. A type of curry called chicken tikka masala—an entrée flavoured with the very spices that inspired trade routes—became England's national dish in 2004. Chicken tikka masala blends authentic Indian flavours with British ingredients like tomato soup.

Ideology and ideas

The spread of ideas—whether they are religious, scientific, literary, or political—can greatly influence cultural change

Spread of Buddhism

Buddhism is the religion of the followers of Gautama Buddha which began in the 6th century BCE in northern India. Although Buddhism is no longer widely practiced in India, it had spread to

many parts of East Asia. Before the Silk Road, Buddhism was confined to its birthplace. Trade along the Silk Road helped to introduce Buddhism into China. The Silk Road was an important early trade route between China, India, Central Asia and European empires. Along with trade goods traveled ideas, art and religion, including Buddhism. Chinese scholars were so intrigued by the ideas of Buddhism coming to them along the trade route that they made pilgrimages to India to see the original scriptures.



Buddhist monks at prayer. © Susan Duncan, 2006

Buddhism has greatly influenced Central Asian art blending eastern and western cultures. Buddhist sculptures, paintings and murals are found in many monuments along the Silk Road. Buddhism has had a lasting impact on Chinese culture. Today, China has the highest number of Buddhists (102 million) of any country in the world.

Islamic-Christian exchanges

The interaction of Islamic and European cultures highlights how cultural interaction facilitates changes. After the fall of the Roman Empire in the fifth century, European knowledge became limited and localized. While the progress of Western ideas slowed progressing, the Islamic empire began to grow. It expanded beyond the Arabian Peninsula after the death in 632 AD of Mohammed, the prophet and founder. By the 8th century, Islam had spread through northern Africa, Spain and Portugal, India, and Indonesia.

In Baghdad, the Islamic empire gathered extensive libraries. These included ancient Greek and Roman works. Through these, they had a clear understanding of geography and astronomy. The mandated pilgrimage (hajj) to Mecca facilitated exploration in the Moslem empire. Travel guides for the hajj were written from all parts of the Empire.

The Crusades were a series of Christian military campaigns in the Middle Ages. Rulers in Western Europe sent their armies to re-capture the Holy Land. Moslems had controlled this region from the 6th Century AD. The Crusaders saw themselves as a combination of military figures and religious pilgrims. The word 'crusades' means "bearers of the cross." The First Crusade in the 11th Century gave them control of Jerusalem and other areas. However, their success was eroded in the next centuries as the Arabs and Turks fought back.

The Crusades played a role in Europe's rise as a region of political and military power. Ideas, inventions and products brought back from the East inspired economic and commercial success in Western Europe. Prior to this, Medieval Europe was insular and stagnant. In contrast, the cultures of Islam and Byzantium were significantly more cosmopolitan and scientifically advanced. The Crusades are believed to be the impetus for the European Renaissance. The Crusades also had negative impacts. They left a legacy of hatred and suspicion between East and West. This conflict exists through today.

Political and legal intervention

Imperialism refers to an empire or country's policy of expansion with the aim of controlling other regions or colonies. When it gains control of a new territory, the imperial country imparts its cultural traits through deliberate action, such as establishing churches and schools.

Expulsion of the Acadians

The Acadians were settlers from France that moved to what is now Nova Scotia, Canada in the early 1600s. They established a French presence in that part of the New World. They took their name from the word "Acadie" used for North America. Though conditions were difficult, they began to farm and trade furs. To keep their spirits up, they established a social club: "I'Ordre de Bon Temps."

They were in a minority relative to the British settlers. Ongoing conflict between the British and French put them in a difficult position. They wanted to retain their unique culture: neither British nor French. The British wanted them to take an oath of allegiance to the Crown. The Acadians instead took an oath of neutrality. In 1755, the British insisted that they pledge allegiance to Britain. When they refused, they were deported. This event was known as the Great Expulsion. In total, 15,000 Acadians were expelled over 8 years. Many families were separated. Most ended up in southern Louisiana. Those who remained held fast to their culture.

There are now significant Acadian populations in the maritime provinces. Over the years, their culture has found expression through poetry, newspapers, a flag and a national day of celebration. In Louisiana, they still maintained their cultural distinctiveness. Their French language persists through today. though it now has a regional flavour. They are known as "Cajuns," a corruption of the word Acadian. Their influence has been significant on the food, music and language of Louisiana. New Orleans is an international tourist destination, popular largely because of its lively Cajun culture. People visit for the food, street musicians and party atmosphere. In New Orleans, the popular phrase that captures the spirit of the city is "laisser les bon temps rouler": let the good times roll.

Forced assimilation of Aboriginals in Australia

Australian Aboriginal culture is the oldest continuous living culture on the planet. Prior to the arrival of European explorers, aboriginal society developed in isolation from the rest of the world. Their cultural traits are unique. There are many Australian Aboriginal groups with different languages and traditions. A cultural trait they all share is a reverence for nature. Animals, rivers, islands, the moon and—the fabric of the natural environment—are sacred.

In the 1800s, the ruling colonial government deliberately forced aboriginal people to assimilate. In order to disrupt cultural learning, the Australian government took children from their families. Aborginal children were put in the care of white parents or in government-run schools. The objective was to raise children with European beliefs and traditions. As a result, many of the aboriginal languages and traditions were partially lost or stamped out completely.

The Aboriginal Welfare Board did not stop taking children from their families until 1969. However, Aboriginal people are still struggling to integrate with Australian society while maintaining their cultural traditions.

Mass media

Communication technology has changed rapidly in the last 200 years. We no longer wait weeks or months to receive news or letters. Every year, communication technology enables more and more contact between people around the world. These rapid changes in communication technology have accelerated cultural globalization.

Television

It wasn't until the 1950s that televisions became a common household item. The broadcasts were black and white and only reached people in some countries. In 1962, a satellite sent the first televised images to viewers worldwide. In the decades that followed, watching television quickly became a favourite past time for billions of people. By portraying a foreign culture, television can create cultural change in a widespread audience.

During the Cold War, people in the USSR lived behind the "Iron Curtain" of communism. They have limited access to the goods and services of North America or Western Europe. Television was one avenue for cultural exchange between citizens in the USSR and the rest of the world. The American soap opera *Dallas* portrayed a rich family living in Dallas, Texas. When the show aired in the USSR, the lifestyles of the people in the soap opera seemed very appealing to the citizens living poorer, more constrained lifestyles under communism. The broadcasting of *Dallas* and other television shows had an impact on society in Eastern Europe.

The Beatles

The Beatles were a world famous band formed in England in 1958. They began playing rock and roll, and rhythm and blues covers. They spent time in Germany where they learned to play as a group. They signed with manager Brian Epstein in 1961. He helped them create a more polished image. The group members were John Lennon, Paul McCartney, George Harrison and Ringo Starr.

The Beatles broke onto the American music scene on the Ed Sullivan Show in 1964. Their energy, youth and catchy music launched "Beatlemania" in North America. Everywhere they appeared they were greeted by screaming fans. Twenty of their singles reached No. 1 on the U.S. charts. They paved the way for other British groups. This became known as the "British invasion." Their popularity gave impetus to youth culture, who became a dominant demographic force in popular culture. Popular music after this point had a very different flavor from previous music. Their haircuts and style of clothing were adopted by many young people.

With Sgt. Pepper's Lonely Hearts Club Band, the Beatles turned rock music into an art form. The album was something new: a holistic musical experience rather than a collection of singles. It synchronized with the hippie "summer of love" in 1967. This and later albums brought awareness of Eastern mysticism and music to a western audience. Beatles' movies "Hard Day's Night" and "Magical Mystery Tour" illustrated the viability of video and movies for musicians. The group ended in 1970 with Paul McCartney's departure. The Beatles

created a point of common understanding for audiences in all parts of the world. They were even popular behind the Iron Curtain.

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Recent developments involving culture

The globalization of culture is welcomed by many people and resisted by others. The United States and a handful of other countries dominate the global traffic of music, movies, television, software, and other lifestyle goods. The multinational corporations that sell these products greatly influence cultures around the world. This global spread of pop cultures can threaten traditional cultures. Many people around the world worry about cultural diversity in the face of globalization.

The following contemporary developments illustrate the globalization of culture:

- Starbucks and McDonald's
- American movies
- official multiculturalism
- UNESCO and World Heritage sites
- globalization of sports

Starbucks and McDonald's

When a corporation opens up an office or store in a foreign country, it becomes a multinational corporation. Multinational corporations compete with local businesses. They expose the local culture to foreign goods and services. This can bring about changes in values and traditions. Some people believe that this exposure undermines cultural identity. However, people worldwide demand the products of multinational corporations. The biggest multinational corporations come from the richest countries in the world. US. Starbucks and McDonald's are two American corporations with global success.

McDonald's restaurants exist in 61 countries, from Guatemala to Oman. When the restaurant chain opened in France, French citizens were concerned. They thought that low quality, cheap U.S. fast food would crowd out traditional French food such as crepes and pastries. Many French people still oppose McDonalds. They feel they could lose the unique cuisine that reflects their culture.

McDonald's has also had an impact on Chinese culture. In the past, Chinese children were expected to eat what their parents provided. It was considered wrong for Chinese children to buy food with their own money. Then McDonald's started marketing to

children. It became common for children in China to buy food on their own. McDonald's also promoted and popularized birthday parties in China. In the past, there was no party to mark a child's birth date.

The coffee company Starbucks has raised cultural debates in Italy. In the United States it is common for people to buy take-out coffee from Starbucks. They carry these while they drive, walk or work. Italians, on the other hand, drink coffee in sidewalk cafes. Coffee in Italy involves relaxing and chatting with peers. American-style cafes might alter this tradition. A large chain could not replicate the personal, friendly atmosphere of local coffee shops. A chain like Starbucks does not reflect a region's unique cultural features the way that local coffee shops do.

American movies

America's economy is the biggest in the world. As a result, producers of popular U.S. culture find themselves in dominant positions internationally. For instance, take the movie industry. For a film like The Simpson's Movie, Hollywood producers can invest \$72 million. This pays for big stars, the best animation. and wide marketing distribution. The film's producers are confident that they will earn their money back because the U.S. market is so large and wealthy. Only weeks after its release, The Simpson's Movie had earned more than \$150 million in America. A successful American film can then be "exported" to earn even greater profits. Because one billion people speak English worldwide, U.S. films have a large audience.

Consequently, American movies, TV and news dominate screens around the world. American entertainment carries American values, traditions and fashions. Few other nations can invest so much money into movie production. Good quality movies in French or Hindi do not reach the same mass global audience.

Some countries try to keep out American and other "alien" traditions. France and Canada have both passed laws to stop American content from reaching homes via satellite TV. Iran, China, and

Singapore have also restricted programming. In parts of the Middle East, media from the U.S. is called "news pollution."

Although globalization does provide glimpses of diverse global cultures, economic advantages mean some countries export more cultural products than others.

Official multiculturalism

Globalization has increased the rate of immigration. It can be a challenge for different cultures to live peacefully together. Canada receives more legal immigrants than any other nation in the world. With each immigrant arrive new cultural traits. Together, these make up Canada's cultural identity. Canada has embraced its many cultures with a formal policy of multiculturalism. The Multiculturalism Act passed the Act in 1988 encouraged immigrants to participate in Canadian life while retaining their original cultural heritage.

India was the first to recognize multiculturalism with its new constitution in 1950. Canada was the second country to give it official recognition. Australia followed suit. Since then, many member states in the European Union have adopted multiculturalism as official policy. On the other hand, some nations oppose multiculturalism. In the Netherlands and Denmark, conservative governments have recently returned to an official policy of monoculturalism (a single culture). Politicians were concerned that immigrants were not integrating into the culture as a whole. They feared this would threaten national unity and identity. Britian, Germany, France, and the U.S. have expressed similar concerns.

UNESCO and World Heritage sites

The United Nations (UN) is well known for addressing cultural issues. On one hand, the organization promotes international cultural beliefs, such as the value of human rights. On the other hand, one arm of the UN promotes cultural diversity. This arm, the United Nations Educational, Scientific and Cultural Organization (UNESCO), was created in 1945. UNESCO aims "to create the conditions for genuine dialogue based upon respect for shared values and the dignity of each civilization and culture."

Part of UNESCO's work is identifying and preserving World Heritage sites. The effort began in 1959 in Egypt. Plans to build the Aswan High Dam would flood the valley containing the Abu Simbel temples. UNESCO launched international campaign to save the temples. Archaeological experts took the temples apart and moved them to higher ground. They were funded by donations from over 50 countries. After the success of this project, UNESCO continued with conservation and restoration of important sites. Eventually, the majority of countries agreed to sign the World Heritage Convention in 1972. Since then, UNESCO has named 851 World Heritage properties. To protect the properties, UNESCO provides training and technical assistance to the governments. The majority of these properties are cultural sites. They include the Summer Palace in Beijing, China and Old Town Lunenburg in Nova Scotia, Canada.

UNESCO works on many other projects to protect global cultural integrity. UNESCO researches and promotes awareness about such issues as endangered languages, indigenous knowledge systems, tolerance and diversity. UNESCO has the goals of preserving cultures and creating peace.



© Susan Duncan, 2007

A Hong Kong soccer fan wearing a Brazilian team shirt walks near a sign advertising Kentucky Fried Chicken (KFC).

Globalization of sports

Sports are an activity that both exaggerate national pride, and bring together people from different countries. The Olympic Games are the largest forum for international sports competition. While individual athletes compete, their countries support

them. Their success is celebrated by the entire country. A country's success in sport influences its self-image. However, people from around the world celebrate the great achievements of the Games.

Athletes may move to different countries to play for professional sports teams. This is most common in ice hockey, soccer and basketball. For example, in 2002, Yao Ming of China became the first "number one" draft pick in the United States to come from a foreign basketball league. If a player moves to a new country, they may be celebrated by both their adopted country and their home country. International marketing of famous sports figures is another aspect of this global culture. Their images and products may be advertised around the world.

Some sports begin in one country but spread internationally. For example, baseball began in the U.S. It is now very popular in Latin American countries. Many players on U.S. teams now come from countries like the Dominican Republic. Cricket is another example. It was brought to the West Indies and South-east Asia by the England during colonial rule. Though they no longer govern there, cricket remains a very popular sport. The former colonies now beat England regularly at the World Cricket Championships. Cricket is even found in many Bollywood films.

Technology facilitates international attention to sports. The National Basketball Association (NBA) broadcasts its games to 212 countries. Sports fans follow their favourite teams online. They may participate in chat rooms, sharing views with people from around the world about their favourite teams or athletes. Less popular sports now have a large fan base drawn from the entire globe. Local teams may have fans in distant countries.

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Global initiatives in culture

The challenge ahead

Cultural exchange is a part of the daily global social, economic and political exchange. Cultural diffusion—the spread of traits, ideas and values from one culture to another—is largely beneficial. However, it can also lead to the extinction of minority language and culture. Many agree that the loss of cultural diversity is tragic. Every culture adapts in unique ways to its surroundings and holds fascinating perceptions of life.

The idea of cultural protection is now more prominent in international discussions. Many are concerned about the increasing cultural influence from Western nations, particularly the US. According to UNESCO, cultural diversity is inseparable from respect for human dignity.

The personal side of cultural globalization

Growing up, Zeveg lived a nomadic life in Mongolia. His family traveled on horseback, herding cattle and goats between fertile pastures. They lived in round huts called "yurts" with wooden frames and felted wool walls. The yurt collapsed easily into a compact bundle when moving to the next camp. Their clothes, food, festivals and customs reflected their pastoral nomadic lifestyle.

By 2002, Zeveg was married with two young children. Unfortunately, two harsh winters killed off the majority of their herd. The family migrated to the capital where they lived in a small shack outside the city. After a couple of years, Zeveg took an English class to help get a better job.

Five years later, Zeveg's daughter and son are learning English in school. The program is part of a new national policy to speed up the country's development. The government decided that Mongolia would become bilingual, with English and Mongolian as the two official languages. Both children think English improves their ability to connect with the world.

Some believe the rise of English will ensure Mongolia's independence from its two powerful neighbours, Russia and China. Of course, along with English, children will also learn some cultural traits. Ideals such as individual rights, freedom of speech and respect for women could enrich Mongolian society. However, materialism and the values of Western pop culture could slowly erode Mongolia's unique nomadic culture. The children will likely have few of the traditional skills and likely lose the customs of previous generations.



The traditional yurt was always set up with the opening facing south. Today, yurts have become very popular in the West and many companies make kits for home or vacation use.

Global initiatives in culture

Globalization presents many challenges to culture. In response to global pressure, some groups wish to stop the mixing of cultures in order to preserve their traditions and beliefs. Others see value in combining cultural ideas, attitudes and skills in order to generate understanding and freedom of choice. Many organizations support a balance between distinct cultural expression and intercultural exchange. Described on the following pages are several projects designed to address the challenges of cultural globalization.

Initiative # 1: Supporting rural cultures.
 TransFair Canada works to build the market for Fair Trade Certified products in Canada by providing independent certification services and by educating consumers about FairTrade. With

CIDA's financial support, TransFair gives small-scale cocoa bean growers a better income, enabling them to afford healthcare and education while maintaining their local, rural culture.

- Initiative #2: Preserving traditional Metawai clans. In 2003, Native Planet launched the Uma Project to protect and maintain existing umas and help build new ones to help clans move back to their ancestral lands. Native Planet's goal is to help the Mentawai preserve their culture and human rights, and to give them a choice in deciding what to embrace of modern society.
- Initiative #3: Protecting cultural diversity. In 2005 the UNESCO introduced the Convention on the Protection and Promotion of Diversity of Cultural Expressions. The goal of the proposed convention is to protect a nation's cultural diversity and its culture from any negative effects of globalization. It also seeks to promote ethnic traditions and minority languages.
- Initiative #4: Showcasing French Creole in Mauritius. In 2001, the international organization, La Francophonie, created the literary prize "Prix des cinq continents" to honour authors who enrich French literature with writing from diverse cultural perspectives.

Culture initiative # 1 Supporting rural cultures

Background

More than two thousand years ago, people in Central America discovered the virtues of the cacao tree. Spanish explorers brought the cacao beans home and, before long, its popularity spread across Europe. Almost four hundred years later, the popularity of chocolate shows no sign of declining. Currently, the annual worldwide production of cocoa is over 27.3 million kg. The International Cocoa Organization estimates that currently there are approximately 14 million people around the world directly involved in the production. Of this, the majority is produced under conditions that would not be acceptable in Canada.

Cocoa is one of the most heavily sprayed crops in the world. Pesticides used frequently include chemicals linked to severe health problems. Many developing countries still use one particularly toxic chemical banned in Canada and Europe. Multinational corporations like Nestlé buy and sell most of the cacao beans. Nestle employs almost 300,000 people and has offices in almost every country in the world. Often, the industry overlooks the people at the bottom of the production ladder the people who grow and harvest the cocoa beans. Companies pay low prices for raw cacao without realizing the human cost. Low international market prices for cocoa beans have meant that many cocoa farmers are not able to cover their own basic costs of production.

As a result, growers often live in poverty and their health is at risk. In an attempt to lower production costs, growers use thousands of children as slave labour on cocoa farms. Many small-scale cocoa farmers sell their harvest to local middlemen who use rigged scales or misrepresent world prices. Meanwhile, the cocoa trade is worth billions of dollars.

Problem

Most cacao farmers live in poverty because they do not receive a fair profit from the sale of cocoa. As well, their health is at risk from the pesticides used to increase production.

Project goals

TransFair Canada works to build the market for Fair Trade Certified products in Canada by providing independent certification services and by educating consumers about FairTrade. With CIDA's financial support, TransFair gives small-scale cocoa bean growers a better income, enabling them to afford healthcare and education while maintaining their local, rural culture.



Agnes and Erica are from a Fair Trade cocoa cooperative. Agnes, on the left, worked as a cocoa farmer for 36 years before she ever tasted chocolate. Almost all cocoa is exported overseas for processing. Credit: Fair Trade Association of Australia and New Zealand

Strategy

TransFair Canada is a non-profit certification and public education organization that promotes Fair Trade Certified products. Inspectors routinely visit licensed farms to ensure that adults are well treated and paid adequately. The farms cannot hire or enslave children as workers. Farmers must abide by strict environmental standards that prohibit use of the most harmful chemical pesticides and encourage integrated pest management. Fair Trade also supports the small farmers' tradition environmental stewardship by generating resources for co-ops to provide technical assistance, training, and organic certification to their members.

Fair Trade helps farmers understand and access foreign markets and work their way out of poverty. It cuts out the middlemen and brokers. Growers get their fair share of the final market value of their products. The growers form democratically run

cooperatives to sell their cocoa beans. Buyers carefully calculate the FairTrade price to cover the cost of sustainable production. Growers must agree to sustainable agricultural practices that restrict the use of agrochemicals. The monitoring and certification at the core of the FairTrade system guarantees that it is built on and functions according to standards of fairness, transparency and accountability.

The cooperatives use a portion of the FairTrade earnings to fund schools and basic medical care for families. They provide opportunities for economic independence and community involvement for women. They also invest in community development, quality improvement and training in organic cultivation. With more income and loans available, farmers are able to improve the techniques for fermenting and roasting the cacao beans. This increases their value. When the farmers earn more, they spend more money in the community supporting other local businesses.

FairTrade products are clearly marked with a label so that Canadian consumers know that the products they are buying are part of the Fair Trade system. In addition to chocolate, familiar products like tea, coffee, ice cream, soccer balls, bananas and sugar are available under Fair Trade certification.

Outcome

Fair Trade growers receive a fair price for their harvest. The system creates direct trade links between farmer-owned cooperatives and buyers. Cocoa farmers have an opportunity to invest in post-harvest techniques that bring out the individual flavors of the particular cocoa-growing region or territory. FairTrade growers have access to affordable credit. Strict labor standards foster healthy working conditions. Children under the age of 15 may work on their family's farm only if it does not jeopardize their education. Children under the age of 18 may not work with machetes (or other dangerous tools) or to apply pesticides.

Small-scale farming models can incorporate organic and shade-grown techniques. Cocoa trees yield a better product when grown in a traditional manner. This means the elimination of chemicals from a normally pesticide-heavy process. Intermixing crops with shade-giving trees provides a natural protective canopy as well as healthier soil. The combination of these techniques ensures both biodiversity and the creation of a habitat for birds—a natural form of pest protection.

As of 2005, the Fair Trade system benefited one million workers and farmers in 58 developing countries in Africa, Asia and Latin America. Canada and the developing world have an opportunity to promote further trade in FairTrade products. Individuals in those countries will reap the benefits of better tasting, pesticide-free chocolate.

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Culture initiative #2 Preserving traditional Metawai clans

Background

For centuries, the Metawai people lived in the jungles of Indonesia. Their natural lifestyle and animistic beliefs allowed them to dwell in perfect harmony with their environment. When their numbers became too large, the clans split. Everyone lived a semi-nomadic lifestyle that never exploited the resources in any one area. The Indonesian military tried to subdue the Metawai but failed. Christian missionaries and Islamic leaders also tried. Despite their efforts, no one made "progress" with the jungle clans. The government, determined to assimilate all indigenous cultures within its borders, initiated a major Mentawai relocation plan. The government promised access to "free" education for their children, medical care, "civilized" clothing and a church of their "choice" if the Metawai moved to government villages. The temptation was strong and many clans left their traditional umas or long houses where entire clans lived beneath one roof. They settled in small, single-family, poorly designed and built houses. Engineers had not thought clearly about sanitation.

The village is a typical example of the ecological disasters caused by relocation. Almost 4000 people still live from the land. So many people in such as small space have now irreparably damaged the delicately balanced ecosystem that once easily fed all the traditional Mentawai. Game is scarce and over-fishing has depleted the human excrement-polluted rivers. Villagers have no choice but to break taboo and adopt "modern" agricultural methods such as deforestation in order to cultivate their taro, sago and bananas. Epidemics are frequent. For the first time in their history, the Metawai are suffering protein and vitamin deficiencies.

Traditional Mentawai houses sit on stilts to prevent insects and frequent flooding from damaging their homes. The thatch roofs are entirely waterproof and last for more than 20 years. Construction materials grow in the jungle, facilitating quick inexpensive replacement. The most important Metawai building is the traditional uma communal house. It is the setting for all of the clan ceremonies and rituals and

the cornerstone of their society. It is where elders teach young shaman apprentices to live in harmony with the rainforest and later initiate them into the way of the sikeirei. It is a spiritual refuge where the living can pray and commune with their ancestors. Without umas, the Mentawai will lose their culture.



Building the umas or community houses will help the Metawai preserve their traditional culture. Credit: Native Planet

Problem

In an effort to subdue the Mentawai and assimilate their culture, for the past three decades the Indonesian government has sponsored a major relocation program. The forced changes, including abandonment of the umas, are destroying the Mentawai social structure and clan ties and threatening their culture, environment, ecosystem, and health.

Project goals

In 2003, Native Planet launched the Uma Project to protect and maintain existing umas and help build new ones to help clans move back to their ancestral lands. Native Planet's goal is to help the Mentawai preserve their culture and human rights, and to give them the choice to decide which aspects (if any) of modern society they want to embrace. Donations support the on-going project.

Strategy

Protecting and building umas is part of Native Planet's strategy to preserve the traditional Metawai culture. The traditional communal clan houses are an essential part of that culture. Because the Indonesian government persuaded many Metawai

to move to government-built housing, traditional clans are vanishing quickly. The Native Planet Uma Project hired local Mentawai and bought supplies to build a new uma and protect and maintain existing ones. As the NGO raises funds, additional umas will be built thereby allowing more clans to return to their ancestral lands and traditions. Other than the Metawai, all workers are volunteer and receive no wages, medical or travel expenses.

In the early stages of the project, Native Planet brought a team of skilled Mentawai carpenters from a nearby village to cut boards. Beams framed the structure in only six weeks. Traditional methods would have taken a year.

Contributions have provided funds to begin the wooden floor as well as the long-lasting thatch roof. Workers need to finish the floor, walls and benches, so the uma can be completed quickly. When it is finished, a shaman's clan can return to live in the unspoiled rainforest of their ancestors and honor the old ways. Native Planet is working to bring in donations and grant money to build additional umas so that other shamans and their clans can return.

Outcome

The Metawai culture has been under attack for many years and is in immediate danger of disappearance. The Uma Project is part of Native Planet's larger commitment to preserve traditional Mentawai clans and their culture. Building umas helps Metawai relocate back to their traditional lands. As clans return to their lands, Native Planet will begin a complementary project, the Mentawai Cultural Ecotourism Association. This related project is a key to Mentawai cultural preservation and self-empowerment. The Mentawai Cultural Ecotourism Association (MCEA) offers a model of conservation that also bridges the gap between cultures.

The MCEA project approaches Mentawai cultural preservation from two directions. We offer educated Mentawai the professional training they need to work and earn a living wage as knowledgeable guides and humanitarian project managers. The program also helps the young, educated Mentawai to better understand, respect and appreciate their culture. Assimilated Metawai will be able to learn about their ancient culture from

those elders who still live it. The young, in turn, can make certain that it is passed on to future generations. As well, knowledge of the old ways will help the guides become sensitive and effective proponents for the empowerment and preservation of traditional Mentawai communities. The Metawai and all Indonesians benefit from the preservation of this rich culture. Canada and the developed world have an opportunity to experience the living traditions of these people. As well, the global village can learn from the dangers of forced cultural assimilation.

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Culture initiative #3 Protecting cultural diversity

Background

Communication advances, new political alliances, and the integration of global markets are creating huge changes. Previously isolated people are coming together voluntarily and involuntarily. Around the world, cultures are threatened. Dominant cultural traits are replacing local languages and customs. Fifty percent of the world's languages are in danger of extinction. The Internet does not represent ninety percent of the world's languages. Five countries monopolize the world culture industries. Eighty-eight countries have never had their own film productions.

Every part of the world has a unique cultural fingerprint reflecting its history and geography. Cultural background is one of the primary sources of identity. It is understandable that people long to return to old conventions, traditional cultures, fundamental values, and the familiar, seemingly secure, sense of one's identity.

The United Nations Educational Scientific and Cultural Organization (UNESCO) recognizes that as cultures interact and intermix, the process can be disorienting. It maintains that countries should be able to adopt measures to protect and promote the diversity of cultural expressions within their territory. UNESCO member states overwhelmingly support the idea. However, the US complained that member states could erect trade barriers against the U.S. film, music, and book industries. These industries play an enormous role in the exchange of Western ideas and ideology.

Problem

In the turmoil of global transition, people may feel isolated and may resort to isolationism, ethnocentrism, and intolerance.

Project goals

In 2005 the UNESCO introduced the Convention on the Protection and Promotion of Diversity of Cultural Expressions. The goal of the proposed convention is to protect a nation's cultural diversity and its culture from any negative effects of globalization. It also seeks to promote a country's ethnic traditions and minority languages. Thirty-one member states must ratify the convention within one year for the convention to take effect in 2007.



A wedding parade in a small village in Rajasthan, India. Traditional customs and costumes, such as these, may eventually disappear with increased globalization. © Susan Duncan, 2006

Strategy

The formal title of the UNESCO Convention is the Convention on the Protection of the Diversity of Cultural Contents and Artistic Expressions. It empowers countries to protect their culture from foreign influences. It allows countries to protect its arts, language, cultural heirlooms, goods, services, activities, and ideas. The Convention will act as a code of conduct for cultural preservation. Its main objective is to take into account cultural diversity when developing other policies.

It recognizes the dual social and economic nature of cultural goods and services such as books, films, and television programs. It confirms the right of countries to implement cultural policies to give their citizens access to their own stories, as well as the range of cultural contents of the entire world. The Convention also recognizes the right of states to adopt measures that encourage artists and cultural professionals to develop and promote their works. This provides governments with mechanisms to resist powerful global forces that threaten the survival of local cultures.

Outcome

In 2005, 148 countries approved the Convention. Two countries—the US and Israel—voted against it and four countries abstained. Critics consider the approval to be a moral victory in the long-running fight to preserve the world's cultural richness. Following ratification by a more than sufficient number of countries, the Convention went into effect in 2007. Canada was the first country to ratify the Convention and continues to play a leading role in promoting its ratification. The Convention now has over 75 signatory states on five continents.

Under the new Convention, diverse cultures from around the world will have better opportunities to realize their own creative projects. The convention sets out common guidelines for cultural diversity at a global level. This is the first time the international community has been able to reach a consensus on these matters.

Following election to the Intergovernmental Committee to promote the Convention, Canada will able it to work with other members to establish the International Fund for Cultural Diversity. The fund, to which Canada recently contributed \$500 000, will help to achieve the objectives of the Convention. Canada, and other countries in the developed and developing world will benefit by taking measures to protect their culture while engaging in developmental activities.

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Culture initiative #4 Showcasing French Creole in Mauritius

Background

Mauritius, off the East Coast of Africa, is a polyethnic island-state. Many European visitors, including the Portuguese and the Dutch, visited Mauritius before the French settled the island. The British took over from the French in 1810 and established English as the official language. Today, the island's vibrant cultural mix includes Creole (French speakers), Chinese, African, English and Mauritians of Indian descent. The various cultures brought with them their own customs, language, and religion, which they have kept alive.

English has remained the official language, but 80% of the population uses a French dialect called Mauritian Creole in daily communications. It is considered the native tongue of the country. Creole was the language used by the African slaves to communicate with their French masters. Creole does not have a definite written form, as mostly English or French are the languages of choice for education, media, government, law and business. The Creole language is the medium of the indigenous music and dance form of Mauritius-the Sega. Sega is the music, songs and dances of choice played to tourists as a taste of the local culture. Its origins are said to be African. The dancers wear colorful blouses and skirts with flower motifs and sway their hips to the rhythmic music.

The rich cultural diversity of the people is often highlighted in tourism brochures. Tourists flock to the island paradise to celebrate the various cultural festivals. However, for many Creoles, Mauritius is no paradise. Many live in poverty in corrugatediron shanties alongside the roads. They work for low wages in the sugarcane fields. Many of them complain of discrimination and see their lives as just a different kind of slavery.

Problem

Many Mauritian Creoles live in poverty and complain of discrimination. Visitors to the island paradise do not see these difficulties.

Project Goals

In 2001, the international organization, La Francophonie, created the literary prize 'Prix des cinq continents' to honour authors who enrich French literature with writing from diverse cultural perspectives. The competition is open to authors from around the world. CIDA contributes to the annual award.



Tourists visit the Creole Cultural Centre just outside Port Louis, the capital of Mauritius. Credit: Hong Kong University

Strategy

La Francophonie is an organization of 55 member states united by a common French heritage and the use of French in daily life. They seek to promote cultural diversity in member states. La Francophonie helps to keep Creole culture alive in countries around the world. The organization finances education projects to make sure that children learn to read and write both French and native languages.

The winner of the Prize of Five Continents receives 10,000 euros cash for a novel featuring a specific cultural experience making the French language richer. The Prize reflect La Francophonie's mission to promote cultural diversity. For the 2006 edition, the five continents jury received 141 works from 31 countries belonging to the Francophone zone. The members of the jury accepted 10 works.

Outcome

Author Ananda Devi of Mauritius won the "Prix des cinq continents," or "Prize of the Five Continents" in 2006. Devi drew attention to the difficult lives of Creole citizens in Mauritius. In the book 'Eve de ses decombres' (Eve of her ruins), she brings to life the struggles and hopes of four youth living in a suburb of Mauritius' capital.

The following year, the Mauritian government acknowledged that Mauritius has not promoted the Creole culture as well as other Creole countries. It pledged to establish an organization to recognize and honour the Creole culture. For the first time in 22 years, Mauritius hosted the International Creole Festival. It remains to be seen whether this "honouring" will result in improved circumstances for Creole workers.

La Francophonie benefits from the financial and logistical support from its member states. Canada's contributions to La Francophonie are managed largely through the Canadian International Development Agency (CIDA). Creole cultures in developing countries benefit from the increased awareness to their struggles for survival. Canada and the developing world have an opportunity to find ways to promote cultural diversity without marginalizing less dominant cultures.

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Globalizing factors in the history of disaster relief

Perhaps you have experienced or heard about a local event that was considered a disaster. You may even have helped out when others faced a disaster. Disasters can happen anywhere, including Canada. For example, the flooding of the Saskatchewan and Oldman Rivers in Alberta created disastrous situations for towns such as Medicine Hat and Lethbridge. Community volunteers rallied to build dykes and sandbag buildings to prevent water damage to valuable property and homes. International efforts to deal with disasters are much the same—people respond to victims of disaster and provide for those who need aid.

However, this has not always been the case. Over the centuries, people responded differently in times of disaster. Sometimes, there has been no help at all for disaster victims. Often ignorance of the cause of the disaster led people to fear for their own safety. As understanding of the causes grew, people gradually began to respond to disasters further away from their own towns. Over time, disaster response became more global.

Various factors have contributed to the globalization of disaster relief, including the following:

- ideology and ideas
- political and legal intervention
- technology
- compassion and ethics
- · mass media

Ideology and ideas

In the mid-14th century, the Black Plague swept across Europe. Fear prevented people from offering assistance. The sick were not offered assistance. The dead and dying were left where they fell. The disease spread quickly through infected carcasses. Only a few brave people dared to offer assistance. No one knew where the pestilence came from or how to stop it. As a result, no one helped those who fell ill. At that time, no disaster relief existed to help families and cities rebuild. As people began to understand how diseases spread, they became more willing to take action. The fight against catastrophic diseases expanded with every advancement in medicine. Developments in modern medicine have increased the effectiveness of helping disaster victims.

Healthcare education

An Italian-born British woman named **Florence Nightingale** planned some of the first disaster relief efforts. Nightingale became aware of the need for better healthcare standards during the Crimean War from 1854 to 1856. Conditions for wounded soldiers were horrific. Ten times more soldiers died from diseases contracted at the hospital than from wounds acquired on the battlefield. Nightingale and a small staff of nurses made it a priority to address the hospital's overcrowded living conditions that were spreading disease.

Her experience tending to soldiers in the army prompted Nightingale to make permanent healthcare improvements. During peacetime, she designed sanitary hospitals for wounded soldiers. When Nightingale made recommendations to Queen Victoria, the Queen called for a major overhaul of the military medical system. By the time of her death in 1910, Nightingale had established nursing training centres, colleges, and modern hospitals.

A century after her death, Florence Nightingale is famous as an advocate for improved health care and disaster relief. She remains an inspiration to nurses around the world.

International Federation of Red Cross and Red Crescent Societies

Around the time that Florence Nightingale was working, Henry Dunant also noticed problems with military healthcare. When Dunant arrived on an Italian battlefield in 1859, he was shocked to see 38,000 injured, dying, and dead soldiers. No one was providing any care. Dunant organized the civilian population, especially women, to assist the injured and sick soldiers. They purchased materials to set up makeshift hospitals. He convinced the volunteers to care for the injured soldiers regardless of their nationality. His experience prompted him to write a book about care for the wounded in battle. Dunant's idea was to form a permanent, neutral (not belonging to either side) relief society to provide care in times of war.

Dunant's vision led to the establishment of the Red Cross Society in 1863. National Red Cross societies

began forming quickly all over Europe. Volunteers from these societies were recognizable by a common emblem. For many years, millions of volunteers worked with national Red Cross Societies to care for wounded soldiers.



French Red Cross train with sick and wounded soldiers, around 1917. Courtesy: Wikipedia Commons

Today the International Federation of Red Cross and Red Crescent Societies work in almost every country in the world. They have broadened their relief efforts far beyond just the care of wounded in battle. Now, the Red Cross and Red Crescent deliver aid to victims of all kinds of crises including natural disasters, disease, famine, civil strife, poverty, and oppression.

Political and legal intervention

The arrangement of political or economic agreements between countries is also a factor in the globalization of disaster relief. When a nation allies itself with another, it most often extends beyond economic or military support. If a nation has any kind of trouble, it can feel comfortable knowing its allies are there to help. This is true in peacetime as well as in the aftermath of wartime.

The Marshall Plan

After World War II (1939 to 1945), the USA offered relief for the reconstruction of Europe. The Marshall Plan was developed to lend money to help rebuild

the infrastructure and economy of war torn Europe. The U.S. was able to offer aid because it was the only world power without damage to its direct territory.

The plan produced benefits for the U.S. as well as for Europe. Markets that the U.S. would sell to and trade with would be rebuilt faster. By offering help, the U.S. established a western sphere of influence in Europe. A sphere of influence comes from beneficial, strong agreements among a group of countries. As well, the Marshall Plan served to counter the communist East, which was the opposing sphere of influence. The influence of the communist East was a concern to the West in the decades following WWII. The offer of economic aid was extended to the USSR if they would make political reforms and accept outside control. The USSR refused the offer.

The Marshall Plan operated for four years. During that period the U.S. gave \$13 billion of economic and technical assistance. This is equivalent to about \$130 billion in 2008 U.S. dollars. The aid helped the recovery of 18 European countries. When the plan ended, the economy of each of the countries, with the exception of Germany, had grown well past prewar levels.

Responding to the Great Depression

Political decisions within a country have also contributed to disaster relief. For example, during the Great Depression, many governments of affected countries provided disaster relief to their own citizens. The Great Depression began as an economic disaster in 1929 with the crash of the American stock market. Cities all over the world were affected, especially those dependent on industry.

The depression started slowly but quickened as the entire world was affected. Construction was halted everywhere. Farming suffered because crop prices fell. Ongoing drought in the United States and Canada made the economic crash even worse. Food was scarce and expensive. Industries and manufacturers were hit hard. People were laid off and fell deeply in debt.

To help people survive the disaster, the governments of both Canada and the United States created makework projects. Public work programs gave the

unemployed jobs building or repairing roads, parks, and airports. Workers were paid only \$1 a day but were given a place to stay and free food. Governments also gave out welfare and other forms of aid. Because of the depression, governments began programs such as unemployment insurance and old age pensions that are still in effect today. We often refer to these programs as being part of a social safety net. They serve as a safety net because they "catch" people and provide a helping hand when misfortune strikes.



Church basement soup kitchen, Montreal about 1930. MP-1978.107.53 © McCord Museum

Technology

Technological advances have changed the way people respond to disasters. Now disasters are reported quickly. Aid needs to arrive as soon as possible. Advances in transportation mean that clothing, food, water, medicine, and fuel arrive more quickly. Aid workers reach victims earlier. Radio, television satellites, computers, and radar systems also play a part in disaster relief. As well, there are now systems to warn citizens of pending disasters.

The Halifax explosion

Railways, steamships, and the telegraph played an important role in disaster relief in Canada in 1917. On the morning of December 6, two ships collided in Halifax harbour. Fire broke out on one of the damaged ships. The ship was loaded with explosives. It drifted toward the main pier in the industrial area. The explosion that occurred was the largest human-made explosion until the atomic bomb was detonated. The devastation was enormous. Two and a half square kilometers were

flattened by the blast. Over 1,900 people were killed. About 250 bodies were never identified and many victims were never found. More lives would have been lost if the two passenger trains headed for Halifax had not been stopped. A train dispatcher lost his life when he returned to the telegraph office to send a message to stop all in-coming trains.

News of the disaster spread quickly. Hundreds of wounded were crowded onto the first train out of Halifax to be helped in hospitals in nearby cities. That train passed other trains bringing doctors, nurses and medical supplies from nearby cities. American naval ships steamed into the harbour to serve as floating hospitals. By that evening, a train loaded with food, clothing, transport, and medical personnel was on its way from Boston. Within 48 hours, trains from other parts of Canada sent carloads of food, clothing, building materials and skilled workers. Funds came from as far away as New Zealand.

The Disaster Assistance Response Team (DART)

In 1994, over two million people fled Rwanda to escape from a brutal massacre. The international community provided food, shelter and medical and sanitary services to the refugee camps. Despite these efforts, a cholera epidemic broke out. Canada's Armed Forces sent a medical team to help combat, but the relief effort did not arrive until the epidemic was subsiding.

As a result, the Canadian government realized it needed to provide humanitarian aid more quickly. It formed the Disaster Assistance Response Team (DART). The team is made up of about 200 Canadian Forces soldiers. It is designed to fly into disaster areas around the world and provide aid for up to 40 days. Almost everything the team needs more than 40 vehicles and 340 tonnes of supplies is stored and ready to be shipped at 48 hours notice. Another 11 tonnes of medical supplies is also ready. The team has the expertise and technology to provide primary medical care and produce safe drinking water. Team engineers are able to fix roads and bridges and repair electrical and water supply systems. They also build refugee camps and set up facilities to make communications easier. Since its formation, the DART has conducted humanitarian relief operations nationally and internationally.

In December 2004, a massive earthquake struck

Indonesia. The earthquake triggered a tsunami that affected 12 countries in all. Some 220,000 people died. In addition, private property, roads, buildings, water and electricity supplies were severely damaged. One of the hardest hit areas was the east coast of Sri Lanka. Canada immediately sent military personnel to the area to assess the need. 12 days after the disaster, DART members were in Sri Lanka. They brought tents, food, and water purification systems. During their 40-day mission, medical teams saw approximately 5,500 patients. Engineers produced over 2.5 million litres of drinking water. They transported more than 55,000 people across a local waterway.

Compassion and ethics

Another factor in the globalization of disaster relief is the increasing number of personal connections around the world. When people immigrate to a new country, they leave family, friends, and a beloved culture in another country. When disaster strikes in either country, the family and friends elsewhere in the world feel it is important to provide aid. This is especially true in wartime.

Wartime aid for Britain

In 1939, at the beginning of World War II, Britain imported 70% of its food. When war broke out, one of the main strategies of the enemy forces was to attack all shipping bound for Britain. The plan was to starve the nation into submission. To make certain that everyone had equal access to available goods, a ration system was set up. The government issued ration coupons so that people could buy the few things that were available. Ration coupons are not like a form of money. Rather, the coupons specify how much and what kind of things a person can buy. For example, sugar was in short supply. A family might be allowed to buy five pounds a month. To buy it, they would need a sugar coupon. If you did not have a coupon for an item, you could not buy it even if you had the money. Many countries, including Canada, used rationing during WWII.

Life became very difficult for people in Britain. Food, clothing and gasoline were rationed. Only enough coal to heat one room in the evening was allowed. As well, even bathwater was limited.

To help, people around the world sent relief parcels to Britain and other European countries. The Red Cross sent personal supplies to military personnel, to prisoners of war, and to needy civilians. The Canadian public was encouraged to pack food and personal items for the comfort of those in another part of the world. Groups such as the Rotary Club and the Imperial Order Daughters of the Empire (IODE) were involved in disaster relief projects. Projects included such things as collecting used clothing to send to bombing victims. Books were collected to send to servicemen and women. Money was collected to buy powdered milk for children in Britain. The women of the IODE knit sweaters. scarves, mittens, hats, and socks for military personnel. Individual Canadians planted Victory Gardens to grow extra food to send overseas. Families used some of their own rationed sugar to can fruit to send to relatives in Britain. Others prepared tins of meat or poultry to send overseas to friends and relatives.

Vietnamese "Boat People"

The personal side of disaster relief continues into peacetime. At the end of the Vietnam War, millions of former South Vietnamese people fled. They sold their possessions and sewed gold and dollars into their clothing. The refugees traveled hundreds of kilometres by road. They then boarded small fishing boats to head for international waters. The flimsy boats were not meant to travel in open waters. Some of the refugees were rescued by freighters and taken to Hong Kong. The unlucky ones drifted in open water and were often attacked by pirates. The refugees were robbed and many were murdered. The dangerous situation became an international humanitarian crisis. Refugee camps were set up in several countries in Asia for the "boat people." Although aid money was sent to the camps, little reached the refugees. Thousands of these boat people languished for years in the refugee camps. The lucky ones were able to immigrate to other countries.

The Canadian government decided that the number of boat people allowed into Canada would be dependent upon public support. In June 1979, a group in Toronto set a goal to raise enough money to save 50 families. In nine days it passed its goal. Six days later there were nine more groups committed to saving boat people. In nine days the number of groups had risen to 58. It cost private groups less

than \$8,000 to sponsor a family. The money provided clothing, food, and accommodation for the family for one year.

In July 1979, the government agreed to sponsor one refugee for each one sponsored privately. Churches, corporations, or groups of five or more Canadian citizens were eligible to sponsor refugees. The two-year goal was to privately sponsor 21,000 refugees. This would be matched by 21,000 government sponsored refugees. In four months, private sponsors had reached their goal. As well, the government decided to admit another 8,000 refugees.

Mass media

The media has been an important factor in the globalization of disaster relief. Images from disaster sites trigger sympathy for victims. Televised fundraisers, newspaper, or radio campaigns rally support for aid. International celebrities use the media to encourage the public to contribute to various causes. People realize that at some point they, too, could need the help of others. On the other hand, growing media attention to suffering around the world sometimes lessens the horror. People become desensitized to the suffering of others when they are constantly bombarded with horrific images. People who are desensitized get used to seeing others suffer. They no longer feel prompted to respond because suffering seems commonplace. The media gives attention to spectacular disasters. As a result, ongoing extremely serious problems may not receive attention because they are not spectacular. Such things as food shortages and human rights abuses often go unnoticed.

Not On Our Watch Foundation

The roots of the conflict in the Darfur region of Sudan go back to the 1970s. However, the present crisis began when civil conflict erupted in 2003. Militants accused the government of neglecting the Darfur region and oppressing black Africans. The conflict escalated when Sudan sent the army into Darfur. People from the region fled to refugee camps in neighbouring Chad. A UN human rights report stated that the Sudanese government and the Arab militias were conducting a "reign of terror" against the black African population in Darfur. There is evidence overwhelming that the Sudanese government is complicit in the killings of civilians in Darfur. At least 200,000 people have been killed in

the conflict. About 2.5 million people have fled their homes.

The UN describes Darfur as the "worst humanitarian crisis" in the world. Funds and supplies are needed to fight disease and malnutrition in the area. The World Health Organization (WHO) has warned that a major health catastrophe will erupt unless aid is given. There are 129 refugee camps in Chad and along the border in Darfur. The WHO reports that 6,000 to 10,000 refugees in these camps die each month from diseases and violence.

Actor George Clooney and his father, journalist Nick Clooney, traveled to Chad and Sudan in April 2007. The two are hoping that the movie star's fame will help bring attention to the crisis in Darfur. Clooney and several other celebrities have formed the Not On Our Watch Foundation to raise money and draw attention to the refugees. They raised \$10 million at a Cannes Film Festival party. They have planned additional charity events. George Clooney has also been appearing on TV talk shows to raise awareness of the crisis. As well, the TV hospital drama, of which Clooney was a former star, featured the Darfur crisis in a recent episode. During the first four months of 2007, the three main evening news broadcasts devoted a total of 10 minutes to the crisis in Darfur. Instead celebrities and TV dramas are raising the public's awareness.

Hurricane Katrina

Hurricane Katrina was one of the deadliest hurricanes in U.S. history. When the storm hit the Gulf Coast at the end of August 2005, it caused widespread damage and flooding. In the hours leading up to the storm and in the aftermath, media coverage was extensive. Around the world, people saw pictures of stranded survivors. Some were trapped inside attics or on the roofs. Bodies of people and animals floated in the floodwater. Clean water was unavailable. Power outages were expected to last for weeks.

People around the world watched the suffering of people "just like themselves" on TV and in the newspapers. They were eager to take action. Corporations, celebrities, institutions, and students started fund raising campaigns. Within two weeks, the Red Cross reported that it had already received more than a billion dollars in donations for the

victims of the hurricane. The Salvation Army surpassed its goal to raise \$1 million. E-mail campaigns were established for donating everything from money to shoes. An organization of shoe companies, churches and individuals set a goal of sending one million shoes to Katrina survivors. Responding to pictures of abandoned pets, people donated money for animal care.

Intense coverage of the disaster lasted several weeks. Charities raised over \$4 billion for Katrina-related relief efforts. Yet, many had little or no confidence in how the money was used. One poll indicated that those who donated to recognized charities, such as the Red Cross, were more confident that the money was well spent. However, very few had any regrets about financially supporting relief efforts.

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Recent developments involving disaster relief

Whether disasters occur more or less often than in the past is open to debate. However, we now hear more about disasters due to improved communication. As well, advances in transportation make it easier to respond to global disasters. Response from individuals depends on how closely they identify with the victims. It also depends on media coverage. Institutions and governments contribute more if they are able to see a return on their efforts. Unfortunately, people may become desensitized to the suffering of others and less inclined to respond.

Disasters require rapid assistance. Victims need immediate food and medical care. Governments and NGOs may need to help people relocate. Damage to the infrastructure can destroy people's ability to earn a living. Unless the government is able to rebuild the infrastructure quickly, starvation and epidemics are likely. Over the past century, relief agencies have been able to respond more quickly to natural disasters and provide more longterm assistance.

Five recent disaster illustrate the range of contemporary relief efforts:

- Responding to tsunamis victims
- Famine relief in Ethiopia
- Responding to the HIV/AIDS epidemic
- Helping after the World Trade Center bombings
- Dealing with massacre in Cambodia

Responding to tsunamis victims

On December 26th, 2004, a 9.0 earthquake set off a tsunami in the Indian Ocean. Massive waves struck Indonesia, Thailand, and Malaysia. Almost 300,000 people died. The UN immediately requested aid for the victims. Militaries were sent to search for survivors and deal with structural crises. Hundreds of international relief groups sprang into action. They organized delivery of food, medical care, clothing and temporary housing. Within a week, pledges reached over \$3 billion. Canada's Disaster Assistance Response Team (DART) spent six weeks in Sri Lanka. One of their tasks was to supply hospitals with 200,000 litres of purified water a day. The UN Population Fund urged increased security to minimize rape and physical abuse of displaced women and girls.

Getting aid to the worst hit areas proved difficult. Many roads and airstrips were damaged, flooded or blocked by debris. Many bridges and harbours were washed away. Coordination between groups was hard. Some donated items, such as winter tents, perfume, and high-heeled shoes, could not be used. A huge challenge for relief agencies is to increase communication and provide aid that is appropriate.

The financial response to the disaster broke all records with pledges of \$13.6 billion. This included an unprecedented response from individuals and firms of \$4 billion towards the relief effort. UNICEF received almost twice as much as it had sought in donations. The WHO and the World Food Programme secured 95% of their funding objectives.



CARE International—with assistance from CIDA and CARE Canada-delivered much-needed rice to tsunami survivors in the province of Aceh.

Famine relief in Ethiopia

In the 1980s, famine in Ethiopia killed over 1 million people. In 1981, drought wiped out crops in Ethiopia. Western governments reacted slowly. The country had not recovered when the harvest again was poor in 1984. Ethiopia's 20-year civil war in

the north made things more complicated. In March 1984, the Ethiopian government warned that five million people faced starvation. They appealed for international aid.

Aid agencies blamed Western governments for not doing more to help Ethiopia because it was a Marxist country. In September, Oxfam tried to shame governments by giving \$750,000. This was the largest single donation in its 40-year history. By October, eight million people were at risk of starvation. The death toll was estimated at 900,000. Television and newspapers showed pictures of famine victims. This led to more public donations. Under pressure from aid agencies and the public, Western governments finally pledged extra money. To Canada's credit, the federal government acted almost immediately on seeing coverage of the famine. As well, individual Canadians rallied to the cause. Students gave up smoking and fasted to raise money.

In the first three months, famine relief seemed desperate. There was only a trickle of outside aid. It was hard to distribute grain in the isolated north. Many were too weak to reach feeding camps. International airdrops raced rations to famine zones. As grain began to arrive, relief became a military-style campaign. They used relief trucks and airlifts. More than a 1.25 million tonnes of grain were delivered. By December the Western public had donated more than \$2.5 million. However, the Ethiopian government continued to divert aid supplies to its troops. By December, 2,000 people a day were fleeing war and famine. They sought refuge in neighbouring Sudan. Musical fundraisers—the Band Aid single, "Do they know it's Christmas?" and two Live Aid charity concerts-raised awareness and millions of dollars. Canada's disaster relief was the nation's largest peacetime rescue effort.

Responding to the HIV/AIDS epidemic

Since the 1970s, the global AIDS epidemic has become one of the greatest threats to human health and development. AIDS stands for Acquired Immune Deficiency Syndrome. The HIV virus that causes AIDS is passed through sexual fluids, blood and breast milk. More than 25 million people around the world have died so far from AIDS. At the end of 2006, approximately 39.5 million people

were living with HIV. Each year around 3.8 million people become infected with HIV and 4.3 million die of AIDS. There is still no cure. Treatment has improved enormously since the mid-1990s. However, few people have access to the necessary services. In developing nations, only 28% of people who need anti-AIDS drugs have access to them. The amount of money available is barely half of what is needed. Weak infrastructure, shortages of health workers, and political and cultural attitudes add to the problem.

The continent of Africa has experienced the most severe epidemic. The Stephen Lewis Foundation works on HIV/AIDS disaster relief in Africa. Stephen Lewis is the former Canadian Ambassador to the UN and Deputy Executive Director of UNICEF. He is now the UN's Special Envoy for HIV/AIDS in Africa. The Foundation provides care to women, orphans and children, and groups of AIDS patients. It also supports grandmothers who care for their orphan grandchildren. The Grandmothers to Grandmothers Campaign works with more than 150 grandmothers' groups. They have raised more than \$1 million. Support includes food, school fees, income-generating projects (communal gardens, raising small animals, crafts), workshops, counseling, and dignified burials.

Campaigns for relief in the HIV/AIDS disaster are unlike other disaster relief campaigns. The need is long-term, rather than immediate. As a result, public response tends to be less dramatic. In 2005, world leaders pledged to try to achieve universal access to HIV prevention, treatment and care by 2010.

Dealing with massacre in Cambodia

In mid-1975, Pol Pot's Khmer Rouge (Red Cambodian) army seized control of Cambodia. The country was already in disarray from years of US bombing. Pol Pot tried to create a perfect agrarian state. He got rid of the media, communications, businesses and everything foreign. Cities were evacuated and people moved to the country. By 1979, his regime claimed the lives of between one and three million people. They died from execution, overwork, starvation and disease. The Khmer Rouge enjoyed foreign support because it opposed Vietnam. The Khmer Rouge government fell in 1979 when Vietnam invaded Cambodia.

Aid for the genocide survivors has been slow. In 1989, Action Against Hunger (AAH) launched programs in Cambodia. In 2002, the emergency phase gave way to rehabilitation programs. AAH improved access to drinking water in about 100 villages for 50,000 people. In 2003, AAH helped strengthen the Early Warning System (EWS) for rising water levels. Messages from the simple warning system are circulated in schools and on the radio. AAH organized training sessions to make sure everyone could follow the procedures. After 18 years of assistance, AAH left Cambodia in 2007.

Survivors of the Cambodian massacre are among the most traumatized people in the world. They went through civil war, massive secret bombing by the US, and years of captivity. They endured torture, starvation, slave labor, brainwashing, atrocities and disease. Refugees have a disability rate similar to survivors of concentration camps. Some hope an international war crimes tribunal can help answer questions about how it could happen.

Helping after the World Trade Center bombings

On September 11, 2001, two planes crashed into the World Trade Centre Towers in New York City. Within hours, two others crashed nearby. The terrorist group Al-Qaeda, under the direction of Saudi Osama Bin Laden, claimed responsibility. The highly coordinated tragedy led to the deaths of almost 3,000 people. It is considered one of the worst terrorist events in world history. Right after the attacks, the US closed its airspace. More than 200 airliners, carrying 33,000 passengers, were diverted to Canada.

Offers of aid poured in from around the world. Canada played a large role in the disaster relief and aid. Individual Canadians housed stranded people. Canada sent money, police, firefighters, volunteers and supplies. The Food Bank for New York City distributed 3 million pounds of food for rescue workers. They worked closely with other organizations to support rescue and recovery teams. Americans donated between \$2.2 billion and \$2.7 billion to assist in disaster relief.

Over the next few weeks, 250 new charitable funds were created in the US. The American federal government set aside approximately \$25 billion.

The American Red Cross created the Liberty Fund with a goal of \$547 million. However, they distributed only 30% of the funds. They set aside the remainder of the funds to prepare for future terrorist attacks. When donors and victims complained, the Red Cross pledged that all funds would directly benefit the victims. In total, the American Red Cross raised \$961 million. It was used for direct aid to victims, long term mental and hospital care, and immediate disaster relief like shelters, food and health care.

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Global initiatives in disaster relief

The challenge ahead

Natural and human-caused disasters are generally unexpected events. As a result preparing for them is difficult. Disaster relief organizations are, however, able to lessen the effects of these unpredictable occurrences. Many years ago disaster relief meant neighbour helping neighbour. Today there are thousands of groups, many international, that offer assistance when disaster strikes. One of the challenges relief organizations currently face is trying to coordinate the efforts of all these groups. Another challenge is to make certain our efforts are appropriate and sensitive to the needs of the victims. The globalization of disaster relief means that no one should lack aid when in need, but the aid should be effective and unhampered by political or economic agendas.

The personal side of disaster relief

Omayra was drifting in and out of consciousness when the reporter found her. She had been there for almost three days. She was in pain and very confused. Like hundreds of others, Omayra was trapped in the rubble from the mudslide that swept away the town.

On a night in November 1985, the snow-covered volcano near Amero, Colombia exploded, creating a mudslide of melted ice and snow, molten lava and other debris. The mudslide swept down the mountainside and, when it reached the town, destroyed most of the buildings and swept away most of the people. Three days later, hundreds of people remained trapped in the rubble. Rescuers had trouble reaching them. A few helicopters tried to rescue people.

Before the explosion, 12 year-old Omayra Sanchez lived with her parents, her brother and an uncle. Now she was in water to her shoulders, her legs trapped under concrete and other debris from the collapsed home. She did not know where any of her family was.

Rescue workers realized the only way to free her would be to pull her out by breaking and ripping her

legs off. Red Cross rescue workers repeatedly appealed to the government for a pump to lower the water level and for other help to free the girl. They even begged the helicopter pilots to get a pump to drain the water. Two days later, a pump arrived. Unfortunately it did not work properly and finally got stuck because of the mud and debris. Finally rescuers gave up and just stayed with her, comforting her and praying with her. She died of exposure after about 60 hours. Omayra remained strong until the last moment of her life. People, who were with her, said that the little girl wanted to live. In her confusion, she did not realize that the town no longer existed—she worried that she would be late for school. Although, rescuers saved many other people from the debris, they could not save Omayra.



Searchers look though mud a debris in Bangladesh

Global initiatives to support disaster relief

When disaster strikes, Canadians respond through individual efforts or by contributing to Non-Governmental Organizations (NGOs) such as CARE Canada, World Vision and Canadian Red Cross. Canadian tax dollars support some aid projects through The Canadian International Development Agency (CIDA). In some instances, the Canadian government sends military personnel to provide such things as clean water and medical supplies. Branches of the UN, such as UNICEF and the World Food Program, also provide assistance in times of disaster. Described on the following pages are several

projects designed to address the challenges of providing disaster relief.

- Initiative #1: Responding to earthquake victims in Kashmir. CIDA, through its Canadian Relief Foundation, contributed to over 20 NGOs who provided health and medical care to earthquake victims. The contributions helped meet immediate as well as long-term needs.
- Initiative #2: Aiding tsunami survivors in Indonesia. CIDA is working with Matching Fund partners on a four-year reconstruction project. Among the goals of the program are growth of small- and medium-sized businesses and building permanent housing
- Initiative #3: Providing supplies to hurricane victims in El Salvador. World Vision developed a project that supplied food and essential non-food items to Hurricane Stan victims.
- Initiative #4: Helping famine victims in Malawi. The World Agroforestry Centre (ICRAF) developed a project to improve soil productivity by getting more families to use fertilizer trees to increase crop yields.

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Disaster relief initiative #1 Responding to earthquake victims in Kashmir

Background

In 1947 Britain divided British India into the independent countries of India and Pakistan. Since then the two countries have argued over who should rightfully control the area called the Kashmir. Both India and Pakistan are densely populated. India is the second most populated country on earth with over 1 billion people. Pakistan is sixth with almost 166 million. Populations of this size place enormous pressure on a country's environment, economy, health system and religious balance. The people in both countries rely heavily on agriculture to earn their livelihoods. However, Pakistan, after years of internal strife and limited foreign investment, has relatively impoverished remained underdeveloped. People in both countries are at high risk for contracting a variety of diseases. Droughts, monsoons, flooding and earthquakes are common in both countries. Although earthquakes are not uncommon in the Kashmir region, most buildings were not designed to withstand this type of natural hazard.

On the morning of October 8, 2005 a magnitude 7.6 earthquake occurred in the Kashmir. Over the following two weeks, 900 aftershocks followed the initial quake. Some of the aftershocks registered as much as 5.9 on the scale. The disaster caused extensive damage in Pakistan, India, Kashmir and Afghanistan. The earthquake struck on a Saturday morning when businesses were open for the day and children were in school. The difficulties in delivering relief to the area were enormous. In some places, the earthquake leveled every building. Thousands of people remained trapped under the rubble. In Pakistani Kashmir-the worst area hit by the quake—over 73,000 people died. In the Indian administered sector 1400 died. The area is mountainous and roads were impassible because the quake sheared thousands of tons of soil from the mountains. The only way to reach most areas was by helicopter. Unfortunately, in the days following the quake, it rained heavily and the helicopters could not fly. As well, the disaster followed several others earlier in 2005, so media attention and donor fatigue meant response was slower than needed.

Problem

The disaster destroyed hundreds of thousands of buildings, often trapping or crushing people inside. Over three million were homeless and many blocked off from aid. Winter was approaching and survivors desperately needed shelter and warmth. Most of the hospital buildings collapsed during or shortly after the quake. Other buildings were unsafe to enter since they had been so severely damaged.



An elderly lady, supported by her granddaughters, walking to a NATO Field Hospital set up after the 2005 earthquake in Kashmir. SHAPE Photos: NATO's Supreme Headquarters Allied Powers Europe

Project goals

The goal of CIDA's Canadian Relief Foundation was to improve the overall health of the millions of Pakistani people affected by the disaster. The fund contributed to over 20 NGOs who provided health care and medical attention to the victims. Since the quake occurred just prior to winter, the NGOs provided tents, clothing, stoves and other winterized essentials. They erected camps for displaced persons. Meanwhile, clean-up crews worked to clear the rubble so that reconstruction could begin. Canada's financial contributions helped meet the initial and immediate needs of the victims. As well it provided for more long-term

necessities. All of these programs continue to be operational today and have helped countless victims from the quake survive and begin to recover and rebuild.

Strategy

In the first days following the earthquake, governments' and NGOs' main focus was to save lives. They provided basic sanitation and nutrition to survivors. Where it could get through, UNICEF supplied blankets, clothing and tents. As well, they supplied emergency medical supplies, food for infants and water purification tablets. Aid workers set up mobile field hospitals. Canadian doctors, nurses and other medical volunteers worked on a rotating basis to treat the injured and support people affected by the crisis. Aid workers used helicopters as medical evacuation transports in the early days of the disaster. For several weeks, they also leased helicopters to make sure that adaptable and rapid transportation was available if any emergency situations arose.

Outcome

The disaster relief effort was a massive undertaking with enormous obstacles. Ten days after the quake, rescuers had yet to reach 15% of the populated areas of the earthquake zone. Six weeks after the earthquake, food was still scarce in some regions. The 160, 000 residents in one valley needed an estimated 10, 000 tons of food, tents, blankets and medical supplies to help them through the harsh Himalayan winter. Three months after the earthquake, the harsh winter weather forced 100 families to move from the mountains to a relief camp in Pakistan's North West Frontier Province. At this point, the UN estimated that 2.5 million people were living in tents below 1500 m while up to 400,000 were living higher up the mountains. In the spring of 2006, CIDA shifted its focus from relief to recovery of livelihoods. Since then it has contributed to NGOs who have distributed seeds for crop recovery, built temporary schools and provided technical assistance for the establishment of new seismic standards. With CIDA's help, CARE constructed ten play centres for young children. Since 2005, with the help of CIDA and other international donors, CARE has helped 272,000 people affected by the earthquake. CARE and other NGOs continue their work in the quake zone. However, there is still much to be done. At the end of April 2007, hundreds of displaced families still lived in tent villages. Rebuilding this area will not only provide security for the people living there but will permit Pakistan to focus on providing a better life for its people. In the meantime, Canada and other countries will benefit if Canadian designers concentrate on developing buildings better able to withstand destructive earthquakes.

Disaster relief initiative #2 Aiding tsunami survivors in Indonesia

Background

About 17,000 islands make up the country of Indonesia. More than 245 million people live in the country, with one-third to one-half living in urban centres. There are five main islands, two of which are Sumatra and Java. Java is the most heavily populated island in the world. 90% of Indonesians are Muslim. The country gradually achieved independence between 1956 and 1963 from its Dutch colonizers. In 1976, Indonesia seized the former Portuguese half of the island of Timor. A separatist movement developed at once in the mainly Roman Catholic region. Since then, more than 200,000 Timorese are reported to have died from famine, disease, and fighting. East Timor gained independence in 2002.

Although Indonesia is rich in resources such as oil and copper, its economy suffered enormously from the Asian financial crisis of the late 90's. Widespread poverty, corruption, terrorism, and environmental degradation are current issues in Indonesia. Rioting, bombing, and growing unrest continue to plague the country. Indonesia is a land of frequent natural disasters. Part of the "ring of fire," it has the largest number of active volcanoes in the world. Earthquakes are frequent. Other natural disasters such as severe drought, tsunamis and forest fires, also occur in the region.

On December 26, 2004, an earthquake generated several huge tsunamis that struck the coastal areas around the Indian Ocean. Almost 300,000 people died, not as a result of the earthquake, but from the massive tsunami that followed. Another 570,000 people lost their homes. Damage totaled over \$4.5 billion. Indonesia experienced the worst devastation, especially in Banda Aceh in northern Sumatra. There was widespread damage to the infrastructure as well as food shortages. Small business people, such as fishers, farmers, and local market sellers, suffered tremendous losses. Women, the poorest people prior to the disaster, were the hardest hit. Canada's military provided emergency supplies, including access to medicinal

stockpiles. An RCMP forensics team aided with body identification. Canadians also provided food, clothing, water, medicine, and supplies. Through NGOs, Canadians built temporary shelters, wells, mobile water purification centers, and housing. Canada committed \$425 million over five years toward a comprehensive response. The Government of Canada pledged to match funds raised by NGOs. Twenty-three NGOs participating in the Matching Funds Program have raised about \$213 million.

Problem

The northern part of Sumatra experienced the greatest impact from the tsunami. Housing, commerce, agriculture, fisheries, transport vehicles and services were the most affected areas. The tragedy had the greatest impact on the poor, particularly women and children. The sheer magnitude of the destruction has been a challenge for the Indonesian government.

Project goals

CIDA is managing \$383 million of Canada's fiveyear commitment. Among the goals of the program are improved governance at local levels, and growth of small- and medium-sized businesses. The program also works to promote gender equity. Matching Fund partners will further these goals by supporting the re-building of permanent houses and related community infrastructure.



Water buffalo churn clay at a brick-making factory in Banda Aceh, Sumatra. Bricks are in high demand for post-tsunami reconstruction projects

Strategy

One of the main priorities was the reconstruction of the hardest hit regions particularly the most northwestern Indonesian province. NGOs worked to strengthen regional governments and community organizations. As well they set up equal distribution of social security programs. Matching Fund partners built permanent houses. The solid brick, concrete and steel structures will resist the earthquakes that frequently strike this part of Indonesia. The plan included help to rebuild infrastructures and develop sustainable economic activity. People were encouraged to participate in decision-making and in planning the reconstruction efforts of their communities. Another part of the strategy was the loans project. The loans were a few hundred dollars each to help rebuild the economy. The Private Enterprise Participation Project (PEP) offered 'micro' loans plus technical assistance. As well, it offered one-on-one marketing advice to survivors trying to re-establish livelihoods. Ten people involved in similar businesses (for example, brick makers) formed a credit circle. Each presented a business plan and they voted each other into the circle, thereby guaranteeing each other's loans.

Outcome

Despite the challenges, reconstruction is progressing well and results are evident. As of early 2007, CIDA had paid out \$59 million forward reconstruction. Matching Fund partners are working with CIDA to build permanent houses, restore livelihoods, and rebuild communities. As of July 2007, they had completed over 2,200 transitional and permanent homes and were building 1,584 more. Other projects include rebuilding village roads and infrastructure for water and sanitation and cleaning hundreds of village wells. CIDA has provided funds to help 51,000 households restore their livelihoods. It has also provided employment training for youths and supported enterprise development in communities. To date the return rate on the loans from the PEP project has been 100%. By dealing with clusters of similar businesses, the program is able to focus resources and expertise for maximum results. With loans from PEP, people have rebuilt 76 of the 120 brick making factories in the area. These projects will benefit people in northern Sumatra through restored communities and livelihoods as well as more stable housing when earthquakes strike. As Indonesians become more equal participants in the global community, Canada and the developed world will benefit as well.

Disaster relief initiative #3 Providing supplies to hurricane victims in El Salvador

Background

El Salvador is the smallest of the Central American countries. An independent nation since 1821, El Salvador has experienced numerous revolutions and wars against other Central American republics. Military dictators ruled the country from 1931 to 1989. In the 1970s, discontent with a large richpoor gap, a poor economy, and a repressive dictatorship led to civil war. In spite of scores of human rights violations, the U.S. intervened on the side of military dictatorship. The 12-year civil war that killed 75,000 people formally ended in 1992. El Salvador continues to struggle to advance its large but slow economy. There are about 6.8 million people in El Salvador-36% of whom live below the poverty line. The wealthiest fifth of the population earns approximately 45% of the country's income. Just under half of the population lives in rural areas. In 2004, El Salvador was the first Central American country to sign the Central American Free Trade Agreement (CAFTA) with the U.S. Many El Salvadorian farmers and workers protested against CAFTA, fearing they would lose their incomes with the importation of cheaper U.S. goods.

As well as hurricanes, El Salvador frequently experiences volcanic activity. In 1998, Hurricane Mitch devastated the country. The disaster killed 200 people; over 30,000 were homeless. In January and February of 2001, major earthquakes struck El Salvador and damaged about 20% of the nation's housing. That summer an even worse disaster struck. Severe drought destroyed 80% of the country's crops, which caused famine in the countryside. Hurricane Stan swept through Central America in October 2005. The torrential rains and winds spurred mudslides and flooding, which resulted in up to 2000 deaths. Two of the hardest hit areas were Guatemala and El Salvador. In El Salvador, the Santa Ana volcano erupted four days before the hurricane struck, making the situation worse. This made flooding and mudslides much worse than they might otherwise have been. Recovery will cost billions and take years.

Problem

The timing of the hurricane was disastrous as the storm hit El Salvador four days after the volcanic eruption. The combined disasters displaced some 72,000 El Salvadorians. The torrential rains with the hurricane damaged 70 percent of the country's roads, thus slowing rescue teams. Eighty percent of the country was under water, with extensive crop damage. Flooding and mudslides wiped out the coffee, corn, bean and sugar cane crops, which were almost ready to harvest. The economy was hard hit and farmers lost whatever income they might have earned. The emergency situation led to the death of 69 people. There were 62,891 people living in 633 shelters across the country. The floods seriously affected an estimated 540,000 people—about 10% of the population.



Residents move relief supplies by hand, fire brigade style, up a muddy slope in Guatemala. The supplies arrived by boat because roads were blocked. World Vision

Project goals

World Vision (WV) developed a program to deal with the most immediate basic human needs of the hurricane victims in both Guatemala and El Salvador. The goal was to maintain health, privacy and dignity by providing essential non-food items to disaster-affected people. The NGO delivered \$2 million worth of relief goods. The items included such things as accessible shelters, food, clothing, blankets, and medicines. CIDA contributed \$200,000 to the World Vision Appeal.

Strategy

World Vision was already responding to victims of the volcanic eruption when the Hurricane Stan struck. They increased their relief efforts to include hurricane victims. Their first objective was to have basic supplies - food, clean water and emergency health care - arrive within 24 hours. Next, WV sent fly-away kits (FLAK), which can sustain people for seven days, to the disaster area. Initial FLAK modules contained life-saving articles such things as blankets, drinking containers, soap, cooking sets, high nutrition biscuits and plastic tarps. Relief workers also distributed corn, beans, flour, and cooking oil. Other FLAK modules contained such things as personal hygiene items and emergency food. They also contained equipment for search and rescue, medical, power, shelter and communications. As well, in a joint effort with World Vision, Air Canada shipped hygiene kits, plastic sheeting, water purification pills and collapsible water containers. Workers distributed the items to families in badly flooded areas. World Vision's objectives for the next phase involved family survival kits. These kits will sustain a family for up to 30 days. Where possible, World Vision purchases supplies locally. To help children cope with the emotional impact of the disaster, psychologists visited the shelters and facilitated activities for children (games, painting, drawing etc.). World Vision also carried out assessments of the damages and urgent needs of the affected population. As the immediate crisis lessened, World Vision moved toward rehabilitation, including agricultural assistance, housing reconstruction and literacy training.

Outcome

The World Vision project helped people affected by Hurricane Stan to effectively move from relief through to rehabilitation and sustainable recovery. Approximately 3,000 displaced families received hygiene kits, plastic sheeting, water purification pills. and collapsible water containers. Nearly 63,000 people living in the 574 temporary shelters received FLAK modules. Approximately 4,000 families received enough corn, beans, flour, and cooking oil for 10 days. The basic goods and supplies enabled people to meet personal hygiene needs, prepare and eat food, provide comfort and protection from health hazards necessary for daily

survival. Items such as these are essential in stabilizing families and communities. Without these aids, instability would have continued. At the same time, recovery, reconstruction and rehabilitation would have stopped. CIDA's contribution to this relief effort helped people effectively recover and redevelop in a long term and sustainable manner. For El Salvadorians, one of the benefits of this project will be food security.

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Disaster relief initiative #4 Helping famine victims in Malawi

Background

Malawi, once called Nyasaland, became the independent nation of Malawi in 1964. Formerly a British colony, it remains within the Commonwealth. In 1971, Malawi's first prime minister declared himself president for life. The first free election in 1994 ended 30 years of authoritarian rule. While no longer a repressive society, corruption scandals continue to taint the government. Recent elections were widely considered irregular. In 2000, there were signs of a coming famine. In spite of this, senior government officials are believed to have sold off 160, 000 tons of reserve maize. In 2002 and 2003, Malawi faced severe food shortages. More than 3 million people suffered. In 2005, Malawi faced its worst food shortage in over a decade, with more than 4 million people, 34% of the population, without adequate food supplies.

In areas where poverty, disease, government corruption and rapidly increasing population already strain survival, drought is catastrophic. Over 20% of Malawi's 118,000 square kilometers is water. So how can Malawi have a problem with drought? Drought is more than simply a lack of precipitation. Drought occurs when, over a long period, a region requires more water than is available. This means that a variety of factors beyond lack of precipitation come into play. Increased demands for water, air pollution, water contamination, heat, deforestation, and poor land and crop management are some of the factors that may contribute. When even some of these factors are in place, drought is probable; when most or all of them occur, drought is almost inevitable. Such is the case in Malawi-considered one the world's least developed countries. The consequences of drought are many. Along with hunger, fires, migration, social upheaval, war, extreme thirst and illness are also common consequences of drought. To compound the problem, the HIV/AIDS epidemic has affected the country greatly—over 14% of adults have the virus. Malawi has had only three good harvests over the past 15 years. Subsidies on mineral fertilizer have helped boost

yields by less than 8 percent nationwide. While aid agencies can supply emergency food rations to famine victims, the best solution to the problem would be to help them overcome some of the factors that lead to drought.

Problem

Hunger is the most pressing issue since harvests are minimal or non-existent. 90% of Malawi's 13 million people live in rural areas and rely on agriculture to maintain their subsistent-level livelihoods. 55% of Malawians live below the poverty line. Irregular rainfall, poor crop management and poor soil play a part. Inorganic fertilizers are too costly for the rural poor. Without access to fertilizers, farmers struggle to grow food. Loss of food security means that most farmers go hungry for three or four months each year, and are forced to beg for food or depend on charity.



A farmer examines his maize crop grown with the help of fertiziler trees. Credit Consultative Group on International Agricultural Research (CGIAR)

Project goals

In response to the 2005 food shortage in Malawi, the World Agroforestry Centre (formerly International Council for Research in Agroforestry –ICRAF) developed a project to improve soil

productivity in the country. The project focused on getting more families to use fertilizer trees to increase crop yields. Canada, through CIDA, supported Phase II of the ICRAF initiative.

Strategy

The project had a clear strategy and an effective technology. Farmers taking part planted fertilizer trees for soil regeneration and food security. Fastgrowing fertilizer trees take nitrogen from the air-more than 100 kg per hectare-and transfer it to the soil. The young trees are cut, chopped and mixed into the soil just before planting food crops. This builds up organic matter and adds nutrients. By helping to restore depleted soils, the trees boost crop productivity. Farmers readily double or triple maize production without purchasing expensive mineral fertilizer. The trees grow back year after year despite severe pruning. This means farmers can plant them at high density in a grid pattern, and then trim them back to the ground so that they do not compete with crops. The nitrogen content of the foliage ranges from 3 and 4 percent and provides a high quality fertilizer that is readily used by cereal crops. Also, the trees produce large amounts of firewood that saves family labor and reduces pressure on surrounding forests and woodlands. The trees are also a one-time investment. Once the trees are established, the local community manages seed multiplication and extension activities. The fertilizer trees are much less expensive – chemical fertilizers can cost as much as 15 times more in Malawi than elsewhere. The cost of training and equipping one family to practice agroforestry is only \$2.50. ICRAF provides options for better ways of producing timber, fuel-wood, fruits and medicinal products, but most importantly, for restoring soil fertility. ICRAF estimates that roughly 40 percent of Malawi's farmers could benefit from these programs

Outcome

In Phase I of the project, approximately 22,000 Malawian farm families were trained in agroforestry techniques and were managing to feed their families. Since the start of Phase II, another 100,000 Malawian farmers adopted the technology. Maize farmers who practiced agroforestry, usually produced anywhere from two

to four times more than the national average. One farmer, previously hungry and dependent on food aid, is now entirely self-sufficient. She now sells seeds and firewood and is using the cash to pay school fees and make home improvements. Women are major beneficiaries of the fertilizer tree technology. Because the trees suppress weeds and reduce soil compaction, they also reduce the burden of land preparation - traditionally a woman's responsibility. Women also benefit from the fuel-wood that the trees produce. Once fully established, a hectare of fertilizer trees can produce up to 10 ton of fuel-wood each year. Most African families need about 3 ton of fuel-wood a year for cooking. Women collect this wood - often carrying their loads long distances from the forest. Growing fertilizer trees near the home eliminates the need to cut and carry fuel-wood. This will also have an enormous impact on the region's forests. The technology addresses some of Africa's problems in an effective and sustainable way. It can lead to greater food security, improved health, and provide an entry point for poor people into a cash economy. By promoting this technology, Canada and the developed world could benefit through the purchase of carbon credits. Fertilizer trees not only store significant amounts of atmospheric carbon, but also greatly improve agricultural productivity and wood production in farmers' fields.

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Globalizing factors in the history of environmental protection

More than any other species alive today, humans alter the environment to meet our preferences. In the long term, some of the changes we make are not wise. We cause environmental destruction. In order to survive on earth, humans need to adopt an approach to living that is more respectful of the earth's ecological system as a whole. Sustainable technology and greater awareness will help with environmental protection. The health of our environment is no longer a local concern. It is a vital global issue.

For the most part, people do not show respect for the earth's fragile and complex ecosystems. But some observable changes and losses in the environment are prompting people to seek and protect an ecological balance.

Globalizing factors in environmental protection include:

- ideology and ideas
- mass media
- economic opportunity
- political and legal intervention
- energy production

Ideology and ideas

Fifty years ago, those speaking out for the environment were considered radicals. However, these concerns are not new. Advocates were calling for improved treatment of animals over two thousands years ago.

Early protection of animals

In 256 BCE, King Asoka of India issued a set of seven edicts or commands to his people. In one of these commands, he declared that animals should be protection. The animals named were: "wild ducks, parrots, deer, bulls, wild asses, pigeons, fish, tortoises, bulls, ducks, terrapins and queen ants. He also included any four-footed creature that was not edible and not otherwise useful.

Buddhism was Asoka's religion. His religious values dictated that animals could not be eaten. Aged and disabled cows were treated with respect.

Missionaries were sent to Thailand and Sri Lanka to teach Buddhism. His son Arahat Mahinda traveled with the missionaries. A hunt in Sri Lanka was interrupted. Arahat Mahinda stopped the King of Sri Lanka from killing a deer. "Every living creature has an equal right to live," he told the King. The King of Sri Lanka became a Buddhist and let his people know that no one could kill living beings. All fauna and flora were also protected at a place called Mahamevuna Uyana. It is the world's first sanctuary. Animal sheltering was also introduced as part of missionary work. To this day, the Buddhist monasteries in Sri Lanka and Thailand often double as animal shelters.

Rachel Carson's 'Silent Spring'

A key turning point in the environmental movement was the publication in 1962 of Rachel Carson's book, *Silent Spring*. Carson was concerned by the increased use of manufactured chemicals after World War II. She warned that there could be a 'silent spring', in which insects, birds, animals, and even humans were silenced by deadly pesticides.

At the time, governments and many agricultural scientists were promoting the use of pesticides such as DDT without studying their long-term consequences. DDT killed thousands of insect species, Carson warned. And it also accumulated in animal tissue. In addition, it caused cancer and genetic changes in humans.

Silent Spring infuriated the chemical industry. If pesticides were banned, they claimed, people would starve while disease and insects ruled. Fortunately, Carson's careful research paid off. Governments were convinced that pesticide use could be dangerous. Ten years after Silent Spring, public pressure in the US resulted in the Pesticide Control Act and Toxic Substance Control Act.

Carson called for a change in the way that humankind viewed the natural world and their place in it. *Silent Spring* was one of many books she published over the course of her lifetime. It helped raise awareness of environmental issues.

Mass media

International environmental organizations work to raise the public's awareness of environmental problems. Due to the efforts of environmental organizations, citizens around the world have become more informed and active in conservation. From seal hunting to nuclear testing, members of environmental organizations protest diverse issues. They sometimes use attention-grabbing techniques. Individuals have even put their lives in danger to draw attention to an issue.

The activism of environmental organizations has helped government agencies come into being. On the first Earth Day, April 22, 1970, over 20 million people demonstrated across the U.S. The strength of the grassroots gathering forced the US government to include environmental issues on their political agenda. Mounting public pressure led to the creation of the Environmental Protection Agency in the US in 1972. In Canada, the government created the agency called Environment Canada to monitor the nation's environment.

World Wildlife Fund

The image of the Chinese panda, Chi-Chi, is the recognizable logo of one of the first international conservation agencies, the World Wildlife Fund (WWF). The idea for the organization was born in 1960. A British man, Julian Huxley, noticed that the ecosystems and animal species of East Africa were threatened by excessive hunting. Upon his return to England, he partnered with several colleagues to form an international organization dedicated to conservation. In order to be effective in more countries, the organization decided to set up offices around the world.

Today, WWF staffs offices in over 90 countries. The organization has invested more than \$1 billion in over 12,000 environmental projects. They have helped to protect tropical forests, the Galapagos Islands, coral reefs, and many endangered species like the Siberian tiger and the Indian wild ass.

Greenpeace efforts to ban on whaling

The name 'Greenpeace' reflects the desire of its founders to both protect the environment and end the threat of nuclear war. A major focus of its

efforts has been to raise public awareness on environment and peace related issues. On its first mission in 1971, a band of determined individuals sailed for Alaska in a fishing boat to protest American nuclear testing. The mission was successful in drawing world attention to issue and the nuclear tests were abandoned. Inspired, they set out again in 1975 to stop French nuclear testing in the South Pacific.

Since its heroic beginnings, Greenpeace has become a global force in environmental protection. The organization has the support of 2.8 million members in 40 countries. They have won many environmental victories through passionate and exciting protesting that have been widely publicized around the world. In 1994, after years of Greenpeace protests against whaling, the International Whaling Commission approved an Antarctic whale sanctuary.



Despite being listed as an endangered species, Fin whales are but are still hunted by the Japanese fleet. Greenpeace (http://www.greenpeace.org/): Jim Rezac

In 2007, Greenpeace rallied volunteers to pose naked for a photo shoot on a Swiss glacier to draw attention to global warming and human vulnerability. In addition to activism, Greenpeace publishes respected reports on the environment to inform the public and spark interest in crucial issues.

Economic opportunity

Although economic development has been a major source of environmental damage, there are many opportunities to profit from careful stewardship of the environment.

Protecting rubber trees in the Amazon rainforest

The Amazon tropical rainforest in South America spans nine countries. It covers an area the size of the United States. Biologists consider it to be the most diverse ecosystem on earth. Human inhabitants of the region rely on the forest for everything from shelter to medicine. On a global scale, the forest helps maintain a stable climate by acting as a giant lung for the planet.

Despite its value as a living ecosystem, the Amazon has been threatened for many years. An area larger than France has been logged. The logging operations are very wasteful. Only 30% of the timber actually makes it to the market. 70% is lost in poorly operated mills. Once an area has been logged, it is not reforested. Chemicals from unregulated mining contaminate waterways. As a result of human activity, the region is at a high risk for forest fires, drought, and mass extinction.

In 1976, inhabitants of the Amazon formed a human chain in the trees to protect against oncoming chainsaws. Chico Mendes led the fight. This protest marked the beginnings of a long campaign to protect the Amazon. Environmental groups like WWF and Greenpeace have teamed with local inhabitants to make the Amazon an international issue. But so far conservationists are fighting a losing battle. The government of Brazil (with the largest piece of Amazon rainforest) has tried to impose logging regulations. Their attempts are not successful. The worst year for logging was 2003. In spite of regulations, an area equivalent to four million soccer fields was cleared.

Countries that buy the most wood from the Amazon, such as Japan, the Netherlands, Spain, the UK, and the US, have taken very few steps to buy products from legal or ecologically responsible logging companies. Also, multinational companies continue to buy soy and beef from newly cleared rainforest land. International demand fuels deforestation.

Electric cars

Electric cars are an important partial solution to concerns about global warming, air pollution and rising oil prices.

Though they sound futuristic, the first electric cars were actually made in the 1830s. Refinements

around 1842 used rechargeable batteries. In 1899 and 1900, more electric cars were sold than other vehicles (gas and steam powered). A variety of factors led to the decline of electric cars through the 1900s. These included the discovery of oil reserves in Texas, the demand for cars that could go long distances, and Henry Ford's production of gasoline vehicles. Their efficient production made them cheaper than electric cars.

Contemporary electric cars run on renewable batteries. These batteries are charged at charging stations: at home, work, or in public places. The focus of current research is to improve the capacity and longevity of batteries. When electric cars run, they do not produce any emissions. The environmental costs of the car come from its production (like any other vehicle), how the electricity is produced to power them, and how they are disposed of.

Interest in reducing vehicle emissions has resulted in renewed interest in electric cars since the 1990s. Prototypes have been developed by major U.S. car companies. Some of these can get up to 80 mph. Most have ranges of 65 to 100 miles, after which they need to be recharged. GM's EV1 was a highly functional sports car and sold out rapidly. However, all models were recalled by the manufacturer. Hybrid cars like the Prius use electricity to run at low speeds and gasoline for higher speeds.

Challenges include moving from prototype to production; creating a network of recharging stations; and creating the will to change in the automotive industry. The automotive industry is enormous and resistant to change. Its connections with the oil industry can breed resistance to vehicles using alternate fuel sources. At the same time, they are market driven and respond to the market.

Political and legal intervention

Governments have long played a role in encouraging and even forcing people and companies to better care for their environment.

The Great Smog

The Industrial Revolution accelerated environmental change worldwide. Coal fuelled trains, boats, and cities. Factories and residences

burning coal generated large amounts of air pollution in large cities like London, New York, Los Angeles, and Paris.

In 1952, London felt the worst effects of air pollution. On December 5th, a thick cold fog blanketed the city. To keep warm, Londoners burnt more coal than usual. Because of air pressure, the fumes from the coal did not rise and disperse. Instead, the city became engulfed in smog. The fog was "so dense that people were known to walk into the River Thames, unable to see where they were going." Driving was nearly impossible. Movie screenings were cancelled because the smog hid the screens in theatres. Over the four days that the weather lasted, 4,000 people died from respiratory illness. In the months that followed, another 8,000 people died in connection to the smog.

The chaos and deaths caused by the Great Smog and similar smog incidents in other cities resulted in a conference on air pollution in 1955. Britain created a Clean Air Act to reduce the smog in London. Smog incidents helped set in motion the modern global environmental movement.

Unleaded gasoline

In the 1920s, several car companies found that adding lead to gasoline helped engines run more smoothly and last longer. They did not realize that putting lead in gas had a negative impact on human health. Over a one year period from 1924-1925, seventeen workers in GM, Dupont, and Exxon factories died "violently insane" from handling poisonous lead. When released in car exhaust, lead settles in the soil near roads. It contaminates water and crops. In children, lead can cause mental retardation. Despite knowledge that lead caused serious health problems, leaded gasoline was promoted and sold around the world for decades.

The US government finally enforced a reduction in the quantity of lead in gasoline in 1973. More reductions came into effect over the next twenty years. The amount of lead in urban air – and in people's blood - decreased dramatically as a result of the reductions. In 1990, leaded gasoline became illegal in Canada. Five years later, it was made illegal in the US. All cars on the road in Canada today run only on 'unleaded' gasoline.

Outside of Europe and North America, countries have been slow to eliminate leaded gasoline. Many people have a poor understanding of the health risks of lead. In addition, they do not know that converting to unleaded gasoline is inexpensive. Africa uses the most leaded gasoline. In 1996, the World Bank joined the World Organization and others in calling for a global phase-out of leaded gasoline. Their report notes that the health costs of leaded gasoline are far higher than the benefits to a few refiners and gasoline distributors. African countries are slowly working towards its elimination. But lead contamination remains high.

Energy production

The energy stored in fossil fuels transports us places, heats homes, cooks food, and provides light. Unfortunately, burning fossil fuels releases carbon dioxide. This gas acts like an invisible blanket, trapping more of the sun's energy in the atmosphere and creating global warming. As well, fossil fuels are a non-renewable energy source.

In order to cut greenhouse gas emissions, humans need alternate energy sources. Renewable energy comes from the natural flow of sunlight, wind, or water. These energy sources do not produce greenhouse gases. It is possible to develop renewable energy so that every house or neighbourhood could have its own renewable power generating equipment.

Wind power

Humans have used the wind for thousands of years. It was used to move ships across oceans. In ancient times, people used it to turn windmills that pumped water or ground grain. More recently, people have harnessed the wind as a clean, safe source of electricity. Wind power is affordable, efficient, pollution-free and inexhaustible.

A wind turbine, a device that looks like an extremely tall, skinny fan, can harness the wind's kinetic energy. At wind farms, masses of wind turbines work together to provide centralized electric power for communities. The cost of the energy is from 5 to 10 cents per kilowatt hour. This is slightly higher than electrical plants. However, the cost of wind energy drops each year, while the cost of conventional production grows.



A bank of wind turbines in southern France. © Susan Duncan, 2007

The use of wind turbine generators is growing worldwide. For example, in 2003, California produced enough wind-powered energy to power more than 495,000 households. Canada's installed wind energy capacity in 2006 was enough to power more than 280,000 homes. The growing use of wind energy creates manufacturing and technical jobs.

Solar power

For billions of years, the sun has poured out huge amounts of energy. In one minute, enough energy hits the earth to match our fossil fuel use for an entire year. This supply is unlimited, and costs little to access.

Solar energy was used in ancient times to heat homes. In Rome by the 6th century, glass sun rooms were placed on the south side of homes. The heat from these rooms was transferred to the rest of the house when they opened the doors. Justinian's Sun-Right Law guaranteed access to the sun for all buildings. In the south-west region of North America, the Anasazi also oriented their adobe buildings to maximize the sun's energy for heating.

In 1839, the photovoltaic effect was discovered by Becquerel, a French researcher. With this link between light and electricity, solar powered engines were produced. Through the 1900s, improvements were made in the technology. Some uses in the mid-1900s included powering American satellites, providing telecommunications in remote Australia, and powering water pumps in Africa.

Solar collectors and modules capture some of the sun's energy and change it from radiation into more usable forms such as heat or electricity. Current solar panels can capture up to 20% of the sun's energy. Electricity from solar cells is used to run many pieces of technology in a home. Solar panels are silent, easy to operate, rarely require maintenance, and produce no polluting emissions. In 1998, the U.S. Department of Energy instituted a program to encourage a million people to install solar energy systems on their rooftops. The installation of these systems could eliminate carbon dioxide emissions equal to that produced by 850,000 cars.

Cost has been a major consideration with solar energy. Technological advances have significantly reduced the costs of solar energy. In remote areas, solar power may actually be less expensive. Savings come from not needing to replace batteries or provide maintenance. As well, as oil prices continue to rise, the relative cost of solar energy improves.

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Recent developments involving environmental protection

Human activity on Earth has a large environmental impact. These changes include climate change, ozone depletion, disappearance of tropical forests, oil extraction, and chemical contamination. In response, many people have participated in the environmental movement. This movement aims to make environmental protection a political and economic priority. The environmental movement has gained momentum in recent decades. However, most governments and citizens are acting slowly compared to the rate of environmental destruction.

Key recent events in environmental protection:

- protesting logging of the Amazon rainforest
- banning of CFCs
- reducing greenhouse gases
- promoting local foods
- boycotting the seal hunt

Protesting logging of the Amazon rainforest

The Amazon tropical rainforest in South America is enormous. It spans 9 countries and is the size of the United States. Biologists consider it to be the most diverse ecosystem on earth. Human inhabitants rely on the forest for everything from shelter to medicine. The forest helps maintain a stable global climate.

Despite its value, the Amazon has been threatened for many years. An area larger than France has been logged. Tropical hardwoods like mahogany are sold on the international market. The logging operations are very wasteful. Only 30% of the timber actually makes it to the market. The other 70% is lost in poorly operated mills. Once an area has been logged, it is not reforested. Lands are used for agriculture and industry. Land used for cattle erodes rapidly. Chemicals from unregulated mining contaminate waterways. The region is at high risk for forest fires, drought and mass extinction.

In 1976, inhabitants of the Amazon stood up to loggers for the first time. Rubber 'tappers' work by gathering latex (rubber) from the rubber trees in the Amazon forest. They formed a human chain in the trees to protect against oncoming chainsaws. Rubber tapper Chico Mendes led the fight.

The rubber tappers' protest marked the beginnings

of a long campaign to protect the Amazon. International groups like WWF and Greenpeace have teamed with local inhabitants to make the Amazon. But so far conservationists are fighting a losing battle. Because of the size of the rainforest, the government cannot enforce logging regulations. In 2003, an area equivalent to four million soccer fields was cleared in spite of regulations. Loggers, miners and ranchers resort to violent tactics, even murder, to get rid of environmentalists. For example, an angry rancher assassinated the rubber tapper Chico Mendes in 1988.

International demand fuels deforestation. Countries that buy the most wood from the Amazon have taken very few steps to buy products from legal or ecologically responsible logging companies. These countries include Japan, the Netherlands, Spain, the UK and the U.S. Multinational companies continue to buy soy and beef from newly cleared rainforest land. International consumers and producers need to be informed and take action to protect this lifegiving tropical ecosystem.



The results of deforestation by burning in the Amazon rainforest. © CIDA: Pierre St-Jacques

Banning of CFCs

The ozone layer is a part of the Earth's atmosphere. It protects against harmful solar rays. In the 1970s, scientists discovered that the ozone layer is sensitive to certain chemicals. The most dangerous chemicals to the ozone layer are called chlorofluorocarbons (CFCs). These chemicals were used in refrigeration and air conditioning beginning in the 1920s.

Studies on ozone depletion found that CFCs had the largest impact at the poles of the Earth, especially Antarctica. So many of the protective ozone molecules were destroyed that people began talking about a "hole" in the ozone layer.

Ozone depletion was finally taken seriously in 1987. Twenty-four countries signed the Montreal Protocol. This was an international agreement to phase out ozone-depleting chemicals. Even conservative leaders like Ronald Reagan and Margaret Thatcher agreed to the Protocol. DuPont was the largest CFC producer. They announced an end to CFC production in favour of safer chemicals the year after the signing of the Montreal Protocol.

CFCs take from 50 to 100 years to breakdown. Therefore, ozone depletion will continue into the future despite the ban. But, in 2003, scientists announced that depletion might be slowing due to an effective international effort to enforce the CFC ban. Many people see the slow reversal as an environmental victory.

Reducing greenhouse gases

Climate change refers to a change in the Earth's climate or a regional climate over time. The Earth's climate has always changed. It fluctuates between periods of extreme cold (ice ages) and periods of warmth. In recent decades, the average temperature on Earth has been rising. This steady, continuous increase in the Earth's temperature is called global warming. Previous changes in climate were due to solar activity, volcanic activity and cyclical changes in the Earth's orbit. This time, the cause of global warming is the release of greenhouse gases due to human activity. Greenhouse gases cause the atmosphere to thicken and trap more of the sun's heat. Levels of carbon dioxide (CO²) and methane (CH⁴), the two most important greenhouse gases, have risen steadily since the industrial revolution. Cars and factories emit these gases.

The first global action to address climate change came in 1997. The Kyoto Protocol is a legal international agreement aimed at reducing greenhouse gas emissions. Since its creation, the Protocol has been ratified (agreed to) by 175 nations worldwide. It went into force in February 2005. Its success depends on whether countries comply with their commitments and whether the assessment data is accurate.

A major obstacle is the resistance of key polluters. Some industry predicts economic "disaster" if CO² reductions are enforced. Meanwhile, coal power plants and vehicles in the U.S. produce roughly one quarter of the world's total emissions. Skeptics and some politicians doubt the science behind global warming.

Promoting local foods

Food has become a commodity on the international market. It is produced in one part of the world and shipped around the globe. The international market means that people in the developed world can eat exotic food from many locations. However, the global food market creates many health and environmental difficulties. Massive farms tend to use more pesticides than home gardens. To simplify harvesting and processing, multinationals grow only a few crops. This results in depleted soil and lost biodiversity.

Another concern relates to moving food around the globe. Food miles measure how far food travels from where it is produced to where it is eaten. It is an approximation of the energy used to transport food. When foods are shipped farther, more energy is used. In the U.S., food travels an average of 1500 to 2500 miles. With increasing concerns over global warming, the CO² emissions from food transportation need to be considered.

There is a renewed interest in alternatives to the global food market. For example, during WWII. U.S. citizens were asked to plant Victory Gardens to increase the supply of fruits and vegetables. The goal was to free up money for the government to support the war. These home gardens produced 40% of all vegetables used in the U.S. at the time.

The local food movement is another alternative. Proponents emphasize the health, environmental, social and economic benefits of eating food from your region. Food is more nutritious because it is harvested when it is ripe. It requires less energy to be transported. Community is strengthened when people rely on others to produce and buy food. Local economies become sustainable when people buy things from each other. The new word "locavore" means someone who eats food from their local area. One popular version of the local food movement is the 100 Mile Diet, pioneered by a young couple in Vancouver.

Boycotting the seal hunt

Seal fur is popular on international markets. It is used for coats and other products. The government has tracked the number of seals killed each year since 1971. The number killed goes up with increased quotas, and down with international protests. In 2003, the Canadian government set a three-year catch limit of 975,000 seals. This hunt is highly controversial.

Seals may be harpooned or shot. However, the most controversial method is clubbing. Seals are clubbed and then skinned. Analysis of their skulls shows that some may be conscious when they were skinned. Most of the seals clubbed are very young: 97% are under three months of age.

Proponents of the hunt emphasize that seals were hunted traditionally by aboriginal peoples. Some believe that seals are responsible for the reduction of the cod fish industry. Finally, many state that the hunt is vital for the maritime economy: in 2006, sales of harp seals totaled \$33 million. On the other side, opponents say that the seal hunt is vastly larger than traditional seal catches. Massive catches by fisheries are a more likely cause of the loss of cod stocks. Finally, they state that the seal hunt contributes little to individual incomes. In Newfoundland, the hunt accounts for only 0.5% of the economy.

Most Canadians oppose the hunt. Of those who have an opinion, 70% are opposed. A vast majority of foreigners are opposed to the hunt. For example, 95% of those in the Netherlands think the hunt is unacceptable. International boycotts of Canadian seafood products have been launched. There have been protests against the annual seal hunt across Canada. On the other hand, a public opinion poll in 2005 found that 60% of Canadians support a responsible seal hunt. Negotiating these conflicts is an ongoing challenge.

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Global initiatives in environmental protection

The challenge ahead

Environmental protection is a global issue. Humans, plants, and animals are part of delicate, interconnected ecosystems. If we damage one part of an ecosystem, we endanger other parts. Ongoing damage—to everything from the Earth's atmosphere to the depths of the oceans—could impact our future in unpredictable ways. Today we face the challenge of halting environmental destruction and restoring ecosystems to a healthy balance.

Economic globalization can both accelerate environmental damage and promote environmental protection. Hopefully, we will learn to use globalization to educate people around the world about environmental issues and ensure that our lifestyles are made sustainable.

The personal side of environmental protection

One year ago, in this remote corner of the Amazon, tropical rainforest covered this whole area in the state of Amapa, Brazil. Today, there is the constant sound of hammering and sawing as a new colony of homesteaders carves a new town in the forest. The number of houses will grow from 5 to 120 this year. Bulldozers stand ready to resume roadwork when the dry season begins in June. Developers hope the road will soon be paved. For many families, this is the opportunity they have waited a lifetime for. Antonio Rodriguez, his wife, Mariana, and their six children struggled for years working the land for others in a drought stricken area of Brazil. Last year when road graders started smoothing the new 130 km road through the area to the state capital, they came to Amapa to stake a claim to just of 100 hectares of land. Today he grows corn and manioc in fields marked by gray skeletons of jungle trees. During the dry season he hopes to work for a timber company cutting logs. "We are finally living the way God intended," says Mariana. "Before, we didn't earn enough to pay for a children's pair of shoes."

Not everyone shares the Rodriguez' enthusiasm for the new town and the paved road. But, those who want to protect the Amazon ecosystem and speak against the development are not very popular. Pedro de Silveira understands the importance of protecting this valuable resource. He campaigned against an application by a timber company to cut timber in a large section of the rainforest. Two days before the application hearing he received death threats. Pedro also opposes the paved road and wants strict controls placed on road traffic through the forest. Recently, two men visited him at his house and beat him severely with wooden clubs. He says, "The history of roads in the Amazon is that the Government builds them without a development plan and it becomes a path for disordered growth." He is concerned that people will move in and disrupt the forest. In particular, he is concerned that as the new settlers' families grow they will want more and more land. Pedro will not be silenced. While he understands the need for economic stability for so many of Brazil's poor, he knows how important it is for future generations to stand up for protection of the Amazon.



The future for these Brazilian children is closely tied to the Amazon. © John Maier, The Nature Conservancy

Global initiatives in environmental protection

People are gradually becoming more aware of the urgent need to protect the environment. Canadians are involved with many projects around the world to protect fragile ecosystems and stop further environmental destruction. Some projects are individual efforts and some are carried out through Non-Governmental Organizations (NGOs) such as World Wildlife Federation and Greenpeace. Other projects are initiated by the Government of Canada and are supported by Canadian tax dollars. The Canadian International Development Agency (CIDA) is an example of a government organization that contributes funds, personnel and expertise toward environmental protection problems worldwide. Described on the following pages are several projects designed to address the challenges of environmental protection.

- Initiative #1: Exploring the environment, agriculture and food security. Canada World Youth (CWY) created the Africa-Canada Ecoleadership program for young Africans and Canadians, ages 17 to 24. Through participation in environmental and community development initiatives, participants learn to tackle difficult environmental problems in their home country.
- Initiative #2: Greening computer waste. In 2006, Greenpeace launched an on-line campaign to force electronics companies to stop making products that contain harmful chemicals. Greenpeace demanded that, starting in 2007, all new Apple products be free of the worst toxic chemicals in the production process and products themselves.
- Initiative #3: Building sustainable fisheries in Cuba. In 2004, the World Wildlife Federation (WWF) worked with the Ministry of Fisheries of the Republic of Cuba to establish a modern sustainable fishery in Northern Villa Clara.
- Initiative #4: Combating desertification in the Sahels. The Agrhymet Regional Centre (ARC) in Niamey, Niger conducts research and training in nine Sahel countries. The goal is to make people in this region less vulnerable to climate change and to protect the environment.

Environmental protection initiative #1 Exploring the environment, agriculture and food security

Background

Burkina Faso is one of the poorest countries in the world. Independent since the 1960s, a series of civilian and military dictators governed the country. In 1983, a Marxist-Leninist brought real revolutionary change. Among other things, he severed ties to the colonial past and allied the country with North Korea, Libya and Cuba. On the positive side, his government investment in schools medicine, food production and clinics brought some improvements in living standards. However, partly because of communist connections, foreign investment declined and many businesses left the country. Four years later, formerly loyal soldiers assassinated the ruler. The new president agreed to reforms proposed by the World Bank.

Burkina Faso has few natural resources. The majority of workers rely on farming as their source of income. When crops are poor, millions face malnutrition and starvation. The principal cash crop is cotton—a thirsty crop. Other crops include peanuts, millet, corn and rice. Some farmers raise cattle, sheep and goats.

There is very little rainfall and much of the soil is very poor as a result of over-cultivation. Few farmers who follow traditional farming practices understand the importance of biodiversity and soil fertility management. Many cannot afford chemical fertilizers and count on rainfall to produce crops. Droughts are an additional problem. Less than 10% of the land is cultivatable without irrigation, although recently the government constructed several dams for irrigation and hydroelectricity. As the planet warms, weather patterns will change. Farmers in areas currently experiencing water shortages, such as Burkina Faso, need to find ways to protect the environment and increase crop yield as the planet warms and weather patterns change.

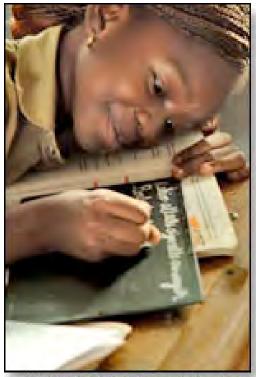
Problem

Environmental change threatens traditional farming practices in Burkina Faso. Farmers lack knowledge

of farming practices and conservation techniques that could help them adapt to change.

Project goals

The Canada Fund for Africa worked with Canada World Youth (CWY) to create a means for young Africans and Canadians to cooperate and participate in environmental and community development initiatives. The goal of the Africa-Canada Ecoleadership program was to provide young participants between ages 17 and 24 with ideas and skills to tackle difficult environmental problems in their home country. Started in 2004, CIDA's \$12 million contribution to the three-year project was part of Canada's \$500 million Fund for Africa.



@ ACDI-CIDA/Samuel Gervais

A student in an education program in Burkina Faso

Strategy

The Africa-Canada Eco-Leadership Program is one of CWY's international exchange programs to enhance the abilities of African and Canadian youth to address environmental challenges. As part of the project, a group of Canadian and African youth explored the relationship between agriculture, the environment and food security. Young people with

an interest in the environment, biodiversity conservation, and community development participated.

Each year over three years, 90 Canadian youth and 180 Africans spent six months working on ecoleadership projects. The youth formed teams of 18 participants. Each team had six members from Canada, six from one African country and six from a second African country. The team environment created a unique three-way cultural exchange. After spending three months in Canada, the 18 young people traveled to Africa to live and work in a rural community. For example, in 2004, six youth from Mali, six from Burkina Faso and six from Canada spent three months on an orchard and vineyard in Quebec. There they learned about agriculture and biodiversity. Once familiarized with the project, they went to a village in Burkina-Faso, to apply their knowledge. In Burkina Faso, their focus was to analyze traditional agriculture. The group documented seed-saving techniques, techniques for conserving water and organic fertilization methods. They also looked at the impact of deforestation on erosion and soil fertility.

During the program, the young people lived with a host family. They also did volunteer work in the host community. The initiative aimed to help participants understand how environmental initiatives can contribute to poverty reduction. As well, it encouraged participants to contribute to sustainable community development. African participants were eligible for business bursaries to help them apply these lessons towards the creation of eco-friendly small businesses.

The group identified successful practices and possible problems in preserving and raising seeds. They organized workshops to help farmers effectively combine modern and traditional techniques.

Outcome

Participants learned about environmental issues in Burkina Faso, developed skills and built attitudes and values applicable in their home countries of Mali or Canada. Working in two African countries emphasized the sharing of experiences and responded to the spirit of intra-African cooperation. Also, Canadians can adapt what they learned in the

project to resolve Canadian environmental and agricultural problems. So far, 440 African and 220 Canadian youth have participated in the program. All have demonstrated an increased awareness of the environmental challenges of host communities and a better understanding of potential eco-friendly livelihoods. Burkina Faso and other African countries can benefit from environmental protection aspects of the program while developing more sustainable agriculture. Canada and the developing world will benefit from the Canadian youth's global experiences in environmental protection. As well there are opportunities to develop seeds that will produce abundant crops in a globally warming environment.

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Environmental protection initiative #2 Greening computer waste

Background

In recent decades there has been an enormous number of electronic devices manufactured. Companies constantly look for ways to improve their products introduce new models with increasing frequency. Planned obsolescence encourages or pressures the consumer to buy the new, improved model. In some instances, manufacturers produce items that you will need to replace regularly. Perhaps the replacement cost is comparable to (or cheaper than) the cost of repairs. Perhaps the replacement parts are no longer available. Sometimes a product is built so that it cannot be repaired. Often manufacturers will create products that are not compatible with an older model. This makes the older model quickly obsolete, forcing the consumer to buy a replacement. This is especially true in the electronics industry.

Presently there is a vast array of electronic products on the market. All of these products – computers, cell phones, I-pods and other electronic devices – are made of carefully designed metal sheets, wires, chemical coatings and plastics. The components contain tiny amounts of precious metals like gold, dangerous metals like lead, and chemicals that are harmful to human health. Once an electronic device has reached the end of its short life, it is discarded and replaced by the newest model.

But where do all those used pieces of equipment and their different components go? Billions of thrownout electronic devices (called e-waste) are shipped to Asia and Africa. Migrant workers take them apart and extract the valuable metals. During extraction, harmful vapors and liquids leach into the air, soil and water. Breaking down electronic devices has a negative impact on the health of people and the entire ecosystem in the region. Meanwhile, consumers buy more and more cell-phones and computers without realizing their harmful potential.

Problem

Fourteen of the largest hi-tech companies produce products containing toxic chemicals. The Apple Company's Ipod nano and Macbook contain Polyvinyl chloride (PVC), a chemical closely linked to cancer and other serious health problems. If Apple and other companies continue to manufacture products containing toxic chemicals, disposal of ewaste will cause widespread health problems and environmental damage.

Project goals

In 2006, Greenpeace launched an on-line campaign to force electronics manufacturers to stop making products that contain harmful chemicals. The Apple Company was their first target. Greenpeace demanded that all new Apple products launched from 2007 onwards be free of the worst toxic chemicals in the production process and products themselves. Secondly, they demanded that Apple expand their collection and recycling program beyond the existing program.



It can be 10 times cheaper for a "recycler" to ship e-waste to China than to dispose of it properly at home. Credit: Social Return on Investment

Strategy

Greenpeace identified 14 of the largest hi-tech companies and the cocktail of toxic chemicals contained in their products. The NGO then ranked each company according to its global efforts to

eliminate harmful chemicals and take responsibility for waste. The Apple Company consistently ranked among the worst performers on the 'green' scale. Greenpeace launched an online campaign with an attractive, user-friendly website in a style identical to an Apple Company website. Right down to the graphics, the site looked like a creation of Apple. This appealed to curious "techies" and Apple lovers. On the front page, Greenpeace coined the slogan "Green my Apple, to the core," and outlined the problem with Apple's practices.

The website gave a list of things to do as part of the campaign. With the click of a mouse, you could write to Steve Jobs, CEO of Apple, to express your concern. You could buy buttons and organic cotton t-shirts to publicize the campaign. You could send ecards to other Mac-users to inform them of the hazards behind their screens. You could use your own Apple computer to create an artistic ad for the campaign.

To accompany the website, Greenpeace produced a spoof keynote speech presented by a stand-in for Steve Jobs. In the spoof, fake Steve announced a new environmental policy for Apple. When it reached YouTube, the video was viewed over 100,000 times. Greenpeace teams visited Apple retail outlets to speak to customers about greening Apple. Students on three continents organized 'Green my Apple' events on university campuses.

Outcome

Thousands of Apple fans flocked to the site. The website won a 2007 WeBBY Award for 'Best Activist Site'. Visitors to the website sent almost 50,000 letters to Steve Jobs. Nine months after the website's launch, Steve Jobs officially announced "A Greener Apple" on the front page of the official Apple website. Apple declared a phase out of the worst chemicals in its product range, Brominated Fire Retardants (BFRs) and Polyvinyl chloride (PVC), by 2008. Their commitment beats Dell and other computer manufactures' pledge to eliminate them by 2009.

According to Greenpeace, a number of CEOs were vying for the top green spot, and challenging their competitors to adopt industry-wide policies to reduce the problem of e-waste. On the Greenpeace 'Green' scale from 1 to 10, Apple, now in tenth

place, raised its score from 2.7 to 5.3. The company Nokia has maintained the highest score (now 8.0) since the beginning of the ranking. It has already phased out PVC, and met or exceeded a wide set of Greenpeace determined benchmarks. Dell and Chinese manufacturer Lenovo were tied for second place. Sony was the biggest loser in this edition, languishing at the bottom along with LGE.

However, Apple still isn't recycling Apple products other than those sold in the US. Other manufacturers offer worldwide take-back and recycling. As of 2007, Apple hasn't marketed an actual green product, but no other electronics manufacture has either. Canada and the developing world, where there are large numbers of electronic devices, have an opportunity to pressure manufacturers to change their practices. "Cleaner" electronics products will improve the health of people in all sections of the world.

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Environmental protection initiative #3 Building sustainable fisheries in Cuba

Background

The marine and coastal ecosystems in Cuba support an incredible range of species. Important breeding, nesting and feeding sites for fish and other marine species make for astonishing biological diversity. In addition, the region is home to edible fish species. Fortunately, when compared to many other regions, Cuba's marine and coastal ecosystems are relatively well protected. The UN has designated the entire region of Villa Clara as a Special Region of Sustainable Development because people rely on the resources in this ecologically sensitive natural environment.

However, people in several provinces rely on fishing resources and the Cuban fishing industry is growing. Fishing an important part of the Cuban economy and high-protein fish is an essential part of the average Cuban diet. As a result, over-fishing by commercial and individual fishers, use of destructive fishing gear, and loss of critical habitats is putting Cuba's fisheries at risk. To make matters worse, there is a division between conservation and economic laws, conflict between authorities and differing priorities. There is a lack of capital and many fishing villages are remote. Authorities need to link habitat conservation and secure fishing resources to practical programs.

The value of fishing to the Cuban economy, the nutritional value of fish to the Cuban diet and the importance of a sustainable fishery to people in Villa Clara province are important reason to address the issue of over-fishing.

Problem

There is an urgent need to ensure that Cubans have the knowledge, skills and tools to manage its fishery as a sustainable resource.

Project goals

In 2004, the World Wildlife Federation (WWF) worked with the Ministry of Fisheries of the Republic of Cuba to establish a modern sustainable fishery in Northern Villa Clara. CIDA was a major

contributing donor to the \$550, 000 project that ended in 2007.



Protecting the habitat and adopting environmentally sensitive fishing practices will sustain Cuba's important fishing industry. Source: MarineBio.org

Strategy

WWF based the project on eco-system management (EBM) balances the social and economic needs of communities and the maintenance of healthy ecosystems. EBM improves fisheries management, reduces the impacts of fishing and promotes sustainably caught seafood. The project focused on the province of Villa Clara on the north-central coast of Cuba. The area encompassed 128,000 hectares of coastal and offshore areas that included extensive beaches, mangrove forests, sea-grass beds, patches of coral reefs and a deep marine shelf.

Working with local people, international workers launched habitat protection campaigns and taught environmentally friendly fishing techniques. Local people were involved in the conservation efforts to ensure the solutions last.

Outcome

The project was a successful community-training project in sustainable fisheries. It increased the sustainability and value of an important fishery through habitat protection. As well, local people worked in the conservation efforts. The results are less marine pollution, stronger local economies, better fishing practices and more protection for

endangered species. The project laid the groundwork for alternative fisheries and community-based aquaculture. By combining environmental action with economic development, communities are now part of the solution. The project benefited 3, 000 people in the region and created an interest for similar projects in other areas.

The project helped Cuba integrate conservation with economic development, which brought benefits to the environment and the people. The government is preparing to adopt a strategic plan for the creation of a network of Marine Protected Areas. The WWF-Canada Villa Clara project provides evidence that CIDA's contributions in Cuba are making a difference. Other areas on the island and perhaps other areas in the Caribbean will apply the lessons learned. Canada and the developed world have an opportunity to develop similar projects in other regions around the world to ensure all people in the global village have access to high-protein fish as part of their diet.

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Environmental protection initiative #4 Combating desertification in the Sahel

Background

One of the most dramatic examples of climate unpredictability is the Sahel region. This area includes stretching across Africa, south of the Sahara desert. It includes Burkina Faso, Cape Verde, Chad, Gambia, Ethiopia, Guinea Bissau, Mali, Mauritania, Niger, Senegal, Somalia, and Sudan. The Sahel region was prone to drought before human activity accelerated desertification. Desertification occurs when rural dryland regions are made even drier by human activities and drought. It is a serious environmental problem that affects over 100 countries worldwide. Today, human activity is the main cause of desertification.

Rainfall levels in the Sahel region have declined by 20-40% in recent decades and the soil has been become for for growing. Declining rainfall causes changes in vegetation. For example, grasses give way to small weeds, and shrubs give way to grass cover. As plants get smaller, there are no roots to anchor the soil. High winds can remove fertile topsoils, causing soil erosion. Fields bare of vegetative cover are easily eroded by the strong runoff at the start of the rainy season.

Dryland ecosystems are very fragile, making them vulnerable to over-use by farming or industry. Over-use of the land can result from many different social, economic, and political pressures. People may be pushed onto unsuitable land due to land shortages or poverty. Farmers will often over-cultivate the few available areas of fertile land to increase production of export crops.

Desertification also contributes to global environmental problems, including climate change, loss of biodiversity, and pollution of international waters. Global climate change may in turn accelerate desertification if temperatures increase or if rainfall decreases.

Problem

Food security in the Sahel region is threatened unless governments make an effort to protect the environment and slow desertification.

Project goals

The Agrhymet Regional Centre (ARC) in Niamey, Niger conducts research and training in nine Sahel countries. The goal is to make people in the Sahel region less vulnerable to climate change and to protect the environment. CIDA contributed \$5 million to boost the Centre's research and training between 2002 and 2008.



Herd of cattle entering reserve where forage is guaranteed for the animals - Mauritania 1996

Herders in the Sahel region have problems finding forage or feeding areas for their cattle. FAO: Balderi

Strategy

The Agrhymet Regional Centre (ARC) has two core programs – a training program and an information program. Experts at the ARC range from experts on insects to agricultural scientists. ARC offers three-year engineering programs related to Sahel food security and two-year diploma courses for technicians. The Centre also has the necessary equipment to make mathematical models, digital maps and publish materials.

ARC produces, manages and distributes information about food security, ways of combating desertification and management of renewable natural resources. The Centre has a network of national correspondents. It also has the equipment it vitally needs to process data and train technicians.

Outcome

Prior to receiving CIDA funding, the ARC had already made valuable contributions to research on desertification in the Sahel region. Thanks to

partnerships like the one with CIDA, they continue to gather data and bring solutions to marginalized inhabitants of the Sahel. Their efforts are increasingly necessary as desertification intensifies, affecting millions.

In the fall of 2007, 70 students graduated with Bachelor Degrees in Engineering, Agronomy, Hydrology, Instrumentation and Microcomputing. As well, twenty students earned higher technician in crop protection diplomas. To date, 935 students have graduated from ARC. ARC training programs have a significant impact on countries in the Sahel region. More than 60% of the personnel of relevant national services are ARC graduates. Countries within the Sahel region will benefit from ARC programs as graduates work to protect the fragile eco-system of the drylands. Canada and the developing world have an opportunity to learn from the research at the Centre as they work to protect drylands in other areas of the globe.

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