

**Policy 360 Transcript – Episode 92 – Don’t Just Document Declines in Nature. Reverse Them.**

Judith Kelley: Hello, and welcome to Policy 360. I am Judith Kelley, Dean of the Sanford School of Public Policy at Duke University.

Judith Kelley: A new intergovernmental report has sobering news about the health of the planet. Scientists say that a million species of plants and animals could go extinct, many within our lifetimes. And the causes are clear. Human actions like overfishing, turning natural areas into farms and cities, pollution and burning fossil fuels. The report was issued by the Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services, or IPBES, or I-P-B-E-S.

Judith Kelley: Hundreds of researchers contributed to it and the summary alone had to be approved by more than a hundred nations. One contributor to the report is with me today, Alexander Pfaff. That name may sound familiar to regular listeners. Alex was a guest on Policy 360 not long ago. Alex is a Professor of Public Policy, Economics, and Environment here at the Sanford School. Welcome to Policy 360.

Alexander Pfaff: Thank you.

Judith Kelley: So, what was your role in writing this report?

Alexander Pfaff: I was a coordinating lead author, and in this case one of two authors, on the driver section or, what seems to have caused these changes over the last 50 years. There's about six chapters. And there's some forecasts, some scenarios, some options for the future. We were: What led these changes to happen?

Judith Kelley: So there was a report that came out prior. How long ago did the prior report come out?

Alexander Pfaff: I think this IPBES report can best be thought of as a follow up on the millennium assessment, which was early 2000s. The sort of cousin of IPBES, IPCC, has had reports maybe every four, five years for a while, and I hope that this global assessment is the start of a trend like that.

Judith Kelley: So, are things, if we were to draw some trends, speaking of trends, trendlines. Are things getting better, staying the same, getting worse, getting worse at the rates that we predicted they would get worse at. What's the overall picture?

Alexander Pfaff: So the reports certainly says that natural conditions are getting worse. I guess, since life tends to pollute, consumption involves production uses nature, some getting worse is not surprising. I think is it accelerating or slowing down is an important question and that varies by where you are in the world. Including something, the report highlights because trade, that in an evermore globalized world, as we see in the paper every day, where you're eating could be different from where natures being used.

Judith Kelley: Mm-hmm, so after report was published you wrote a piece for the Hill. And you said the report will yield a call to action but that, I'm quoting you here "We have learned unfortunately that good intentions of just doing something often yields little in terms of actual results". So what did you mean by that?

Alexander Pfaff: Right, I think, this is not a new idea to have environmental interventions as I mentioned in the Hill paper its mentioned silent spring by Rachel Carson in the 60s "A true call to arms to change the way we, for instance use pesticides". And a lot of people paid attention. And in the early 70s the U.S. EPA was created, and that has led to some impacts, I mentioned the Clean Air and the Clean Water Act. And especially in richer countries there have been some willingness, has been some willingness, to invest in regulations constraints all sorts of measures that actually change the trade off, between for instance, eating and pollution.

Alexander Pfaff: But around the world, there have been many actions that, beautifully written laws, or lovely protected areas with pictures taken of them with forests all throughout that actually haven't changed anything at all. So I think where were at after the last fifty years is not the new idea that we should do something but we have a lot more knowledge, that just doing anything may not do much at all. We need to get a lot smarter about taking the actions that will actually change these trends.

Judith Kelley: Do we have any good examples to look there. I mean are there cases where maybe laws weren't passed but other people just took actions, or things came about.

Alexander Pfaff: We do. And I think that's why I wanted to call out is, it's especially in a big generalized report that gets a little bit watered down. It's a tremendous set of natural science. But its not certainly able to be a detailed policy suggestion for any given country.

Judith Kelley: Mm-hmm (affirmative)

Alexander Pfaff: If we look around we do find, again, we have real regulations on Clean Air and Clean Water in the U.S. and other richer countries. We have local communities have organized when they depend on their own water supplies or forest resources. They organize to monitor each other to make an agreement about what's a reasonable use.

Alexander Pfaff: Indigenous lands actually have played a large role in that way, something the report highlights. And some global agreements appear to have a difference. For instance in the Montreal Protocol where we tried to fix the ozone hole. Which

really stands out because there richer countries tended to be transferring technology to poorer to help make things happen.

Judith Kelley: Right.

Alexander Pfaff: Which is quite different than saying, "Oh could you lease stop doing agriculture cause we would like those species to exist" that doesn't always go as smoothly.

Judith Kelley: And there also was a technological solution, right?

Alexander Pfaff: Correct.

Judith Kelley: Which is very different from just say do less of everything.

Alexander Pfaff: And that's absolutely right. There was a technological option. I'd emphasize there that, based on the stories I've heard, the provision of that option also helped the firm that was most dominant in providing it, which help the politics. And I think something we really want to bring out, I would like to bring out, is that we have to think hard about who are the actors? Are they being reasonable? Private firms, consumers, government with very different conditions. And ask ourselves what are the things that we really think they might all be willing to make happen

Judith Kelley: Right. So in the article, you list five different hurdles that sort of tripped us up in the past. As we've tried to address climate change and so I thought we might go through them. You said the first one, you said "in the past when polices have affected the environment positively" like the U.S. Clean Air, Water Acts, like we just talked about, then you said "those whose interests are limited by such policies and able to shift public priorities". Can you tell us a little bit about that?

Alexander Pfaff: Sure, and I think that occurs around the globe. Off of West Africa you might have excellent regulations written for having sustainable fish catch but if that limiting a foreign fleet that could make a lot of money. I think we know, including form work done at Duke, that there might be a way to have some corruption, have a bribe to a certain official, so that foreign fleet can take all those fish. Even though it's not in the interest of the whole country, but it was in the interest of one person. In the end, the De jure law wasn't carried out defacto, and that fish catch was eliminated.

Alexander Pfaff: Coming to the U.S., a look at Brazil. We've had significant regime changes at the national level in terms of environmental policy. In Brazil indigenous lands, that very clearly can be shown to limited deforestation, are now being considered as something that might, perhaps should be reduced. The environmental agency has been placed within the agricultural agency. So, someone for this rural agricultural producers, who has a certain amount of weight in the politics in Brasilia, might say "well that's all very fine, but why should this be solved at my expense, and please next president change the way this is happening". Even if

we look in the United States, the current EPA occurs to be very, very focused on reducing the cost of regulation. I think the rhetoric is to keep the core mission, but I believe there are people who worry that the effective constraints on pollution are being removed.

Judith Kelley: When it comes to things like deforestation and other things, to the extent that corruptions, warranted individual incentives might undermine the legal intent or the regulatory intent. Do we have new technological solutions that help us monitor this more intensively than we were able to do in the past.

Alexander Pfaff: I do think that the general trend, of high tech as a way of getting information is going up. I don't work on fisheries? Per se but there are evermore transponders on fishing boats around the world, that can be required to be on and be used to monitor where boats were.

Judith Kelley: Right.

Alexander Pfaff: I think there's an evermore ability to perceive from a satellite whether there's a fire or whether there's been deforestation of certain size. You won't be surprised as a social scientist to know that people then respond to that. That when you change what you can measure. People change the way they deforest, to lower the probability that someone notices and comes after them.

Alexander Pfaff: But I think the general idea of increased measurability helps us think about writing contracts, that can be something that people on the ground will be willing to do. Just to give an example I'll be in Peru soon, talking about small scale mining. And I think if we can detect changes in the forest quickly, and we can write contracts that say "small holders you have a right to do mining as long as you use clean mining practices". We might even be able to shift it so that they become the monitors and call in when external people come to invade their land. And then the federal forces that currently are in a bit of a conflict with the small holders, could actually support them.

Alexander Pfaff: So I think as we get more information as you say, it can change the deals we write to make things that work on the ground.

Judith Kelley: So the second hurdle you identified is that most successful environmental policies have occurred in the richer countries. But that's not where we find the highest population growth and extraction from nature. We tend to find that in the not rich countries, often to the benefit of the rich countries. So what do you mean by extraction from nature and what does it mean for how we should act today?

Alexander Pfaff: Well I think that the point there was, when we point successes and they have occurred in places where people are rich enough to be willing to apy for more cleanness of different varieties. We might realize that the great majority of people, the great majority of the earth, and certainly also, the great majority of

growth in people is going to occur outside those settings so we need to think really hard about how, when people, who then quickly say "hey by the way, you cut down all your trees in the U.S. when you were growing, why don't we do that?" And there should be a good answer something like, "you're right we did, so why don't we make it worth your while". So basically thinking about both richer and poorer in on average, poorer places in asking, how do we set a deal, or a contract or an agreement that answers that question for them and makes them want to do what's globally sensible.

Judith Kelley: There was an agreement that they, were working on, or reached without U.S. buy-in, I guess a few days or weeks ago, about plastic trash or trash and shipping it overseas.

Alexander Pfaff: And that's a huge and growing problem, as you mentioned information there's been evermore ability to take particular pictures and capture this information. And I do think that the world, perhaps anticipating that eventually the U.S. might return to its formal, former somewhat leading role on the environment. Are trying to push ahead on creating institutions and agreements that could be enforced more generally later.

Judith Kelley: All right, the third hurdle you wrote is, it's "is it for richer consumers to blindly import goods from other countries where the degeneration is less affectively regulated but its out of their view". And as the report shows, increasingly they do. So is this a little bit like reverse issue of shipping your trash overseas but you're importing goods.

Alexander Pfaff: Exactly. You're shipping your tree cutting, you're shipping your pollution, overseas. It's exactly what you said, not only are more people in those places. But the consumption around the world is being produced in those places. Currently a lot of middle income countries, have a tremendous number of exports. So they are probably getting to the point where they start to think about regulating but they're really on a growth path. And part of that growth path essentially is shipping their nature off to richer countries who can then sort of happily say "hey look we have regulations, that's not bad".

Alexander Pfaff: But where at the point where the richer consumers thinking about saying especially if they had more information, which is one thing this report is trying to produce, saying "Oh my! I'm actually having an impact elsewhere." Now does everyone care about that? No, but it doesn't hurt to have people be more aware.

Judith Kelley: I mean some of the fair trade and seal of this, that approval. Tries to speak to that sort of, Western coun-

Alexander Pfaff: Dolphin safe tuna, various forms of nice coffee. Which can be, as you say, fair trade, can be about social conditions. But a lot of its about environmental conditions.

Judith Kelley: Right. So, the fourth hurdle you say is "while environmental organizations work across borders they are hindered by" what you call "happy lies". Or sometimes in international relations we just call it HIPPA compliance. So what are happy lies, and why are they a hurdle?

Alexander Pfaff: So we do, if you ask yourself, "is no one looking around the world trying to solve this problem?" Well they are. We have large international environmental NGO's we have the world bank has environmental safe guards. Why has that not prevented these trends? And i think in part the answer is that we have used a bit of a 'check that box' 'did I do something' without worrying enough about well 'what did I accomplish?'. So we even have presented to say the gold environmental fund. Evidence that the protected areas, many of the protected ares, by the time you finished bargaining with people who want to do agriculture. The protected area ends up so far from anywhere, that is indeed beautiful and pristine and it is identical to the non-protected area next to it because there's just nobody out there.

Alexander Pfaff: The U.S. has made the biggest green protected areas in places where there's just nobody there. So you did something, and if you count in hectares its really big, if you count in impact it might be zero. And so, we essentially need to, I think two things we need to do, are move past 'did something check that box' to actually achieve what we need to achieve. And the happy lies, in a way are any number of assessments of 'yes we did something', that actually didn't change very much.

Judith Kelley: Is it just hard for politicians because they make commitments to do something, and in the short term there's suffering in order to obtain the outcome, and the outcome is down the road passed their electro cycle, passed their time when the outcome can be measured and they can benefit from it?

Alexander Pfaff: Yes, and also its often outside their country. So there are transfers from, really positively minded countries in Europe, I'll say without naming any in particular. A certain amount of money flows to a developing country and we say "Look! We did good". And maybe that's because were feeling bad, we make most of our money from oil. But...

Judith Kelley: Without naming any particular countries.

Alexander Pfaff: Without naming them. And yet there hasn't been a lot of attention as to whether that money actually achieved something. I've basically, in a way, I've purchased an indulgence for my domestic consumption. And you know, I did it and you worry about the details. And that's completely natural for a local politics as you say.

Judith Kelley: Are there any sort of bright spots, where things are changing, where it's not just happy lies?

Alexander Pfaff: There are. I think in general the world of expenditures overseas whether through aid, or through international institutions, has a lot more evidence focus than it did. There's beautiful intentions, often, and now there's more pressure to make sure that the actions for good intentions had real outcomes. And I think that's a positive thing, maybe that's biased because university researchers like to push for it and we love evidence. But I think it's also true that there's more evidence based evaluation. Even when you get there though, there's sort of counting some numbers and there's getting good evidence that something happened. And I think pushing that further will be very helpful.

Judith Kelley: So, you say the fifth hurdle to really making a difference when it comes to climate change is that governments struggle to pursue balanced visions. For example agencies they sort of jealously protect a single mandate. Do you have an example of that?

Alexander Pfaff: Yeah, it's in the Hill piece. The example we used was roads very much like we discussed about the China build through road initiative at one point. It is just shockingly rare that in the planning process, all the agencies who could fit in to this sustainable vision are at the table early on. So a road probably comes from a transport ministry, whose mandate is to build roads. An economic development, that's what they do. Someone higher up has to say, "Oops, wait a second, we also have an environment ministry" and actually history is telling us that, not all these roads do very much.

Alexander Pfaff: We had to think pretty hard, about the trade impacts. So could we possibly focus on the roads that actually help the economy and don't sort of needlessly hurt the environment. And for that matter some of them could help the environment, because there's a huge global trend towards urbanization, which will remove some rural pressure. And it is very rare that someone is forcing all the people who have the different agendas to be at the table early in the planning process. That is absolutely doable. You would think, you tell a second grader that "we should probably pay attention to both". But in our current institutions that is quite rare.

Judith Kelley: But don't they have to do like an environmental impact assessment?

Alexander Pfaff: Great question. Those tend to come way down the line after all the big decisions, have been made. Then you say "Hey as long as we're going in this place already", which is all the big choices, "let's make sure not to spill oil". Okay, that's a good thing not to spill, but it's nowhere near, let's not run through this particular protective area or let's go to the places where we were going to get economic concentration and leave a lot of space for nature.

Judith Kelley: Mm-hmm (affirmative)- So now this report has come out, are you happy with the coverage it's gotten? Do you think it's, what as the authors of this report will you hope to accomplish with it? What are they going to do to try to make sure that it gets the attention it needs

Alexander Pfaff: Well it's certainly, they did a great job, getting a huge amount of attention at the release and that tends to be true. And that, but you know so quickly the news cycle passes, and that's actually why I wanted to write the opinion piece. Because I think it's very, very easy to say something should happen. And I guess the way I say it to my fellow IPBES folks is, this is an incredibly detailed picture of sad trends. Right? And we don't really want to write another one in ten years saying "here's another incredibly detailed picture of sad trends". And-

Judith Kelley: Or even sadder trends.

Alexander Pfaff: Or sadder trends right? And we really have to go beyond what people have done with prior calls to action if we want to avoid that.

Judith Kelley: Mm-hmm (affirmative)- We can take a big report like this, but at the end of the day it seems like having young people really speak up, can be incredibly powerful, and you know it's their future in so many ways, as they're claiming.

Alexander Pfaff: I certainly hope so. I think we see this, I think it will play out at the nation by nation level. I think at the country by country level as people get richer you tend to see, 'yes id like to breathe and drink clean water'. I think a tougher question is when those countries go out into the world and they wish to make income, very reasonable. And that income eventually might help people come to the point where they're willing to have a balanced consumption environment in a lifestyle. But can we possibly monitor, as you say, and write deals so that the people who have the right to eat can.

Alexander Pfaff: And yet we can give incentives to them so that we don't have to have ever sadder trends before we get to, as a globe bringing it back up. And at the level of species, a lot of them are not coming back, so some of these things are irreversible which is one thing that this report wants to call out. Even if we do the more general sort of, state of nature, we would really like to avoid having a giant dip as the majority of the glob gets to a reasonable standard of living. And that is doable but it takes a lot more than just 'Oh, I'd like to clean my local air.'

Judith Kelley: What, if anything, did you as an environmental economist learn from being part of this process.

Alexander Pfaff: I think that two things, I was impressed with the tremendous breath of knowledge that the many, many colleges, brought to bear in terms of monitoring how the world is. And I was struck by the many, different dimensions of social science of society that people passionately bring to bear. It wasn't surprising to me, you know, important focus on indigenous lands and important focus on poverty. Almost no two people have exactly the same view on this, but that actually I think is representative of the challenge we face as a world. Is of course we don't have exactly the same situation, we come from different places, we live in different settings, that doesn't mean we couldn't be



serious about figuring out how to avoid this gigantic crash before we are all willing to make it better.

Judith Kelley: Mm-hmm (affirmative)- So the lead scientist of the report says that its not to late to tackle climate change, but only if we start now and if we work at every level from local to global. So given, what we've been talking about, that just seems really daunting, so much needs to change. So what do you think would be the best next step?

Alexander Pfaff: So I think it will actually take, local to global. I actually think local tends to be happening, but it tends to be happening in places where people can afford for it to happen. So the first order, the best next step is to have the richer places that care about these global outcomes go out there, as many people know, and realize that there are ways to, it won't cost nothing, people would love for things to cost nothing. But at some cost less cost than completely reshaping richer economies, which are getting changed with electric cars and solar energy. But they're not most of the world. We need to get out there and help poorer countries, and more middle income countries now which is good, help to continue to develop economically. But just pay attention to things that are absolutely shiftable in terms of lower environmental damage as people develop.

Judith Kelley: Mm-hmm (affirmative)- and are there particular leap frogging opportunities that we should be specifically focusing on so that they don't have to go through.

Alexander Pfaff: That's a great question. I think the answer is yes, on many dimensions. Here at Duke, the set initiative is thinking about leap frogging in energy.

Judith Kelley: Right.

Alexander Pfaff: There is no doubt that, investments in electric battery storage are going to help around the world. If I'm not mistaken the day after Trump pulled the U.S. out of the COP India still announced they were going to cancel some coal plants. Not because they now had a political friend to go save the world. But because they perceived that the cost of storage of solar power had dropped 70% because of innovation. So I do think that these investments in technologies as you say, technological options will potentially be exports for richer countries and help poorer places to leap frog as they did in the Montreal protocol to help Ozone.

Judith Kelley: Well lets, try to hold on to that positive note at the end. Thanks so much for joining me today and for your contribution to this really important report.

Alexander Pfaff: Thanks for having me.

Judith Kelley: Alexander Pfaff, is a professor of Public policy economics and environment here at the Sanford school. He was a contributor to the recent IPBES environmental report that made global headlines.

Judith Kelley: Well have a link to the article we've been talking about. The one Alex wrote for the Hill. That's at our website [policy360.org](http://policy360.org)

Judith Kelley: Next time on the podcast we'll be talking about the growing number of coal plants that are being built around the world and the role China is playing in that growth. We were trying to end on a positive note, but that's for next time.

Judith Kelley: Thanks for joining me, I'm Judith Kelley.