



Not Just The Weather Changes Social and Economic Risks Associated with Climate Change

Outside of environmental concerns, climate change promises to dramatically shift the fabric of global society and business.

Climate change has become about much more than the weather. New studies of the social and economic elements that would be impacted by a shifting climate are revealing both direct and indirect risks. Yet it's not just scientists taking notice – Ernst & Young notes that in the last few years, half of shareholder proposals have centered on social and environmental issues, forcing businesses to do more. Ernst & Young is a multinational professional services firm headquartered in London, United Kingdom. It was the third largest professional services firm in the world by aggregated revenue in 2012.

A large part of doing more means understanding where work needs to be done. By understanding the key social and economic factors in play, business leaders can guide their firms successfully through the shifting climate landscape in the decades ahead.

Social Risks of Climate Change

The social risks of climate change are often left out of the discussion, even as governments take steps to mitigate the economic risk. Yet of the two, it is social risks that may have the most lasting impact, since they dictate humanity's ongoing ability to adapt.

According to the United Nations Development Program (UNDP), failing to address climate change issues sentences the poorest 40 percent of the world's population to a future of diminished opportunities. That's 2.6 billion people facing an increasingly bleak future ... and not simply because their incomes are closely tied to how well agricultural and fishing activities can be carried out.

The world's poorest people are the most vulnerable because they have limited access to good social support systems. What's in place in many regions where poverty reigns are fragile structures that can be easily disrupted – and once gone, these systems are hard to replace. There will be very direct and real casualties of a lack of access to clean water, food, and basic health services.

Indirectly, there's the risk that by not helping this part of the world population, we're handicapping our future. Many of the world's poor live in the less developed nations of Africa, South America, and Southern Asia. Yet these nations are also experiencing some of the fastest rates of economic growth in the world and benefit from young, exploding populations coming into the workforce. Allowing climate change to undercut all the progress being made creates the risk that these regions will slide into chaos that could take generations to rebuild.



Plus, when the great young minds of these regions focused on basic survival and adaptation, they often put aside experimentation. This potentially robs humanity of the next wave of true innovators, pulling down the entire global development framework. Without talented workers on the ground, global supply chains degrade and everyone's capacity for ongoing expansion diminishes.

This gives a more serious element to community investment and advocacy in at-risk regions. Far better than surface efforts, then, is to work to support these areas with meaningful initiatives in the face of climate change so that future thinkers can grow up in a stable social environment with good access to educational resources.

Economic Risks of Climate Change

Though the economic risks of climate change are often considered first, they grow directly from the social risks. As social systems crumble, so too do the underpinnings of economic activity at all levels.

Some of the direct risks come in the form of reduced workforce capacity, lower growth rates, and higher costs of production. In an environment where billions have been displaced by rising seas or starved by shifting weather patterns, worker quality suffers. In turn, it is harder for firms to expand or even maintain global operations, particularly in at-risk coastal areas or regions where the infrastructure depends on stable weather patterns. Finally, when natural resources like water become scarce, production costs rise as organizations compete with individuals for supplies.

For businesses, a major challenge is estimating these future costs so that appropriate investments in automation or energy efficient systems can be made. But even setting a specific dollar amount on elements that impact climate change, such as carbon emissions, can be frustrating. Even where scientists agree, business analysts often don't.

Estimates of the direct cost of one ton of carbon emission in the US have been pegged at \$37 in future harm costs by the Interagency Working Group on the Social Cost of Carbon in a study commissioned by the US government in 2013. Other international models have put the cost at anywhere from \$12 to \$67 per ton (for the year 2020). These wide ranges bring uncertainty to prediction models, creating a further economic risk of making the wrong kind of choices.

Indirectly, the funds spent mitigating climate change pull away from a company's ability to invest in other areas. While this seems obvious when written – that a dollar spent in one area can't simultaneously be spent in another – it can be extremely difficult to show that the costs of not offsetting the impacts of climate change now may be an inability to invest in other areas of the business in five years ... ten years ... or further down the lifecycle of the firm.

And yet, it is exactly this long-range view that both businesses and individuals need to consider. Short-term gains in profits by delaying green investment or opting for less expensive but non-recycled goods may come with much higher long-term price tags. Locating certain production sites in at-risk regions may be affordable in this decade, but completely unsustainably over the life of the



factory when longer effects are taken into account. So taking the time to consider what happens 10 and 20 years down the line can prevent wasted economic investments.

Taking a longer view also helps offset the perceived grimness of listing out different social and economic risks of climate change. The reality is that our climate has changed – often dramatically – throughout the centuries, and humanity has adapted to survive. By understanding the risks in advance, it is easier for both businesses and individuals to start the adaptation now, reducing the negative impacts of these risks and setting the stage for a bright future in any kind of weather.