

Text 1: Rain-Forest Threats Resume

1 Until recently, Brazil stood out as a hopeful outlier in the plague of deforestation. Be-
 tween 1990 and 2010 the clearing of tropical forests increased 62 percent worldwide, but
 in Brazil, such destruction plummeted from 2004 to 2011, in part because of tough envi-
 5 ronmental regulations and a ban on the sale of soybeans grown on rain-forest-cleared
 land. Since August 2014, however, tree cutting more than doubled in the country com-
 pared with the same period a year earlier, according to a satellite analysis released this
 spring by the independent institution Imazon¹.

The report may signal a new round of challenges facing the world's largest rainforest.
 Most of the land cleared in the uptick will serve as cattle pasture, spurred by higher global
 10 prices for beef. (Cutting the forest for ranches is the largest driver of deforestation in the
 Brazilian Amazon, accounting for nearly 70 percent of clearing.) And Brazil's recently
 reelected president, Dilma Rousseff, has called for several new hydroelectric dams and a
 major highway that, if built, will slice through the pristine heart of the Amazon.

Her administration also supports legislation that weakens environmental protections and
 15 offers amnesty to those who illegally cut down trees, citing the need for economic growth.
 A 2014 study by Brazil's National Institute for Space Research found that deforestation,
 especially extensive cutting along the southern edge of Amazonia, has decreased the
 movement of atmospheric moisture to the south. Climate scientists at the institute say the
 change is a possible factor in a severe drought that has necessitated rationing of water in
 20 Brazil's largest metropolis, Sao Paulo. And if clearing of the Amazon continues, says Phil-
 lip Fearnside, a biologist at Brazil's Amazon research institute INPA², "you will end up
 with a permanent drought, not just a one-year thing."

Tree loss in the Amazon reverberates beyond Brazil's boundaries. It reshuffles the climate
 deck for the entire Western Hemisphere: the rainforest pumps 20 billion tons of water
 25 vapor daily into the atmosphere through leaf transpiration, an influx that has ripple effects
 in weather systems a continent away. The Amazon is currently nearly 20 percent defor-
 ested, which may be close to a tipping point in terms of ability to maintain the climate
 system and rains that it helps to support, says pioneering Amazon researcher Thomas
 Lovejoy. A perfect storm of deforestation, fire and climate change, he fears, could poten-
 30 tially transform vast swaths of southern and eastern Amazon into savanna.

One 2013 study, for example, predicts that a fully deforested Amazon would mean 50 per-
 cent less snowfall in California's Sierra Nevada, quashing spring runoff vital to the re-
 gion's agriculture. (Whether the present level of deforestation factors in the current West
 Coast drought is unknown.) To avoid further damage, many players will need to come to-
 35 gether, but Brazil now appears to be moving in the opposite direction.

*From: Richard Schiffman: "Rain-Forest Threats Resume." In: Scientific American, June 1, 2015.
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Annotations

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| 1 | Imazon | non-profit research institution |
| 2 | INPA | Brazil's Amazon research institute |

Text 2: Extract from: Encyclical Letter Laudato Si

1 Humanity is called to recognize the need for changes to lifestyle, production and consumption, in order to combat [global] warming or at least the human causes which produce or aggravate it. It is true that there are other factors (such as volcanic activity, variations in the earth's orbit and axis, the solar cycle), yet a number of scientific studies indicate that most global warming in recent decades is due to the great concentration of greenhouse gases (carbon dioxide, methane, nitrogen oxides and others) released mainly as a result of human activity. [...]

Climate change is a global problem with grave implications: environmental, social, economic, political and for the distribution of goods. It represents one of the principal challenges facing humanity in our day. Its worst impact will probably be felt by developing countries in coming decades. Many of the poor live in areas particularly affected by phenomena related to warming, and their means of subsistence are largely dependent on natural reserves and ecosystemic services such as agriculture, fishing and forestry. They have no other financial activities or resources which can enable them to adapt to climate change or to face natural disasters, and their access to social services and protection is very limited. For example, changes in climate, to which animals and plants cannot adapt, lead them to migrate; this in turn affects the livelihood of the poor, who are then forced to leave their homes, with great uncertainty for their future and that of their children. There has been a tragic rise in the number of migrants seeking to flee from the growing poverty caused by environmental degradation. They are not recognized by international conventions as refugees; they bear the loss of the lives they have left behind, without enjoying any legal protection whatsoever.

Sadly, there is widespread indifference to such suffering, which is even now taking place throughout our world. Our lack of response to these tragedies involving our brothers and sisters points to the loss of that sense of responsibility for our fellow men and women upon which all civil society is founded.

From: Pope Francis: Laudato Si. Chapter One; Pollution and climate change [23] and [25] (24th May 2015); <http://w2.vatican.va> (14th September 2015).

Tasksheet

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Do the following tasks, using your own words as far as appropriate.

Describe the changes in Brazil's environmental situation.

Analyze the implications deforestation of the Amazon and climate change have worldwide. Consider both texts.

State the intention of each text and show how language and style support it.

“When people become self-centred and self-enclosed, their greed increases. The emptier a person's heart is, the more he or she needs things to buy, own and consume.” (Chapter 6 [204])

Pope Francis (born 1936)

Reflect on this statement. Write a text of about 350 words and count your words.