Key Informant Interview 2 USVI

Date:

Stakeholder Group: NGO

Years of Experience in Occupation/Field:

Community/Area/Location:

Speaker 1: Just share with us a little bit about what is your position and what are some of your daily tasks that you do with that position?

Speaker 2: [...] So I'm a coral disease person, a coral ecology person. [...] we have a monitoring station at Coki Point, which is the reef that surrounds pretty much Coral World. Coral World is on a peninsula, kind of like projects out on the Northeast side of the island. And there's this very nice fringing reef around there. So before the disease actually start pretty much emerged or appeared on that reef, the Coki Point Reef, it had been pretty isolated to the west south side of the island for about a year. And then it jumped all the way around and invaded Coki. [...] I was kind of just getting started there and they had asked if I could set up a station to monitor pretty much as a control site, because it hadn't been impacted yet. However, the disease did make its way in there. And so we pretty much have a really good time lapse of the invasion, and then the epidemic, and then now we're in the endemic zone. So kind of became a little bit more involved in that work. [...] So we're out there pretty much treating corals tagging corals, monitoring the effectiveness of those treatments on those colonies. And then, we started progressing into more rescue restoration work because the disease had... it was pretty bad, but now it's kind of cooled down a little bit. So we're starting to the potential resilient or resistant colonies. [...] And so we started going out there and rescuing corals in collaboration with UVI. So I worked very closely with them... Also, sorry, I'm kind of like jumping around here. A lot of stuff that's happened the past two years. So I also help with that monitoring station. That's actually one of UVI's main projects, and so we collaborate with them on that type of work. [...] and, yeah, I am heavily involved in full disease work, rescue restoration, and just, yeah. So that's pretty much me in a nutshell.

Speaker 1: And so, Speaker 2, in your work, do you have any direct or indirect involvement with USVI Fisheries that you could describe?

Speaker 2: So I, actually, don't have very direct involvement, to be completely honest. [...] So very basic conversations with them, but I have not actually been heavily involved on that side of things, here on the Virgin islands.

Speaker 1: And would you say, in your opinion, that USVI coastal communities are highly dependent on fisheries?

Speaker 2: Just fisheries, not the Marine environment in general? Well, yeah. I mean, it is definitely. Well, so I guess, what, fisheries provide... I mean, this is an old stat, but I believe it's around like $6 million a year in free goods and services to the Virgin islands, right? Something like that. So definitely extremely important, I'd say, for coastal communities. The north side, 100%. A lot of my friends, their great-great grandfathers were fishermen, right? So they do it, not just because it's their livelihood, but it's a culture. It's really important to them culturally to be able to teach their kids how to fish. So it's important, for sure, for the culture down here. And then, out where I work at Coki Point, there are definitely people who they rely off of... Yeah. I mean, I would say, yeah, it's very important, I'd say. I mean, not just economically speaking, because it definitely is, but also social. There's a social and cultural component to it that's really valuable as, I guess, the Virgin Islander identity. So I think, yeah, I would say they're extremely important to us down here.

Speaker 1: Yeah. And would you say that USVI fishermen are highly dependent on fisheries for their livelihoods?

Speaker 2: I would say in some cases, definitely. I do know I have friends who a hundred percent of their revenue comes in from the fishing that they do. So I would say 100%. Yeah, it's very important.

Speaker 1: And would you say that USVI coastal communities are highly dependent on coral reefs?

Speaker 2: Yes. I can definitely say that, 100%, not just for the fisheries, right? Of course, that's extremely important, but tourists... I mean, sorry, coral reef induced tourism revenue. So revenue, I mean, about probably 190 to a hundred million a year based off of coral reef. Tourists want to see pretty corals, they want... And healthy corals are pretty corals, and healthy reefs support healthy fisheries. And so it's all connected to each other. So if you have a healthy reef, if you may have also a healthy fishery too. Whereas, if the reef is completely degraded, there's a good chance that the fishery and the fish populations in that area are not going to be that great. So extremely important for that. But also shoreline protection and especially with climate change or predicting the sea... I mean, sea level is rising. It has risen. And that, in combination with increased magnitude frequency of hurricanes, that's not going to be great for us. And so coral reefs provide that buffer to our coastal residential communities. But also, I don't think a lot of people are aware that a lot of our industry is located on the shoreline. And so that's all vulnerable to the effects of climate change, and coral reefs reduced 97% of that wave energy. And so without living actively accreting coral reefs, that's going to cause some problems further down the line. So they're extremely important to us here.

Speaker 1: What would you say is, or are, the major problems facing fisheries in the USVI?

Speaker 2: That's a good question. So, well, there's definitely over fishing, right? I mean, that's just a fact. We have seen fish sizes, catch sizes, the species of fish that we are targeting has declined substantially. I don't know. I don't study fisheries like that, but I could say substantially since the fifties. So we are definitely fishing down the food chain. It's kind of hard, though, because at least for me... I think we need a... Well, so the fishermen in St. Thomas, actually, it's kind of an interesting story. So they do work. I don't know how closely anymore, but I knew in the past that there were definitely some collaborations between the University, UVI, and some fishermen, at least the fishing association on the island. They helped us out a lot with the lionfish control.

And I know that they do understand that there is an investment to working with scientists to regulate, or at least make our fisheries a little more sustainable, because if we fish everything out now we're not going to have fish for the future. But there is definitely overfishing. And so that is a concern. I know it is. It's kind of a sensitive subject because it is somebody's livelihood, but there's definitely overfishing going on. I have personally seen on social media, fishermen, maybe not fishermen, but markets kind of posting what they have for the day. And I have seen very, very small, I mean, you can tell from the photos, queen triggerfish, small groupers and snappers. I've even seen some doctor fish in some photos and those are pot fish, right? So there is definitely... We're not as sustainable as we should be. With that said though, about a decade, maybe two ago and longer than that, we had the Nassau grouper became functionally extinct in the Virgin Islands, at least that's what we believed. And then we started to see a decline in other grouper species and the researchers and the fishermen came together to pretty much modify those fish pots to make it so that they're larger mesh sizes and there are ways for smaller fish to escape. The fishermen were kind of hesitant at first, but then embraced that idea because they did start to see they were getting more fish and the fish were larger in size. So I think that there's still a lot to work to do, but we have made progress over the past couple of decades and we are now starting to see Nassau grouper coming back because the fishermen, for the most part, are respecting the fact that those spawning aggregation sites are closed off during the spawning season. And so we are starting to see juvenile and larger Nassau groupers emerging, reappearing on our reefs here. So I would say that overfishing is definitely an issue. And then of course the decline in coral reefs is having an impact for sure.

Speaker 1: So if you had to rank those two issues, which would you say would be the most important one to address?

Speaker 2: I think coral reef decline, personally. Just because, yeah, I mean, there are a lot of things that we do here in the territory. It's not just, it's local stressors. So there's regional stressors, there's global stressors. Those are a lot harder to contain or mitigate. But things like irresponsible development practices down here in the Virgin Islands, for example, you are legally allowed to clear cut land without developing on it immediately. And so all that runoff goes straight into the reef and we do know that has an impact. And then, yeah, non-point source pollution is another thing that we could regulate better here in the territory. Septic tanks leaking that haven't been cleaned in a few years, a lot of that stuff is going into the ocean and it's causing algal blooms and it's also killing the corals. So there are definitely a lot of things we could do here in the territory that would make our reefs a little more resistant or resilient. And then that would definitely help the fisheries down here.

Speaker 1: Okay, great. So I think you may have mentioned some of these in the previous question that I just asked you, but what would you say are the most significant changes that have occurred in the USVI fisheries in the last couple of decades?

Speaker 2: Well, the size of the fish is definitely decreasing. And the species that are being targeted have changed as well, because we are fishing down the food chain. I would say that's probably, I kind of feel bad actually, because I'm not really a fishery person at all. And so... I'm trying to think. The fish sizes are definitely getting smaller. I mean, I can just tell going to a restaurant and seeing, okay, I'm going to order fried fish tonight and I'll see the fish size. And I'm like, well, that's... I wouldn't have ordered that if I had known it was that small. And it kind of is shocking to me that you could even legally sell that. I think there does need to be some type of size limitation down here. There may be, but it's definitely not enforced as much as it should it be. I think it's kind of, like I said, a very complicated issue because you want fishermen to be honest, you want that collaboration. You don't want them to be turned off by what you're saying. However, if we keep doing the same thing over and over again, we're just going to keep... it's not going to be great for our fisheries. So I would say the sizes of the fish has decreased for sure. And the species that would not have been eaten decades ago are now being sold much more regularly in the marketplace. And I would say that that's indicative of not being able to catch the fish that people would, the highly prized food fish, because we've fished them out, so.

Speaker 1: Right. Absolutely. Okay. And Speaker 2, what would you say are the most significant environmental changes that have occurred in the USVI in the last couple of decades?

Speaker 2: Well, in my lifetime, I can say... I'm 32. So the past 20 years, I can say there are a few things that have changed substantially. Over development. There are a lot of houses that have been constructed since the early 2000s that were not there previously. So we've definitely seen a boom in development, especially during that 2005, maybe 2010 period. So there's that. With that comes more people. So there's just going to be, there's just more people having an effect. And 100%, I mean, I've seen the coral reefs decline, so they weren't in the greatest shape in the 90s and the early 2000s, but they were coral. I mean, I remember snorkeling with my dad and seeing a lot of coral. I mean, that's actually why I wanted to study coral because I remember it being so beautiful. And then the 2005 bleaching event and the white plague disease outbreak that occurred after that really did a number on our reefs down here. I mean, I remember going back out a few years later and seeing the status of the same reefs that I had been snorkeling in the early 2000s. And I mean, it was heartbreaking. I couldn't even believe it. It was mind boggling. So the most significant effect I've seen has been the decline of our reefs here in the Virgin islands. I mean, in some areas it's extremely noticeable.

Speaker 1: Okay. And have you observed any changes in the USVI fisheries and/or environment that you think can be attributed to changes the local climate?

Speaker 2: Well, so we are seeing more frequent bleaching events and that's tied directly to climate change. We are also seeing new diseases appear. The diseases are more virulent and pathogenic and they affect more species, and that is most likely also tied directly to climate change as well. So there is definitely an impact of climate change here in the territory. I do know that we have seen sea level rise, but I haven't personally noticed that. But the hurricanes as well. So I mean, Irma and Maria back-to-back. That was catastrophic and pretty significant. And there are things that I've noticed too, that I'm not quite sure are directly connected to climate change, but just kind of strange. This is completely just observation growing up down here, like, "Huh, it's not raining as much during this time of the year when it usually is raining a lot, so I feel like there are some weird things that have changed in the climate, but I can't say definitively if that's connected to climate change or some other climatic event, pretty much, like an El Niño or La Niña or something like that.

Speaker 1: Right, okay. And in your opinion, are USVI fishers concerned about climate change?

Speaker 2: I'm actually really not sure to be completely honest. I actually really... I don't know.

Speaker 1: Okay. How about in your opinion, are USVI fishery managers and researchers and decision makers concerned about climate change?

Speaker 2: Yeah, I would say the people that I've worked with and talked to, I think all of us are a little concerned about... I mean, we're concerned about climate change for sure because we've seen these changes. So I yeah, I would say definitely.

Speaker 1: Okay. And then how would you describe the relationship between members of the community in the areas where you live and work?

Speaker 2: Well, so I feel like the community where I work at Coki Point, I would say it's probably a pretty close community. I think people see each other a lot, they hang out in the beach. There's definitely some... Yeah, maybe like a little family close knit kind of vibe, I'd say here. And definitely where I live, on the north side of the island, it's very small town-esque. So everybody kind of knows everybody and they know your business, whether you want them to or not. So I'd say it's pretty close, yeah. Yeah.

Speaker 1: So I have a couple of questions, they're also sort of getting a little bit into relationships, but more specifically about the fishing communities. And again, you can talk from experience from growing up there and knowing people in the area, or if you're into highly entirely not comfortable answering the questions that's perfectly fine as well. How would you describe the relationship between fishers in the USVI?

Speaker 2: I really don't know, to be completely honest I actually really don't know. So I know that there is one fishing for sure. And I believe that there are probably others. I don't know how they interact with each other. I'm really not sure.

Speaker 1: So can you think of any examples, and again, if you cannot think of any that's perfectly fine, but can you think of any examples of fishers getting together to address an issue? Is that something that you've witnessed or experienced?

Speaker 2: Yeah, so I do know with the lionfish invasion, well, when was that 2008 maybe? Is that right? I'm not quite positive, they do definitely did come together to try to [inaudible 00:22:25] that, I guess, right, and get rid of it, try to regulate those populations. I do know that with the groups that I work with in coral reef stuff, we try to get them involved too, to come out, and especially when the disease first made its way to St. Thomas, having all eyes on the water, including the fishermen, especially since it is in their interest to participate in that because coral reefs provide habitats and food and everything for the animals that they need for their jobs. So we've had some... Yeah, we've had some people who have been interested and come up and want to get involved in that type of work. The lionfish example is probably the best one, but like I said, I actually wasn't there personally for that, that was what I had heard when we're discussing this how to get the fishermen involved, and they had said they were involved in the lionfish part of it. And they were concerned, I do know that. So I would say the lionfish invasion was a... and they came together to try to help mitigate that population.

Speaker 1: Right, and do fishers in your community get together socially. Is that something that you observe?

Speaker 2: Yeah. So there is a couple places on the north side of the island where I will, I don't know if they're coming together as a fishing community, but maybe just so they hang out because it is one of those popular places and there's only a couple of them in that area, and that's where most of those fishermen live and work. But I don't know if there's any organized events where the fish fishermen come together and just... I feel like there is, I feel like, I don't want to say for sure if I know this because I'm not positive, but I do feel like there are meetings that they have with one another and with some other fisheries biologists down here. I think that does happen.

Speaker 1: Yeah. And how would you describe the relationship with between fishers and fishery managers in the US? And if it's applicable to make a distinction between the local and the federal government in your response, then that would be great.

Speaker 2: So I'm not sure, but I do know one person who has just talked to me about this, because he knows that I'm involved in coral reef stuff and he was like, "Okay, well NOAA came down here and they checked out our fisheries and now they're telling us this, and I'm going to follow what they say because we want to work with them. But also there's the other side of it where I don't think that they know what they're talking about." And I'm like, "Well, they probably do." But I think there may be that type of perception that, "Okay, well these people are coming down from the States, and they're telling us what to do. And they're not here, they don't see all the sites where there are a lot of fish." And then in my head, I can see both perspectives. So I'm like, "Well, I can see where you're coming from. But also we do have over fishing." But that's just one little snippet of a fisherman that I know who was just kind of talking to me one night. And I don't know if that's how the rest of the fishermen feel, I have absolutely no idea. The way he put it was "I'm going to listen to what they say, but I also am a little hesitant to listen to what they say," if that makes any sense.

Speaker 1: Absolutely, yeah. And can you think of any examples of fishers and fishery managers getting together to address an issue?

Speaker 2: Oh, I feel like there's a much better person who could be giving you the answer to these questions to be honest, because I feel like there is, but I just don't have any specific examples.

Speaker 1: Okay. Again, these are our last three questions and what you can answer, that would be fabulous. And otherwise, we totally understand that some of these may be more geared towards someone who's a little more familiar fisheries, specifically. But the next question is do you feel that fishery management in the USVI is fair in the decisions that they make?

Speaker 2: I would say it's fair for sure. I would say that there are probably more restrictions that should be put in place in certain areas. I think it's quite lax, to be completely honest.

Speaker 1: Okay. Do you think there's a difference between the local and federal government?

Speaker 2: That's a good question. There's definitely a difference, but I'm not sure if specifically the fisheries management ... how that works ... but there could be more enforcement, that's for sure.

Speaker 1: Okay. And do you think most fishers in the USVI understand how fishery managers make decisions? Speaker 2: I have absolutely no idea.

Speaker 1: Okay. And then the last question is, if they exist, how do you think conflicts between fishers and fishery ... and other fishers are resolved? If you know the answer to that.

Speaker 2: I don't know the answer to that.

Speaker 1: No. No worries at all. And do you know if any conflicts exist between fishers and fishery managers?

Speaker 2: I don't know. I don't know if ... Yeah. I wouldn't be surprised if there was. I don't know how much of that is expressed. Still, I'm not quite sure.

Speaker 1: K. That was our last question. I didn't know if you had anything else that you wanted to share with us about your experiences living and working in the USVI and, specifically, all the great work you're doing with coral.

Speaker 2: No, I don't. I'm wondering, though ... I don't know if I could ... how this word work ... but I feel like there are definitely some other people that would give you guys better information. They'd be better interview candidates because they are scientists but also they have either their family are heavily involved in the fishing industry or they also are semi-involved as well. I don't know if I would be able to give ... I'm not sure, actually. I would probably have to reach out to them, too.