

KEYNOTE INTERVIEW

Optimizing outputs



*Regenerative agriculture is attracting rising investor interest as a way to meet present needs without compromising future productivity, explain Manulife Investment Management's **Brent McGowan**, **Oliver Williams** and **Julie Koeninger***

Investment in agricultural assets is sometimes viewed as being antithetical to sustainability goals, as there is a perception that intensive farming practices are rarely aligned with environmentally positive outcomes. However, investors can in fact support the health of both humanity and the planet – by investing in regenerative agriculture.

Manulife Investment Management's strategic adviser and board member, agriculture, Brent McGowan, global head of agriculture investments Oliver Williams, and Julie Koeninger, managing director and senior portfolio manager for agriculture, explain what it means for an agriculture asset to be regenerative and set out why focusing on optimizing both returns and sustainability is a way to meet the long-term needs of all stakeholders in the sector.

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Q How do you define regenerative agriculture?

Oliver Williams: We define regenerative agriculture as a farmland management framework where the goals of soil health and productivity guide management decisions, in turn leading to optimized farm production, biodiversity and the sequestration of atmospheric carbon into the soil.

We have more than three decades of experience around regenerative agriculture. After all, regenerative agriculture encapsulates activities that have been around for years. For example, we hear a lot about planting

cover crops as a means of maintaining the soil, but that practice has actually been around since the Dust Bowl of the 1930s.

Regenerative agriculture is also about doing a better job of communicating how these practices can optimize farming outcomes. With enhanced technology today, alongside our increased ability to capture and analyze data, we can now fine-tune some of our regenerative tools and innovate around them.

Brent McGowan: It is also important to realize that regenerative agriculture is not a destination. Instead, it's about deploying a series of tools that are available to a farmer from a horticultural and agricultural perspective in order to reach an optimal outcome. The key is

to understand the tools that are available to you on each individual property and to deploy them for an outcome that is better than the one you are currently able to achieve. For instance, you may be able to achieve higher productivity through enhanced soil health, while avoiding soil erosion.

That said, there still seems to be some confusion in the industry regarding terminology, such as with organic practices. Organic farming is a production methodology, while regenerative farming is about utilizing all of the tools available to you to reach an optimal

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JULIE KOENINGER

outcome. The appropriate mix of tools will naturally change every year.

Q What positive effects can regenerative agriculture have on soil health and biodiversity?

BM: The wonderful thing about the regenerative agriculture sector is that we have technology that was not available even five years ago. This means we can test for things that tell us about soil health in greater detail than ever before.

We are measuring things in the rhizosphere, including how roots interact with beneficial fungi and bacteria, in a way that simply wasn’t possible until recently. We are now able to conduct a genetic assessment of the soil microbiome. That allows us to be very prescriptive in the regenerative practices we employ to achieve the outcomes we are looking for.

We are in an interesting period, probably the third agricultural revolution, driven by advanced analytics and additional data capabilities. Artificial intelligence is feeding into this, but the other factor is the development of advanced synthetic biology.

In the future, we will be able to use sensor technology to understand instantaneously exactly what is going on within a particular plant. This will allow us to tailor our farming practices to smaller plots within a farm. We farmed by the field for years. More recently, we farmed by the acre. In the future, we may be able to farm by the square meter.

OW: We are always looking to deliver optimization, and regenerative agriculture has been really useful for this. Back in the 1990s, we talked about a process of ‘spoon-feeding,’ where inputs were applied in small amounts as needed. This showed that we could reduce our inputs and achieve a better outcome, all while reducing costs. This is now called precision agriculture. To put it simply, the aim today is to manage our farms

Q What does the future hold for investment in regenerative agriculture?

BM: An investment in agriculture is an investment in the future of humanity. It is about prioritizing the food, fiber and fuel assets that mankind needs to thrive.

It is also an investment in a regenerative system. There is no doubt that there are parts of the world that don’t necessarily have access to the right tools to be regenerative, but the US, Australia, Europe and certain parts of South America have a toolset today that puts regenerative practices at the forefront. This is simply how we grow food now.

JK: My hope is that we do a better job explaining regenerative systems going forward so there is less confusion in the market. I think we are starting to see that.

In addition to people investing for returns, they increasingly want to be doing something to support humanity. We see our mission as shining a light on regenerative agriculture and demonstrating that it is a great way to invest in the future of the planet.

OW: Everyone has an embedded interest in agricultural outcomes. As such, we see the growing focus on regenerative processes – from the farm gate, through the supply chain and ultimately reaching the end consumer – as a trend that will only intensify in the future.



Analysis

sustainably and achieve the optimal output, without compromising future productivity.

Julie Koening: We used to call this good stewardship of agricultural assets, long before the terms ESG or sustainability became popular. It's worth remembering that good stewardship is good business. This has always been our mantra because we have always been looking for the next optimization, as the environmental outcomes go hand in hand with the financial outcomes.

Q What investment trends are you seeing around regenerative agriculture?

OW: On the consumer side, we have seen a lot of retailers, especially in the consumer-packaged goods space, wanting to source products that have their origins in regenerative practices. As we mentioned previously, there is still some confusion regarding the terminology around regenerative agriculture, so marketing segmentation does

play a role in some regional differences here.

Looking at the macroeconomic environment from an investment standpoint, higher interest rates and inflation have certainly changed capital flows. But investors still find agriculture attractive for a number of reasons, such as its long-term expected returns and income-generating potential.

JK: On the investor side, regenerative agriculture is definitively important in Europe and is catching on in other regions too. While the current focus is on demonstrating a commitment to regenerative practices, we think investors will eventually want to dig deeper.

One way to do this will be looking at the numbers. For instance, 100 percent of our properties use some form of regenerative practices, but I think the next step is to be able to measure the impact of this. We are developing better and better tools to measure the impact of regenerative practices, whether in terms of carbon sequestration or any other measure of soil health.

Q How important is certification as a proactive step to address challenges such as yield vulnerability, pest management and financial success?

JK: Currently, 100 percent of our US and Australian farms are certified by Leading Harvest, a non-profit organization aiming to harmonize sustainability standards across the food sector and scale best practices in sustainable agriculture.

It isn't prescriptive, but it does require that we address soil health, which can include regenerative practices. In addition to our US and Australian assets, our Canadian assets will soon be certified by Leading Harvest and we expect Leading Harvest to continue to expand to other geographies.

OW: Although sustainability is very important for us, it is also important for

the agricultural industry more broadly. In 2017, a number of industry participants in the farmland investment space convened to create a standard for sustainable farmland management. This ultimately became Leading Harvest.

These days, the reality is that if you want to have an impact on a global scale, you need certification. One of the complications that we have regarding agriculture is that every region is different.

That drove Leading Harvest to move toward an outcomes-based standard. It is based on 13 principles, supported by 71 indicators that point toward specific areas of agricultural production. The standard provides the framework and a third-party auditor verifies whether your outcomes are compliant with that.

Q How important is it for investors to adopt a long-term view when supporting regenerative agriculture?

OW: It is a fundamental assumption when we bring investors into this space that they will have a long-term view. When we are advising them, we want them to be invested for, say, 15-plus years.

However, the reality is that we have annual crop cycles and, over time, things change. So if you really want value creation and other benefits that come with regenerative agriculture, it is essential to adopt a long-term mindset.

JK: There has to be a long-term focus because agricultural crops and markets move through cycles. We try to diversify across regions and crop types because the cycles are not all correlated, and we are very consistent in the way that we manage our assets for the long term.

After all, we have a fiduciary duty that we take extremely seriously. Any farmland management practice that we adopt must align with our fiduciary duty to our clients. ■

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