

MULCH MATTERS EP. 26

# Beyond the Plastic: How Social Values Shape Mulch Decisions in Agriculture

[00:00:00] Nataliya Shcherbatyuk:

Hello and welcome to the *Mulch Matters Podcast* where we will explore the intriguing world of mulch and its impact on agriculture and the environment, as well as update you on the latest research about soil-biodegradable mulch and recycling options for plastic mulch. I am your host, Dr. Nataliya Shcherbatyuk, and I am a communications specialist for the project, "*Improving end-of-life management of plastic mulch in strawberry system*". In each episode, we'll dive into the latest research, trends, news, and insights on why mulch matters and how we can improve plastic mulch end-of-life options. We'll also branch out and discuss other plastics as well as talk to researchers, experts, and practitioners in the field who will share their insights and experiences on how to use mulch effectively in different settings.

Hello, hello, and welcome back to another episode of Mulch Matters podcast. Today our guest is Beth Prosnitz from WSU, so let's welcome her.

[00:01:17] Nataliya Shcherbatyuk:

Hi Beth. How are you today?

[00:01:18] Beth Prosnitz:

I'm well. How are you?

[00:01:20] Nataliya Shcherbatyuk:

I'm pretty good. I'm pretty good. I'm so excited you're here with us today.

[00:01:28] Beth Prosnitz:

Yeah, thank you for having me. I really appreciate being here.

[00:01:32] Nataliya Shcherbatyuk:

Oh yeah. That looks like it's going to be quite interesting conversation. And I wanted to start actually by, you know, letting you talk first a little bit about you, your background, what you do, and also if you can tell us a bit about what was that thing that drew you to study, like what you're doing specifically, you know, looking at that. Intersections of sociology, economics, and agriculture.

[00:01:58] Beth Prosnitz:

I am a postdoctoral research associate, I'm a sociologist and I'm working with the human dimensions team, So I've had a bit of a meandering career, but I always had this question about land. What is land? What are land rights? How does land configure our social relationships? So, I've always been kind of pursuing a career where I could ask those questions, and that just sort of landed me right at that intersection. Of course,

when we're talking about land, we talk about land use, which means we're talking about amongst other things, agriculture, we're talking about various technologies that we use to, um, compute value of land whether that's being the actual price value of land or whether that's how we, you know, are thinking about land as something that configures our relationships with our families or our neighbors or whatever it is. And so that just kind of put me on this path to studying agriculture and then also being interested in this question of the wider question of the environment and how does agricultural sit agriculture sit within this? I joined this project earlier this year, I saw the call for applications, and I thought, wow, this seems really.

### [00:03:22] Nataliya Shcherbatyuk:

Yeah, that's, that's interesting to, to actually see how your previous work did connect you to the strawberry production and actually use plastic mulch in strawberry production. That's what our project is about, so, yeah. And for our listeners, you know, who might not be familiar too much about some terminologies you'll be covering today, could you please explain what relational work means, and if that's when we are speaking in the context of economics, sociology.

### [00:03:53] Beth Prosnitz:

Right. So relational work kind of covers a broad range of things, but first I'll, I'll, back up a little bit and talk about value, right? So, Value is a very broad and very complex term, right? Sometimes we think, oh, yeah, as this very straightforward thing, it's a lot. We're bringing a lot of different ideas and practices and beliefs and so forth to our understandings of value, right? Okay, so relational work. So, to think about relational work, we think about value, right? And so, when we're thinking about market economies, we tend to think about value in terms of price, in terms of cost we know that socially, there are other values that come into play when we're making decisions about how we spend our money on things, right? And so when we think about relational work, we're thinking about what it is that's sort of playing into our various financial decisions, right? And so, we think about how money it's, you know, we like to think, well, a dollar is a dollar is a dollar, but. When we think about money within social relationships, we kind of see, well, a dollar isn't always, just a dollar isn't always just a dollar, right? And so, think about the various ways that people are making decisions about how they're spending money, how money corresponds to different kinds of values, social values, cultural values, and so forth, right? And so relational work really highlights how it is that people are working through their interactions, through their labor, so forth, to set these various values and to match monetary values, you know, prices with other kinds of value, and so this becomes important when we're thinking about agriculture in general, but also plastic mulch in particular because we know that plastic mulch both the application of it and the removal of it has a cost. It has a price point. And right. Plastic mulch is something that people, you know, budget for, they consider it. They think about, well, how do I wanna structure my budget? And so, then they bring in their various, , other forms of values that they're thinking about to think about how they want to spend money on app applying it and disposing of it.

### [00:06:18] Nataliya Shcherbatyuk:

Yeah, that really helps us to understand farmers and stakeholders decision about, you know, using plastic mulch, talking about your research, what you're doing, can you tell us what kind of social values, and you've covered bunch of them, but are there any specific, values come into play alongside economic considerations?

**[00:06:43] Beth Prosnitz:**

Yeah. So, one of the things that comes up in the literature of agriculture is good farmer identities. And so, the growers that I've talked with and, you know, people in the wider industry as well, there is this desire and it gets articulated as to do the right thing. There is this desire to do the right thing for the environment. And so, it's important, I think about how these kinds of financial decisions are overlapping with those environmental decisions and that desire to do the right thing. So that's, those are, you know, the big social values that I see coming up land stewardship wanting to protect healthy soil. Wanting to, you know, produce healthy fruits food safe fruits, right, meeting food safe safety regulations. And making sure that all of these financial decisions that they're making are in the effort of advancing those kinds of good farming practices.

**[00:07:51] Nataliya Shcherbatyuk:**

And when we are speaking about plastic specifically, biodegradable versus non-biodegradable. There are still a lot of growers who do prefer to use non-biodegradable plastic. So, from your studies and your research, did you have any surprising insights from growers about why they continue to use non-biodegradable polyethylene mulch versus biodegradable alternatives?

**[00:08:22] Beth Prosnitz:**

Yeah, I'm not sure if I consider this surprising or not, but it's, I didn't necessarily think about it until I started talking to people, but, you know, the way that land tenure is structured and the way that land leases are structured and the way that crop rotation is structured in these industries, it kind of doesn't leave growers enough time to allow biodegradable mulches to biodegrade and so folks who are interested in using it say, I'd be happy to use this, but we have vegetable farmers who are, rotating with us right. At the end of the season, we're out on October 31st. They're on November 1st. And so even if it can biodegrade, we're still gonna have to remove the plastics.

**[00:09:15] Nataliya Shcherbatyuk:**

So that leads me to another question I had for you which is what, what roles do, for example, when we talk about waste management professionals and recyclers, what role do they play in shaping sustainability when we, you know, talking about plastic mulch,

**[00:09:29] Beth Prosnitz:**

So, they play a huge role in it. The first thing is that part of the constraint that we're seeing is that there's this push for market-based solutions to plastic pollution. And so, until there is a market for something it feels as though it's hard to approach the problem of plastic pollution. So, recyclers and waste management professionals in particular are really doing a lot of work to show that this market for plastic waste exists and that this market can then process it and actually recycle it. So, one thing that I've come across is a lot of skepticism about recycling, you know, whether things are actually being recycled or not, you know, and this is not to, you know, accuse anyone of anything. That's not what I'm, what I'm doing. But, you know, there is some skepticism of that process, and some people have felt that, you know, they have been promised things in the past by recyclers, and it hasn't come to fruition. And so, what's the point? And, you know, a lot of waste management professionals are really trying to kind of intervene on that and say, well. We're creating this market; we are going to create this circular economy. We are going to actually recycle this. And so it's about producing

economic value, price point value for plastic waste, and showing that that can not only be done, but that it can then be reprocessed into something that can go back onto the market to be purchased.

**[00:11:16] Nataliya Shcherbatyuk:**

And you know, when we are talking about overall, let's say short term and long term, and when we look at sustainability, we probably want to look more on long-term sustainability versus short term sustainability. But also, what's important about these questions is, uh, profitability. Because I mean, you know, everything costs money and everybody needs to put in and also take, take it back. So do you see any tension between the short-term profitability and long-term sustainability goals in specifically strawberry industry?

**[00:11:53] Beth Prosnitz:**

I think one of the really helpful things about relational work is that it, it sort of breaks down those discreet categories, right? Of short term, long term, and then these oppositional categories of sustainability and profitability. And so, I think that, you know, what we're seeing is people really. Thinking through all of these things. And there might be, profitability is, it's, it's primary, right? Everyone needs to get right out of the market. But then thinking about how we define short-term, long-term and what, where we're defining the future and up until what point do we want to, you know, have things be sustainable and what does that look like? That's something that is happening in people's interactions, in relations with each other. So it's hard to distinguish sometimes between a short term goal and a long-term goal and thinking about profit and environment as these mutually exclusive categories.

**[00:12:56] Nataliya Shcherbatyuk:**

When we are talking about this, goals and short term, long-term and all the decisions, do you think there are any, , effect from social pressure that, that they make impact on the decision being made? Like from consumers, peers, regulations, anything might affect those decisions in a certain way?

**[00:13:17] Beth Prosnitz:**

Yeah. I mean, I think that the strawberry industry as a whole, right? And so, this includes growers. This includes manufacturers of plastics. This includes recyclers. I mean the, the industry as a whole is feeling the desire to do something about plastics, and so, there's definitely an internal pressure to do something. I think there is in California. The extended producer responsibility legislation. But that doesn't apply to, you know, there's an exemption for agriculture, but there is thinking that, okay, this might be extended to agriculture, and it might apply to plastic mulch at some point, so, we need to think about this with our, um. With our plastic mulch practices. And I do think that there is there is some thought about what consumers will think when they learn about plastic mulch. Because from my experience in talking to people who are outside of agriculture, they have no idea what plastic mulch is. And that's not to knock any, yeah. I didn't know what plastic mulch was, right. Until I started on this project. And so, I think that there's an imagination of what's gonna happen when the public learns. And so, it's less from the consumer public. The pressure is less from, you know, what the consumer public is thinking and more about what. Folks are thinking the public will think when they learn.

**[00:14:47] Nataliya Shcherbatyuk:**

Absolutely. Yeah. Well, you know, people don't know what they don't know, and if they are not something, this is not something they work around or are being introduced to, how would they know? So, right. It's if it's something unfamiliar to you, you can probably just imagine or some sort of create that image of what it is, but do you really know? So, education would be quite important here as well. And in your work, I think you've got a pretty cool privilege by ability to talk to a lot of people like public, but also growers and stakeholders. And here I wanted to ask you about your study, what that actually reveals. If we are talking about the challenges of technology adoption in agriculture on the more broadly side.

**[00:15:38] Beth Prosnitz:**

Right. I mean, I think that there is constant pressure to improve on agrarian practices. I think that that's something that people feel very acutely, and so in a market context, this becomes a bit fraught, particularly when we're thinking about solutions being delivered through the market, I mean, if you think about your own life when people are trying to sell you products, you're kind of like, I don't. Why should I buy it into this, right? Yeah. Why should I spend my money on this when I'm not certain that this is gonna do anything and when I know that I'm just gonna be in this pattern of people trying to pitch me products? To improve on my, on my practices. Right? And so, I think when we're thinking about relational work and we're thinking about how it is that people are matching these monetary values with other social values and how those relationships are configuring these kinds of things, we can start to think more about. How it is that technology comes to be a part of those relationships and how those relationships matter to how people are thinking about their agrarian practices. And so, you know, and whether we want to use the market, solely the market to, to deliver solutions or not necessarily solutions, but, you know, sources of improvement or however we wanna frame it.

**[00:17:04] Nataliya Shcherbatyuk:**

Like an option, alternative. Yeah. Well, it makes, it makes total sense to me as well. If somebody just brings up a new product, the first question you might want to ask is, how is this better than what I'm already using? So, you know, if you are not aware of the benefits or potential, and we are talking about any benefits, even it's on the agriculture focus or price, cost or sustainability in the long term, if you're not aware, aware about that and if you are not educated on that topic, it's kinda does create a skepticism of will it really do a job? It's, you tell me it will do. Yeah. So, tell us what are the next steps in your research?

**[00:17:51] Beth Prosnitz:**

So, I haven't had the chance to actually get into the field and see people remove their mulch and so I really want to be able to do that to see what that process is actually looking like and how people are thinking about, well, okay, we've just pulled this from the field. Now what goes into getting it from the field to somewhere else and what, how this process, um, places or confers value on plastics as it moves from field to somewhere else.

**[00:18:26] Nataliya Shcherbatyuk:**

That's so interesting, when are you planning to go see something? Have you already doing some research planning? Where are you gonna go? And, you know, when.

**[00:18:34] Beth Prosnitz:**

Yeah, so I keep checking in with certain people about, have you pulled your plastics? Have you pulled your plastics? When are you gonna do it? And it's just, you know, there's not a set time for it, so I'm just waiting until I can kind of get in.

**[00:18:48] Nataliya Shcherbatyuk:**

Right. Well make sure you take bunch of videos of that as well. That's pretty interesting too. You know, keep it in memory: How do you hope your work that, that what you're doing and you'll be doing, of course, will continue to policy discussions around agriculture, plastic, and sustainability?

**[00:19:10] Beth Prosnitz:**

You know, that's a tough question to answer for a lot of different reasons, but you know, one of the things that has come up for me is that plastic use isn't just about plastics. There are other considerations that come into this, right? And so, I mentioned earlier about land leases and land rights and how that's configured. And so, I think for me, it's always a question of, okay, if we want to address a particular issue, where is the entry point to that? So my hope is that, you know, with thinking about relational work, with, thinking about all of these values that are, that are playing into people's decisions and thinking about the various, the bigger structures that are coming to bear on some of these decisions, that, that the entry point becomes a little bit, um, clearer or wider because it's not just about plastics itself.

**[00:20:18] Nataliya Shcherbatyuk:**

Yeah, that's, so true. I mean, there is a lot of attention on the plastic, but it's not the only one that's, you know, the main, the main, main player in agriculture. Yeah. And you know, I have one more question that I wanted to ask you. , Was the focus on our audience as well as farmers and policy makers if you have a chance to have, uh, one message, what message that would be that you wanted to share, , in regards of relational side of farming decision.

**[00:20:54] Beth Prosnitz:**

I think it would be to, well, there are a couple things. One is to view cost and financial decisions within a broader cultural context. So, to not just reduce thinking about cost to thinking about. Price point solely, right? We wanna be thinking about the various things that people are thinking about and thinking through, and the various values that people are bringing to these discussions, right? So that would be one. So not just sort of a rudimentary calculation of how much money X, Y, Z would save, but to think about the various ways that people are approaching their budgets and their financial decisions. And the second is, you know, I think, um. And I think this is gonna be a very obvious point, but, you know, particularly because good farming identities are so strong. And people feel very committed to doing environmentally that there's a lot of opportunities for relationship building and coalition building around that. And so, there's a lot of opportunity to engage with farmers and to understand how they're approaching things and how to build practices from that.

**[00:22:08] Nataliya Shcherbatyuk:**

Yeah, that's pretty good. Thank you so much. I think that was quite. Interesting. Slightly different to what we get used to talking on the podcast. We usually talk about, you know, plastic mulch and alternatives themselves, but from the policy makers and decision makers, that's quite interesting information. Thank you and I hope I'll be having back at some point to share more results, more interesting things you've learned while seeing, having your boots in the field basically.

**[00:22:39] Beth Prosnitz:**

Yes.

**[00:22:42] Nataliya Shcherbatyuk:**

That's it for today and until the next episode. You can find more information by following us on Instagram and LinkedIn by @mulch\_matters and going to our websites [www.smallfruits.wsu.edu](http://www.smallfruits.wsu.edu) and choose Mulch Technologies. This work is supported by Specialty Crops Research Initiative Award 2022-51181-38325 from the USDA National Institute of Food and Agriculture. Any opinions, findings, conclusions, or recommendations expressed on this podcast are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.

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