

Transformations for a disparate and more equitable world

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Introduction

Fifty years ago, *The Limits to Growth* presented groundbreaking research that predicted a resource catastrophe. With 2022 marking the 50th anniversary of the publication, the new and updated models in Earth4All continue to predict planetary emergency and threats to humanity if major transformations are not realised. This brings us to the existential question of our times: What transformations and trade-offs will be needed in a resource-constrained 21st century to reverse our supercharged self-destructive trajectory?

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Answering this question will require a departure from existing and simplistic understandings of the world we live in. We must address the power dynamics in the current world order and ask questions about development and prosperity, the structure of economic models in the globalised economy, the global institutions that dominate and perpetuate the status quo, and the very nature of political systems. For many nations these will be departures not yet pondered and even deemed impractical due to the current economic orthodoxies within the global economic architecture.

At the moment, the existential threats facing humanity – including climate change, mass pollution, ecosystem destruction and resource depletion – are considered “global challenges”, and therefore there is a great deal of faith in “global solutions” and the ability of existing global systems to deliver on them albeit with some modifications. Underpinning this narrative is the

superficially appealing idea that combating these threats will require [all nations and peoples to work in unison](#). This is widely accepted and touted by international leaders and institutions, and is a theme in conferences and high-level reports. However, the inconvenient truth is that each country cannot follow the same path – especially large poor countries – as we head into an uncertain and complex future. There is no single global path to addressing the existential threats, as comforting and convenient as it is to suggest so. The nature and manifestation of the threats, and the inequity that marks our world, differs greatly between rich countries and poorer countries and also within each country. As a result, they affect livelihoods, prosperity, quality of life, sustainability and resource management in myriad ways.

It is also important to accept that there are deep-rooted structural inequities in the way the global economy works and unravelling them will be met with resistance. Thus, while this might all seem evident and easy to build consensus around, rich countries that are the global minority and main beneficiaries of the current order will continue to view solutions within the confines of their governance systems, political ideologies, economic models and national interests – as is their right. However, it must also be made clear that they should not export these solutions in ways that cannot be mapped onto the global majority. Rich countries resist the sorts of global structural transformations needed to enable the global majority, and therefore the planet, to deal with the planetary emergency.

The baseline for this argument is that, unlike the global minority, the majority must pursue sustainable development and fundamental national development simultaneously while still bearing the injuries of the past and at the same time struggling to build the strong institutions needed to navigate these unprecedented demands for change. After all, the global population will peak at 10 billion in 2050, and most of this growth will be in majority countries; there are already more people living in the single continent of Asia than in the rest of the world put together. In majority countries, population growth outpaces the capacity of governments to provide the basic needs in housing, education, water and sanitation, food, and energy. Weak institutions and weak governance systems exacerbate this problem.

This problem is particularly visible in rapidly expanding urban areas, which are seen as beacons of opportunity and an escape from poverty for millions. Megacities in majority countries, including Lagos, Manila, Mexico City, Dhaka, Jakarta and Mumbai, are experiencing pressures not felt by any city in global minority countries. Peripheries and rural regions also face decline as resources are primarily being diverted and stretched to manage growth in these megacities in the false belief they will be the engines of economic prosperity for all. This is the nature of the struggle and the context in which the transformations have to be implemented. It will require extraordinary resilience from state institutions to deliver them.

With such rapid population growth, urbanisation, and the perennial need to continue raising living standards and improving quality of life, resource mismanagement and resulting constraints are inevitable in majority countries. Not least because much of the resource base is being exploited for export to earn the much-coveted foreign currencies. These problems are exacerbated by the global economic model, which couples growth with consumption. As I have argued in my first book, *Consumptionomics: Asia's role in Reshaping Capitalism and Saving the Planet*, this model is leading majority countries to believe that achieving a state of "high mass consumption" is one of the most important – if not the most important – indicator of their nation's developmental success.

Many sustainability transformations in majority countries struggle to account for how deeply rooted and all-pervasive this belief is. For instance, take India. How will this country of almost 1.4 billion (peaking at 1.5 billion in 2050) lift hundreds of millions – perhaps as many as half a billion – out of poverty in the next 30 years, yet also curtail its emissions and resource consumption at the same time? All the economic development models available to India – predicated on Western industrial equivalents – would release huge amounts of greenhouse gas emissions, result in overuse of resources and create copious amounts of pollution, thus worsening the global sustainability challenge. This is a dilemma not addressed by international institutions, as it would raise fundamental questions about the approaches to sustainability being promoted. Many are in denial of the fact that most people in low- and middle-income countries cannot and should not aspire to copy Western lifestyles and levels of consumption or even get close. Can there really be a globalised "us" in the push for sustainability when such disparities exist for majority countries like India?

Understanding this predicament is also crucial for the implementations suggested in the five extraordinary turnarounds in Earth4All: ending poverty, addressing inequality, empowering women, transitioning to clean energy, and making our food system healthy for people and for ecosystems.

Given this context, this paper will argue that creating a disparate world and managing the varied existential threats will require political and economic transformations that may not be aligned with what is often promoted in the rich world as the gold standard, or even the only standard. We will therefore assess global responses implemented so far and will critically examine if neoliberal market-based approaches tethered to loose definitions of democracy – which are the norm in the rich Western world – are applicable to majority countries. This paper will also propose that

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truly transforming society and realising the five turnarounds in accelerated timelines will require stronger institutional interventions led by the state, especially for those majority countries that need to solve the dilemma of achieving sustainability and economic development simultaneously.

On a practical level, state interventions are the most appropriate for managing the existential challenges we face because they will take into account the economic, cultural, geographical and political contexts of each country in a more realistic manner than an imagined system of globally unified transformations. They are also the only means for the large-scale mobilisation of a range of resources to bring about change on the scale needed. At the international and multilateral level, this will require major adjustments and an acceptance of the plurality of governance systems worldwide, not imposing Western ideological beliefs. For instance, no longer demanding democratic reforms as seen through the lens of Western-led global institutions, which are often used to further geopolitical agendas, to establish institutional norms, or to place economic and political demands onto countries with different developmental contexts, no matter how well-intentioned.

The free market is not a “one size fits all” approach

The global approaches that have been advocated to solve resource constraints are, at present, developed within the confines of neoliberal market-based economic models, and commonly within the context of the rich Western world, where these models take primacy of place. However, this is less a global solution and more of a Western preference. Despite global agreement that neoliberal capitalism has led to many of the challenges the modern world faces – particularly from a resource consumption standpoint – there is still a general consensus among Western thinkers that we can improve the existing economic model rather than moving forward with a complete overhaul. A deeper transformation will require concepts such as placing collective welfare ahead of individual rights in policymaking and thus establishing the necessary governance systems to achieve such objectives. Another example is the push for more renewable energy to displace fossil fuels. Although a good objective, there is insufficient focus on the core issue: reducing overall consumption of energy (regardless of the source), especially by those accustomed to cheap energy.

Generating more renewable energy without concerns about its use is a denial of the consequences of economic activities that thrive on promoting relentless consumption. Such an approach may address the carbon emissions dilemma but not the destructive nature – on the resource base and society – of economic and political systems that encourage relentless consumption, which is seen as an individual right and a means for old-fashioned economic growth metrics to be met. Any transformation will need to confront this challenge and it is the key issue for the global majority countries where most people have yet to join the consumption jamboree, which sustains the current global economy.

Given the extensive body of criticism of the free-market model's hyperfocus on growth at all costs – fuelled by consumption and underpriced resources and labour – it should be clear that it is impossible to reconcile free-market ideology with sustainability and resource management issues. Governments pursue economic growth in a way that ignores the clear environmental and social costs. Businesses find they cannot simultaneously embrace corporate growth and sustainability so they get trapped in never-ending facile discussions about their commitment to sustainability challenges – cue Corporate Social Responsibility (CSR) or Environment, Social and Governance (ESG) reporting exercises. Little thought is given to what costs are worth bearing and what growth is actually for. At the moment, growth is synonymous with economic expansion (which is reliant on promoting relentless consumption) and has been conflated with improvements in quality of life for all even though this is not a linear relationship. These are not issues and contradictions that governments within the global majority can ignore, and approaches towards transformations cannot be used to mask these inherent dilemmas.

Market-based approaches have the superficial benefit of not requiring extensive and difficult decisions about how to best allocate resources. The assumption is that the market will somehow handle this independently, automatically resolving any problems associated with diminishing resources. Take the market-favourite climate solution, carbon offsetting, as an example. The carbon offsetting market has allowed business-as-usual activity (including in financial markets) to continue without any fundamental change in our consumption model and the associated lifestyles it enables. But the reality is that even the world's largest at-source and direct-air carbon capture plants can only collect as much carbon dioxide (CO₂) in a year as is emitted in 1.5 hours and 4 seconds respectively. Adding to this complexity, even if carbon offsetting technologies could be used to reduce rich-world emissions, they are blind to the needs of majority countries. For instance, the Grantham Institute estimated that solutions like biofuels and [bioenergy with carbon capture and storage](#) (BECCS) would demand between 0.4–1.2 billion hectares of land, which equates to 25–80% of all land currently under cultivation. This is simply not possible when the global demand for food in 2050 will be 30–50% higher than at present – mostly from large majority countries such as Nigeria, Indonesia and India. In reality there is no “one size fits all” approach. Governments of these countries will need to focus on feeding their people first and foremost, [not dedicating land to drawing down carbon](#) (although there are approaches that could do both in some instances).

Market-based solutions also fail to question fundamentally our rights and freedoms in the face of an existential threat. For example, in a resource-constrained planet, is car ownership a human right for the global majority? The answers are not to be found in new tech solutions like electric vehicles. The global transportation sector produced approximately 7.3 billion tonnes of CO₂ in 2020, which accounts for 17% of total global emissions, with [passenger cars accounting for](#)

41% of total transportation emissions. Governments' lack of spending on public transport and inability to curb car production and purchasing in large countries seeking to mimic the West has transformed megacities into transportation nightmares: copious amounts of air pollution, high incidence of traffic accidents, extreme commute times, deteriorated health and street-level chaos are among the myriad externalities excluded from the cost of car ownership and usage.

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Given the limitations and inherent flaws with free-market orthodoxy and its drive for perpetual growth, a new political-cum-economic growth model is necessary, especially for majority countries if the transformations are to have any chance of succeeding. This model should couple growth with the provision of basic rights and needs, thereby securing wellbeing for the majority. It should involve lifting populations out of poverty, growing more food, building more homes, providing access to potable water and sanitation, expanding energy access, and other development initiatives. Importantly, all of these can be done in ways that will expand the economy without necessarily benefiting the interconnected global economic system and its gatekeepers, including financiers. The transformation requires long-term planning and can also be designed to create opportunities for meaningful work. Although this model will inevitably still result in increased resource consumption – and thus emissions – at least in this case, growth would be in service of a social purpose and the creation of public goods. Indeed, these sort of patterns in consumption must be captured in any global resource-based modelling if an accurate portrayal of the trajectory in majority countries is to be predicted.

Let us look at what this wellbeing-based economic growth model would look like if employed in a specific country. In India, it could ensure that every person has a home, which will “grow” the Indian economy through materials purchasing, paying labour for construction, and the added value to the property market. Add to that all the positive externalities that arise from providing everyone with a home, such as water supply and sanitation and dignified and equal living standards for women. It is almost impossible to see how growth pursued through free-market mechanisms could deliver this or have the same direct social impact given that almost 50% of India's population live in informal housing with no access to proper roads, water and sanitation.

So, if the free market is not suited to lead a wellbeing-based economic growth model in majority countries – or, for that matter, high-income countries – what is? Given the scale of the challenge to make transformations, only an active state with the power to consistently intervene in the market to improve the livelihoods of the poor majority, while also aiming for long-term sustainability, can achieve the necessary outcomes.

A strong state can push for an economy that is not driven purely by consumption but also by securing quality of life for all. Such interventions free the majority from the drudgery of a life of poverty and lack of access to basic needs, such as energy and healthcare. It thereby provides resources for its current generation while preserving resources for its future generations – this applies to both minority and majority countries.

The role of the state in enabling transformations

Realising the five turnarounds and achieving wellbeing for all will mean the state needs to take a more active role in managing resources and directing the course of economic activity such that it serves the primary goal of providing the population with the basic rights to life (housing, healthcare, water and sanitation, education, electricity and so on). This is what differentiates the “sustainable state” from a “developmental state”: whereas the latter uses state resource management to drive high economic growth, the former will use it to create a more sustainable, universal economy. While this may come at the expense of losing high growth rates as narrowly defined by gross domestic product, it guarantees stability and human rights as viewed through the lens of sustainable development, and vastly reduces our currently disastrous impacts on the environment.

As discussed in my second book on this very topic, *The Sustainable State: The Future of Government, Economy and Society*, this is a new political philosophy for human progress that will help shift narratives to place collective welfare over individual rights, critique the idea of unimpeded consumption and reinterpret the definition of prosperity in an era of constraints. Although the concept of the sustainable state will manifest differently for each country, there are three foundational objectives it will adhere to:

- 1. Protecting common and public goods**
- 2. Defining a path towards moderate prosperity**
- 3. Allowing societies to prosper within challenging resource constraints**

The first objective requires the state to protect public and common goods to ensure that all its citizens have equal and fair access to them.

The first objective requires the state to protect public and common goods to ensure that all its citizens have equal and fair access to them. The state can actively manage its resource stocks by starting with a vision of the economy built on resource management, not on the archaic belief that unchecked resource exploitation will deliver economic growth and improvements to wellbeing by proxy through “trickle down”.

The state should also work to create strong institutions, including trusted and independent monitoring and enforcement agencies. These bodies can monitor how resources are used, granting licences to private operators to access natural resources and using the revenue for public good. Those who overexploit natural

resources ought to be sanctioned and resources seized, with costs recovered to the wider economy. These agencies need to have the power to punish companies that “cheat” and the politicians and community leaders who enable it. Whether they are dealing with poaching, illegal deforestation, sand mining or fishing beyond quotas, government agencies need to step in quickly to sanction these companies, seize illegally exploited resources, and invest in seriously protecting and sustainably managing the natural environment.

Inevitably, there will be some resources for which there is no free-market way to provide fair access, so state institutions, or heavily regulated companies, must determine how to apportion

access. The success of these measures depends usually on the maturity, competence and stability of the institutions. In some cases, nationalisation may be the only option, ensuring that only the state has the authority to (sustainably) manage these resources. Nationalisation also ensures that revenues from resources are in state hands, which means they can be reinvested for future generations.

There is already a model for this: oil-exporting states have long used state oil companies as a way to invest in public services. The usual argument against this approach is that nationalisation leads to the “resource curse”, where countries abundant in natural resources have seen lower economic development than resource-poor countries. But this happens only because the state is weak: a weak state sees resources as a source of easy revenue rather than as “seed capital” (to borrow a business term) for future growth. When the state is strong, it can transform resource revenues into a foundation for future development.

Of course, some states have done this better than others. Some state oil companies are public in name only: Petrobras, the Brazilian state-owned oil company, acts more like a private company. Other oil-producing authorities, such as the US state of Alaska, directly share oil revenues with their populations in the form of dividends, which can have little long-term benefit. Finally, other states, such as Bahrain, Abu Dhabi and the Nordic democracies, have invested oil revenues into long-term public and social services, improving quality of life even as oil reserves begin to deplete.

For the second objective, the state must define a path towards a moderate prosperity that is suited to the resource constraints of the 21st century and the national need for built-in self-sufficiency.

In short, there are several mechanisms through which to manage common resources. But letting them be exploited by an unregulated free market prevents these finite resources from contributing to long-term economic development and wellbeing for all.

For the second objective, the state must define a path towards a moderate prosperity that is suited to the resource constraints of the 21st century and the national need for built-in self-sufficiency. This path will stand in contrast to the no-holds-barred understanding of prosperity we have today, and will structure the economy to internalise market externalities, allowing for a more honest understanding of productivity, economic benefit and economic cost.

In majority countries, the state is obliged to help bring the majority at the bottom of the pyramid up to a basic standard of living, while also preventing resource overexploitation and overuse by actors at the top. When a large segment of the population sits at the bottom of the income distribution, the country is more difficult to manage. It is in the state’s interest (and arguably in the interest of the ruling elite as well) to lift living standards at the bottom, as a moral, political and economic imperative. Take away the drudgery, and populations will thrive in almost all spheres of human endeavour.

The simplest solution to this is to directly provide cash or resources to low-income families. One of the most successful antipoverty initiatives was Brazil’s Bolsa Família, which combined short-term poverty alleviation with long-term investment in public health and education. Covering over 12 million families at its peak, the government initiative offered direct cash transfers to

low-income families in exchange for keeping their children in schools and ensuring they were up to date on vaccinations. Indeed, as Earth4All suggests, certain proportions of tax revenue generated can also be distributed evenly to all citizens as a universal basic dividend.

Governments can also take greater control of certain sectors of the economy to ensure that economic opportunities exist throughout the country, rather than just in a few central locations. For example, China relied on “town-and-village enterprises” (TVEs) in the early stages of its economic reforms from 1980 onwards. These were community-owned enterprises that provided much of the initial growth that eventually fuelled China’s economic boom a decade later. Unlike purely private corporations, which were still largely distrusted in Communist China, the TVEs combined public and collective ownership to facilitate their operation. Nominal public control meant these enterprises could be brought together to fuel economic development.

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Finally, for the third objective of allowing societies to prosper within resource constraints, governments must not only focus on helping the bottom of the economic pyramid, but also on constraining the top. Much of elite consumption places excessive costs on the rest of the society, which are not covered in the market price. Governments need to work to “internalise” these costs and ensure they are included when a person decides to consume something.

Tackling consumption inequality is different from tackling income or wealth inequality. Although these are likely to be correlated, one can easily think of a middle-class household consuming far beyond its (or society’s) means, even if the family’s income is not particularly high in the grand scheme of things. Perhaps they purchase a second car, or engage in high-energy lifestyles. The same can be said of corporations and private businesses. Like individual consumption, corporate consumption is correlated with corporate size, but not necessarily in all cases. Some sectors have external costs much greater than their overall size.

The state can also structure the economy to internalise market externalities and regulate overconsumption. One straightforward way to do this is taxation. For example, instead of hoping that the market solution of carbon offsetting will balance all the emissions from car ownership, a country like Indonesia can reduce emissions and alleviate traffic congestion in overcrowded urban centres by implementing road pricing, whereby direct charges are levied for the use of roads in the form of tolls, distance or time-based fees, congestion charges, fuel-based fees, etc. Indeed, electronic road pricing is being implemented in Jakarta for the first time to combat dire congestion. The benefit of taxation is that it provides revenue for state governments, which can fund public efforts to help the majority. Quotas and licences are another way to limit consumption of certain goods and services; both Singapore and Hong Kong, for example, institute high fees for vehicle licences to discourage vehicle ownership.

In sum, by meeting the three objectives of protecting common and public goods, defining a path towards moderate prosperity, and allowing societies to prosper within resource constraints, the sustainable state will no longer only apply the tools of state management to foster a high-growth, high-consumption economy. Instead, a new political philosophy will have the willingness and

capabilities to meet the goals of the five turnarounds: ending poverty; addressing inequality; empowering women; transitioning to clean energy; and making our food system healthy for people and for ecosystems.

The need to accept political plurality

For a sustainable state to prevail in achieving the five turnarounds, it is important to first identify what a successful state looks like. As the world navigates an uncertain future it is critically important that policymakers are not seduced by the notion that the only political system that can prevail is Western democracy. It is crucial to understand state strength independently of how democratic a state is or is not. A poorly designed democratic system will be just as incapable of addressing the challenges of sustainable resource management as a poorly designed nondemocratic system. Strong states will be better placed to make necessary decisions about constraining consumption and spreading access to basic needs and the rights to life for billions in the global majority nations of the world. For example, a heavily divided yet democratic United States will struggle to implement the transformation, as will a weak democracy such as India.

India, as the world's largest democracy, is often subject to comparison with China. In India, the basic rights of life have not been met across its population. Hundreds of millions still live in dire poverty, with poor access to food, clean water, sanitation, secure housing and electricity. Many in rural communities have no access to proper toilets, which has been blamed for the country's tragically high rates of child malnutrition, as children's bodies spend more time fighting infection than growing. In contrast, by 2021, [China had lifted 800 million of its population out of poverty](#), showcasing far greater success than India in reducing poverty and providing basic needs for its most vulnerable populace. It also seems more capable of long-term strategic thinking, from its infrastructure programme to its sustainability agenda. This is not to say that India should emulate China's one-party system. Nor does this imply that China's performance has been perfect, but it is true that China's performance in poverty reduction and almost all spheres of development is far more successful than India's, despite the latter being a democracy.

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Socialist Cuba is another example of a strong nondemocratic state. It has been under sanctions since 1962, largely due to its choice of political system, and this has prevented American-made products from being exported there, including medicines and med-tech. Despite this, it has one of the world's strongest public healthcare systems, because it has had to develop domestic capabilities and technologies. Cuba's model can provide inspiration for majority countries. Spending only 5% per capita on healthcare compared with the United States, Cubans enjoy a longer life expectancy and one of the lowest childhood mortality rates in the world. This is largely due to an early focus on preventative healthcare and community health measures over curative medicines. Placing the onus of providing public health services on the state as opposed to the market has meant that [Cuba has invested in the construction of rural clinics](#) as opposed to expensive urban hospitals, and the training of medical auxiliaries, instead of doctors focused on costly

specialities. Its robust healthcare system was even able to produce its own vaccine during the COVID-19 pandemic, which demonstrated a [92.4% efficacy in clinical trials](#).

Indonesia is another compelling example. Since 1945, Indonesia has followed a political philosophy called Pancasila, which, given the nation's vast cultural and racial plurality, attempts to synthesise the ideologies and values of various Indonesian belief systems into five pillars, ranging from Western political thought to Islam, Hinduism and Javanese Kejawèn. These five pillars are: representative democracy, justice and the virtue of humanity, Indonesian unity and patriotism, social justice for all the peoples of Indonesia, and the belief in one God. In drawing from a multitude of values, Pancasila has transcended governance systems to persist across nearly 80 years of political transformation in Indonesia (including liberal democracy, guided democracy and military control). Indonesia is now one of the world's most successful large democracies, but is run according to a very different set of guiding principles than Western democratic ideals, demonstrating the potency of embedding pluralism into the DNA of a nation.

Such examples are evidence that if a state fails in achieving any transformation, the root cause of its failure lies not in the nature of its political system, but rather in its weakness to be entrapped by private and vested interests, failing trust between the government and its people, or lack of competency and experience. However, only global systems rooted in Western democratic systems of governance are positively discussed in Western media, schools and by Western politicians when compared with nondemocratic systems. This is evident in the global ideological rallying led by the media to undermine or misconstrue any of China's domestic achievements and international relations.

Achieving sustainability necessitates decolonising global hierarchies and systems to allow diverse solutions to arise from all nations, and not just the West.

The world possesses a diversity of political systems that it is important to accept and work with in order for all countries to be willing to demonstrate a lasting commitment to meeting the five turnarounds. This will require major adjustments at the multilateral level. International organisations such as the United Nations, the World Bank, the International Monetary Fund, the World Economic Forum and the World Trade Organization will all need to reassess the uneven power dynamics within their operations, which continue to uphold governance systems employed in the rich Western world. Removing the antiquated five-nation veto power, Western-only presidencies, forced trade liberalisation, and structural adjustment programmes for majority countries are important first steps towards accepting plurality and allowing for global equity to flourish. Indeed, the fight for equity is an essential component in

edging societies and economies closer to sustainability, as I argue in my third book, *Dismantling Global White Privilege: Equity for a Post-Western World*. Given that inequity between nations fundamentally pertains to limited access to resources and less influence on the direction of global matters – of which climate change, pollution and biodiversity loss are now central elements – achieving sustainability necessitates decolonising global hierarchies and systems to allow diverse solutions to arise from all nations, and not just the West.

Lastly, it is for this reason that scientific models, such as Earth4All, can actually play an important role in demonstrating why political plurality is important. Future modelling efforts can and should

incorporate the predicted impacts of diverse political-cum-economic governance systems on how different countries will respond to existential threats in the coming years. This will help ensure that scientific modelling is representative of global heterogeneity, which will aid the process of research and implementation into tailored solutions for different nations.

A critical solution for majority countries

Given the importance of the state and political plurality in the context of the five turnarounds suggested in the Earth4All project, it should be expected and obvious that every country will take its own path at the national level, even if the goals for poverty alleviation, combating inequality, women's empowerment, transitioning to clean energy and sustainable food systems are global. Thus, this section will examine one particular state-led transformation tailored for majority countries that is particularly important, for which Indonesia will be used as a case study: rural development and deurbanisation.

States in large majority countries should focus on their large rural population, ensuring that these people are stable and well fed. States should not recklessly encourage urban migration in some mad rush to “modernise”. Governments need to blunt the flow of migration from rural areas, and channel the remaining migration across a wider area. This means decentralisation and deurbanisation: encouraging people to live in rural communities and secondary towns, rather than in the major metropolitan area.

One major factor can be the spread of provision of basic needs (electric power, clean water, proper sanitation, safe housing and so on) across large rural areas. Building this infrastructure and these services will help create important economic opportunities, encouraging people – especially the young and the skilled – to remain where they are and develop their local regions. States can also go beyond providing only the infrastructure for addressing basic needs: they can invest in many of the amenities and facilities that serve urban areas, such as higher education, advanced healthcare, financial systems and public cultural facilities. These things may never “make money” but that will not be the point: their purpose will be to provide rural areas with the moderately prosperous lifestyle people currently associate with cities.

Governments should also focus on secondary cities and towns, developing them into their own economic and business clusters. This will give migrants more options (and relieve pressure on the major cities) if they still decide to relocate from rural settings. Additionally, majority countries, as they expand their state institutions in managing the economy, can start to place important governing and regulatory institutions throughout the whole country, rather than centralising them in one city.

The current president of Indonesia, Joko Widodo – popularly known as “Jokowi” – is [aiming to do just that](#) by changing the nation's capital from Jakarta to Nusantara in the East Kalimantan province. While certainly a controversial move, the sentiment is clear: Indonesia cannot allow its entire economy and infrastructure to be localised in one overburdened city.

Dealing with this issue at state level also allows for a national system of resource management and distribution, rather than leaving individual areas to work on their own. Governments could develop tax incentives to encourage people to stay, work and set up businesses in rural areas

and secondary towns. If this is done on a national level, state governments can ensure that any shortfall in revenue is made up through a national redistribution of income (as opposed to a federal system, where lost tax income stays lost).

A vibrant agricultural sector will also provide farmers with more opportunities to earn an income and thus improve their own economic position, thereby becoming self-sufficient within the context of a moderately prosperous society.

Governments can also create better economic opportunities in both rural areas and secondary towns. Instead of upholding resource-intensive industrial agriculture, they should support smallholder farmers in building a viable food production system that is stable and locally owned, farmed and managed – one that in turn provides enough surplus to feed an urban population. A vibrant agricultural sector will also provide farmers with more opportunities to earn an income and thus improve their own economic position, thereby becoming self-sufficient within the context of a moderately prosperous society.

Indonesia's major islands could all strive to become "self-sufficient". This would not mean that their economies would actually be able to provide all the materials and commodities that people need, but rather that each island would have an economy vibrant enough to provide adequate opportunities for its growing population. People could decide to stay and improve their local region rather than feeling they need to move elsewhere, especially to overcrowded Java. This would mean a programme

of investment both in Indonesia's less-developed islands (e.g. Sumatra, Sulawesi, Kalimantan and the Indonesian part of Papua New Guinea) and in its secondary cities, to avoid too much economic centralisation in Jakarta and the island of Java. Indonesia could take advantage of its bounty of natural resources. By taking greater control of commodities, the state could ensure these resources are harvested and exploited in a sustainable manner – first and foremost for local populations – while ensuring that revenues are turned towards providing basic needs.

For example, Indonesia could take the revenues from oil and gas exploitation and funnel them towards investments in renewable energy across the archipelago. This investment would be backed by the state, rather than purely by private sector entities or NGOs. Indonesia's government would also play a greater role in managing agricultural commodities, such as palm oil and wood pulp. Much as with energy and mining, Indonesia could ensure that these commodities are managed sustainably, with the long-term goal of reducing the size of the industry. The Indonesian government could embark on a programme of land reform and redistribution, splitting up large plantations into smaller farms growing higher-value produce. Money could be funnelled into investments in rural development: not just roads and ports, but cold chains for perishable items, hospitals, local universities, financial institutions and training centres.

In practical terms, Indonesia can be taken as an example of what will be needed on the ground for large low-income countries and of the trade-offs involved in the context of the transformations that are required at the global level. Solutions in which rural development is prioritised will have an overwhelmingly positive effect in dispersing the resource constraints present in the overcrowded cities of majority countries, allowing them to doubly pursue sustainability and development while ensuring wellbeing for the majority.

Conclusion

Earth4All has presented bold strategies for five key development areas. Having identified these priorities, the challenge now is deciding how to facilitate them. As this paper has discussed, abdicating the responsibility of achieving the five turnarounds to free-market doctrines is simply not a viable solution – the “invisible hand” will not create optimal outcomes when the current economic model fundamentally underprices and undervalues environmental resources and human labour, and ignores negative impacts on nature and societies.

Thus, a rethink is needed in how we govern our societies through our political systems and economic models, given the two are interlocked. This realisation, when coupled with the differences between minority and majority countries in the face of existential threats, points to a new political philosophy: that state governments will have to strengthen and directly intervene in business and society to prevent further damage and to create wellbeing for all. State governments are the only bodies with the legitimacy, power and contextual understanding of their own countries to meet the goals of the five turnarounds. This undertaking will require the protection of public and common goods, the internalisation of market externalities, and the enabling of moderate prosperity for all – tasks on a magnitude only achievable by the state.

Importantly, states should determine their own pathways to meeting the five turnarounds. Each nation and region will take different trajectories in the coming decades with differing challenges: the rich world will struggle to placate its populations when the need for reduced resource use and lowered emissions comes to bear, while majority countries will continue to struggle to provide security and meet the basic needs for their populations as the impacts

of climate change and resource depletion worsen. The notion that ideas about sustainability from the United States or Europe will work for majority countries such as Nigeria, Indonesia, Bangladesh and India is too reductive for the contexts of the global majority.

It is equally important to recognise that with a multitude of cultures, geographies and histories, a divergence in political systems is natural. Not only is accepting plurality in governance systems a sensible option for combating our anthropogenic existential threats, but it is also a key step on the path to decolonisation and global equity.

The fight for equity is an extremely important economic reality, because it pertains to the fact that majority countries will inevitably and dramatically increase their resource consumption for the vital social purpose of meeting basic needs. In the struggle

to achieve quality of living – even if this is still not equal with minority countries – sustainability can easily become a deprioritised agenda. Resolving this dilemma between development and sustainability is the test of our times, and building an economy to manage this contradiction in a constrained 21st century will be challenging. But if we are to achieve the five turnarounds and take positive strides on the existential issues of sustainability, climate change and resource management, we must fundamentally change how we govern our societies and economies.

Resolving the dilemma between development and sustainability is the test of our times, and building an economy to manage this contradiction in a constrained 21st century will be challenging.

References

Meadows, D. H., Meadows, D. L., Randers, J., & Behrens III, W.W. (1972). *The limits to growth*. Universe Books, New York (Potomac Associates).

Nair, C. (2011). *Consumptionomics: Asia's role in reshaping capitalism and saving the planet*. Wiley.

Nair, C. (2018). *The sustainable state: The future of government, economy and society*. Berrett-Koehler Publishers, Inc.

Nair, C. (2022). *Dismantling global white privilege: Equity for a post-Western world*. Berrett-Koehler Publishers, Inc.



Earth4All is an international initiative to accelerate the systems changes we need for an equitable future on a finite planet. Combining the best available science with new economic thinking, Earth4All was designed to identify the transformations we need to create prosperity for all. Earth4All was initiated by The Club of Rome, the Potsdam Institute for Climate Impact Research, the Stockholm Resilience Centre and the Norwegian Business School. It builds on the legacies of *The Limits to Growth* and the planetary boundaries frameworks.

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