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Law in Non-Places: A Comment on Siva Thambisetty, 'The Unfree Commons: Freedom of Marine Scientific Research and the Status of Genetic Resources beyond National Jurisdiction' (2025) 88(2) MLR 300

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Siva Thambisetty's article is a timely review of the BBNJ Agreement which marks an important milestone in the regulation of genetic resources. While the article touches on many important topics, its main contribution is that it explains how the negotiators managed to ground the complex regulatory framework needed to implement the granulated approach to benefit sharing envisaged in the BBNJ. This comment places those arguments in historical context to reflect on the 'unprecedented' nature of the BBNJ.

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Researchers, breeders, and scientists have used genetic resources as building blocks to develop new products for centuries. While the collection of genetic resources was occasionally subject to domestic laws that controlled access and use, for the most part researchers operated under the idea that genetic resources were part of the common heritage of humankind, which effectively meant that they could collect and use genetic resources as they wished. Over the last 30 or so years the idea that genetic resources are under the common heritage of humankind has gradually but steadily been eroded as access and benefit sharing (ABS) laws have expanded to cover more and more territory and different types of genetic resources.

The first international law to regulate access to genetic resources was the 1992 Convention on Biological Diversity (CBD). Undermining the presupposition that genetic resources are part of the common heritage of humankind, the CBD affirms that States have sovereign rights over their own biological resources. In doing so, the CBD recognised that the authority to control access to genetic resources rests with national governments and is subject to national legislation. The shift away from the common heritage of humankind continued with the 2004 International Treaty on Plant Genetic Resources for Food and Agriculture (Plant Treaty) which regulates the way plant genetic resources for food and agriculture are accessed and used. The latest international treaty to regulate genetic resources is the Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction (BBNJ Agreement) which extends the reach of the international regulatory ABS regimes to scientific research using marine genetic resources derived from areas beyond national jurisdiction. With the BBNJ, access and benefit sharing laws also expanded to include intangible digital sequence information derived from physical genetic resources. While global saturation of ABS is not complete, and outer space is a frontier yet to be conquered, it is getting close.

In developing the BBNJ Agreement to regulate access and use of marine genetic resources, the parties had to balance a series of competing demands. At a general level, the interests of scientists in accessing marine genetic resources for use in research had to be weighed against the need to conserve and protect the oceans. The negotiators also had to work out a way of ensuring that there was some type of compensation for the use of marine genetic resources (which begged the question of who was to pay and who would be paid) that did not unduly hinder research involving marine genetic resources. The negotiators also had to grapple with the uncertain status of digital sequence information in international law and to work out a way of ensuring that intellectual property rights taken out on innovations derived from marine genetic resources did not hinder ongoing access to those genetic resources. The negotiators also had to deal with the fact that as areas of the high seas fall outside the jurisdiction of any single state there was ‘no starting property setup relevant to [marine genetic resources] in [areas beyond national jurisdiction] to lean into or out of’ (at 309). In the absence of an obvious legal foundation, the negotiators had to work out a way of grounding the proposed regulatory scheme to govern marine genetic resources.

While Siva Thambisetty’s ‘The Unfree Commons: Freedom of Marine Scientific Research and the Status of Genetic Resources Beyond National Jurisdiction’ provides insights into many of these issues, its main contribution is in the way it explores how the BBNJ negotiators grounded the regulatory scheme that was developed to control access and use of marine genetic resources. Her starting point for doing so is with the conundrum which lay ‘at the heart of the BBNJ negotiations.’ (at 304). This was the challenge of how to reconcile two competing models for how the high seas and its resources could each be used: namely, the freedom of the high seas (which includes freedom

of marine scientific research) on the one hand and the common heritage of mankind on the other. Drawing on the knowledge she gained as expert for the Chair of the G77 plus China Group of countries, Thambisetty argues that the final text of the Agreement 'bridges the normative dissonance' between these competing demands by crafting 'a new and unprecedented constitutionalising norm in global biodiversity governance.' (at 300).

In explaining how these conflicting demands were accommodated within the BBNJ, Thambisetty's article 'offers a new way to think through both the dissonance in the negotiations as they proceeded and the eventual text-based solutions'. (at 304) This is the idea that freedom of marine scientific research in the BBNJ is 'a property-protected activity tethered to marine genetic resources where the scope and consequences of the activity' which are subject to the common heritage of humankind regime 'demarcate the commons resource' (at 300). More specifically Thambisetty argues that freedom of marine scientific research is a freedom 'enjoyed by all state parties, now or in the future [and this] gives it priority over interferences with that freedom. In this sense, it is a form of prior-use right, a property interest that must be maintained for would-be marine scientists' (at 305). The property-protected activity, which can only be carried out provided the tethered resource is not consumed or degraded, is a 'necessary adaptation to move beyond the flaws of both commons and private property models as it relates to the management of relevant resources' (at 306).

My aim in this comment is to place Thambisetty's arguments and the BBNJ Agreement in an historical context. To do this, I want to think about the novelty of the BBNJ in terms of its relationship with other international laws that regulate access and use of genetic resources. While Thambisetty raises many important issues in her article, I want to use this historical background to reflect on her comments about the novelty and 'unprecedented' nature of the BBNJ. I also want to use this history to follow up on Thambisetty's comment that 'benefit of mankind', which is the fictional recipient of the BBNJ access and benefit sharing scheme, is 'an aspirational outcome that will have to be actively engineered, and that is where the BBNJ Treaty will either succeed or fail' (at 323).

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The 1980s saw a number of scientific, commercial, political, and policy changes that had a lasting impact on the international legal and policy landscape across the twentieth century and beyond. This included scientific and technical advances that allowed researchers to manipulate biological material with more precision than they had been able to previously. This is turn triggered a growing interest in using natural resources to develop new bio-based products. Following the 1980 US Supreme Court decision of *Chakrabarty* (which confirmed patent protection for genetically modified organisms in the United States) and the introduction of plant variety rights legislation in a number of countries around the world, there was an increased interest in using intellectual property to protect investments in biological innovations.

While it was claimed that biodiscovery-based research would deliver global benefits, this was met with scepticism, particularly in terms of the benefits it was supposed to deliver to developing countries. One of the concerns was that while the biodiversity that underpinned biodiscovery research was primarily sourced from developing countries, very few if any of the benefits that flowed from that research would find their way to source countries. There was also anxiety that intellectual property protection taken out over inventions based on genetic material derived from developing counties would limit access to those genetic resources. There was also a concern that as most of the world's biodiversity is located in developing countries that the burden and cost of conserving that biodiversity would be borne by developed countries (who had no real hope of receiving any of benefits for its use). Despite the suggestion that biodiscovery research was changing the way genetic resources were used, critics argued that it was simply a continuation of the misappropriation of genetic resources that had been occurring in developing countries for centuries.

Prompted by a fear that developing countries might restrict access to biological resources and thus undermine the benefits that were expected to flow from biodiscovery research, developed and developing countries began to discuss ways to move forward. To do so they had to work out some way of ensuring that researchers and companies would be able to access the genetic resources they needed for their research and, at the same time, that the farmers, local communities, and Indigenous Peoples who had stewarded those genetic resources would receive some sort of compensation for that use.

While it took some time, it was eventually agreed that the way that this would be done was by affirming that States have sovereign rights over their biological resources. This, in turn, allowed countries to introduce laws that stipulated that a party would only be given permission to access genetic resources if they promised to compensate the access provider for doing so (a fair and equitable sharing of benefits). Once it was agreed that there needed to be some sort of compensation for allowing someone to access and use genetic resources, attention shifted to a series of interrelated operational questions: who were the benefits to be paid to; who was responsible for paying those benefits; and how were the benefits to be calculated? Channelling the economic liberalism championed by Reagan and Thatcher, the response to these questions in the CBD was to leave these issues to be decided by the parties to the access and benefit sharing contract. The primary role of the state was to introduce laws that recognised some type of legal interest in genetic resources that could be traded and to ensure that access and exchange of genetic resources could only occur if there was a valid access and benefit sharing agreement in place.

Since the CBD came into operation in 1993, there have been major changes in the way researchers access and use genetic resources. While the CBD played an important role in this transformation, in other ways it has been much less successful. One of the complaints made about the national access benefit sharing laws that have been enacted to implement the CBD is that they have hindered, delayed, and in some cases stopped research altogether. There

is also little evidence that bilateral access and benefit sharing has delivered on the promise to generate and distribute fair and equitable benefits to access providers (other than the non-monetary activities that researchers would have delivered anyway).

While it took some time for many of these complaints to surface, concerns were raised early on about the negative impact of the CBD on the ability for researchers to access genetic resources for food and agriculture. Worried about the impact this would have on the breeding of new crops that were vital for food security, a push was made to develop a new tailor-made access and benefit sharing treaty for genetic resources for food and agriculture. The end result was the 2004 Plant Treaty.

In developing a scheme to regulate the use of plant genetic resources for food and agriculture, the negotiators of the Plant Treaty were faced with a number of problems. Unlike with the CBD where the genetic resources are primarily obtained from the location where they naturally grow (*in situ*), many plant genetic resources for food and agriculture have been removed from their natural homes, circulated, exchanged, and eventually deposited in seed banks, herbaria, and botanical gardens, often outside their country of origin (*ex situ*). In this situation the drafters of the Treaty were faced with a problem. Given that the party providing access to the genetic resource was often unconnected (in CBD terms) to the (initial) access provider, it was not feasible to use bilateral access and benefit sharing to regulate the use of plant genetic resources for food and agriculture. While it was accepted that there should be some sort of compensation for the use that was made of plant genetic resources for food and agriculture, it was clear that this could not be done using bilateral access and benefit sharing. To deal with this problem, the negotiators to the Plant Treaty developed a new type of ABS system called the 'multilateral system of access and benefit sharing.'

There are a number of differences between the bilateral access and benefit sharing scheme of the CBD and the multilateral access and benefit sharing of the Plant Treaty. One of these is the scope of the genetic resources that are regulated.[1] Under the CBD, each of the 196 member countries has jurisdiction over the genetic resources within their territories, which they deal with according to their national laws. In contrast, the plant genetic resources regulated by the Plant Treaty are located in a virtual global pool which is drawn from different ex situ sources.[2] As with the CBD, access to genetic resources in the Multilateral System is mediated by contract. While the CBD leaves it up to the parties to decide the terms and conditions of access, for users to obtain access to resources in the Multilateral System they are required to conclude a Standard Material Transfer Agreement (SMTA) with the provider of the resources. While the terms of the bilateral access benefit sharing agreement are determined by the parties, the Plant Treaty's SMTA sets out non-negotiable conditions that govern the access and use of the resources.

One of the differences between bilateral and multilateral access benefit sharing is in relation to the way compensation is understood. Under CBD bilateral access benefit sharing, the party receiving the genetic resources

compensates the access provider for the privilege of accessing and using the genetic resources. The nature of these payments is dictated by the terms of the access and benefit sharing agreement. While access and benefit sharing are linked under the CBD, they are (largely) decoupled under the Plant Treaty's multilateral access benefit sharing scheme, both in terms of who pays the benefits and who they are paid to. This can be seen if we look at the way monetary benefits are dealt with under the Plant Treaty.

There are three types of monetary benefit sharing under the Plant Treaty. The trigger for the first two is where recipients use plant genetic resources for food and agriculture that they have received under a SMTA to develop a product that is commercialised. In this context, the benefits that recipients need to pay to a collective fund known as the International Benefit Sharing Fund depends on whether the commercialised product is available without restriction for further research and breeding. Where research and breeding are unrestricted, monetary benefits are voluntarily shared. However, where limits are placed on the ability of third parties to use the commercialised product for subsequent research and breeding, the recipient is required to pay an equitable share of the benefits arising from the commercialisation of that product to the International Benefit Sharing Fund. A third form of monetary sharing occurs where money is voluntarily transferred to the International Benefit Sharing Fund.

While benefits are shared directly with the provider of the genetic resources under the CBD, benefits are shared with a more diffuse audience under the Plant Treaty. Specifically, the monetary benefits paid to the International Benefit Sharing Fund are subsequently distributed 'primarily, directly and indirectly, to farmers in all countries, especially in developing countries and countries with economies in transition, who conserve and sustainably utilise plant genetic resources for food and agriculture'.[3]

While the access and benefit sharing regimes developed under the CBD and the Plant Treaty are similar, not least because they embrace the idea that there should some type of compensation in return for access, on closer inspection there are important differences. While some of the differences can be explained by the specific goals of the different ABS regimes, the key reason for the difference is because genetic resources are not equal. As we have seen, the location of the genetic resources being regulated plays an important role in determining the shape of the regulatory architecture that is adopted. The localised, identifiable, and traceable nature of genetic resources under the CBD meant that it was possible to equip the access provider with a legal interest that they could trade. Linked by contract, the access provider and the receiver operate as the focal point to ensure that payments are made for use of genetic resources. Because plant genetic resources for food and agriculture are largely *ex situ*, this mode of regulation was not possible under the Plant Treaty. In this situation the legal fiction of the Multilateral System was introduced to deal with the fact that there was 'no starting property setup ... to lean into or out of' (Thambisetty at 309).[4] While the Plant Treaty uses contract (SMTA) to ensure that the recipient pays some sort of compensation for use of the genetic

resources, this has failed to generate any real benefits. Instead, 99% of the monetary benefits that have been paid under the Plant Treaty are from the voluntary payments made by organisations who are at a distance from the user of the genetic resource. As a result, most of the compensation paid for access and use under the Plant Treaty is not made by the party who receives and uses the genetic resource.

It is clear that the regulatory schemes adopted by the CBD and the Plant Treaty to ensure that compensation is paid for access and use were shaped by the genetic resources being regulated. So too with the BBNJ. There are a number of features of the genetic resources regulated by the BBNJ that shaped the mode of regulation that was ultimately adopted in the Agreement. As with the other ABS schemes, an important factor in deciding on the system of governance used in the BBNJ was the location of the genetic resources which were from 'areas beyond national jurisdiction'. In contrast to the CBD, the BBNJ operates on the basis that 'no State shall claim or exercise sovereignty or sovereign rights over [marine genetic resources] of areas beyond national jurisdiction.' (art 11.4). One of the consequences of this was that there was no obvious legal basis which could be used to build the access and benefit sharing scheme (Thambisetty at 309). In this sense the marine genetic resources covered by the BBNJ exist, to borrow from Mark Augé, in a legal non-place.[5]

One of the features of this non-place is that there are no groups or communities who can claim responsibility for having stewarded the marine genetic resources who could be targeted as potential recipients of any benefits generated from the use of those genetic resources (as there is with the CBD). In this situation, the negotiators had to work out how to turn the legal non-place into a space that was juridically meaningful. They also had to work out a way of ensuring that 'the benefits that result from the use of marine genetic resources and digital sequence information on marine genetic resources of areas beyond national jurisdiction [would] be shared in a fair and equitable manner to contribute to the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction'.[6]

The BBNJ adopted two very different ways of responding to these challenges. The first and more radical approach, which is the default interim position, decouples access, use, and benefits. It also moves access and benefit sharing away from a property-based regime. This is an approach in which high-income parties are required to make an annual contribution to a multilateral funding mechanism (similar to the Plant Treaty's international benefit sharing fund). While the scope of the voluntary payments made to the Plant Treaty are decided unilaterally by the party making the contribution, the BBNJ proposes that the Conference of the Parties establish a more formulaic approach to calculating payment. One of the consequences of the annual contribution approach is that it operates independently of the way resources are accessed and used. Notably, the contribution approach does not depend on there being a property-like interest in genetic resources, require parties to enter into contracts, for national laws to be introduced to police research on marine genetic resources, or for use to be tracked and accounted for. While this

approach adheres to the idea that took shape in the 1980s that there should be compensation for use of genetic resources, it shifts the user-pays approach from the level of the researcher (as under the CBD) to that of the state.

The interim voluntary payment system will continue until the Conference of the Parties replaces it with a new way of sharing monetary benefits arising from the utilisation of marine genetic resources of areas beyond national jurisdiction. While the details of the alternate approach have yet to be determined, the BBNJ suggests that it might include: (a) Milestone payments; (b) Payments or contributions related to the commercialisation of products, including payment of a percentage of the revenue from sales of products; (c) A tiered fee, paid on a periodic basis, based on a diversified set of indicators measuring the aggregate level of activities by a Party; and/or (d) Other forms as decided by the Conference of the Parties, taking into account recommendations of the access and benefit-sharing committee. One of the strengths of Thambisetty's argument is that she provides a viable legal basis to ground this alternative approach. At the end of the day however the alternate way of sharing monetary benefits and with it the need for a property-based solution may not be needed.

While the default contribution-based approach to benefit sharing requires relatively little follow-up work, the alternative more granulated approach requires considerable legal, admirative, and technical intervention. For example, in order for the granulated approach to function parties are required to introduce legislative, administrative and policy measures that ensure that they comply with the benefit-sharing provisions under the BBNJ. Parties also need to take the legislative, administrative, or policy measures needed to ensure that researchers who use marine genetic resources show that they have fulfilled the benefit-sharing obligations of the BBNJ. The BBNJ also envisages a tracking and tracing system that will be used to calibrate the benefits that users derive from the use of marine genetic resources. Under this approach there will need 'to be a way of registering or tagging [marine genetic resources], a way to record significant or material outcomes from the use of those resources and a means of calibrating the aggregate benefits that entities derive from the use of [marine genetic resources]' (Thambisetty at 320).

The result is an incredibly complex and fragile governance structure. One of the advantages of Thambisetty's argument that freedom of marine scientific research in the BBNJ is 'a property-protected activity tethered to marine genetic resources' is that it helps to explain the conundrum 'at the heart of the BBNJ negotiations' which was how to reconcile the freedom of marine scientific research and the common heritage of mankind. Importantly, by clarifying the ambiguous property status of marine genetic resources found in the high seas, Thambisetty also offers a way to think through and to ground the complex regulatory framework needed to implement the granulated approach to benefit sharing envisaged in the BBNJ. While from this perspective it seems reasonable to conclude, as Thambisetty does, that in doing so the BBNJ has crafted a 'new and unprecedented constitutionalising norm' (at 300), at the end

of the day the long-term innovation of the BBNJ may lie elsewhere. In this sense the conundrum at the heart of the BBNJ may not matter.

Based on the experience in relation to the other ABS regimes it is highly likely that there will be difficulties in implementing the BBNJ Agreement in national laws, there will be a lack of domestic support for the administrative agencies needed to implement those laws, and there will be pushback from the research community who are already overwhelmed by existing ABS laws. Given this, it may be that the alternative ABS scheme never eventuates. In the same way in which the placeholder term ‘digital sequence information’ has now become entrenched in the text of the BBNJ, there is a good chance that the decoupled interim approach to access and benefit sharing will become permanent. If this happens, the long-term legacy of the BBNJ will not be in the way it sees marine scientific research as ‘a property-protected activity tethered to marine genetic resources’. Instead, by decoupling access from compensation the legacy of the BBNJ may be that it moves access and benefit sharing away from its property-based roots altogether. And that would not be a bad thing.

References

[1] There are also differences in scope. While the CBD applies to all non-human genetic resources, the Plant Treaty only applies to plant genetic resources for food and agriculture.

[2] This includes the 64 crop and forage species listed in Annex 1 of the Treaty that are under the management and control of the Contracting Parties and are in the public domain, that natural and legal persons voluntarily include in the Multilateral System, or are held in the *ex situ* collections of the International Agricultural Research Centres of the CGIAR and in other international institutions. The Multilateral System also includes non-Annex 1 material.

[3] International Treaty on Plant Genetic Resources for Food and Agriculture art 13.3

[4] While this quote refers to the BBNJ it also applies to the Plant Treaty.

[5] Mark Augé, *Non-Places: Introduction to An Anthropology of Supermodernity* (Verso 1995).

[6] BBNJ arts 9(a), 14(1).

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