

I'm Mike Goudzwaard, the Instructional Designer for ENVX. I was recently in Melbourne, Australia, and had the opportunity to interview Phil Connors, a faculty member from Deakin University. We discussed human population and resource use. Like the United States, Australia is a developed country, but many of its neighbors are developing nations. Here's our conversation.

That's a really interesting question because carrying capacity of the Earth depends on the resources that people are using. So for instance, if everybody used the same resources that we use in Australia per head of capita, then it would be like probably 2 and 1/2 to 3 Earths that we would require to use those resources. And so for me, it's more of a sociological understanding about what is it about people and the use of resources.

So depending on how we look at it, there could be different populations depending on how many resources we are using. I know, for instance, as a global population, we're using something like 1.7 Earths at the rate we're going at the moment-- something along those lines. But probably less than a quarter of the global population is probably using 3/4 of those resources. So for me, it's a case of not so much having a set number of people, but it's how those resources are utilized, and how those resources are distributed between the population that we've got.

First thing, I think we probably are. There seems to be a slowing in population growth. And from what I can gather, it's going to peak out at about 9 billion or 9 and 1/2 billion or somewhere around there, and then start to fall away. And you've got a lot of societies, for instance, Japan, Australia, probably the US, where you've got large aging populations. Although in developing countries or countries of the south, you've got very young populations.

But again, it comes back to that resource use. For me, it also comes back to that notion about our economic system. If we continue with a growth-based economic system, then it's not going to be sustainable even if we had half the number of people on the planet. If it's a continual growth rate, then we're going to constantly be using resources unless we can-- and science has been very good at being able to utilize less to provide more resources. But that can't continue. There's been a decreasing rate in the way that science can assist in that process.

So you've got to have that decoupling of resource use from an economic-- what's considered economic

growth. And so we need to look at all of those different sorts of systems. And I would be loathe to put a carrying capacity figure on something, because I think if we start to look at a figure and we don't look at those other issues, then it's not going to help us much at all, unless we start to change the way that our whole economic system and that our whole social structures are developed.

I suppose for me it's about using resources at a rate at which they can be replaced by natural processes, and not producing or only producing waste that can be reabsorbed by natural processes, which the way certainly G20 societies are going at the moment, is not sustainable at all. So I look at it more along those lines.

Interestingly, in my research with them, there's been no indigenous communities that have actually [INAUDIBLE] up, probably because they don't need to because they've learned, say, certainly in Australia-- indigenous populations are probably far better able to understand what sustainability is and have their understanding about that. So it's interesting to see where these things are picked up and who is using them, and what information is being brought out about them. But those sorts of alternative understandings can be very useful at raising people's awareness.

My other concern about that sort of thing is how much are they talking to the converted. Those people who already have a good understanding about sustainability and about lower resource use and so forth have a smaller footprint on the planet rather than how [INAUDIBLE] can they engage with those that may not be in that space already.

So for me, it's also about a cosmopolitan understanding, is how do you link communities up in one country with those in another? Different contexts, and get them to talk across that difference and look at those issues around sustainability. What's meaningful in one place may be quite different in another. How do we understand that?

Phil, thank you so much from everyone at Dartmouth and for the students of our Introduction to Environmental Science.