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Scaling local climate action: learning from community organizations to build a post-development agenda for Central America

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This article considers the possibilities and limits of reimagining international development policy by taking the values, practices, and worldviews of Indigenous communities as its starting point. Drawing on ethnographic research in Guatemala, we contrast the development industry's overwhelming focus on economic growth as the gold standard of well-being with the perspective of Maya-Achí groups, who insist that growth and modernization must not come at the expense of the ecology, food sovereignty, or Indigenous ways of life connected to the land. We argue that the Maya-Achi organizations with whom we collaborate offer a philosophy and practice better attuned to the urgency of the climate crisis than that of the dominant model of development. To bring the international development agenda in line with local climate action, we propose reconceiving Development as Buen Vivir—an Indigenous philosophy of good living. To do so, we propose three lines of action: (1) Increasing Funding for Indigenous-led climate action; (2) Reconceptualizing development practices to align with Buen Vivir, and (3) Transforming social and economic policies.

The dominant development model—promoted by the U.S. and Western European nations—remains fixed on a single factor: macroeconomic growth. Nowhere is this more evident than in Central America¹, and more specifically, Guatemala, where many indicators of extreme poverty, inequality, health, and ecological sustainability are worsening in the face of climate change, even as national economies grow^{2,3}. Yet despite the growing awareness that endless growth is incompatible with necessary action to address the climate crisis⁴—the basic premises of international development remain stubbornly resistant to change.

An example of the above is the Biden administration's policy "Call to Action for Northern Central America."

Launched by U.S. Vice President Kamala Harris in 2022, the initiative aims to address "root causes of migration" by attracting the private-sector investment of U.S. companies such as Nestle, Target, and Mastercard to so-called Northern Triangle countries of Guatemala, El Salvador, and Honduras. By doing so, the architects of the policy aimed at "creating jobs, connecting people to the digital economy, expanding access to financing for small businesses, providing training and education for youth and workers, and improving economic livelihoods for people in the region"⁵. Notably missing from the administration's public discourse is any serious discussion of climate change, ecosystems, or the need for policies to respect the rights and sovereignty of the region's Indigenous communities. The initiative illustrates the extent to which the pursuit of economic growth has become such a powerful ideological commitment that it operates almost by reflex—a solution in search of problems. As we face a worsening climate emergency, this vision of development has simply become untenable.

We are certainly not the first to make this critique of development. Numerous scholars and advocates have called for a fundamentally distinct paradigm of addressing ecological breakdown, poverty, and preventable illness in the Global South⁶⁷. This paradigm, broadly referred to as "postdevelopment," foregrounds ecological concerns and the rights of nature, decenters the economy, and is often informed by Indigenous communities' knowledge systems and worldviews. We consider post-development an umbrella term for a range of alternative paradigms and theories mostly emerging from the Global South—such as Buen Vivir from South America, Ubuntu from South Africa, and Swaraj from India, among others⁸—which have important points of convergence with "degrowth" in the European context⁹. As stated by author Omar Giraldo¹⁰, post-development is centered on building and respecting autonomy, making local food production and social movements crucial. While post-development has been called abstract and impractical, our combined 30 years of experience working in a Maya community in Guatemala shows that Indigenous-led organizations offer concrete philosophies and practices that could readily form the basis for a post-development agenda in the region.

The argument we propose is straightforward: GDP, as an indicator of the dominant model of development, must be dethroned and replaced by frameworks informed by the values, practices, and worldviews of local and Indigenous communities, many of whom are at the forefront of climate mitigation strategies that include environmental protection and sustainable food systems^{11,12}. We build this argument in three parts. First, we discuss what the narrow focus on economic growth has looked like in the territory where we work, informed by our participatory research and long-term accompaniment. Second, we provide a very brief snapshot of the work of Indigenous-led organizations which have been responding to the disaster of development and the catastrophe of climate change by strengthening local food production, restoring ecosystems, and capturing carbon in the soil, all the while revitalizing the land-based cultural practices of Maya-Achí

communities. Third, we consider what insights might be gleaned from their efforts and how entities in the Global North might support, rather than undermine, the post-development agenda emerging from the Latin American grassroots and to do so at the speed and scale that the climate emergency requires. We argue this can be achieved by increasing and shifting funds from market-oriented development to grassroots and Indigenous groups (supported by state and international funds), by eliminating structural barriers to communities' self-defined goals, and by transforming dominant frameworks of development. As part of the topical series on Local Climate Action in Latin America¹³, we aim for this commentary piece to respond directly to questions surrounding how and why local climate action may achieve greater success, and the likely barriers.

The disaster of development in the Pueblo Maya-Achí. Our engagements in Guatemala have primarily taken place in the Maya-Achí *Pueblo* (territory/community) of Rabinal, Baja Verapaz, Guatemala, located in Central America's "Dry Corridor." This is a predominantly rural and Indigenous region known for its extreme vulnerability to climate change¹⁴, high rates of outward migration, rural poverty, and food insecurity^{15,16}. On the other hand, the territory is renowned for its biocultural diversity and sustainment of ancestral crop varieties, pre-hispanic ceremonies, and cultural traditions¹⁷. Living and working in the region since 2007 has provided us with a unique vantage point for observing what the hegemonic model of development (hereafter, "Big Development") has actually meant in the lives of the so-called "target populations" such policies purport to assist.

Big Development emerged in the Maya-Achí world most notably with the World Bank and Inter-American Development Bank-Funded Chixoy Hydroelectric Dam, justified in the name of development and modernization. The dam's construction in 1980 coincided with and helped inflame the extreme violence of Guatemala's 36-year armed conflict¹⁸. Although the dam would flood or otherwise directly impact 33 communities living along the Chixoy River, none of these communities were provided adequate consultation prior to its construction. Those who resisted their forced displacement, such as the residents of the Rio Negro community, were brutally tortured, killed, or raped. Forty years later, survivors of the massacres and their families live in the same "model village" built for them by the military at the time of their displacement; a slum with no land to farm, where most residents survive primarily from seasonal work on plantations, remittances from relatives in the U.S., and low-wage day labor¹⁹.

Since the early 2000s, the situation in post-conflict Maya-Achí territory superficially might appear improved; indeed, it fits the bill of a "development success story." Incomes, without question, are rising. Access to the Internet via smartphones has become widespread. Thanks to increased remittances and credit access (albeit with interest rates often surpassing 20%), many *Rabinalences* have built relatively large, cement block homes, generating a construction boom and significant employment. Today, Rabinal's central square is replete with large sound systems and billboards hawking the wares of a modern, industrial lifestyle—from imported agrochemicals and pharmaceuticals to fancy electronics to soft drinks and pizza. Few of these products are regulated, yet for those who can afford to pay for them, the American Dream has never been closer at hand.

In the surrounding countryside, where family agriculture remains central, changes to the mostly sustainable traditional milpa farming system (intercropped maize, beans, squash, and other highly nutritious herbs) and agroforestry are well underway. These changes are often promoted by policies aimed at "modernizing" campesinos through the intensive use of agrochemicals and by sidestepping structural reforms to Guatemala's vastly unequal distribution of land and capital²⁰. In contrast to traditional

intercropping strategies, the chemically intensive approach, which is often promoted by development agencies²¹, temporarily increases yields but also degrades topsoil and increases vulnerability to water and heat stress.

Climate change vulnerabilities, which include consistent and severe drought, are compounded by others, including loss of family labor and the prohibitive cost of external labor; introduction and promotion of cheap processed foods; and outward migration, specifically among youth who pursue more lucrative employment outside their community. Thus, traditional small-scale and diverse agriculture is giving way to more commercialized monocultures, jeopardizing local food sovereignty and nutrition in a region wracked by childhood malnutrition.

What do residents of Rabinal have to say about all this development? Our research—which includes over a decade of accompanying community organizations and farmers while conducting participatory and ethnographic field research^{17,19,21-23}—shows that while improvements in some aspects of life are recognized (e.g., paved roads have eased transport), many perceive development to be an unmitigated disaster for their communities and ways of life. In recent focus groups and interviews conducted by Bakal and his colleagues in 2022²², Rabinalences consistently reported unprecedented levels of economic, cultural, and ecological precarity. They noted that development has brought about accelerated deforestation, worsening air pollution, increased traffic fatalities, declining nutrition, deteriorating water quality, and more indebtedness (recall those 20% interest rates). They decried the widespread environmental and health consequences of toxic agrochemicals and lamented the loss of communal values of respect and reverence for the natural world as growing numbers of young people pursue the "American dream." One participant aptly summarized, "as Rabinal develops, we get further behind."

Yet in spite of—or perhaps because of—these rapid changes, growing numbers are losing faith in the Euro-Western development model and pursuing a revitalization of their ancestral practices of farming, ecological stewardship, and communality while working towards more resilient communities and self-determination.

Local success stories, in spite of development. Indigenous-led organizations in the Maya-Achí territory employ a multitude of strategies to respond to the situation above, successfully inspiring thousands of families and individuals to pursue alternatives and improvements to their rural livelihoods. Their agenda is one of "development from within" rather than externally imposed projects. It is often grounded in practices of agroecology and the philosophy of well-being known as Buen Vivir.

With myriad definitions, Buen Vivir, in its simplest form, is an articulation of local and Indigenous perspectives of well-being and quality of life²⁴. It is often expressed within the linguistic and epistemic frameworks of local communities and, in many instances, represents a contrast to Western beliefs (accumulation of wealth, etcetera)^{10,25}. As a concept, Buen Vivir can be traced to Quechua and Kichwa communities in South America, where it has become a political movement that intends to bring Indigenous values and (post)development goals into social policy, community life, and daily practice²⁶. This process, while inspiring for many, has also generated much controversy, especially with respect to national governments that have pursued policies of environmental extraction under the so-called banner of Buen Vivir and continued essentialization of Indigenous livelihoods²⁷. Meanwhile, the concept remains a generative framework in many contexts, continuing to stimulate reflection around what truly constitutes a "Good Life" and how to organize social life on that basis²⁸. In the Maya-Achí territory, Buen Vivir, also called Utziil Kasleem, is focused on the revalorization of native seeds and crops (preserving genetic diversity and the rich cultural practices connected to these plants); local food production and

gastronomy; sustainable agrarian livelihoods and food sovereignty; and commitment to reciprocity and connection to Madre Tierra, Mother Earth ^{17,22}.

Treating cultural and ecological revitalization as fundamentally linked, Maya-Achí organizations and programs aim at strengthening ancestral value systems of ecological balance and conviviality, with a direct emphasis on agroecology. The history of agroecology and agroecological development in the territory is complex and explained in other texts^{17,21}. For the sake of this article, it should be understood that agroecology, while introduced as a conceptual framework in the 1990s, is rooted in ancestral farming practices and crops; which, despite all the "development" that has occurred, remains central to local identity and self-determination.

Agroecology as a holistic growing system and system of horizontal teaching and learning²⁹ has proven to increase resilience and is verifiably attractive to thousands of Maya-Achí families still involved in agriculture for family subsistence, for economic and cultural motives (See Isakson³⁰ for relevant analysis into the persistence of milpa agriculture in Guatemala). Given its emphasis on small-scale production, diversity, and local food systems, agroecology often goes hand in hand with "food sovereignty" and "Buen Vivir" ²⁸. These frameworks and practices are cornerstones for local organizations in the territory and often stand in stark contrast with the export-oriented regimes promoted by development agencies.

In this section, we focus on three organizations with whom we have worked and continue to work quite closely for the past 15 years. These include the Association of Committees of Community Production (ACPC) Fundación Nueva Esperanza (New Hope Foundation, or FNE), and Voces y Manos (Voices and Hands). Each of these organizations work towards Buen Vivir in distinct but complementary ways to support family farming livelihoods, protect local ecologies, build culturally sustaining models of education, and advocate for structural change at local and national levels, guided by Indigenous proposals for territorial and food sovereignty. Together with other groups in the territory, most notably Q'achuu Aloom³¹, an agroecological farming and seed-saving cooperative developed to support women widowed in the state-sponsored massacres, they provide concrete examples of lines of actions that can inform a post-development agenda.

Founded in 2001, ACPC is an association of approximately 450 families in 22 communities within the Xesiguán watershed, a region where strong campesino organizing once flourished yet was all but decimated during the armed conflict of the 1980s. ACPC was organized by former community leaders and their children to restore the watershed, which had been heavily deforested and damaged by burning and overuse of agrochemicals, while simultaneously reinvigorating sustainable family agriculture and the rural economy. Water remains central to their work, with specific actions including the development of micro-irrigation for dryseason farming, water catchments, enhancing vegetative cover through agroforestry, and increasing soil organic matter³². Agroecology and food sovereignty are also central, supported by farmer-to-farmer extension, the development of new local markets, and locally produced organic bio-inputs.

Fundación Nueva Esperanza (New Hope Foundation, or FNE) serves children of the survivors of the Rio Negro massacres connected to the Chixoy Dam construction described above. It is committed to the holistic formation of the next generation of Maya-Achí community leaders by teaching the Maya-Achí language and culture, emphasizing historical memory, and training Maya-Achí youth in agroecology. Since its initiation, hundreds of youth have attended FNE. However, given the pressures of life under a neocolonial economic and development model, most—though not all—FNE graduates must leave their communities to find work. Putting aside their extensive training and aspirations to work as agroecologists and community leaders, FNE graduates find work in the few avenues available:

as police officers, wage laborers in Guatemala City, or as undocumented workers in the United States.

Voces y Manos works closely with both ACPC and Fundación Nueva Esperanza, specifically aiming to increase opportunities for youth in the region to practice agroecology as a profession. It offers internships and full employment to Maya-Achí young adults to work as "promotores de Buen Vivir"—agriculture extension agents with a distinct focus on the promotion of Maya-Achí farming practices and values for some 250 rural family producers. They specifically aim to revitalize the ancestral milpa farming system, which integrates beans, corn, squash, and a range of medicinal plants and nutritious herbs through a network of model agroecological parcels spread across Rabinal's rural hamlets.

Together, these three organizations are working synergistically to open new channels for dignified education and work that sustain local economies, cultures, and ecologies—while merging economic opportunity with direct climate action. For example, graduates of Fundación Nueva Esperanza go on to apply lessons learned in agroecology as professional agricultural extension workers in Voces y Manos, where they collaborate with the campesinos of ACPC to spread agroecological practices. They are addressing poverty, fostering climate change resilience and mitigation, restoring watersheds and food systems, and empowering women, girls, and Indigenous youth—the very objectives Big Development agencies claim to support. However, what we have observed and heard firsthand from community leaders is that local organizations receive little assistance from the government and development agencies. In fact, they report that their most significant achievements have taken place *in spite of* development, not with its help. So, what's the problem?

Acknowledging the complexity of this issue, we attribute a significant part of the problem to funding streams and geopolitics. Development budgets consistently fall short of international pledges, too little money makes it to the grassroots, and geopolitical rather than humanitarian goals too often set the agenda³³. In addition, we believe there is a clash of paradigms at work: Big Development is simply too fixated on spurring privatesector investment or achieving narrow goals tied to pre-specified metrics to adequately apprehend the much more expansive vision of many Indigenous-led collectives. These groups pursue integral strategies in which cultural revitalization, livelihoods, local communities, and ecological sustainability are all seen as closely interconnected and pursued all at the same time. By incorporating the principles of Buen Vivir into their work, they measure progress in ways often incompatible with GDP and the pro-growth paradigm. Yet, from our perspective, these visions and goals offer exemplary cases of climate action and point to strategies that must be taken seriously and supported by the international community.

Scaling local climate action. Thus far, we have traced, in a rudimentary fashion, local forms of climate action being enacted within the Maya-Achí territory under the broad framework of Buen Vivir. This brief portrait of one community illustrates the incompatibility between the vision of these Indigenous-led organizations and what Big Development promises. Consider, for instance, that even if the US government's "root causes" initiative were to achieve its stated goals, it would offer Indigenous communities little more than the "opportunity" to send their children off to work in highly exploitative conditions disconnected from their communities. The notion that the best a \$4 billion investment can offer Indigenous youth is a low-paid job at a Nestlé® factory or MasterCard® call center is, in our view, a moral failure and an enormous missed opportunity to engage young people in working for meaningful and urgent climate action.

What would it take to finally make international policy and funding a boon to local post-development initiatives³⁴ instead of an impediment? We

argue that rather than dismiss international financial assistance altogether, what is instead required is a paradigm shift—a re-orientation of international assistance toward communities' autonomous pursuits of Buen Vivir. We propose three lines of action for how organizations in the Global North can support such a transformation: (1) increasing funding for (often) Indigenous-led climate initiatives for Buen Vivir; (2) re-conceptualizing development practices to align with Buen Vivir; and (3) transforming social and economic policies that impede the pursuit of Buen Vivir.

Funding Indigenous-led climate action. Our first recommendation is simply to increase funding for grassroots, Indigenous and campesino-led organizations. We believe that such funding can support significant and urgently needed actions consistent with the transformation to a lowcarbon future35, including (1) providing thousands of meaningful, wellpaying jobs for young people to lead climate action in their territories; (2) providing farmers throughout Central America with access to the lowinterest credit, subsidies, grants, and technical assistance needed to transition from toxic, carbon-intensive agrochemicals to ecologically sustainable practices; (3) strengthening food sovereignty, community resilience, and agricultural production that reinvigorates rural economies and supports cultural revitalization. Crucially, control over the conceptualization, implementation, and evaluation of such actions must be in the hands of local groups, with special emphasis on Indigenous-led efforts. By promoting food sovereignty, restoring ecosystems, and providing education and dignified work, such Indigenous-led initiatives can make significant inroads to addressing climate change and a dearth of opportunities to earn a living—two of the root causes of forced displacement from the region.

While grassroots funding alone will not fix the root causes of inequities between the Global North and South, it can help enable new economic models and political imaginaries to emerge from below. Nor will more funding be a panacea for issues of community division, many of which remain as open wounds since the time of the armed conflict. Still, funding can lessen those divisions. By providing a greater degree of assurance that worthwhile local programs will not come crashing down at the end of a short-term grant cycle, long-term funding streams can alleviate competition among would-be allies for needlessly scarce resources.

The movement of resources from North to South should be understood as, and justified by the logic of, reparations ³⁶. This stems both from the moral obligation of the greatest carbon emitters to pay for necessary adaptations to climate change and also from the recognition that many of Latin America's woes can be traced to the disastrous legacy of U.S. military and economic interventions in the region. This transfer of resources from North to South can be achieved both by shifting resources from Big Development to grassroots groups and by expanding budgetary allocations for international cooperation in the fight against climate change.

Re-conceptualizing development practices. The second necessary transformation is for international development agencies to abandon narrowly defined economistic metrics of success and top-down measures of accountability. As the aforementioned Maya-Achí organizations show, successful community efforts often seamlessly integrate health, nature, culture, spirituality, and historical memory in ways that defy facile assessment or metrics. Rather than require community organizations to translate their activities and goals into the technocratic language of Big Development agencies, the onus should be placed on development agencies to adopt frameworks that enable them to understand and support local groups pursuing climate action on their own terms.

This implies a concomitant shift away from top-down accountability tied to the achievement of those narrow indicators. We have seen first-hand how this top-down model engenders paternalism, dependency, and community divisions (for a wider critique of status quo development/aid geopolitics in Guatemala; i.e., how it neutralizes grassroots activism and more radical initiatives such as land reform (see Copeland³⁷. A conceptual shift toward a more holistic focus on achieving Buen Vivir—as defined and understood by local groups—is critical to moving beyond these dual traps of siloed goals and top-down accountability.

Transforming social and economic policies. Finally, recognizing that grant funding for organizations—though urgently necessary—will not be sufficient to achieve population- and region-wide transformations, structural change must also be pursued. Here again, local groups can set the agenda. Specific priorities can be identified through careful analysis of the economic and social policies that impede local groups' efforts to realize Buen Vivir. For example, many Indigenous groups in Guatemala have had their efforts systematically undermined by laws and policies that enable the usurpation of Indigenous lands by extractive industries, the promotion and sale of agrochemicals, the substitution of peasant food production for "non-traditional export crops," and the intensive marketing of soft drinks and processed foods. Small-scale agroecological producers cannot realistically be expected to compete with large agribusinesses, many of whom are foreign-owned and receive significant subsidies. These structural inequalities must become the target of specific interventions, for example, a strict regime of accountability for industries that reap enormous profits at the expense of the environment and the public's health, subsidies for farmers using agroecological approaches, and laws protecting the sovereignty of Indigenous communities, lands, and waters.

Such policy changes must be matched by local governments significantly increasing their funding for public health, education, sustainable natural resource management, emergency response, and other forms of social assistance, with climate action suffusing the plans of each sector. Such transformations, Latin American history shows, cannot be expected to emerge from enlightened governments' self-motivated action but rather will only come about through social movement pressure, such as that which is taking place as we write in the streets of Guatemala today³⁸. For their part, the countries of the North must reckon with their legacies of imposing neoliberal austerity and structural adjustment on the countries of the South and recognize that popular movements, as a response to that legacy, warrant international support and solidarity.

Conclusion

We recognize that our "scaling local climate action" proposal carries significant risks of cooptation or dilution. While cognizant of the historical baggage and critiques of international assistance³⁹, we also believe it is crucial to recognize that today's most successful agroecology initiatives reach only a small fraction of Central American farmers, who still must face the burdens of climate change they did not cause while swimming against a constant stream of economic and social policies that undermine their efforts. If the U.S. government is investing billions of dollars to ostensibly address the root causes of migration, this is too great of an opportunity to squander out of "small is beautiful" purism. The climate crisis only adds further urgency for the need to "think big." We thus believe it is necessary to propose the change at a broad scale: a vision of North–South cooperation rooted in solidarity, historical memory, and the understanding that the (post)-development agenda can and must be set by local, often Indigenous, organizations.

The near-total overhaul to Big Development that we propose here may sound utopian. To be sure, it will require fundamental transformations to deeply entrenched systems of economic and political power. Yet it is clear that if we are to survive the climate crisis with vulnerable communities' livelihoods and ways of life intact, the Global North cannot continue to impose policy and program interventions that support the same old economic and ecological model while leaving frontline and Indigenous communities to fend for themselves amidst its wreckage. Our partners on the ground understand that these policies and programs have brought them little more than new consumer goods and gadgets, leaving utter ecological devastation and social misery in their wake. They are doing their best to enact alternatives in spite of development. Their local efforts should be studied seriously and be used as the basis for a reformulated, post-development model built from the ground up and guided by ecological, communitarian, and social equity criteria rather than merely economic growth.

Data availability

All relevant data can be made available upon reasonable request to the authors.

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Author contributions

Both authors were involved in the conceptualization, writing, editing, and revision process for this article. The authors used a combination of their own independent experiences and previous data collection from other research to collectively develop and write this article.

Competing interests

The authors declare no competing interests.

Additional information

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