

KEY TERMS:

BIGGEST PROBLEM?

carbon-emissions rhetoric

alarmist climate-change

policy

NOTE-TAKING COLUMN: Complete this section <u>during</u> the	CUE COLUMN: Complete this section
video. Include definitions and key terms.	after the video.
What did the latest study from the United Nations Intergovernmental Panel on Climate Change find?	How does the data provided in the video differ from the narrative that climate change alarmists promulgate?
What is the primary factor in the dramatic decline in the death rates from floods, extreme temperatures, droughts, and storms?	
	How is alarmism over climate change more harmful than helpful?
What expectation does the International Energy Agency have for the use of wind and solar energy by 2040?	

DISCUSSION & REVIEW QUESTIONS:

- What factors regarding the climate change debate does Dr. Lomborg stipulate are a reality?
 Do you think that these acknowledgements can be the basis for a more meaningful
 discussion about influencing climate change policy? Why or why not? What are the main
 obstacles to effective climate change discussions?
- Dr. Lomborg teaches us that, "If we want to help the world's poor who are most threatened by natural disasters, it is less about cutting carbon emissions than it is about pulling them out of poverty," and that, "The dramatic decline [in deaths from natural disasters] is mostly due to economic development that helps nations withstand catastrophes." What could some examples of this happening be? What realistic methods of economic development might contribute to help 'pull the poor up out of poverty' in countries such as the Philippines or Guatemala?
- Dr. Lomborg states, "...a one-sided focus on worst-case stories is a poor foundation for sound policies." If well-meaning environmentalists wish to actually preserve the planet, why do you think that they focus so heavily on the one-sided, worst case scenarios in order to attempt to influence policy rather than on sound reasoning derived from legitimate data? Shouldn't agreement on factual data be the starting point for discussing solutions?
- Who makes climate change policy, and how best should those policy makers go about doing
 what's best for the environment? Considering that each nation and each law-making body
 have their own interests, agendas, and influencers, do you believe it to be possible for global
 cooperation in regards to what Dr. Lomborg refers to as 'smart solutions?' Why or why not?
- Considering that carbon emissions continue to rise, especially in rapid-growth industrial nations like China and India, and that solar and wind power will continue to be egregiously expensive to convert and use, Dr. Lomborg explains that, "...we should focus on investing in research and development of green energy to lower its costs, so everybody will want it, including China and India." Do you agree with this proposed solution? Why or why not? What solutions would you offer?

EXTEND THE LEARNING:

CASE STUDY: Wheat

INSTRUCTIONS: Read the article "Wheat yields to fall more than expected in warmer world" and "Wheat Production Sets New Records Thanks To Global Warming," then answer the questions that follow.

- Do you consider the Reuters article to be 'alarmist?' Why or why not? What language and claims make the Reuters article 'alarmist,' if any? If the language and claims are not alarmist, what are they?
- Which 'experts' or 'expert agencies' does each article site? Should lawmakers use any of the data or claims in these articles to decide policy (such as the proposal to develop wheat that is more 'heat tolerant')? Why or why not?
- Do you think the Reuters article might be more helpful or be more counterproductive to the environmentalist agenda to save the planet? In what ways?



1.	What are	three	horsemen	of the	"climate	apocalypse'	"?
----	----------	-------	----------	--------	----------	-------------	----

	a. Earthquakes, wildfires, and droughts.b. Hurricanes, tsunamis, and droughts.c. Earthquakes, tornados, and tsunamis.d. Hurricanes, wildfires, and droughts.
2. that	In 2040, under its most optimistic scenario, the International Energy Agency estimates t of the world's energy will come from wind and solar. a. 42% b. 22.2% c. 11.7% d. 2.2%
3. focu	Hurricane Sandy would have caused much less damage if New York and New Jersey used resources on which of the following? a. Building sea walls. b. Adding storm doors to the subway system. c. Make porous pavements. d. All of the above.
	When innovation eventually makes green energy as cheap or cheaper than fossil fuel ergy, everyone will use it, including China and India. a. True b. False
5.	One of the most persistent claims in the climate debate is that global warming leads to

a. more extreme weather

b. more famine

QUIZ - ANSWER KEY

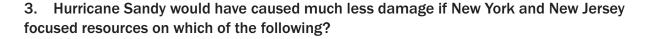
IS CLIMATE CHANGE OUR BIGGEST PROBLEM?

1	What are three	horsemen of the	"climate	anocalynse"?
ж.	wilat are tillet	; 110136111611 01 1116	Cilliate	apucatypse :

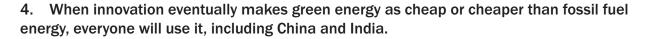
- a. Earthquakes, wildfires, and droughts.
- b. Hurricanes, tsunamis, and droughts.
- c. Earthquakes, tornados, and tsunamis.
- d. Hurricanes, wildfires, and droughts.

2.	In 2040, under its most optimistic scenario, the International Energy Agency estimates
that	of the world's energy will come from wind and solar.

- a. 42%
- b. 22.2%
- c. 11.7%
- d. 2.2%



- a. Building sea walls.
- b. Adding storm doors to the subway system.
- c. Make porous pavements.
- d. All of the above.



- a. True
- b. False

5. One of the most persistent claims in the climate debate is that global warming leads to

- a. more extreme weather
- b. more famine
- c. more death
- d. more wars



Edition: UK

Commodities | Mon Dec 22, 2014 4:00pm GMT

Wheat yields to fall more than expected in warmer world

By Alister Doyle, Environment Correspondent

OSLO, Dec 22 (Reuters) - Global warming will cut average wheat yields by six percent for every degree Celsius (1.8 Fahrenheit) of temperature rise in a bigger-than-expected brake on food production in a hotter world, a study said on Monday.

The report, by a U.S.-led team of scientists, said a six percent drop would be 42 million tonnes of 701 million tonnes of wheat production worldwide in 2012, highlighting a need to breed more heat-tolerant crops.

In recent decades, wheat yields had declined in hotter sites such as in India, Africa, <u>Brazil</u> and Australia, more than offsetting yield gains in some cooler places including parts of the United States, Europe and China, the study showed.

"Global wheat production is estimated to fall by 6 percent for each degree Celsius of further temperature increase," according to the scientists who used wheat crop computer models and field experiments.

They said there were wide possibilities to limit the damage from higher temperatures by developing new types of wheat to tolerate extra heat, especially in warm regions.

The study examined only temperatures, not for instance the fact that more carbon dioxide - the main greenhouse gas emitted by burning fossil fuels - is an airborne fertiliser. It also did not try to assess possible changes in rainfall patterns.

"Wheat yield declines in response to temperature impacts only are likely to be larger than previously thought and should be expected earlier, starting even with small increases in temperature," they wrote.

Joergen Eivind Olesen, a professor at the University of Aarhus in Denmark who was one of the authors, said the focus on temperature alone meant the study "is not the complete picture".

"Even so, in many parts of the world there would still be a decrease in yields" even with small temperature rises, he said.

In March, the U.N.'s Intergovernmental Panel on Climate Change projected that yields of wheat, rice and maize would fall overall with temperature rises of 2 degrees C (3.6 F) above late 20th century levels - a higher threshold than in Monday's study.

Average world temperatures have risen by about 0.9 C (1.5F) since the Industrial Revolution and are projected to rise by between 0.3 and 4.8 C (0.5-8.6F) this century, depending on whether governments cut emissions or let them keep rising. (Editing by David Evans)

http://uk.reuters.com/article/2014/12/22/climatechange-wheat-idUKL6N0U617O20141222

Energy & Environment
The Little Black Book of Billionaire Secrets
Dec 26, 2014 @ 02:52 PM 11,662 views

Wheat Production Sets New Records Thanks To Global Warming

James Taylor

Contributor

I write about energy and environment issues.

Opinions expressed by Forbes Contributors are their own.

Global wheat production set new records in 2013 and 2014, contradicting alarmists' claims that global warming is reducing wheat harvests.

Global warming alarmists and their lapdog media allies decided Christmas Week 2014 should be filled with claims that global warming is crushing wheat production. Grist, Reuters, the UK *Guardian*, and the *Columbus Dispatch* are among the many news organizations parroting alarmist assertions that global warming is reducing wheat harvests. The Reuters article, for example, cites a study co-authored by several global warming alarmists to claim, "In recent decades, wheat yields had declined in hotter sites such as India, Africa, Brazil and Australia, more than offsetting yield gains in some cooler places including parts of the United States, Europe and China."

Reuters did not indicate whether it had fact-checked the straightforward claim that global crop yields have been declining in recent decades. Reuters also failed to provide any countering viewpoint, giving readers the impression that declining global wheat yields are universally recognized. Knowing, however, that global warming alarmists and their ventriloquist dummies in the media often make straightforward factual claims that are proven false by objective, verifiable data, I decided to fact-check their straightforward claim about declining global wheat yields.



Global wheat production sets new records virtually every year, contradicting alarmist' claims of falling production.

Not only are global wheat yields not declining, they are rising at a spectacular pace. According to objective <u>U.S. Department of Agriculture</u> (USDA) data, global wheat yields have risen by 33 percent since 1994. Moreover, there has been a 4 percent increase in areas harvested for wheat, indicating increased atmospheric carbon dioxide, improved soil moisture, and global warming are making more lands suitable for wheat harvests. Cumulatively, the 33 percent increase in wheat yield per acre and the 4 percent increase in land harvested for wheat add up to a near 40 percent increase in the global wheat harvest since 1994.

The spectacular gains in wheat yields show no signs of slowing down as the Earth continues its modest warming. The year 2014 saw the highest global wheat yield in history, exceeding the 2013 yield that had also set a new record.

Looking a little closer at wheat production data, the alarmists' propensity for telling lies extends far beyond lies about global wheat production. It turns out the alarmists and their media allies are also telling lies about wheat production in the very nations and continents they claim are experiencing wheat production declines — India, Africa, Brazil and Australia.

Let's start by looking at Africa. Egypt is the only African nation that cracks the global top 20 in wheat production. In Egypt, wheat output has quadrupled during the past three decades, with the past 10 years producing the 10 highest wheat crops in Egyptian history. This is quite a contradiction to Reuters' claim that "In recent decades, wheat yields had declined in hotter sites such as India, Africa, Brazil and Australia...."

And it's not just Egypt, either. Africa's second largest wheat producer, Morocco, <u>produced its largest wheat crop in history</u> in 2013.

On the other side of the African continent, South Africa also <u>produced record wheat yields in 2014</u>, continuing a trend of rising South African wheat yields that extends back to the 1980s. Taking advantage of

rapidly rising wheat yields, South Africans have been able to cut the area cultivated for wheat production to merely one-third of 1980s levels while still maintaining steady total wheat production. This has enabled South Africans to produce additional crops on former wheat farms and return much of the cropland to its natural condition for Africa's iconic wildlife.

Reuters' alarmist claims are just as false regarding, Brazil, India, and Australia.

Brazil <u>produced record wheat yields</u> in 2014, with this year's wheat crop fully 30 percent larger than the previous record, set in 2013.

India is also likely to have <u>produced a record wheat crop this year</u>, with Indian wheat production surpassing the prior record, set in 2012. The USDA explicitly credits favorable weather conditions for India's record wheat crop.

Of all the nations and continents that Reuters claims is experiencing declining wheat production, Australia is the only one not to have produced a record crop in 2013 or 2014. Nevertheless, Australia's 2014 wheat crop was the eighth largest in its history, with the record crop produced just three years ago in 2011. In fact, Australia's wheat production has been <u>rising at a strong and steady pace for more than four decades</u>. This year's Australian wheat crop, for example, is nearly four times as large as the 1972 wheat crop.

Reuters isn't alone in making ridiculous and provably false claims about global warming reducing wheat harvests. Grist published similar claims in an article titled, "Bad news for wheat and eaters everywhere." Moreover, the Guardian claimed a decline in global wheat production is causing rising food prices, which in turn are causing food riots in developing nations. The Guardian had the audacity to claim its false claim of falling wheat production "counters the optimistic projections of some climate change skeptics, who argue that more carbon dioxide in the atmosphere will increase plant growth, as they take up carbon from the air for photosynthesis." Guardian readers who don't read Forbes.com or who haven't researched the facts for themselves are likely to believe the Guardian's agenda-driven global warming lies.

This newest round of global warming alarmism –with global warming activists and their willfully ignorant media allies attempting to dupe people into believing global warming is causing a decline in wheat harvests – is a perfect illustration of all that is wrong with the alarmist global warming movement. The alarmists count on people being either too stupid or too detached from the objective facts to discover the falsity of the alarmists' claims. Fortunately, however, people are smarter than the alarmists think.

http://www.forbes.com/sites/jamestaylor/2014/12/26/wheat-production-sets-new-records-thanks-to-global-warming/