

US INTELLIGENCE COMMUNITY: STILL NOT GETTING IT ON CLIMATE CHANGE

I'm going to have more to say about the Global Trends 2030 document in a few days. But for the moment I want to just point to what it says about climate change.

It considers climate change both a significant factor in one of its mega trends—"food, water, energy nexus" ("in combination with climate change," the report adds to this category in the body of the text but not the executive summary) and a potential Black Swan that could cause disruptive impact.

But (as previous National Intelligence Council documents also have done) it treats climate change as something that will primarily affect the world by "aggravating" existing food and water scarcity, not by causing it (and not how cagey the language is, here avoiding naming climate change directly).

The increasing nexus among food, water, and energy— in combination with climate change—will have far-reaching effects on global development over the next 15-20 years. In a tectonic shift, demand for these resources will grow substantially owing to an increase in the global population from 7.1 billion today to 8.3 billion by 2030. As we have discussed, an expanding middle class and swelling urban populations will increase pressures on critical resources—particularly food and water—but new technologies—such as "vertical" farming in high-rise structures which also reduce transportation costs —could help expand needed resources. **Food and water**

security is being aggravated by changing weather conditions outside of expected norms.

We are not necessarily headed into a world of scarcities, but policymakers and their private sector partners will need to be proactive to avoid scarcities in the future.

[snip]

Climate change impacts on food and water availability will vary widely by region and probably will be more limited in the period out to 2030 than in the decade after that. In the medium-term, atmospheric carbon rise is expected to boost carbon fertilization and thereby crop yields; however, the impact of climate change on extreme weather events (see box on page 32) probably will offset the positive effect on farming. Moreover, climate change analysis suggests that average precipitation patterns will change such that wet areas will become wetter while dry, arid areas will become more so. Much of the decline in precipitation will occur in the Middle East and northern Africa, as well as western Central Asia, southern Europe, southern Africa and **the US Southwest**. [my emphasis]

This, written in a the richest country in the world, which produces more than any other country, yet in which a sixth of the population already faces food scarcity. And written in a country in which 60% of the country—including much of its less arid land—is facing a historic drought. It seems inconceivable after the last few years to see climate change affecting agriculture only in arid places.

And the focus seems to be exclusively on climate change's impact on agriculture, not society-disruptive events themselves. Consider the way

it discusses rivers as sources for agriculture.

Recent scientific work shows that temperature anomalies during growing seasons and persistent droughts have lessened agricultural productivity. degraded agricultural productivity, when coupled with more protectionist national policies tightening global supply, undercuts food security, especially in impoverished regions.

Flows in the Nile, Tigris-Euphrates, Niger, Amazon, and Mekong river basins have been diminished by droughts that have persisted during the past decade. Although weather patterns in these regions are dominated by natural variability, these persistent droughts are consistent with the expected effects of warming from increased greenhouse gas concentrations in the atmosphere.

Flows have also been affected—through flood last year and drought this year—in the Mississippi. And the Great Lakes. And these flows have not just affected agriculture, but even more so, shipping. Yet, there's little attention to how climate change is literally reshaping the globe, which will have impacts beyond hunger.

And while it discusses how governance and climate change interact, with the “best case” (right column) being that rising powers (AKA China) may be prepared to make economic sacrifices, but it's “worst case” (central column) focuses only on the issue itself, not what happens when climate negotiations collapse, as the continue to do.

Climate Change	Annual meetings have failed to yield any new post-Kyoto comprehensive agreement.	Global economic slowdown makes it impossible for the US, China, and other major emitters to reach meaningful agreement. The result leaves UN-sponsored climate negotiations in a state of collapse, with greenhouse gas emissions unchecked.	Cheaper and more plentiful natural gas make emissions target easier to achieve, but so-called “two-degree” target would be unlikely to be met. As disparities between rich and poor countries decrease, rising powers may be more prepared to make economic sacrifices.
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Moreover, it doesn't seem to factor in how climate change itself, rather than food scarcity

or some weather events (it includes Tsunamis but not floods), will challenge governance going forward. Bangladesh—one of the countries that faces the most daunting challenges because of climate—even does better than previously (though still quite badly) on the list of countries that might face collapse.

Then there's the Black Swan events. Some of the others include pandemic, collapsed EU or China, "reformed" Iran—all a collection of totally foreseeable events that demonstrate that these are not Black Swans at all, but predictable and possibly even likely events (and the fact it includes Iran on this list shows a bias towards the maintenance of current US hegemony, even while saying that won't sustain).

Here's what it says about climate change as a Black Swan.

Much More Rapid Climate Change: dramatic and unforeseen changes already are occurring at a faster rate than expected. Most scientists are not confident of being able to predict such events. rapid changes in precipitation patterns—such as monsoons in India and the rest of Asia—could sharply disrupt that region's ability to feed its population. But it seems unaware of the many ways climate change will affect the issues it treats.

It admits that climate change is already happening faster than expected, its best case scenario doesn't see us stalling warming at 2 degrees—after which the climatologists see real catastrophe. And yet it considers this a Black Swan, not the central event that will guide events 18 years out. Again, the threat is seen primarily in terms of food scarcity and not the disruption caused by losing entire cities.

As I said, I'll return to this later in the week (and those with the time should read how the report discusses fracking and other energy

sources, which is the counterpart to this weird approach on climate). But for the moment, understand that the climate change exacerbated weather that still has people in NYC left without power and still has shipping on the Mississippi facing daunting challenges doesn't really factor in our Intelligence Community's understanding of what life will be like in 18 years, to say nothing of today.