NEW ZEALAND’S large-scale commercial plantations of radiata pine appear increasingly at odds with the spiritual, cultural, environmental and economic aspirations of their Māori owners. Associate Professor Dr Mānuka Hēnare, Director of the Business School’s Mira Szászy Research Centre for Māori and Pacific Economic Development, discusses a bold new plan for forestry collaboration and innovation with Business Review editor Vaughan Yarwood.

Mānuka Hēnare

Māori landowners see a bright future in indigenous forestry
**Business Review**: Northern hapū-iwi are developing a new forestry model that they say is better aligned with Māori values and needs. What is the current industry model?

Mānuka Hēnare: The current model of forestry is based on one species – *Pinus radiata*. New Zealand wanted to diversify its economy and planners got it into their heads that there was all this land available in the central North Island. The problem was that the land was owned by Māori. So the government of the day basically confiscated it and planted the big Kaingaroa forest, and others, using radiata pine. And out of that grew an extraordinary forestry sector.

But that model of business is problematic, because Māori owned the land but not necessarily the trees and so received only stumpage fees. As a result of the Treaty settlement process and a number of court cases over the past 20 years, all the forests from Taupo north, and some smaller forests further south have been returned, or will be returned, to Māori. However, it remains a messy, convoluted political and commercial process. At the same time, there continued to be a rather narrow view of forestry, centred on one species. You cut the top and bottom off the trees and sold logs. Very little processing was done in New Zealand. Now Māori have become the owners of the trees and the land, but there are still another two or three cycles to go in the existing contracts. In other words, they are committed to pine trees for another 60 to 90 years. However, that is useful because it gives you a chance to plant replacement species, so that when the pines are gone another forest is in place. So that is the context of the discussions at the moment.

BR: Apart from that model being dubious because it was based on commodity export, what needs was it failing to address for Māori?

MH: Has anybody seen a Māori greet a pine tree? That is a cultural way of saying the tree is functional; it has commercial value but little cultural purpose. Kauri, tōtara, rimu and other native species, however, are ancestors to a lot of tribes. So you treat them very differently. When Māori foresters say prayers over them before felling, they are saying: ‘we have to make a living, so you have to sacrifice yourself.’ Metaphorically speaking, the tree offers itself for the good of the Māori community. That cultural dimension is quite significant. So, having got ownership of the pine estates, Māori are now saying that their cultural needs are not being met solely by pines. That then leads to the question: ‘why don’t we start planting in a systematic way to restore the heritage forests?’ And some of those heritage forests will never be cut down.

BR: Let’s talk about the Te Taitokerau Forestry Innovation Cluster. What was the thinking behind taking the process forward in that way?

MH: From the Business School end, knowing that this was going on – that is, the phenomenon of suddenly we own the trees as well as the land – and meeting with all those tribal groups where many of our Māori postgrad students come from, through the postgraduate programme of Māori development, you hear people talking about these issues. That is how we were becoming increasingly informed about the dynamic in the Māori world. So some of our academics started looking for a new model. About 18 years ago, we won a significant FRST research project on innovation in the seafood sector. That was a joint project between NIWA, the Business School and the Mira Szászy Research Centre for Māori and Pacific Economic Development. That study found no apparent culture of innovation in the seafood sector, even though Māori had become 50 per cent owners of the quota management system. There were examples of innovation, yes, but no culture of innovation.

With the ICEHOUSE business incubator, we scoured the world for another model of business and we came up with innovation clusters – an idea that was coming out of Harvard Business School, and North Carolina and elsewhere. A business innovation cluster is not an incubator, it is a cluster of existing companies that want to transform themselves into something else. And as part of that there is always incubation, because you have got new companies so you create a different context. You couldn’t get Māori owners to stay in the Auckland suburb of Parnell [where the ICEHOUSE is located] for incubation purposes – that is just impossible. So we looked for a flexible way of taking incubation and innovation to them. They had to be willing companies, because otherwise the process would be like trying to coordinate a lot of alley...
cats. So you bring in research capabilities – in this case the Business School – then you bring in an investor. That becomes the cluster. The investor can then inform the companies on opportunities, and the academics provide R&D which New Zealand firms are weak on. So that is the basis of the Tai Tokerau Innovation Cluster. We are developing others on seafood and tourism based on the same principle.

BR: Forestry hasn’t been known for innovation in recent years. What are the barriers to new thinking in the industry?

MH: Well, they are hooked on old models, with huge plantations of trees requiring big mills, trucks, roads, all that infrastructure. However, there are a number of companies – not just Māori ones – saying we should be doing more with trees. So, in the light of all that, it struck me that someone should sit down and craft a new philosophy of forestry. And that is where I have come in. I have started exploring it and testing it out. What has been interesting is the number of non-Māori who say that is terrific, we like that. Māori are not the only ones worried about the concentration on a single exotic species.

BR: How do you integrate all the new perspectives and insights from around the world that are ripe for introducing into the new model? Does the cluster itself have the capability of doing that?

MH: The cluster is really at the kindergarten stage of learning; it is nowhere near mature. And don’t forget, New Zealand doesn’t have a history of innovation clusters. What we found in the earlier study of the seafood sector is that everyone, including the government, was using the word ‘cluster’, but what they really meant was forming coordinating committees. So you aggregate a whole lot of them and half are unwilling. They are there to stop the others getting an advantage. That is why we said, you have to bring together those who want to change, and let the market deal with those who don’t.

BR: Given that there isn’t a tradition of cooperation in New Zealand, isn’t it also necessary to educate people about how it can work effectively?

MH: One of the things you have to do is ask: ‘what are our shared values?’ Even in a Māori context you can’t assume that the shared values are all on the table and agreed on. So in response to that, we came up with a Harvard-inspired strategy map, and we applied the Māori vision of a business, which is the four wellbeing: spiritual, environmental, kinship and social, and economic – and that was written and designed after a two-year series of retreats. That strategy map contains some assumptions. If you are going to join this group, these are the core values: commercially-driven, design-led, research-based, culturally-focused. Spirituality is also important. In terms of individual firms, there are financial and administrative criteria. What are the KPIs for these four wellbeing? We have Masters and PhD students working on that now. From the economic point of view, we moved into the capabilities approach of the Nobel Prize-winning economist Amartya Sen, which asks: ‘What are people and sectors capable of?’

BR: Obviously, the economic imperative looms large. What research is there to suggest that there is no contradiction between cultural needs and economic needs? That one will not jeopardise or compromise the other?

MH: One of the things I have done is to look back at the Nobel laureates in economics over the past 25 years to spot differences or changes in economic thinking. What you find is that the behavioural sciences have had a huge impact over time. Initially I didn’t like Gary Becker’s approach – it was a little too economicistic. But from studying human capital, researchers have gone on to look at social capital, then cultural capital, and finally spiritual capital. All because Becker and others long ago had identified capital other than material capital. Remember he was addressing the issue, among other things, of poverty. And Amartya Sen received his Nobel Prize because he introduces ethics into economics. Well, Adam Smith did that in Volume One of The Wealth of Nations, but everyone reads Volume Two, on the creation of wealth, not his moral imperative. That is a misuse of Adam Smith, because he said the economy is an extension of moral thinking. That is where Māori are: from the spiritual world comes your material world. And when we looked at all of that, we thought we can now develop a Māori sense of the economy, drawing on tradition and on what the new economists are saying. It is post-neoclassical economics. A whole area of global economics and ethical pluralism. So we are in a lovely new ball game.

BR: You mentioned that Māori have a 90-year grace period, when you can develop other tree species. How far has your thinking progressed? Is much science-based research needed before that can go ahead?

MH: Remember that in the model of the innovation cluster you bring the science labs together. In this case the science lab is Scion – a world-leading forest research institute, and it has been involved from the outset. Scion has come up with new scientific models of plantations. It is a matter of being able to say to the scientists this is what we need to know, as opposed to the scientists in splendid isolation coming up with ideas and trying to tell the market. One of the tasks the Māori group put to Scion at the outset was to suggest what the infrastructure should look like, and they are still working on that. One possibility is that forests are cut down selectively.

BR: When you talk about different species and new types of logging, implicit in that are new products and processes, and indeed a new high-value supply chain.

One of the things you have to do is ask: “what are our shared values?” Even in a Māori context you can’t assume that the shared values are all on the table and agreed on.
In the philosophy we are asking how do you use 100 per cent of every tree, so there is no wastage any more. And 100 per cent of the whole forest. This is a huge transformation.

MH: Well, manufacturing is now on the table. You put a small mill near that forest. In the philosophy we are asking how do you use 100 per cent of every tree, so there is no wastage any more. And 100 per cent of the whole forest. This is a huge transformation. At the Business School we are fortunate to have a memorandum of understanding with Scion, so it is a close relationship.

BR: What would you like to see happen in terms of collaboration with suppliers of machinery and other technologies?

MH: In some parts of forestry you are seeing technological development. When I was working in forestry in the late 1960s in Waipa State Mill, Rotorua, both as a labourer and later as a study officer, it was very labour intensive. But now, there has been technological development. The remarkable thing is, why has it taken so long? Is that going to be the normal pace of technological change? Because it is quite clear that in other sectors we don't seem to have entrepreneurs who can anticipate where the sector is going to go. Where are the incentives supposed to lie. Is it with government, the private sector, or the individual sector itself? Ideally, you would hope that the sectors themselves would do it, but they are not.

BR: The dairy industry, which has been quite innovative, is driven by farmers, who are naturally self-reliant problem solvers. You wouldn't expect a forester to tinker with machinery.

MH: If we were cutting significant forests of native species I suspect that we would have to export them to be turned in to something, because that capability is not here.

There are some small companies – I can think of a niche manufacturer in Kerikeri, that produces furniture made from native trees, but we need dozens of these. There is a Japanese company, Juken NZ, in Kaitaia, North Auckland that produces a high-quality triboard – 3-layered panel boards, using glue from Denmark. Since 1992 Juken, formerly known as Juken Nissho, has developed new kinds of mills, in Masterton and Gisborne, and it employ around 1,000 New Zealanders. The puzzle is why haven't others imitated that?

BR: Is New Zealand too small to incubate those sorts of industrial solutions?

MH: Yes. The Business School recognised the innovative work being done by the Central North Island collective, CNI. That is the group that has been co-ordinating the return of Kaingaroa forest, and all of that is in transition now. They realise that they can fragment that forest into little tribal interests or they can keep it together, and so aggregate the assets and keep the mana where it lies. CNI is one of what we call our tribal alumni. I keep in touch with them and Scion works with them. They have huge forests, but all the same issues. So in many ways we are a small lab. There is no reason why one day there couldn't be a cluster of innovation from Taupo north, but they have to be willing.

MH: My instinct is to look for cooperatives committed to continuous innovation along the value chain. The Meat Board, the Wool Board and the Dairy Board are old New Zealand cooperatives that get reborn every now and again. They have their ups and downs, but they actually come back don't they. You then get a whole-sector approach. So you have Juken, a foreign company coming in to process logs. And you have the Talley's Group, an old South Island New Zealand family that prides itself in its small businesses. It started out in fish processing but has now expanded into food harvest and processed vegetables and meat and has units in Motueka, Timaru, Westport, Blenheim, and Moerewa in the Bay of Islands.

BR: So you envisage small companies filling niches within forestry?

MH: Yes, but there needs to be a more coherent sector understanding that we are going to transition from a single commodity to many diverse products. And that has to be built in, so you begin breaking down the big into smaller units – I call them clusters for want of a better word. But it could be new types of cooperatives – which is actually the New Zealand story. We have done well as a nation because of cooperatives. The added dimension is the commitment to continuous innovation.

One thing some Māori entrepreneurs are looking at is planting trees further apart so that sunlight can get in and you can grow crops – ginseng, for instance – without waiting 30 years to get a financial return. Others allow livestock in. So you are getting multi-use of the land. Trees over 30 years, cows and sheep on a daily basis, and also food products.

BR: I suppose the question is whether native trees can thrive in that plantation environment.

MH: We won't know until someone applies tree science and tries.

BR: And that is separate from heritage forest?

MH: I wouldn't be too hard and fast on that. Some people say that in a heritage forest, we're never going to cut the native and endemic trees down. But that doesn't preclude running sheep through one part of it. So instead of having all sorts of low-lying plants in there, you have grass...
As a result of Treaty settlements and court cases most North Island forests are being returned to Māori. The current model of exotic plantation forestry does not align with Māori spiritual, cultural, and economic needs. A new collaborative model is being investigated, which calls for heritage and mixed production forests, and innovative manufacturing to minimise waste and deliver high-value products.

**K E Y   T A K E - O U T S**

- As a result of Treaty settlements and court cases most North Island forests are being returned to Māori.
- The current model of exotic plantation forestry does not align with Māori spiritual, cultural, and economic needs.
- A new collaborative model is being investigated, which calls for heritage and mixed production forests, and innovative manufacturing to minimise waste and deliver high-value products.