

SM157 | 1.13.2024 Setting Course | Episode 2

Dan Basse, Founder & President, AgResource Company

For the second installment of our *Setting Course* series, we welcome Dan Basse, Founder and President of AgResource Company, into the SmarterMarkets™ studio. Host David Greely sits down with Dan to discuss what's happening in the agricultural and grains markets – and to what extent climate change and decarbonization are creating an agricultural transition alongside the energy transition.

Dan Basse (00s):

Somehow USDA and policy needs to get involved in the environmental talk. And if farmers are to sequester carbon and do other things, they need to be paid for it. And so far, measurement and other things have been difficult, but they are willing to react, if you will, and be the participants that we expect and hope. But it does start in Washington and everything like this costs money, and farmers can't afford to do it by themselves. They need leadership, and they need economics behind them to have these kinds of things happen.

Announcer (29s):

Welcome to SmarterMarkets, a weekly podcast featuring the icons and entrepreneurs of technology, commodities, and finance ranting on the inadequacies of our systems and riffing on ideas for how to solve them. Together we examine the questions: are we facing a crisis of information or a crisis of trust, and will building Smarter Markets be the antidote?

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David Greely (01m 09s):

Welcome back to Setting Course on SmarterMarkets. I'm Dave Greely, Chief Economist at Abaxx Technologies. Our guest today is Dan Basse, Founder and President of AgResource Company. We'll be discussing what's happening in the agricultural and grains markets, and to what extent climate change and decarbonization are creating an agricultural transition alongside the energy transition. Hello Dan, welcome to SmarterMarkets.

Dan Basse (01m 37s):

Hi, Dave, good to be with you.

David Greely (01m 39s):

It's great to be with you. It's a real pleasure to have you here. I enjoyed listening to your podcast called Old Folks Talk Grain and the perspective on the agricultural markets that you provide on it. And I really do appreciate you being our guest on Smarter Markets today to share that perspective with our listeners. We haven't had a lot of people here to talk agriculture with us, so I think this as more of a, a special conversation for us. You know, here on smarter Markets, however, we often discuss the challenges posed by climate change and the energy transition being driven by net zero commitments and decarbonization of our energy systems. And so I've been looking forward to talking with you about the challenges being posed to our food systems as well. In short, I'd like to talk about if there's an agricultural transition happening out there too. But first, this series setting course, we're trying to help our listeners get oriented for what may be coming at them this year, and I'm hoping you'll share some of your outlook for the agricultural markets in 2024. It's been about two years since Russia invaded Ukraine, and while that war continues, maybe surprisingly for some, the price of weeded and other grains has continued to decline over the past year. So I'd like to start off by asking you why have grain markets been relatively calm and where do you think they'll be going this year?

Dan Basse (02m 59s):

Well, you know, Dave, surprisingly, even amongst the war between two major producers of grain in the world, you know, the Ukrainians, the, the European grain basket, if you will, and the Russians being the world's largest grain exporters, although they've got a war, they are exporting record amounts of food from both countries. And so, you know, with the help of the UN early on in the corridor, and of course Russia's need for hard currency in the world market to supply some of its ballistics that it's sending at Ukraine, everybody's kind of got together and worked it out. And so the Russian wheat price today is down about 40% from where the World



War started. They have been supplying record amounts and even in Ukraine, it's in the last month they've exported almost a record amount of corn. So I'm happy to say for the world food systems, although we've got a geopolitical situation of size and substance in the Black Sea, it really hasn't impacted trade dramatically.

Dan Basse (03m 56s):

And I don't see anything at least nearby that would do the same. So we'll watch it carefully. I'm afraid the longer that that war goes on, we have clients based in Ukraine, if you will, and fin farmers there are financially struggling mightily as you can, you can imagine. I mean, who wants to finance a farmer who's going through war and what would all happen to him? So the farmers are making do, but the longer this goes on, importantly the farmers there will come under financial stress, and I do believe that Ukrainian grain production will come down, but Russia, at least for the time being, is supplanting that and keeping the world well supplied, particularly in North Africa.

David Greely (04m 32s):

And it is somewhat fascinating that even with countries at war, that they continue to, to have the food supplies moving. And I'm curious, you know, one thing we saw in the energy markets was that countries around the world reprioritized energy security, you know, once the, the gas stopped flowing from Russia into Europe. And I'm curious, have we seen a similar reprioritization of food security by countries around the world?

Dan Basse (04m 59s):

We really have, as you think about Egypt, the world's largest weed import or a country that struggles to feed its population, as you look at that sort of country, they, they've decided to lay in an extra month, month and a half of food supplies such that they don't have worry going forward if there's something were to happen on a more geopolitical front. So Egypt, North Africa in general, even the Chinese right now are stockpiling grain, if you will, at these lower prices thinking about the future ahead. And we may have another geopolitical event. I have customers that are trying to ship grain through the Red Sea. You know, that's become a problem. And so rates to take grain from, let's say the Black Sea of Ukraine over to let's say Taiwan or China, are now up \$22 a ton. So the cost is rising, and as ships have to go around the horn of Africa through the versus the Suez Canal, it adds an extra two to two and a half weeks to a voyage.

David Greely (05m 51s):

So Dan, outside of some of the geopolitical issues that are raising risks in the agricultural markets, even though the food continues to flow now, when you look out at 2024, what are, what are some of the big issues you're looking at and, you know, what's your overall view on what people should expect in the grains markets?

Dan Basse (06m 09s):

Well, you know, our, our biggest concern and really what's keeping us up at night continues to be something probably you talk a lot about, which is climate. Undoubtedly, as we look around the world, we are seeing climate being more volatile. I'm not gonna get into the debate whether it's done, you know, produced by man or God. We'll leave that to some politician to decide that. But there's no doubt in our data that weather is becoming more tumultuous. And with that, my big concern is that global grain yields are starting to stagnate. Now, going back to the 1950s when we had the hybridization of corn globally, you know, we've had global crop yields moving up about 1.7 to 1.9% annually, just based on technology and farmers understanding that the practices that they engage in planting more seed, adding more fertilizer, always bring them more crop.

Dan Basse (06m 53s):

In the last three years we've seen global per capita and global yields in general start to stagnate. This means that as I go forward to feed an ever-growing world and a world that's becoming more wealthier, I'm gonna need about 24 to 25 million extra acres of crop production to come under plow. That's a big ask because that's triple from what we've seen in the last five to seven years. And a lot of those acres would come from South America, I'm not gonna say the Amazon, but let's say the Satos of Brazil and portions of Argentina. So as I think about the opportunities going forward, we need to see the yields going forward, or we're gonna find ourselves back into a position again where price is starting to rise.

David Greely (07m 34s):

And when you think about that rise in prices, do you think that's something that could happen this year? Or are there other forces that are putting downward pressure on crop prices at this time?



Dan Basse (07m 44s):

So at the moment, you know, we've seen crop prices start to relax going back to the middle of 2022. And that was all based on, if you will, what we thought was, was rising rates in a slowing economy. The US Central Bank has this hammer called rising rates and it, its demand destruction. And so as we looked at rising rates in a slowing of the economy, we actually saw that indeed global and domestic grain demand started to come down. And so a lot of what we're seeing is related to rising rates and the slowing of the economy. We also had a relatively big crop last year in in Brazil. And so when you think about that crop that's something that, you know, has helped the market at least get to where we are today.

David Greely (08m 27s):

So Dan, I'd like to dive into some of these longer term issues with you that you've brought up. In particular the challenges posed by climate change and to better understand how the agricultural sector is being both impacted and how it's trying to contribute to the efforts to reduce carbon emissions. Maybe first I'd like to dive into a little bit more your views on the potential for a changing climate to affect agricultural production. You talked about, you know, you're already seeing more volatile weather, you're seeing crop yields coming down. Obviously weather's a key driver of agricultural production and prices. You know, you've been in these markets for a long time, since 1979. I'm curious, you know, you've said that you've seen it becoming more extreme and more volatile. Maybe you could put that in context for us, and how is it changing how you think about forecasting supply and prices and managing risk in these markets?

Dan Basse (09m 20s):

So as I go back, early in my career you know, the US was the dominant world exporter of grain doing 64% of that trade. We now find, of course, the us presence, if you will, in the global grain markets falling to around half of that or down around 31%. And so the world has become global and South America, Russia are now two hotbeds, or let's say the Black Sea are two areas where global grain trade is expanding dramatically. With that, in said when we look at what I would call climate and I'm a farmer, I'm, I'm, I'm still farming, if you will, you know, we have seed varieties that will help us in drought. The seed is bred such that I put it in the ground. If it's dry during the reproductive period, there may be a weight where the seed can look for 10 days out, delay its process, and if rain comes, it gets back to normality.

Dan Basse (10m 11s):

What we don't have in seed is what I call temperature tolerance. And so as temperatures keep rising, and we see some of this extreme heat that we've been seeing, you know, temperatures recently in a key state of Mato Grosso so one of the biggest production states in Brazil reaching up to 110 or 190 degrees in November was very adverse to their soybean crop down there and it's, it's this temperature that is really playing havoc, if you will, with global grain yields. And so as I talk to seed breeders and others in the seed industry, they're all trying to look for the answer, but it's much easier to breed into drought tolerance than heat tolerance. But I hope it's something that technologically we can make some advances in the, in the next couple of decades. The other aspect that I think is so, so important as you look at this whole thing is that farmers are trying to better understand what I would call soil health.

Dan Basse (10m 59s):

And so one of the ways they're reacting to the, to the problems of rising temperature in less rain is by looking at soil health and using biologics and using different methods, if you will, to preserve what's what moisture is in the soil. No-Till farming is something that has taken up dramatically in the United States. It's now spreading around the world. Not only does it keep moisture in the soil, but it diminishes the release of carbon. And so that's one way that we farmers are trying to be good stewards of the soil, but also preserve the opportunities for seed once we get it in the ground with each growing season. As an analyst, as someone who works with farmers and nations around the world and tries to manage risk for some of the biggest corporations and countries in the world, I've had to take each growing season as a new sheet of paper.

Dan Basse (11m 43s):

By that I'm saying is that every time there's a new growing season, I need to assess the risk for that growing cycle. And I brought on climate scientists on staff now to help me make those risk assessments. We try to measure what is the probability of a drought or our extreme heat in a key growing season three to six months in advance. And we're getting better at it. But again, when you get to Mother nature and our volatility, it is always a challenge to better understand where the ravages of drought will be occurring. But they are more frequent and they've surely have, have crept in my discussions with clients more often in the last five years than they have in the last 50.



David Greely (12m 21s):

Right and when you bring up the, the role of the extreme heat, is that leading to a shift in where agricultural production is going to occur. Are certain areas becoming less fertile, less productive for farming and forcing that farm production to migrate in a sense?

Dan Basse (12m 39s):

We're starting to see hints of that, but also interestingly, and it's not something that's happening in the southern hemisphere, so I want to think about this hemispherically. It is happening to some degree in the northern hemisphere where we're seeing maybe less productivity across the southern areas of let's say, whether it's Europe or the United States. But on the same standpoint, we're seeing the growing seasons being pushed farther northward into key countries like maybe our friends in Russia or Canada, places where here to four, we haven't seen extended growing seasons are now able to get longer duration seed in there and that's helping boost yields in those areas. So right now it's a little bit of an offset, if you will, but I still can't get enough acreage in those areas to really buffer the loss that we're seeing on a global perspective and so when I think of this globally in the hotspots that have developed, that's where I think this is key.

David Greely (13m 30s):

And Russia keeps coming up in the conversation first in terms of the potential threat to supply and then it sounds like you're getting more production, potentially moving to Russia and when I kind of think back, I'm old enough to remember the late seventies as well, and you know, then you saw food being used with the, the grain embargo that the Carter administration took against the Soviet Union and how that impacted the Olympics and everything else. I'm curious, how do you think coming back off of the, the role energy played with Russia's invasion of Ukraine and the response in the western countries, the US Europe, how do you think about the geopolitical significance of food moving forward. If we're gonna have more of the production potentially in Russia in areas that they, you know, the US may not be as dominant as it's been in the past.

Dan Basse (14m 20s):

I think almost with every country and every meeting that I have overseas, food security's become an issue and, and as you move up the totem pole, if you will, of people who make decisions for populations, it's becoming a big deal and so I imagined as the dominance of the US is diminished from a geopolitical standpoint and we see more weather issues and we've got these renegades running into different wars. We've got two theater wars going on right now that food security is something that is going to dominate headlines in the next few years. Volatility is gonna be difficult in the food markets, and I believe it to be the same in energy. I know that we're in these transitions, but these transitions are not easy In the case of food, I mean, I think that the populations and things coming out of the climate assessment meeting of a few weeks ago wanted to move away from meat production into more grains.

Dan Basse (15m 12s):

That's all well and good, but to do that I need more acres. And that's why I said earlier this, the climate and yield needs to change. I need to get yields increasing again. Otherwise somewhere around 2060 to 2065, the world ends up being in what I call peak farmland. The US is in peak farmland today. We really don't have that many additional arable acres to bring bracken into production outside of a program called Conservation Reserve. We keep about 21 million fragile acres in there just for wildlife and the general wellbeing of the central US and other areas. But as I go another, and it's only like 40 years forward, we do end up in this real problem of maybe not having enough arable landmass. And so that's when I get worried for the world. But these are things that politicians and let's say strategies and, and other things need to get thinking about because either as we go down, let's say 10 billion people by 20 47, 20 52 we are gonna struggle in terms of feeding everyone. And even here today we're seeing impoverished people suffering the most. They always are the ones that get hit the worst in this kind of situation. But we are reaching what I would say the limits of a variable land, which means we need to find it kind of as a national or international treasure chest going forward.

David Greely (16m 34s):

Yeah, and I want to stay on this point because I think it is so important, right. Obviously food supply crop production, it's a fairly straightforward equation of yield times acreage, and as you've stressed, the yields are coming down, the change in the climate likely means that's gonna be more of a trend than a one-off. And at the same time, you know, if we think about the agricultural sector and its contribution to climate change, deforestation to increase arable land is one of the key contributors. So if we can't get the yields up, it probably means that the acreage is gonna expand and that's gonna come at the cost of deforestation potentially. I was hoping it might take a step back in terms of helping people understand what supports crop yields, because I believe it was the green revolution of the fifties and sixties when the last time people were really worried about having enough food. And there were a lot of advances made both



in fertilizers, hybridization that enabled us to move past that problem. Is there something in the toolkit that can help increase those yields that you see?

Dan Basse (17m 38s):

Well, you're right. A guy named Norman Borlaug who, who won a Nobel Peace Prize for the Green Revolution his idea was to throw more at everything. And it kind of worked that way in terms of better seed, more fertilizer, more water. And of course he saved a billion people as India became a net exporter of grain versus a big importer. And that was of course his legacy. Today technology and Al are being thrown at, of course crop yields. One of the things farmers have been able to do very aply is plant more seed per acre. It's something that every farmer tries to do every year and get away with, though again, that seed needs the right ingredients. And so how do we precision place nutrients in the ground so that that crop can grow to its full potential?

Dan Basse (18m 20s):

That's been happening now. We're now playing around with biologics because as I said earlier, we're starting to understand the importance of soil health. I always say we probably know more about what's 200 miles above our head than what's two feet below our shoes and so when you think about soil health, it's microorganisms, it's a lot of things that we are only now diving into in a deep position. But I do believe that those are the ways we'll keep our yields rising and at least moving higher over time. Again, yields aren't declining, they're stagnating, but it's that stagnation that's so much different in the last five years than what we've seen in the previous 50, which has got our attention and I do believe it's due to climate change because farmers look at every crop like their firstborn child, where they want to give it the right opportunities of everything and I know as a farmer myself, we do the same sorts of things, but it's challenging. And then if we are to keep the, the carbon in the ground and not till the soil, because once I till it, that carbon is released, those are the kind of things we all have to mix together and come up with solutions in the next five to 10 years.

David Greely (19m 25s):

Yeah. And I'm curious, you know because we do hear a lot of farmers wanting to move and moving towards more regenerative practices and no-till farming. Is there a tension between those techniques and yields, or are they complimentary or is it higher yields in the long term but lower in the short term? How does that work?

Dan Basse (19m 44s):

So we're, we're only learning about yields so far. The, we do see a yield drag, if you will, on some of these new technologies and, and, but our costs in producing a crop is down. So it's a tradeoff and let's face it, farmers are economists at, at the end of the day, they need to make money, they need to survive. And so as you look at farmers, they will try these kinds of new practices because they want to be the best stewards of the soil and, and, and pass it on to generations to come. That said, there's still a lot of what I call traditional farming out there in which we're probably throwing too much fertilizer, too much things added to get better yields, and that may need to change. But there's other countries today that are looking at different models of food production.

Dan Basse (20m 27s):

The EU has this program called Farm to Fork. Farm to fork is where they want 25% of their farm land in EU to be organic. They want to cut nitrogen use by 25%, pesticide use by 50%. These are all objectives that they're looking at enacting by 2030. We in the United States really don't have a policy on, on that size or scale. We of course, are still subsidizing farmers and at least at today's market prices for corn, soybeans, and wheat, the three principle crops of the food chain, you know, in a lot of cases, farmers looking at the crop they're gonna be planting next spring will lose a modest amount of money. So, you know, they're less interested in being good how should I say, looking at new technologies and adopting. They're just trying to stay in business here today.

David Greely (21m 11s):

Right and are there things that we can be doing to be more supportive of those efforts with farmers, is it from the investor side of the community, Is it from the policy regulatory response? You know, we've seen a lot of things like the inflation reduction act and what that's done for helping with energy transition industries. Is there something we need to be thinking about on the, the farming and agricultural side?

Dan Basse (21m 36s):

Well, you know, policy is very, very key, obviously as you can imagine, we farmers react to incentives. We, we right now are looking at planning what we would call cover crops in the fall. Cover crops preserve our soil. They're gonna take some carbon out of the air. They're gonna give us a nice seed bed in a regenerative fashion as we go to next spring but SDAs only offering like a few dollars per acre



to do that. So farmers are losing money in that practice and if it they'll try it once or twice and say, you know, I can't have an operation or a healthy economic operation, I'm not going to be doing it. So somehow USDAN policy needs to get involved in the environmental talk. And if farmers are to sequester carbon and do other things, they need to be paid for it. And so far, measurement and other things have been difficult, but they are willing to react, if you will, and be the participant that we expect and hope. But it does start in Washington and everything like this costs money and farmers can't afford to do it by themselves. They need leadership and, and they, and they need economics behind them to have these kind of things happen.

David Greely (22m 36s):

Right and I wanted to ask you if, if the, you know, the carbon markets, the availability or lack of availability of carbon finance in some instances, is that something that farmers are able to, to utilize, you brought up measurement and it made me think of, oh, is measurement a stumbling block for them accessing financing by sequestering carbon?

Dan Basse (22m 57s):

Well, we as farmers and I'll tell you we've been looking at this now for a decade. This is not a new, this is not a new discussion topic. And I, my friends at the Chicago Board of Trade would love to trade carbon if we could just get a regulation defining what carbon is. You can't trade it until you have a definition that's in the regulations of the US government. And so as a farmer myself, I would love to be part of the solution. And if you could trade it and I could capture it and we could all work everything out together, wouldn't it be a great world, but as I said, we've been trying this dance for a decade now. I'm not sure we're too much farther ahead. There've been several companies that have gone out and paid farmers just because they wanted to incentivize them. But we are not in a position to commercialize this and go forward, measurement's a problem. And then, as I said earlier, if you, if you till the soil and you release the carbon back into the air, should there be penalties. There needs to be policy surrounding all of this so that we as farmers collectively act the right ways.

David Greely (23m 55s):

And another issue that I wanted to ask, if it's, it's a challenge when you look at farmers adopting some of these newer techniques, whether it's technologies that enable for more precision application of pesticides and fertilizers, whether it's no-till techniques, one question's always can it scale and what are the impediments to scale to do it. So it makes a meaningful difference both environmentally and for the economics of the farmer and for the food supply. Are there challenges you see on that side in terms of being able to scale some of what's being done now so that it makes a meaningful impact?

Dan Basse (24m 32s):

I mean, there's, there's challenges in, in scaling of things like cellular agriculture in terms of meat production. That's gonna be a difficult scale. But in terms of carbon and everything else that we'd like to do, Dave, I do believe that there's abilities to scale, but there needs to be in, there needs to be financial policy and incentives for we farmers to do it. And so I, you know, cover crops a very good example. It's, it, it helps the soil. It basically is gonna, has regenerative properties, it collects carbon, but for a few dollars an acre, we are not gonna do it on a mass scale unless there's a payment and a policy in place for us to take care of it. So again, there's leadership that needs, needs to be offered on an agriculture for this to happen as a consumer.

Dan Basse (25m 12s):

Maybe some of your listeners can go out to local farmers and say, Hey, I would like to buy products with X, Y, and Z happening. And that's all fine and on a local basis that can happen. But it's, it's not enough to get where the world needs to be. And, and I'll mention even something else that's going through a lot of farmers and mines right now. There was a new technology called renewable diesel that was promoted roughly two years ago. The US agricultural industry has gone out and built 600 million bushels of additional soybean crush plants for this. And you see, of course oil companies investing billions, but the main ingredient, which is soybean oil, has not been utilized to a degree that builds up soybean prices. So unless I get the soy oil market going a lot higher, these refineries have been using things like, you reclaim Greece from China. And so unless I get that soil price going higher, US farmers are not gonna see an income bump, if you will, from renewable diesel. In fact, it'll really hit their prices and profitability because on the other side of that, I get a product called soybean meal and the world's gonna be saturated with soybean meal, which is dropping soybean prices right now. And so US farmers, that's why I say they're looking at negative margins for some crops, and that's harmful heading into a new growing season.



David Greely (26m 26s):

That's interesting because they do, you know, one of the looking for sustainable fuels, sustainable aviation fuel, renewable diesel, you know, I do wonder if we get into a world where, where yields are stagnant and demands growing, do we get that food fuel competition and how does split play out? It's interesting that because it's creating a surplus of soybean meal that that's actually harmful to farmers as opposed to raising their prices.

Dan Basse (26m 51s):

Well, I think I think if, if the industry continues to build out as projected over the next three to four years, you could get into that yin and yang of where food versus fuel will come back into debate again but today, and I'm afraid for the next year or so, the abundance of meal as these new crush plants, and again, when we set up these technologies, I don't think we really expected vessel loads of used cooking oil to be showing up from Southeast Asia and so it's that used cooking oil now that has a higher CI score or a carbon score that gets the extra payment, that payment goes back to China. And unfortunately the US farmer is not reaping the benefits of higher soybean oil. He's just seeing lower prices and he's kind of a little angry about it, if you'll to say the least.

David Greely (27m 31s):

Hmm, interesting. One more global issue, I I wanted to pull you back to on the energy side, what we often see is the approach to the energy transition being very different in the US Europe, say the global north relative to the global south, and people facing very different issues you know, one comment we've heard kind of again and again is there are many energy transitions going on in the US and Europe. It's about electrification and technology to a large extent and moving off of fossil fuels into lower carbon renewables supplied over the grid. But many people in the global south are just trying to get to a meaningful amount of energy to improve their, their quality of life. You know, transitioning from wood to gas or propane. And as you remarked earlier, you know, when there are food shortages, it's the poor and the poorest countries that bear the burden of that. So I was curious, when you look at this move to trying to do more sustainable agriculture, how is that being viewed in the global south countries or the poorer countries relative to what a, a discussion in the US may look like?

Dan Basse (28m 38s):

Yeah, you know, if I, if I head to my clients and I talk to indie or Bangladesh or people, let's say in that part of the world, it's, it's just about finding the, the next, the meals for the next week. I mean, that's what they're focused on and they want to talk about availability nearby and what is the price and can they afford it, and how do their families get by? When you look at disposable incomes taking as much as 40 to 70% just to buy food, we in the United States are blessed with a very abundant food supply. We spend 6.7% of our disposable income on food, yet we complain every grocery trip that we're spending too much, but we have the most abundant and the cheapest food supply in the world. If I go to South America, you know, and we talk about sustainability and every Brazilian farmer I have an office in Brazilia would tell you that, yeah, you know, I want to be sustainable.

Dan Basse (29m 25s):

I want generations to farm my farm. But you know, they're just not engaged in this carbon discussion. They're not engaged in organics, they're not engaged in regenerative agriculture, they're just expanding because they're making money. And so that's the thought process there. But you know, somewhere along the line, we've got to get all parties pulled together and have a, a march, if you will, that looks cohesive, that it's not just Europe. That's you know, Europe is out there trying to do this farm to fork, which is great, but when we get to trading of commodities globally, this is when it becomes difficult because there's gonna have to be premiums associated with commodities or crops that are produced in different environments for climate that need to have premiums. And today it's still a commercial commodity environment that needs to be looked at or at least thought about in the next four to five years.

David Greely (30m 15s):

Oh, that's really interesting because I that I wanted to ask you about that. You know, you've talked a lot about your clients, your founder and president of Ag Resource Company, you provide research, risk management advice to the agricultural markets and I wanted to ask you about where are you seeing a need for better risk tools, better technology But it sounds like you're bringing up a piece that we, we hear a lot that we almost need to be able to provide green premiums or low carbon premiums, or allow people to distinguish commodities based on how they were produced or where they were produced. We certainly hear that in the mining industry, hearing it more and more in the, in the energy as well. Can you dive into that a little bit deeper, how do folks in the agricultural markets need to be able to distinguish their crops so that they can get paid for doing the right thing?



Dan Basse (31m 07s):

No, right and maybe the best example that I have for you, Dave, is the organics industry, which, you know, developed roughly 20 years ago now over 20 years, in that for a time period those consumers that wanted to buy organic vegetables or fruits or, or even grains, paid a sizable premium in some cases as much as two times the commercial price. Now, over time, because it's been developed and it's, I would say almost mature, that has narrowed up to maybe something in a vicinity of five to 7% premium to commercial crops and so where I'm going on this all today is, is, is I think if we use that model of organics and saying we start to incentivize the production, if you will, in different locales, and it's up to the farmer then where he would be able to get the premium, because I'm really doubtful that the world will be able to come up with a platform that treats farmers similarly.

Dan Basse (31m 57s):

And by that I'm saying, you know, if you do this, that, and whatever, you'll get this premium. Well, that may work for US farmers, but European farmers are gonna want something different and Brazilian farmers are not even hearing it. So this has to be a groundswell effort that has to start with the consumer and then it must move from there. And it can always start in the countries that are wealthy, the United States, Europe those kind of places where maybe Japan where consumers can afford to have the luxury of, of making these choices. But I do think that as you think about commodity and commodity trade and local farm activities, this is the way that this will happen as we go forward in time. It has to happen with the consumer and then spread out from there. Because politically speaking, although USDA provides support and leadership for the US farm community, I don't think in a global perspective they are gonna have the voice to get accomplished. What needs to happen to really change agriculture in a meaningful way that would affect climate.

David Greely (32m 54s):

I think organic food creates a great example. I'm glad you brought that up. Up. Is there some dimension along which distinguishing different types of crops or food would be the first good step. Was it done with no-till or what, what's kind of the metric that might be in mind for some of the, the first approaches to try to do that?

Dan Basse (33m 13s):

Well the first approach I would say that US farmers adapted no-till farming very, very quickly. You know 10 years ago it was it was a new proposal. It spread across the Midwest because people saw it as a, they, they wanted to be good stewards of the soil. It reduced erosion, it saved moisture in the soil, and in fact, policy didn't even really get involved. Farmers just saw it as the right thing because they didn't need as much tractors, they didn't need as much fuel to produce crops because they didn't have as many passes over the land. So that, that's a start. But I hope the research effort on soil health continues to push forward and that we have real meaningful thought discussions about biologics where we can use different things in nature rather than, let's say, just chemicals to help our soils recharge and increase its productivity.

Dan Basse (33m 59s):

This may be also a way where we see better drought tolerance and maybe can, we're starting to see hints of where there's some temperature tolerance. So research efforts and, and these kind of areas of soil health will be really helpful. And again, i, I think we, farmers just learn about different crops going forward. I mean, I could envision, like in Brazil, Brazilian farmers plant two or three crops a year. I'm hoping in Americas today because of climate, we're really a one crop country, but that can change. And where we can plant different crops following corn and beans in a fall, harvest it before we plant the next crop, and we get into a rotation. And that too will help not only the soils, but also help the availability of food globally.

David Greely (34m 37s):

Well, first I want to really thank you, Dan. It's a fascinating conversation. I could talk to you for hours, really appreciate all, all the insights and, and thoughts you've brought to us today. It'll take me a while, I know to digest them all. I was hoping just as, as we wrap up, maybe if you could help us kind of wrap it up in a bow of what we should be taking away. You know, as you look farther down the road, under all these pressures and forces, how do you see the agricultural markets evolving as we look out 5, 10 years, is it new commodities, distinguishing commodities based on how they're produced, new regions or markets rising in importance? What does that landscape look like relative to today? If you're, if you were to kind of step back and think, where might we be or where would you'd like us to be in 5, 10 years?

Dan Basse (35m 28s):

Well, I'm very hopeful on AI and the speed of technology that will be coming forward. I'm very hopeful that as we think about the next five to 10 years, we can think as food, as medicine where we can really beat back some of our health problems, understanding food and



how it affects our health. I think for us farmers I vote as one that we would really like to have more information on that so that we just don't say you're buying a natural food. That's kind of something that I hope everybody does every day, but we as farmers want to produce for you the consumer. And I want research and AI and the speed of technology to get involved in that whole discussion so that we have a healthier, we have a more beneficial nourishing food supply available. And then that it treats the environment and climate favorably.

Dan Basse (36m 13s):

I can tell you farmers will do whatever they do. They want generations to farm on their land, and this is not something they take lightly. This is something that's dear to their heart and very, very important. So the three crop system we have in the United States, which is corn, soybeans, and wheat, I think we need to diversify it. I think there's opportunities to, to, to look at the where we're going. And I hope that policy in Washington become fixed so that we as farmers and, and we in agriculture can have the right signals to do the right things for you, the consumer.

David Greely (36m 41s):

Well, I want to say thank you, Dan. I really appreciate the insights and perspectives on the agricultural and grains markets you were able to share with us today, and I really appreciate you spending the time with us this morning.

Dan Basse (36m 52s):

I really appreciate being on the show. And, and, and for all of your listeners, you know, if you see a farmer thank them for the food they produce.

David Greely (37m 02s):

Thanks again to Dan Basse, Founder and President of AgResource Company. We hope you enjoyed the episode. We'll be back next week with our next episode of Setting Course. We hope you'll join us.

Announcer (37m 15s):

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Announcer (38m 03s):

That concludes this week's episode of SmarterMarkets by Abaxx. For episode transcripts and additional episode information, including research, editorial and video content, please visit smartermarkets.media. Please help more people discover the podcast by leaving a review on Apple Podcast, Spotify, YouTube, or your favorite podcast platform. SmarterMarkets is presented for informational and entertainment purposes only. The information presented on SmarterMarkets should not be construed as investment advice. Always consult a licensed investment professional before making investment decisions. The views and opinions expressed on SmarterMarkets are those of the participants and do not necessarily reflect those of the show's hosts or producer. SmarterMarkets, its hosts, guests, employees, and producer, Abaxx Technologies, shall not be held liable for losses resulting from investment decisions based on informational viewpoints presented on SmarterMarkets. Thank you for listening and please join us again next week.