# INDIGENOUS FUTURES

REIMAGINING DEVELOPMENT IN ASIA AND THE PACIFIC FORESIGHT BRIEF | AUGUST 2022

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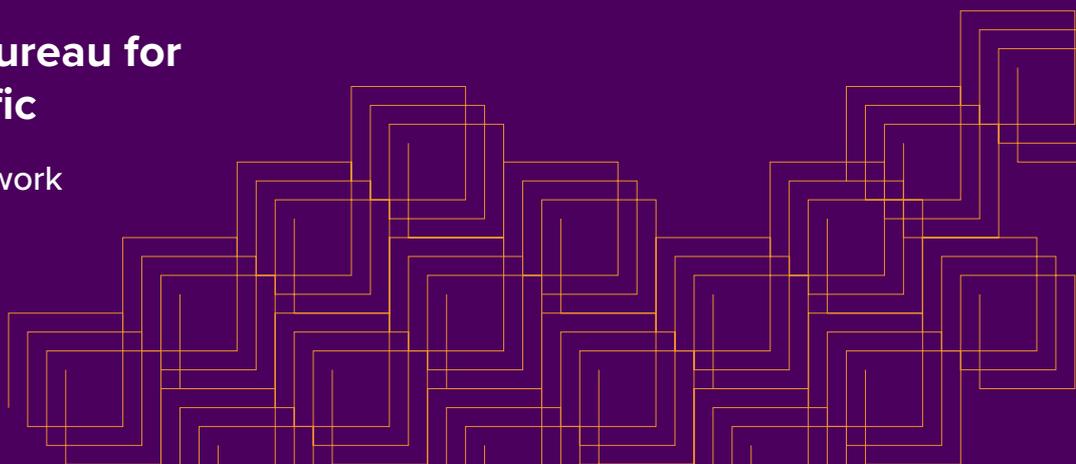
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EXECUTIVE SUMMARY

This foresight brief has pursued the following lines of inquiry:

- How might Indigenous futures inform and transform how sustainable development is considered, contrived and implemented?

- How can a future development paradigm learn and be informed by Indigenous concepts of sustainable development?

- What are different measures of 'sustainable development' or 'flourishing' we can utilize that respects Indigenous futures and their notions of flourishing?

The first question informs and shapes the other two points, articulating what is meant by Indigenous futures and futurity, and how the past guides and shapes iterative Indigenous futures and futures thinking through Indigenous protocols. These protocols can be thought of as flexible and adaptive governance models, noted in further detail in the "Protocols for (Re)generative Development" and "Learning Through Doing: Practices as Policy" sections.

The second half of this brief offers tangible policy implications that are guided by and expand on the UNDP 2020 Human Development Report's (HDR) four dimensions. This brief does not offer concrete answers to the last two questions, rather it offers points for further development in decision-making and metrics for measuring policy outcomes.

> "We always have our ancestors at our back. That certainty gives us a wider possibility of movement, a more supple way to navigate through the world. Standing on our mountain of connections, our foundation of history and stories and love, we can see both where the path behind us has come from and where the path ahead leads. This connection assures us that when we move forward, we can never be lost because we always know how to get back home. The future is a realm we have inhabited for thousands of years. You cannot do otherwise when you rely on the land and sea to survive… This ensures that the land is productive into the future, that the sea will still be abundant into the future, and that our people will still thrive into the future.
>
> This is the future we are leading the way to, the future we are going to live in, the future our ancestors fought for, the future we still fight for.
>
> Come join us."
>
> -Bryan Kamaoli Kuwada, "We Live in the Future. Come Join Us."[1]

FOUNDATIONS: WHAT ARE INDIGENOUS FUTURES?

This section articulates meanings of *Indigenous* and Indigenous conceptions of *futures* to illustrate how these concepts differ from contemporary mainstream meanings of these terms, and how those differences are key to this work. It begins with *Indigenous*, specifically Kanaka Maoli [Native Hawaiian] scholar and philosopher Manulani Aluli Meyer's definitions of the term: denoting Indigenous as signifying commonalities among peoples who have continuity with, and make sense of the world based on a specific territory.[2] This sense-making happens through processes of gathering knowledge through experience as individuals or collectives, and through "a way of being via site-specific familiarity through years, generations and lifetimes."[3]

Thus it is not only knowledge that is passed across generations, but the sense-making: training to understand and teach these knowledges. This aspect is introduced before broader definitions in the next section to emphasize not only connection to place, but knowledge that evolves and adapts through deep territorial connections that span centuries.

Indigeneity: Some Layered Meanings

Indigenous communities span the globe, and while the term Indigenous and Indigeneity are used broadly to signify these groups, these terms are not intended to universalize Indigenous peoples and nations. They are engaged here "to collectively secure the distinctiveness and singularity of individual Indigenous nations, cultures and communities."[4] While it is imperative to note here that Indigenous peoples are not a monolithic category, there are some commonalities of these worldviews that are relevant:

- Ontologically relational[5] – there is a fundamental understanding that humans are connected to place-based networks of plants, animals and elements. This understanding guides their individual and collective actions and decision-making processes

- Cyclical or fluid views of time (past/present/future)

- Epistemological pluralism – learning from Western science and technology and from traditional forms of knowledge and experiences; core values of reciprocity and collective stewardship[6]

To offer some specific examples connecting these three commonalities: Kanaka Maoli scholar, Noelani Arista, writes of the Native Hawaiian concept of *pono* as "balanced flourishing" – inherent in her articulation of this concept is each individual's ongoing assessment of their positional responsibility [*kuleana*] within larger local networks of human and non-human communities.[7] This example illustrates the specificity meant by "place-based" and how personal genealogies and past histories impact present and future decisions.

Examples from a different region are *buen vivir*, translated as "good life" or "good living" as a "pluralistic concept, namely 'buenos convivires': different ways of 'living well together'."[8] This concept emerges from the Indigenous and colonial languages of Ecuador and Bolivia: 'Buen Vivir' (Spanish) or 'Sumak Kawsay' (Kichwa); 'Vivir Bien' (Spanish) or 'Suma Qamaña' (Aymara), 'Sumak Kawsay' (Quechua), 'Ñande Reko' or 'Tekó Porã' (Guarani).[9] This "good life" is an ongoing and fluid

goal of balance among species and communities, assessing past practices to understand current impacts and shapes, inclusive yet Indigenous-led futures.

Another is *mātauranga Māori*, encompassing health and well-being through interconnectedness.[10] On a very basic level of interpretation, this is "knowledge accumulated in a Māori way". However, it differs from Western understandings in that it draws from generational place-based sources of knowledges, and includes extended futures planning, accepting and working within complexity and change.[11] *Māori* scholar, Mason Durie, frames *mātauranga Māori* with two primary knowledge-creating pricinciples: *whanaungatanga*, connections through kinship and linkages, that illustrate interdependency between people and their external world, and *tāwhiowhio*, learning and thinking from looking outside of and beyond ourselves.[12]

The examples above are brief definitions of nuanced Indigenous scientific concepts. They are offered here as a common thread for our approach: how Indigenous communites engage in sustainable development through place-based and interconnected futures thinking on extended timescales, guided by past generations and histories.

Normative Futures Models

Before this brief presents models of Indigenous futures as praxis, normative descriptions of futures thinking and development need to be outlined.[1] There are numerous approaches to what is termed futures thinking, forecasting, or foresight work.

The terminology around relevant tools, techniques and processes involved in futures work has yet to be standardized.[13] The overall process of structured reflection on the future may be termed horizon scanning; in other organizations the process is termed foresight or futures thinking.[14] Whatever the terms used, much of this work involves techniques for "detecting early signs of potentially important developments through a systematic examination of potential threats and opportunities, with emphasis on new technology and its effects on the issue at hand."[15]

The majority of these approaches involve linear ideas of future planning and action:

- Dator's Four Futures Model (Continuation, Limits and Discipline, Decline and Collapse, Transformation) which are often illustrated by growth curve graphs[16]
- Horizon scanning as a forecasting tool[17]
- Seven-step frameworks to develop foresight habits[18]

These models include collecting expert opinions, consulting stakeholders, and synthesizing data from scans and new information-gathering (within the past few years or decades). Such approaches are indicative of the structures of inequity, exploitation and colonialism that are reproduced within these futures frameworks.

A radical shift is essential for the futures of development. The crises we face on the local, regional and planetary scales require systems that can draw on millennia of Indigenous knowledges and practices, and Indigenous peoples to apply them in specific locales to ensure the balanced

flourshing of human and non-human communities. Indigenous futures work connects past to present and potential futures, defined here as cyclical processes of balanced flourishing that are deeply place-based, and include human and non-human well-being – especially native flora and fauna, lands and waters. By looking to their communities' past histories and examples as models, Indigenous peoples test, assess and apply these ongoing processes and protocols to work for future human and non-human health and well-being.

This brief employs the term non-human throughout this work, rather than other-than-human or beyond-human. The latter two phrases are currently used in social sciences and humanities fields to indicate that humans are not above or superior to other entities. Drawing on specific Indigenous writings, *non-* is not perceived as lesser, but as powerful, honourific and generative – thus it is used here.[19]

Past as Future

This section title refers to the second point of commonality: Indigenous conceptions of past and future being cyclical and connected. "Past as future" is also engaged here to emphasize the ways that mainstream development and sustainability projects have marginalized or compartmentalized Indigenous participation. These patterns must be traced in order to note how they were (and are) repeated and replicated in different settings, so that they can be changed. Indigenous peoples' inclusion in development has been delineated by mainstream metrics.

The following goals are from Indigenous Peoples and the 2030 Agenda for Sustainable Development and exemplify perceptions that appear in other United Nations and international development organization work.[20][21]

- Education: Education for all
  - Critique: Not considering opportunities that numerous Indigenous communities have created by launching their own Indigenous language and culture-based schools.

- Empowerment: Ending poverty and hunger
  - Critique: This goal is important, but must not ignore the decades and in some cases centuries-long impacts of non-native crops and imported supplies on ecosystems and watersheds.

- Engagement and Inclusion: Indigenous peoples are to be engaged in implementing programmes and policies
  - Critique: Indigenous peoples are engaged when implementing programmes, but not centred or included substantially in the processes of policy-making and revision.

- The planning process includes Indigenous peoples and intends that they should "contribute to reviews on progress at a country level."[22]
  - Critique: This excludes the localized place-based understandings that Indigenous communities have and creates significant tensions around processes of selecting Indigenous members to speak for the entire nation or a larger region.
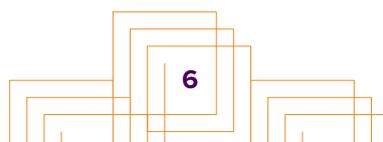
A Transformation Dialogues Series, led by the Presencing Institute and UNDP SDG Integration, took up issues around the marginalization of Indigenous sources of knowledge and experiences that happened during the negotiations around the Indigenous Peoples and the 2030 Agenda for Sustainable Development, working with Melanie Goodchild (Moose Clan, Biigtigong Nishnaabeg First Nation) and Danika Billie Littlechild (Ermineskin Cree Nation).

In the second session, two points were noted in the recap that are relevant to this work: first, a profound gap exists between knowing and doing, "The HDR says we have much to learn from indigenous peoples — but are we listening and learning?"; secondly, "finding balance requires listening to the margins to shift power."[23] Sophia Robele wrote a reflection on one of these online meetings, where Goodchild performed a tea ceremony as part of the gathering. Robele notes:

> "When we are consistently called on to respond to the systemic challenges that are 'urgent,' and base our investments and attention on that which poses the most pressing existential threat to humans and the planet, our understanding of the concept of 'urgency' is significant. What if the urgency is not in how quick we respond, but how deep? What if the slow, deep work of collective unlearning, or making space for different ways of being and thinking together, or taking the time to value different cultures through practice rather than words, is how we address the source of our interconnected crises, not just their symptoms?" [24]

These steps mark an important turn in Indigenous inclusion and model some ways that United Nations sections and affiliated groups can adjust after receiving feedback from Indigenous participants. However, these calls to make space, listen and value differences often remain within crises and urgency frameworks. If sustainable development is to be reimagined and flourish, frameworks for where and how Indigenous communities and knowledges are centred must be expanded.

In many of these briefs, documents and agendas, Indigenous peoples are mentioned alongside a lack of education, environmental issues and crises, and/or poverty. Yet these communities have much to offer around technology, innovation and long-term sustainable development. They are not centred (or substantively included) in decision-making about development. These are missed opportunities for organizations and governance bodies to move from resilience-thinking into flourishing in times of crisis through Indigenous futures approaches.

As noted by this section heading, applying Indigenous futures as active policy implementation starts with understanding Indigenous communities' valuation of the past – not only remembering it, but actively guided by past models and teachings for making future decisions. Indigenous governance models are cyclical processes, based on past examples and 'living' structures of human-non-human relations. Michi Saagiig Nishnaabeg scholar and artist, Leanne Betasamoke Simpson, describes how her Indigenous communities are made through cyclical processes of build-breakdown-assess-rebuild: these processes and protocols are how her community has/is/and will be made stronger and enacts sovereignty within their human and nonhuman nations.[25]
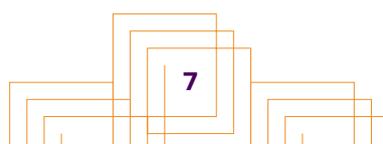
Understanding these processes as ongoing, cyclical and localized is key. While they draw from centuries of past models and teachings, they are active practices of Indigenous knowledge as futures-thinking that extend across generations, yet remain deeply place-based. *Place* here includes lands, waters, air and wind patterns and the interconnected ecosystems of a particular region. Each area or region is specific, thus these practices are not interchangeable. While they "contemplate multiple knowledge systems that exist within the many languages, cultural landscapes and worldviews of Indigenous peoples,"[26] these practices are deeply rooted understandings of patterns, change, and how to apply historically-tested processes for future decision-making.

As Kanaka Maoli scholar and writer Bryan Kamaoli Kuwada notes about progress and Indigenous futures-thinking on centuries-long timescales, "when you see the possibility of 'progress' in this more connected way, you see that we are actually the ones looking to the future. We are trying to get people back to the right timescale, so that they can understand how they are connected to what is to come."[27] While this quote may appear to relate only to past and future timescales, Kuwada's writing and the concepts within them, which opens this brief, are inexorably entwined with Hawai'i. The past and future referred to here are those of a specific interconnected set of lands, waters and the ecosystems that are supported by those lands and waters.

Any measure of futures thinking or sustainable development must be operating on these timescales, and must also be rooted to specific lands, waters and communities. To ignore the interconnections between past, future and place (such as futures and foresight development from a few mainstream groups who look only at the near past) means continuing practices that have caused and will continue to cause impacts we are witnessing today: declines in native species, polluted airways and waterways, supply chain disruptions, health and wellness issues, and more.

To provide another example: *naturacultura* is an articulation of Indigenous futures drawn from Mayan, Andean and Garifuna worldviews. The term is used to denote a commonality among Indigenous communities around the world and has strong resonances across the Asia-Pacific region: "insistences that the people cannot be conceived of separately from the land and that development should be culturally defined."[28] Naturacultura is described as highly path-dependent, "always embedded in a history that structures the possibility of its form. . . Any change in it must be iterative—built onto the past, not in denial of it."[29]

This statement that Indigenous peoples build onto the past is not inaccurate, but for the purpose of this brief, it is important to emphasize how Indigenous sources of knowledge offer powerful tools for futures-oriented development through localized and circular processes, not a linear construction from past, to present, into the future. These cyclical processes are iterative in that they are assessed and measured as to how they are restricting or encouraging balanced flourishing. They are active, ongoing and relational: coming together, acting, assessing, and iterating using past guidance to shape future actions.[30] More about these iterative processes will be articulated in a later section as policy approaches, referred to as protocols.

Indigenous Protocols

The previous sections established some core understandings of Indigenous futures as they pertain to decision-making for development and sustainable futures. This section outlines how Indigenous protocols are a key component for engaging and applying Indigenous futures, while including people from many different backgrounds and positionalities.
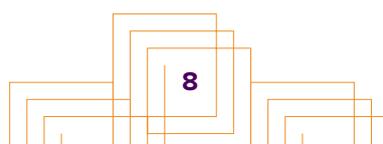
The first step is to define Indigenous protocols and how they differ from other current and emerging concepts and approaches. Indigenous protocols will be revisited in a later section noting how they can be applied within decision-making organizations on larger and smaller scales. The concepts of Indigenous protocols and inclusive assessments outlined in this brief draw from The Value of Hawaiʻi 2 and 3, the ʻĀina Aloha Economic Futures Declaration, the Indigenous Protocol and Artificial Intelligence Position Paper, a discussion with an Aboriginal Gadigal and Dunghutti community member for the Gender, (In)security and Temporalities of Violence Global Symposium, the Orang Asli/Asal Communities: Building Back Better UNDP Webinar for Indigenous Malaysian communities and Marshallese educator, artist and United Nations Climate Summit opening speaker Kathy Jetñil-Kijiner's writings and performance pieces.[31]

Angelina Hurley describes protocols "as a set of rules, regulations, processes, procedures, strategies, or guidelines… the ways in which you work with people and communicate and collaborate with them appropriately.….Protocols are the standards of behaviour, respect and knowledge that need to be adopted."[32] Indigenous communities have kept and expanded their languages and protocols for non-human and human connections throughout the centuries, thus these protocols both guide human relations and how specific communities relate with all that share their lands and waters.

Indigenous protocols include guiding principles and a methodology for conducting oneself in any activity, "the customs, lore and codes of behaviour of a particular cultural group and a way of conducting business. It also refers to the protocols and procedures used to guide the observance of traditional knowledge and practices, including how traditional knowledge is used, recorded and disseminated."[33] These protocols are expanded, adapted, improved and adjusted depending on the contexts: formal settings versus informal ones, Indigenous community members versus participants from other backgrounds, whether one is visiting or away, among other factors.[34] Often even the processes to evaluate and reflect on protocols have their own sets of guidelines for how people come together to assess them.

Indigenous futures through applied protocols are key to understanding the message of this brief. Models such as "inclusive growth" cannot sustain balanced flourishing, nor are externally developed models of inclusive growth, regenerative growth, or circular economies enough; *(re)generative development* is required. (Re)generative development here means **balanced flourishing through cyclical, reciprocal protocols for assessment with flexible/fluid structures, led by Indigenous communities from the areas in question.** This is done through ongoing and place-based applied Indigenous protocols.

The next section looks at examples of inclusive growth and circular economies that resonate with this work but lack these protocols; then moves into what (re)generative development is and how it is applied. Why and how *(re)generative* differs from *regenerative* is detailed in the "Protocols for (re)generative development" section. The parenthetical shift is introduced here to denote that (re)generative development through Indigenous futures is markedly different than normative regenerative development concepts and models. **For those familiar with calculations or computational symbols, think of (re-) here as being a multiplier that must be understood within Indigenous contexts first, before connecting to generative development.**

TIDAL SHIFTS: DEVELOPMENT POLICIES, SIGNS AND SIGNALS

There are important political and cultural signs within the last decade that suggest national and international approaches to inclusive development are shifting, alongside growing recognition that Indigenous worldviews and sciences have much to offer to sustainability and energy development debates.[35] These models and programmes recognize the interconnectedness of environmental and social/mental/economic development, yet centre mainstream and universalized approaches by "drawing from" Indigenous views or offering "place-based" approaches without noting Indigenous peoples.[36]

The language of "drawing from" and "learning from" Indigenous communities without centring their knowledge keepers and decision-making bodies repeats what Patrick Wolfe famously termed the structures of settler colonialism: repeating patterns of behaviour and decision-making that continue processes of extraction and erasure.[37] To expand this further: reciprocity and responsibility are important parts of Indigenous conceptions of balanced flourishing, noted earlier in Noelani Arista's definition of *pono*. Not reciprocating Indigenous communities for their knowledge (which has been taken and written about by non-Indigenous programmes internationally), and not assessing the positionality of those involved in development projects and their responsibilities (here meaning obligations), are forms of extraction and erasure.

External development groups may have good intentions yet continue processes of cooptation. Rewording Indigenous core concepts or repackaging Indigenous sources of knowledge that derive from and are rooted to specific places and peoples, then marketing them into more palatable concepts and movements by centring Western norms is one way this has occurred. Using the universal "we" or "humanity" in development models without recognizing specific past and present structures of erasure, extraction and control is another. The following section outlines some contemporary examples of these patterns and structures.

Examples and Patterns

EXAMPLE 1: CIRCULAR ECONOMY

Circular economy concepts have been promoted by U.S., Canadian and European media outlets, notably the Ellen MacArthur Foundation, World Economic Forum and European Commission's circular-economy-action-plan, for over 10 years.

A citation from the Ellen MacArthur Foundation home page states: "We must transform every element of our take-make-waste system: how we manage resources, how we make and use products and what we do with the materials afterwards. Only then can we create a thriving circular economy that can benefit everyone within the limits of our planet."[38]

Critique: When referring to "economies of care" and "circular economies," organizations should name the sources of Indigenous knowledge that have influenced their thinking and establish ongoing reciprocity with that community. The accompanying video notes how "we" revolutionized the world and consumed without limits, but now "we" are designing out waste and pollution. This universalized "we" erases centuries of colonization and extraction while positioning those who have caused these harms as now able to "design" them out.

EXAMPLE 2: REGENERATIVE FUTURES

The Royal Society for Arts, Manufactures and Commerce "Regenerative Futures" programme states: "A 'regenerative' mindset is one that sees the world as built around reciprocal and co-evolutionary relationships, where humans, other living beings and ecosystems rely on one another for health, and shape (and are shaped by) their connections with one another."[39]

Critique: This RSA model has some parallels to this brief, such as reciprocity and human-non-human community-based approaches. However, as with the first example, the universal "we" is never decentred or examined. This wording borrows heavily from Indigenous worldviews (reciprocity, interconnected ecosystems) without mentioning them – illustrating how contemporary development frameworks continue these erasures.

EXAMPLE 3: UNDP HDR 2020 BRIEF, "HUMAN-NON-HUMAN NATURES"

The UNDP HDR 2020 brief features a section entitled "Human-non-human natures: Broadening perspectives."[40] It notes Indigenous perspectives should not be othered, "[I]nstead, the new perspectives invite us to reweave our intimate, caring connections with non-human natures in all their characters and capabilities."

Critique: Indigenous perspectives of interconnected well-being are not new. International organizations may be new to include them, and popular environmental and technology scholars (such as Haraway, quoted in this section) may be new to include them – but the Indigenous peoples and knowledge systems cited here have existed for millennia.

It continues, "And were we to think that these are outdated notions of the past, look at how people in so-called modern industrial societies relate to their pets, accuse particular dogs of viciousness or attacks, engage with their garden plants and the animal life in cities and seek to protect particular, individual trees from road developments."[41]

Critique: this section universalizes Indigenous concepts, positing "how people in so-called modern industrial societies" care for pets and particular plants and trees as examples of this human-non-human well-being. This brings to the fore two points of concern: one, citing Indigenous worldviews, then trying to universalize them illustrates missed insights that Indigenous communities can offer. In this case, a lack of understanding of how domestic pet populations decimate native wildlife, or how invasive tree and plant species impact native endangered ones. The second point: Indigenous views are again relegated to the environment and caring for non-human species, rather than being understood as powerful development modes for balanced flourishing.

Each of these examples does not account for community members' positionality, experience or histories with the human and non-human communities they live in. This brief splits apart the universalized "we" and "humans" to illustrate how processes of place-based interconnectivity are imperative, and how assessment models **must be guided by the human community members who know these interspecies networks, lands and waters best**.

Returning to my earlier definitions of Indigenous, here is where their epistemological pluralism – that is, learning from Western science and technology and from traditional forms of knowledge and experiences – indicates Indigenous groups are well suited to design and innovate in many areas of development, not only in land and water conservation programmes.

Colliding Waves: Clashes and Tensions

Indigenous perspectives and voices should be central to development decision-making processes. But there can be significant tensions around not only differing worldviews, but also around expectations of progress, impact, efficacy and other metrics required by financing organizations and developers.[42] For example, Oceania movements focused on place-based, oceanic sustainable development can be undercut by international corporations in tourism, real estate and extraction industries on both land and sea. Military and international development organizations have created massive waste runoff problems that threaten many human and non-human communities in Hawai'i, New Zealand and Australia, while Indigenous land and water protectors are framed as being primitive, backward or living in the past.[43]

Another documented example of this is from the Zapotec peoples in southern Mexico, who are described as having "a distinct perspective on sustainability and a unique cosmovision that often clash with the modernist propositions of energy developers."[44] These clashes between Indigenous community members and national energy developers continued to reproduce the region's "past colonial arrangements in terms of cultural domination, non-recognition of Indigenous identities and disrespect for local customs."[45] Interconnected ecosystems were irreparably damaged, causing further strife and, from an Indigenous perspective, creating a short-sighted sense of development and progress.

Each of these examples demonstrates advanced futures thinking across human and non-human communities: illustrating generations-long understandings of water, land and non-human systems' health as essential for present and future flourishing. By contrast, military, government and business development projects that measure impacts for only the next 30, 40, or 80 years seem markedly short-sighted by comparison.[2]

As climate change and related economic and social support fractures increase, a shift to other ways of being with each other is necessary. It is imperative to move from merely being resilient to balanced flourishing in the face of increasing natural and socio-economic fluctuations. Utilizing a resilience framework is not adequate; a balanced flourishing framework is required: as one community is impacted or requires aid, ample local resources will be available to support those in need.

This brief proposes working within local systems that are connected to larger regional, national and international networks allows for different growth cycles. As Indigenous and non-Indigenous communities vary widely across the Asia and Pacific regions, one universalized model will not suffice. The next sections propose centring place-based local Indigenous-led models within current systems to support and expand (re)generative development processes.

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2   A current example [as of 10 January 2022] of this short-sighted development: Rachel Treisman, "Thousands displaced from Oahu military base due to contamination in Navy water system," *NPR, WNYC,* 15 December 2021, https://www.npr.org/2021/12/15/1064514935/water-contamination-hawaii

The keys to this approach are protocols that can include people from many backgrounds, but are guided by those who know specific lands, waters and communities best.

PROTOCOLS FOR (RE)GENERATIVE DEVELOPMENT

In this Indigenous Futures brief, **crafting paths to place-based, Indigenous-led cyclical processes is the goal**. It offers ways Indigenous protocols can be centred to accommodate Indigenous worldviews, while mitigating frictions with contemporary expectations for development and growth. To do this, we begin with the phrases regrowth and regenerative – connecting them with definitions of (re-) and emergences from Indigenous scholars, to describe (re)generative development.

(Re)generative development is a term offered here to define the futures of development from Indigenous perspectives: generative and cyclical assessments that centre Indigenous protocols and community members, guided by a goal of balanced flourishing. The (re) in parenthesis assists in visually marking how this concept differs both from regenerative development and circular growth models and from previous United Nations positions on Indigenous inclusion. The use of (re) in this brief also models what (re)generative growth embodies by citing and rooting the usage to an Indigenous scholar and community. Earlier in the brief (re-) was noted as operating as a multiplier with a specific sequential order: Indigenous contexts first, which then shape the resulting development models.

Seneca scholar, Mishuana Goeman, describes using *(re)-* rather than *re-* in her work as "a break from settler colonial logics of time and place" marking a shift to encompass the way Indigenous women "are (re)constructing their own understandings of space. While these understandings are different for each…they are rooted and routed in cultural understandings and connections that span centuries. Often it is only the articulations of these concepts in contemporary media that are new – and even these modern formats carry traditional aspects."[46]

Connecting (re-) to development within this work shifts away from dominant ahistorical or universalized concepts of regenerative development, which can include important concepts such as "start with place and connect," "supporting others to build reciprocity" and "seek different perspectives" but do not centre those who have been place-based for centuries.[47] This brief shifts to **(re)generative development: place-based and Indigenous-led processes that include many positionalities, but from the earliest planning and development stages onward are structured by Indigenous protocols and emergences.**

Emergence here connects with work by Jon Goldberg-Hiller and Noenoe Silva.[48]

They articulate emergence as the shoots of the ancestors: new, but of the same stalk. They engage with this concept, rather than Deleuzean terms used in political theory, such as rhizome or assemblage, to maintain the earthiness of these concepts and recognize Indigenous connections and contributions. Emergences is applied here to indicate that what may appear as a "new" Indigenous-led growth model often draws from millennia of rooted experiences and knowledge: paraphrasing Goeman, they are (re)newed emergences of much older practices. (This was noted in Example 3, the UNDP HDR 2020 quote.)

Space + Time

When Indigenous groups gather for the overarching goal of balanced flourishing, they must make decisions among themselves about expectations, outcomes, and who among them is most suited for a particular project and location, among other concerns. Outside participants, developers and officials must remember that space and time must be allowed for processes and protocols. Connecting back to Goeman and Silva, decisions around technology, development and other 'modern' development areas may seem like new iterations or ideas, but they have much deeper roots and are connected to much older protocols, genealogies and histories.

To outside observers, it may seem that too much time is spent on ceremony and other Indigenous protocols, yet these are integral parts of larger Indigenous governance structures and function on many levels: recognizing human and non-human connections, assessing positionality and responsibility, centring focus and purpose on balanced flourishing for all those gathered, methods of formalized relational processes between Indigenous communities or between Indigenous and non-Indigenous communities, and more. People external to these communities, but who are part of their development groups, must allow space and time for various emergences to appear.

Much like with plant growth, not all emergences are going to be productive or contribute to balanced flourishing. Some may appear in unexpected places or times; some may need to be restrained or culled – these are parts of the process. This section of the brief is not calling for "space to fail," but for space and time to reorder and adjust expectations in each setting. These processes for balanced flourishing are an outcome in and of themselves: protocols of how communities come together, what is decided and when – all of these become models for future protocols, assessments and iterations. Thus, space must be given for these (re)newed emergences to appear and for those tending to them to decide which protocols are best suited to a particular urgent issue, which ways of encouraging balanced flourishing are working and what pressing issue needs to be dealt with first.

Example: 'Awa Diplomacy

This section illustrates how a traditional formal *'awa* ceremony acted as a form of governance and diplomacy for an organization of Indigenous and non-Indigenous participants from several countries, all of whom were gathered to discuss and plan technology and development futures. This is detailed to show how formal Indigenous protocols are relevant for decision-making (who holds power in deciding what happens within specific locations), but also for resolving tensions and conflicts that can occur in larger-scale projects. It also illustrates that traditional Indigenous ceremonies have an important place in 'modern' development projects, such as computational systems and AI.

An example of space and time for (re)generative development is the traditional Native Hawaiian 'awa [kava] ceremony that opened the first 2019 Indigenous Protocol and Artificial Intelligence workshop.[49] For this workshop, Indigenous and non-Indigenous participants were arriving to Honolulu from several countries and from three continents. There were multiple funding agencies involved, representing academic and economic interests, and many of the participants had not worked with each other before.

Tensions were developing, and the Native Hawaiian organizer and local organizing assistant were cognizant of these pressures as they planned particular logistics.

They worked with a practitioner they trusted, who was qualified to perform a traditional 'awa ceremony, thinking through how to arrange seating according to status (which is customary) and trying to plan how the ceremony could include at least 35 people (many of whom were being flown in), while remaining within the time constraints imposed by travel and funding.

The most complicated was the question of status – who should be introduced first? Who should come last? How would different types of leadership roles within different Indigenous communities from different parts of the world be recognized and respectfully evaluated? The answer to these questions and the issue of timing became clear once a place-based protocol emerged:

- The Hawaiian island and specific region of that island where the ceremony took place would be the centre.

- The organizers who were most connected to that specific region would be seated in the leading positions, others would follow according to their connections to the place and the organizers most connected to it.

- Thus, each of the five main organizers would sit in the centre in a semi-circle, according to each one's connection to that specific place.[3]

    - Everyone associated with one of those five organizers would be seated behind them in the larger second semi-circle. This physically illustrated their purpose there: representing their support and bearing witness.

        - Bearing witness was important, as each of the five organizers was told to speak their intention for this workshop over the ceremonial cup of 'awa they held.

        - It was made clear early in the ceremony that what each of the five organizers said would act as a spoken word contract over the 'awa.

- Each person seated behind one of the main organizers was not only observing this action but supporting their stated objective through **each of their actions over the course of the workshop**.

This ceremony structure provided clarity and helped resolve conflicts and tensions. The act of observing and supporting for each of the participants, no matter what their background, allowed them to feel included without having additional rounds of speaking. The main organizers were reminded of their larger purpose, focusing on it and committing to it for the duration of the event. As noted, this was a technology-based gathering; yet because it was Indigenous-led, the receiving and hosting protocols, as well as making time and space for those coming from other communities to share their visiting protocols (songs, dances and gifts) were not merely included as an opening, but functioned as core structural components.

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3   If this ceremony had been held on another area of O'ahu, or on another island - Hilo, Hawai'i, for example - the seating chart may have differed as the Native Hawaiians most connected to that specific place would be seated first.

LEARNING THROUGH DOING: PRACTICES AS POLICY

As noted, Indigenous Futures are cyclical processes based on past examples and 'living' structures of human-non-human communities. As such, they offer powerful governance and futures-planning models. Indigenous communities are made and remade through cyclical processes of build-breakdown-assess-rebuild: these processes and protocols are how communities are made stronger and how their human and non-human members enact sovereignty as they address crises and developmental issues.

This section concludes with tangible policy shifts, coalescing earlier ideas and concepts into applied decision-making examples. However, before the contraction comes an expansion. This section begins with launch points for cyclical collective processes that reimagine and act for balanced flourishing, interventions and models that:

- Remain inclusive, yet centre local/place-based Indigenous expertise and knowledge

- Are processes that understand growth and restriction of growth as important and necessary parts of balanced flourishing

- Are ongoing and reflexive on every level – from individuals and small groups, up through larger scale organizations

- Are iterative: each process includes feedback, assessments and looking to past examples as future guides to (re)generate, then act accordingly

Indigenous Futures interventions into current development paradigms might include:

1. Indigenous pasts are understood to be important models for building inclusive future plans and paths, with non-linear expectations of success and other quantitative metrics required by funding organizations built into the development plans.

2. Indigenous worldviews deepen articulations of multilateralism (per the United Nations common agenda) through balanced development within planetary limitations AND shifting local ecosystem parameters.

3. Indigenous growth, development and progress are valued as 'past-guided, but futures-oriented' models: Reinterpreting past models for future health through processes of testing, observations, assessment and reflection.

4. Age and gender norms are challenged in terms of development leadership: qualifications for particular positions are based on localized human and non-human community roles and an individual's life experiences.

Models for Indigenous Futures-led development might include:

1. Definitions of, and markers for, balanced flourishing are decided by Indigenous and decolonial place-based community members; these organizations and governance models will themselves be reflexive and iterative.

2. Space for testing and reflection in each gathering is understood as necessary parts of processes of (re)generation and community flourishing.

3. Human community members, who are strongly connected to specific non-human communities (for example, elk, fish, specific forest groves), act as negotiators and diplomats. These representative roles are decided by the local communities.

4. Not only looking to future human generations or to children, but observing how the elders of many species are behaving and communicating for guidance and inspiration.

5. Drawing guidance for future decisions from ancestors and Indigenous archival records, renewing and iterating these older processes of decision-making, ceremony and protocols.

Up until this point, this brief has predominantly offered lines of flight for future imaginings and policy shifts. The "Tide Shifts: Development Policies, Signs, and Signals" section showed how Indigenous concepts have been inserted into existing international development documents to show Indigenous inclusion in current development models. However, the language of "learning from" or "listening to" Indigenous communities to "draw from" these sources of knowledge – without reciprocating in meaningful ways – continues to centre the same structures and mechanisms that remain inadequate to face current socio-economic and environmental challenges. This does not mean all current work has to be scrapped or pushed aside, nor does it mean that this brief concludes with somewhat-intangible policy steps.

Now that the expansion of Indigenous Futures potentials has been described, it is time for the contraction noted earlier: coalescing the core elements of this Indigenous Futures brief into concrete steps. This section articulates how current UNDP HDR frameworks and indicators might be recalibrated with (re)generative growth models for balanced flourishing. To do this requires Indigenous-led decisions and protocols, applying them as flexible yet place-based inclusive governance guides. It also requires those involved in development decision-making to understand how these protocols and the people in charge of them will shift depending on location, as noted in the 'awa ceremony example.

The following collective processes of action and imagination are extensions of the 2020 HDR four dimensions. Each box below shows a dimension of the 2020 HDR and its respective indicators, followed by some proposed interventions and considerations to bring an Indigenous Futures lens to that dimension.

HDR DIMENSION I: STATUS OF HUMAN DEVELOPMENT

Within this dimension, there are six stated indicators that reflect the health of people and the planet in different ways and the interaction between them.

○ Human Development Index (HDI): long and healthy life, knowledge, decent standard of living

○ Number of deaths and missing persons attributed to disasters

○ Mortality rate attributed to household and ambient air pollution

○ Forest area, change: Percentage change in area under forest cover

○ Red List Index: Measure of the aggregate extinction risk across groups of species

○ Fresh water withdrawals: Total fresh water withdrawn, expressed as a percentage of total renewable water resources

INDIGENOUS FUTURES INTERVENTIONS FOR HUMAN DEVELOPMENT

○ Significant portions of Asia and the Pacific are ocean-connected.[50] Impacts from ocean toxicity and climate-change need to be addressed and understood as being formative for these human communities development, as they are deeply connected to the ocean and salt water flows, as noted by Albert Wendt (Samoa), Kathy Jetnil-Kijiner (Marshallese), Noe Goodyear-Kaʻōpua (Kanaka Maoli) and Aiko Yamashiro (Uchinanchu (Okinawan), Kanaka Maoli) and many others.

○ Several of these assessments are exclusive to humans – yet impacts of pollution extend through and to many interconnected species, and many Indigenous communities consider particular non-human relations as elders and extended family members.

▶ Applying a relational and reciprocal approach, metrics should be developed to measure native species and ecosystems' health/mortality.

▶ Applying an interconnected approach, carefully monitoring the well-being of these non-human kin could map and forecast regional human mortality/illness issues.

HDR DIMENSION II: ENERGY SYSTEMS

This dimension includes four indicators. Two relate to countries' greenhouse gas emissions; two indicate countries' response to reduce emissions.

- Carbon dioxide emissions, production emissions per capita

- Carbon dioxide emissions, consumption emissions per capita

- Carbon dioxide emissions, per unit of GDP: provides information on the extent of "carbon decoupling" from the economy

- Renewable energy consumption: direct– and forward looking –measure of adoption of alternatives to fossil fuels

INDIGENOUS FUTURES INTERVENTIONS FOR ENERGY SYSTEMS

Understanding food sovereignty and food imports/exports as interconnected with energy systems:

- Shipping disruptions, levels of trash produced, and food deserts will escalate if not reimagined quickly. This requires working with those who know particular places intimately and across larger timescales: community knowledge bases of what has been and can be produced there in larger quantities, with minimal environmental disruptions (for example, Taro fields, ulu groves, traditional fishpond technologies, among others).

- (Re)generating traditional Indigenous food systems and developing inclusive trading/ exchange routes and markets that are place-based and strengthen local ecosystem well-being to become not merely resilient, but flourish.

- Understanding histories of documented tensions between "green" energy movements, outside development projects and Indigenous communities – applying Indigenous-led protocols to work through tensions and build alternative models.

HDR DIMENSION III: MATERIAL CYCLES

This dimension considers how intensively countries use – and reuse – raw materials.

- Domestic material consumption per capita

- Material footprint per capita: this indicator is calculated as raw material equivalent of imports plus domestic extraction minus raw material equivalents of exports

- Use of fertilizer nutrient nitrogen, per area of cropland

- Electronic waste recycling rate

INDIGENOUS FUTURES INTERVENTIONS FOR MATERIAL CYCLES

Not all material extraction processes are equal – metrics should recognize more harmful/toxic processes, whether these are international or domestic.

- Metrics and processes can be put in place to measure the (re)generation of interconnected communities impacted by previous material cycles: healing and supporting impacted human and non–human communities, many of which are Indigenous areas.

HDR DIMENSION IV: TRANSFORMING OUR FUTURE

As discussed in the 2020 HDR, to steer actions towards transformational change, it is important to empower people in three ways: by enhancing equity, by pursuing innovation and by instilling a sense of stewardship of nature.

- Prevalence of severe food insecurity in the adult population, female

- Gender Inequality Index (GII): A composite measure reflecting inequality in achievement between women and men in three dimensions: reproductive health, empowerment and the labour market

- Increase in vulnerable people in coastal zones, by 2100: Additional ranks of vulnerable people due to permanent rises in sea levels by 2100 (under conditions of no mitigation)

- Inequality-adjusted HDI (IHDI): HDI value adjusted for inequalities in the three basic dimensions of human development

- Multidimensional Poverty Index (MPI): Percentage of the population that is multidimensionally poor adjusted by the intensity of the deprivations

- Solar photovoltaic, electricity capacity: Solar photovoltaic refers to electricity capacity from solar photovoltaic measured in megawatts

- Terrestrial protected areas: Totally or partially protected areas of at least 1,000 hectares that are designated by national authorities as scientific reserves with limited public access, national parks, natural monuments, nature reserves or wildlife sanctuaries, protected landscapes and areas managed mainly for sustainable use

○ Gender and food security – Many **Many Indigenous communities and nations have more than two genders/gender roles**. The well-being and health of those community members must be measured as this would offer additional insights into inclusive futures and overall community health.

○ Sea levels and health – Centring how interconnected coastal human and non-human communities respond to climate change and rising waters.

○ For terrestrial and oceanic protected areas – Structuring organizations and development systems to understand, monitor and protect **core members** of non-human species groups that ensure the health and flourishing of their groups, such as mother trees, matriarch whales and orca, among others.

  ▸ For communities deeply connected to freshwater or ocean areas: recognizing their (re) generative development protocols and metrics differ from those that are more inland, noting how different water-affiliated communities might have similar patterns/processes.

○ Reciprocity over stewardship – shifting stewardship ideas to create **processes of active care and reciprocity**. Stewardship must be place-based and hyper-local, with interconnected networks to support larger-scale well-being and responses to crises as they emerge.

○ (Re)generating reserves and areas – Understanding and centring how Indigenous land and water practices are different from national and international articulations of preserves and sanctuaries.

○ Shifting to local, place-based Indigenous protocols and rules around sacred or protected areas and ancient practices of harvesting/culling, which offer protection against climate and disease.

CONCLUSION

The same patterns and structures of Indigenous erasure or 'repackaging' Indigenous concepts and relationalities – without having Indigenous people at the centre of place-based development – will repeat the same failures, only with more devastating consequences as climate change escalates in both intensity and scale. This is a call to insist that local, place-based Indigenous-led groups are established and supported to build and maintain these processes – starting with the 'think tanks' and those in the early planning stages, through to the funding agencies and managers.

Steps must also be taken to ensure that unexpected developments or outcomes are not seen as failures (not meeting some linear timeline). Rather, these moments of breakdown/stalling/crisis **are crucial parts of these processes**. They are necessary for the next stages of (re)growth and community building. They are part of the metrics and outcomes. Instead of making space to fail or 'fail forward,' we frame these Indigenous futures-oriented iterations and processes as both central and measurable. The spaces and opportunities created are to test, iterate and assess (re)generative development, but always from place-based and past-as-future standpoints.

When Indigenous governance protocols are centred, there is a place for everyone. However, depending on the location and communities involved, those who are at the centre of decision-making will shift. There are spaces within inclusive Indigenous futures for people from many positionalities, but the processes and protocols for development and community projects should not be decided by external sources, even those that draw from or refer to Indigenous sources, without centring Indigenous experiences, knowledges and reciprocity. Launch points for further development have been offered here – ways to establish processes of balanced flourishing and (re)generative development as fluid and iterative outcomes and goals.

Indigenous futures are predicated on the knowledge that there have been many words, many ways of being that have ended and were remade. Whether we call the current global tipping points the Anthropocene, Cthulucene, or pre-apocalypse, Indigenous communities are here and remind us that this chain of large-scale global crises is neither the first nor only one that humanity has encountered. To frame current events as such continues patterns of Indigenous erasure and centres the current mainstream way of life as the only possible way. There are, have been and will be other ways – we just have to centre them, listen to them, and join them. To close, I return to Kuwada's opening piece:

"All of these things done in the name of rootless progress show (un)surprisingly little care for trying to truly progress and create a future that we all want for the coming generations.

And when you see the possibility of 'progress' in this more connected way, you see that we are actually the ones looking to the future. We are trying to get people back to the right timescale, so that they can understand how they are connected to what is to come… Protecting the ʻāina, carrying on our traditions, speaking our language, and acting as kahu for our sacred places are not things measured in days, or weeks, or even years.

This work spans generations and eras and epochs.

The future is a realm we have inhabited for thousands of years. You cannot do otherwise when you rely on the land and sea to survive. All of our gathering practices and agricultural techniques, the patterned mat of loʻi kalo, the breath passing in and out of the loko iʻa, the Kū and Hina of picking plants are predicated on looking ahead.

This ensures that the land is productive into the future, that the sea will still be abundant into the future, and that our people will still thrive into the future.

This is the future we are leading the way to, the future we are going to live in, the future our ancestors fought for, the future we still fight for.

Come join us."[51]

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