



## INTERVENTIONS: PROVOCATION

### Global social challenges for development studies in the Crisis in the Anthropocene

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This panel discussion session explores some of the central dimensions of the Crisis in the Anthropocene that constitute global social challenges in the context of development studies. The conference theme highlighted the profound human impact on our blue-green-brown planet, that is already breaching planetary boundaries and pushing us beyond the roughly 1.5°C tipping point. This threatens liveability and sustainability in many localities and regions and may well rapidly be ‘off the scale’ of imaginability and survivability. Inevitably, as mounting empirical evidence and increasingly clear projections by the IPCC and other authoritative bodies show, these impacts are unevenly spread, both socially and spatially, both

now and over the coming decades. The urgency of appropriate action is undeniable and we already know many dimensions of the required adaptations and transformations. Yet progress mostly remains too slow. These challenges are vital to the development studies community – heterogenous as it is – with our concerns for tackling poverty, inequality, deprivation and environmental degradation globally and locally.

Hence this symposium asks what the crisis means for development theory, policy and practice and what development studies can and should be contributing to – and, indeed, whether it is capable of – addressing some key dimensions that warrant greater attention.

**Key words** Crisis of the Anthropocene • development challenges • climate change • human security • circular economy • development finance • planetary health

**Key messages**

- Many dimensions of global development social challenges are interrelated.
- This symposium highlights often overlooked dimensions and processes.
- The importance of equity and social justice dimensions emerge strongly.

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## Introduction – David Simon

Publication of this symposium represents an experiment for this Journal with another innovative output format in furtherance of its aim to promote fruitful engagement and debate about the major challenges of our time across themes, communities of practice and disciplines. It seeks to reflect the contributions and discussion during the conference symposium session on which it is based. The authors have written up their remarks since the conference in accordance with our guidelines to represent a blend of their verbal contributions and feedback from discussion during the session to provide a more rounded treatment of each theme. It is important to emphasise that these are not intended to be exhaustive treatments of their respective subjects or reviews of the relevant literature(s), but to air particular issues, topics and perspectives deserving of greater attention in concise, perhaps even somewhat polemic, terms. Nevertheless, sources cited are referenced in the usual way. Distinctively too, and in contrast to conventional single- or multi-authored papers or short-form categories of publication, we are publishing this as a single document (hence with one DOI) but with each author identified separately at the beginning of their respective sections.

This symposium originated as a panel discussion convened by David Simon and Sarah Bird at the annual conference of the UK Development Studies Association (DSA) at the University of Reading, UK, on 29 June 2023 and we are grateful to the organisers for their willingness to experiment with an unfamiliar format. In selecting participants from the responses to the call for contributions, we sought both to include a range of relevant themes or topics that are perhaps less familiar to many readers

and to ensure as healthy a spread of participants as possible in terms of community of practice, regional base and socio-demographic characteristics.

Accordingly, this symposium explores some of the central dimensions of the Crisis in the Anthropocene – the conference theme – that constitute global social challenges in the context of development studies. The conference theme highlighted the profound human impact on our blue-green-brown planet, that is on the brink of breaching planetary boundaries and pushing us beyond the roughly 1.5°C tipping point. This threatens liveability and sustainability in many localities and regions and may well rapidly be ‘off the scale’ of both imaginability and survivability. Indeed, the authoritative Climate Governance Commission, co-chaired by Mary Robinson and Johan Rockström, has reported since the conference that no fewer than six of the nine planetary boundaries have now been breached (CGC, 2023).

Inevitably, as mounting empirical evidence and increasingly clear projections by the IPCC and other authoritative bodies show, these impacts are unevenly spread, both socially and spatially, now and over the coming decades. The urgency of appropriate action is undeniable and we already know many dimensions of the required adaptations and transformations. Yet progress mostly remains too slow (for example, IPCC, 2022; Schlosser, 2022).

These challenges are vital to the development studies community – heterogenous as it is – with its concerns for tackling poverty, inequality, deprivation and environmental degradation globally, regionally and locally. Hence this symposium explores key dimensions of what the crisis means for development theory, policy and practice; and what development studies can and should be contributing to and, indeed, whether it is capable of addressing its relevant dimensions. The range of themes, as well as their degrees of breadth or specificity and complementarity, varies. Cross-references have been inserted where appropriate to assist readers in making connections.

Although the multidimensional nature of sustainable development means that numerous interrelationships exist and many different sequences of contributions to reflect this could be imagined, the provocations in this article are organised in a, hopefully, logical manner to reflect different scales of focus and using juxtaposition where close relationships exist.

First, Oscar A. Gómez and Des Gasper foreground the implications of crises, both of the Anthropocene but also in human development processes and thinking, from a human security perspective. Rather than this being some objective and universal approach or condition, they focus on the subjectivity of (in-)security. Second, Kate Bennett attends to the complex but often overlooked relationships between development theory and practice and development finance as the supposed critical enabler. The gulf between theory and rhetoric on the one hand and much practice on the other means that funder priorities still often take precedence over those of recipient governments or communities, and can lead to maldevelopment or ‘white elephant’ projects.

The focus then shifts to three urban or predominantly urban contributions, which are therefore linked to a greater or lesser extent. Carla-Leanne Washbourne reflects on recent work, in which she has been closely involved, to understand the valuable role of urban observatories around the world in generating and disseminating appropriate knowledge for use in policy formulation and planning. This is followed by two rather different perspectives on aspects of the circular economy. Whereas Ilaha Abasli and Farhad Mukhtarov compare and contrast the nature of discourses

around its social impacts in the Global North and South in broad terms, with some reference to how green economic discourses are (not) integrated, Sonia Dias offers an incisive practitioner's perspective on the extent – arguably rather paradoxically – to which informal sector workers and their labour remain marginalised from circular economic discourses and policies. While drawing principally on her extensive Brazilian experience, it also reflects the global efforts of the remarkable NGO, Women in the Informal Economy Globalizing and Organizing (WIEGO). The final contribution, by Amitabha Sarkar, returns to the macro scale and the fundamental importance of planet(ary) health in the crisis of the post-COVID Anthropocene, arguing that human health and security are impossible in an insecure and unhealthy, polluted world. Accordingly, the One Health concept offers the potential to act as appropriate medicine for the currently ailing sustainable development. Finally, Sarah Bird offers some concluding reflections.

### **Rising subjective insecurity and the need for a shared sense of human security – Oscar A. Gómez and Des Gasper**

How people make sense of actual and potential threats in connection with their lives has huge implications. Perceived insecurity undermines trust, seeds instability and hinders collective action at all levels. Democratic societies dominated by subjective insecurity can give way to populist governments, and less democratic ones can deepen their authoritarian features.

Thus, addressing rising subjective insecurity worldwide is a crucial global social challenge. As the most recent wave of the World Values Survey (WVS) shows ([Haerpfer et al, 2021](#)), societies that have made considerable progress in reducing poverty have not necessarily converged towards similarly high levels of trust and tolerance. [UNDP's \(2022\)](#) Index of Perceived Human Insecurity, based on the WVS, indicates that, even in countries rated as having very high human development according to the Human Development Index (HDI), less than a quarter of people felt secure. Specifically, 23 per cent of people from 'very high HDI' countries felt secure, surprisingly close to the figures for 'high' (14 per cent) and 'medium' and 'low' HDI countries (8 per cent). Indeed, the increase in perceived insecurity has been more prominent in these 'very high HDI' countries. The research shows too that satisfaction with their financial situation does not insulate people from feeling insecure. This can facilitate turning a blind eye to blatant injustice, such as inhuman practices in managing migration, the invasion of Ukraine in 2022 or thwarting initiatives to confront climate change.

Subjective insecurity is a complex challenge, involving at least three dimensions: knowledge sociology (including risk perception); information ecosystems; and political culture. Knowledge sociology concerns the relation between objective and subjective appreciation of threats and how to confront them. It considers the interaction between values, institutions and social realities. The field includes attention to religion, as in the WVS work. Ronald Inglehart, founder-director of the World Values Survey, argued in a series of studies that societies with high levels of human security are less religious than societies with low levels. His 2011 book with Pippa Norris, reviewing work by them and others, concluded: 'what drives religious values, we believe, concerns levels of societal vulnerability, insecurity, and risk' ([Norris and Inglehart, 2011](#): 269). They found that: 'a Lived Poverty [Index], which measures the extent to which people have been forced to go without basic necessities during the

past year ... was indeed strongly correlated with religious values' (Norris and Inglehart, 2011: 257). The links applied not only to values but to religious practice: 'The most vulnerable populations in the world – those who lack the basic necessities ... of life such as food, running water, and electricity – are far more likely than others to feel that religion is important in their lives and to participate more often in religious practices' (Norris and Inglehart, 2011: 263–4). They found also strong correlations between *felt* insecurity and religion, and between the declared importance of security and of religion; and strong links between high inequality and high religiosity (Norris and Inglehart, 2011: 266).

The information ecosystems dimension reflects how data and knowledge disseminate across societies. Objective 'truths' always require subjective means to reach the public, and reactions can be influenced through different framings. In this regard, mis- and disinformation have received particular attention recently, given how social media and information technology have made users more vulnerable to manipulation.

Finally, insecurity is closely linked to political cultures and how people understand protection. Life used to be 'solitary, poor, nasty, brutish, and short', argued Thomas Hobbes (1996 [1651], XIII: 9) and similar thinkers, until sovereign states emerged with the capacity to enforce a social contract of protection. We might say that crises were at the centre of modern political institutions from their very beginning – the reason for the existence of the state. This implies that crises are deeply political, affecting the legitimacy of the government, and are rarely considered simply as development issues. Instead, they are mainly considered security threats (Gómez and Gasper, 2022). There are different expectations about who should address threats, and how that should be done. This is central to discussions about the social contract, the extent of welfare states and how far different insecurities can be used for political purposes.

Perceptual components add layers of complexity to dealing with crisis, in a way that traditional development thinking does not easily encompass. Partly because of perceptions, security crises affecting rich countries and elites receive overwhelming priority. Attention is biased too towards visually appealing agendas. The security of rich populations completely trumps the security of those on the periphery. Crises may materialise, though, because elites or the wider public do not believe they will happen, do not want to believe or do not care, or discount future events (and generations) heavily (Gasper, 2019). All these aspects are beyond the measurements of a population's functioning as done by the capability approach, for example, and need their own approaches.

While all the dimensions have received attention, consolidated frameworks for analysis remain missing. Subjectively felt insecurities are major drivers and mainly concern matters other than the safety of property or persons; but data collection on subjective human security/insecurity has been very deficient, as seen for example by the pre-2010 blindness regarding the social pressure-cooker in the Arab states. How to collect relevant data and translate them into policy planning requires more attention. Fields in which this point is critical, such as criminology, still struggle against accusations about crime statistics not matching people's feelings of insecurity.

Subjective insecurity is a structural challenge with far-reaching causes and implications. The 2022 UNDP Special Report on Human Security (UNDP, 2022) outlines these connections and the necessity of improving the perceptual basis for responding collectively to insecurities, objective and subjective, including

by strengthening awareness of local, intra-national and global interconnectedness, shared interests and shared humanity, as opposed to sectarian and nationalist mutual antagonisms and perceptions of zero-sum games (Gasper and Gómez, 2023).

### **Systemic integration of development finance with development theory and practice – Kate Bennett**

One of the central dimensions of the Crisis of the Anthropocene is linear epistemology: a theory of knowledge grounded in objective truths and linear causality, and ‘characterised by a reductionism through which wholes are broken apart analytically into constituent parts and the concept of feedback removed’ (Mitchell et al, 2020). Linear epistemology exacerbates and perpetuates global social challenges such as poverty, inequality, deprivation and environmental degradation, as it fails to acknowledge interrelation, complexity and context. Systemic or recursive epistemology, by contrast, emphasises ecology, relationship and whole systems, and more effectively captures the dynamic interplay between social, economic and ecological challenges. Two examples of how linear epistemology impacts the effectiveness of development policy and practice are the reductionist approaches to development challenges within the development studies discipline itself, and the lack of feedback and systemic integration of development studies with other development-related disciplines, such as development finance.

In exploring the current theoretical frameworks of critically interrelated disciplines of development studies and development finance, we can see how linear epistemology results in suboptimal real-world outcomes. Post-development theory – heterogenous though it may be – highlights the importance of decolonisation, decentralisation, self-determination, localisation and customisation for impact effectiveness, with key metrics determined with and by local populations. In contrast, the development finance agenda, largely reshaped in 2015 (UN General Assembly, 2015a; 2015b), places greater focus on global rather than local priorities and on the mobilisation of private capital as a priority. Given that private capital pursues financial efficiencies over development effectiveness, development finance is tending increasingly towards centralisation, scale, standardisation and the imposition of impact metrics defined by global bodies.

Development practice is dependent on finance; therefore, development practitioners accommodate the needs of capital providers despite these being in complete opposition to best practice development theory and practice. This trend, coupled with prioritisation of global rather than local development needs, exacerbates global social challenges, particularly in underprivileged communities and regions. This has been evidenced in countless articles on the detrimental local social and environmental impacts of conservation projects (Springer, 2009; Martin et al, 2015), biodiversity and carbon projects (Osborne and Shapiro-Garza, 2018; Merk et al, 2022), and large-scale energy, agriculture and infrastructure projects backed by private capital and development finance (Clapp and Isakson, 2018).

Given that real-world development outcomes depend on the convergence of development finance and development practice (emerging from the academic disciplines of finance/economics and development studies respectively), this fundamental misalignment between the two is problematic and provides a high-level insight as to why addressing the issue of linear epistemology as it applies to

development studies and associated disciplines is so critical when discussing the global challenges of the Anthropocene.

As stated in the panel description, 'the urgency of appropriate action is undeniable'. But the question remains as to what defines appropriate action, bearing in mind that this must cover not only the development studies community, but also all other players in the development ecosystem. By looking at development effectiveness and financial efficiency in unison, we are more likely to create a holistic approach that benefits all parts of the system. There are several gaps we must close to ensure that development finance and practice are working in harmony to address global social challenges.

First, knowledge gaps: these relate not only to *what* we think, but also *how* we think. (Sanford, 2022). Training programmes in regenerative practice are emerging across multiple disciplines<sup>1</sup>. These are providing foundational experiential insights into how we think and build systems thinking capability, thus supporting the critical shift from linear epistemology to systemic epistemology. The extent and pace at which such learning will be adopted and incorporated into formal tertiary education and research institutions remains to be seen. That said, transdisciplinary study programmes that encompass all aspects of the development system – from finance through to project delivery – could be readily adopted within these institutions. This would broaden the knowledge base and generate greater systemic understanding for practitioners across all associated development disciplines. Finance and economics specialists would gain a deeper appreciation of the theoretical foundations of development, as well as the complexities of development projects in practice, including local impact monitoring and evaluation. And the development studies community would gain greater understanding of financial trends, models and mechanisms, and learn how to determine and negotiate proposed finance options that are in right relationship with the development needs and objectives of local communities.

In terms of practice gaps, which include limits to processes and technology, of greatest relevance to the divide between development finance and practice are the challenges of blended finance and the power imbalances (reinforced by both process and technology) which position financial capital as dictator rather than enabler of local development agendas. Decentralised and distributed finance and governance technologies are emerging to address these gaps, bringing greater voice and agency to local stakeholders and their development priorities. That said, the practical complexities of enabling access to decentralised technology in underprivileged communities and regions, and the risk of merely replacing financial colonialism with digital colonialism, require deep reflection.

Finally, policy gaps are also impacted by linear epistemology. Policy makers often sit in specific regions or ministries addressing specific issues without visibility of the whole, lacking the broader web of understanding. In terms of closing the gap between development finance and development, the lack of policy supporting decentralised organisations, assets and technologies hinders the uptake of high-impact local development finance solutions at institutional scale through aggregation of projects. Given the policy uncertainty, institutional investors are unable to leverage decentralised solutions that would enable them to finance consolidated groups of small-scale high-impact projects efficiently. As a result, modest-sized projects that could easily be funded with available capital are deemed ineligible. This is why we continue to hear finance practitioners complaining of a lack of 'fundable' projects, while development practitioners complain of a lack of appropriate finance.

Any action to address global social challenges must be integrated and systemic. Transitioning from linear epistemology to more systemic epistemological approaches is a critical condition for success in addressing the Crisis of the Anthropocene. Focusing exclusively on any one element, dimension or component of a systemic issue, particularly when there are multiple interdependencies, can impede outcomes across the system as a whole. Equally, ‘changes for the good of the whole may sometimes seem to be counter to the interests of a part of the system’ (Meadows, 2001). And this is possibly the greatest sticking point of all: vested interests of the parts of the whole, particularly when those interests are financial.

## **Cities and the Crisis – Carla-Leanne Washbourne**

Urbanisation is one of the key drivers of global change. It is an innately human process which seeds and shapes environmental and social challenges (Zhang, 2016). To address these challenges and set a course for more sustainable and equitable urban development in future, we need a detailed and robust understanding of how our urban areas have developed and currently function. There is a pressing need to create and support effective urban knowledge systems, equipped to collect diverse insights for analysis, translation and dissemination to support decision making (Acuto et al, 2018a).

More than half of the world’s population now lives in cities, with this proportion projected to increase over the coming decades (UN Population Division, 2018). Cities are responsible for the majority of global greenhouse gas emissions (70 per cent), energy consumption (78 per cent) (UN-Habitat, 2023b) and resource consumption. There is, therefore, a ‘consensus about the strategic importance of the role of cities and urban areas for achieving a global transformation towards sustainability’ (Castán Broto et al, 2019: 449).

Much research to date on urban knowledge systems focuses on the capacity of urban knowledge institutions (like urban observatories, living labs and local government data units) for data collection, storage and analysis. Many cities collect and store data on spatial form, infrastructure and demographics (Dickey et al, 2021). Increasingly, data are collected on more diverse topics including sustainability indicators, service provision and lived experience of people in the city (Dickey et al, 2021). Many urban areas are strengthening their capabilities to develop diverse knowledge insights, increasing instrumental and remote measurement, deploying surveys and other proactive tools and, more rarely, directly engaging with citizens. In parallel, there is increasing reflection and innovation to make current systems and approaches more fit for purpose.

Our understanding of the application of urban knowledge to urban policy, through the interaction of complex sets of institutions and actors, is still developing. Many researchers and practitioners are now engaged in the direct study of these processes. For example, a recently published comparative review (Dickey et al, 2021: 46) offers an intimate snapshot of the global case of ‘urban observatories’, institutions that have been developed to: ‘bridge multiple types of knowledge, very often also with a normative underpinning aimed at promoting more nuanced and inclusive understandings of cities’. Many observatories provided insightful cases on generating and mobilising knowledge to supporting critical issues at the science–policy interface through boundary work (as intermediary, convener, translator) across a range of interlinked topical areas (Dickey et al, 2021).



An increasing quantity of work reflects on this ‘boundary’ role that urban knowledge institutions can play, as entities that straddle the worlds of research, public and private sector, in the generation and dissemination of knowledge for use in decision making (Acuto et al, 2018b; Perry et al, 2018). There are still significant gaps in understanding the research–practice insights from this science–policy interface and the boundary work undertaken (Acuto et al, 2018b; Washbourne et al, 2021). There is also a challenge of ensuring that the institutions and systems we design to address the environmental and social challenges of the Anthropocene do not simply replicate them but that they embrace practices and processes that engage diverse voices and perspectives without being extractive and exploitative. Many working in this space are mindful of the need to retain (where present) and develop (where not present) decolonised institutions to achieve truly transformative change in the urban setting (Wijsman and Feagan, 2019).

Key policy challenges include spatial and temporal effects on how to prioritise urban data collection. This is particularly true in the context of multi-scalar governance, connecting the aspirations of global agendas like the Sustainable Development Goals (SDGs, also 2030 Agenda), with regional and national level policies and processes, which act on smaller spaces and often shorter timescales, and ensuring that local level priorities based on the immediate experience of those living in different urban areas are not neglected.

Urban areas are situated at the nexus of all global challenges. Mapping and monitoring by UN-Habitat and partners as part of the efforts on implementing and reporting progress on SDG 11 has shown, for example, that all the other SDGs have components that can be directly mapped to SDG 11 ‘Make cities and human settlements inclusive, safe, resilient and sustainable’ (UN-Habitat, 2018; 2023a). It is necessary for cities to be an integral part of any meaningful action on global challenges for sustainable development.

### **Contesting the social aspects of circular economy: a view from the Global South – Ilaha Abasli and Farhad Mukhtarov**

Recent academic and policy discussions on the circular economy have gained momentum (Kirchherr, 2017; Murray et al, 2017; Genovese and Pansera, 2020), not only in highly industrialised countries but also in the Global South. The burgeoning literature on the circular economy has brought attention to the social aspects associated with it (Korhonen et al, 2018a; 2018b). However, the discourse surrounding the circular economy has primarily been shaped by natural sciences and engineering scholars, leading to criticism from social scientists regarding its techno-optimistic conceptualisations and the limited empirical and contextual knowledge from the Global South. Therefore, there is a lack of comprehensive understanding and discussion regarding the discourses, conceptualisations, mechanisms and desired outcomes pertaining to the social aspects within the research agendas.

Examining academic narratives and discourses allows us to gain insights into the materialisation of specific conceptualisations, their alignment with policy frameworks, and the involvement and mobilisation of various actors, mechanisms and sociopolitical implications. Furthermore, as Hermann et al (2022) highlighted, academic discourses on the circular economy play a significant role in shaping collective and political imaginaries, influencing policy-making processes, and informing social actions. So,

the study questions differences and similarities of the main social conceptualisations of the circular economy in the contextual and empirical scholarship within the Global North and the Global South.

Through an analysis of the existing literature and empirical evidence, it has become evident that the main conceptualisation of social aspects of the circular economy relates to social benefits, such as job creation, community development and enhanced social inclusivity through mechanisms such as inclusion and participation. Although 'inclusion' and 'participation' mechanisms are being employed as a justice tool across the spatial differences (high-income 'developed' countries and low-income 'developing' countries), we identify the differences in the empirical scholarship in conceptualisations of these mechanisms in the respective contexts of the Global South and the Global North. 'Inclusion' and 'participation' for social aspects in the Global South are conceived from a developmental lens, such as formalising informal circular practices and including marginalised informal workers in low-income contexts, presenting 'formalisation' as an ultimate social good for societal impact. In contrast, in high-income contexts, 'inclusion' and 'participation' are discussed through the institutional and technocratic lens as an enabling mechanism for diverse stakeholder participation – inclusion of consumers, municipalities and the private sector (small and medium business) into policy making and implementation for regenerative social and economic growth through a circular economy. So, overall these differences in the conceptualisations refer to (1) how the intended social aspects are produced through the circular economy in the Global South versus the Global North and (2) how the mechanisms for social aspects are instrumentalised to reinforce socio-economic agendas (such as EU Green Deal and Green Economy) for consumption and production.

Overall, this contribution raises concerns regarding the potential implications of these narratives, as they may reinforce existing socio-economic agendas, neglect local and contextual knowledge in the Global South, and overlook existing inequalities and marginalisations in the Global North during the inclusion process. These differing conceptualisations align with the contested nature of the circular economy and illustrate how the concept is instrumentalised as a developmental tool in the Global South and as an institutional techno-fix in the Global North.

Alongside acknowledging and challenging the existing divergences in the academic literature, emerging scholarship on social aspects of circularity might look into nuances of the different spatial contexts but also empirically and conceptually open up a discussion on genuine social-political matters around the transition to material circularity both in the Global North and the Global South. Through repoliticisation of the circular economy agenda, the social dimension and its deviated aspects, such as inclusiveness in the Global North (beyond stakeholder inclusion and techno-fix) or well-being in the Global South (beyond job creation), could be genuinely discussed from societal lenses.

### **What place is there in the circular economy for informal workers? – Sonia Dias**

The UNEP Circularity Platform highlights that circularity transition needs to be inclusive to trigger the transition from a 'winners versus losers' to a 'win-win' situation not only for the conservation of the environment but for everyone's well-being. But

what place is there for informal waste-pickers in circular systems given the complexity of such systems? As the distinction between raw materials and wastes becomes blurred, what are the challenges, in terms of ownership of materials and requirements for traceability, that workers will face? As the intersection between waste pickers and circular economy has usually been accomplished through the implementation of Extended Producer's Responsibility (EPR) models, especially in Latin America, this contribution aims to reflect on the opportunities but also challenges faced by informal workers to be integrated in circular economies in Brazil. It also provides some reflections on the necessary conditions to ensure that circularity is delivered by informal waste-pickers.

There is a growing understanding that the world's 20 million informal recycling workers, according to the International Labour Office's Green Jobs report (ILO, 2013), play a crucial role in providing sometimes the only waste collection available in some cities. In reducing the quantities of waste disposed of by directing valuable materials to the recycling chain, and in conserving energy and indirectly preserving ecological systems, waste pickers perform a key environmental role (Dias, 2016). Growing concerns about the environmental, social and economic impacts of climate change, as well as other forms of related pollution – like plastics – in the environment, are propelling investments and policies to mitigate climate change, and promote a more circular economy and responsible sourcing of materials.

However, mainstream conceptualisations of a circular economy did not really build inclusivity in as core component from the start. Also, there are growing concerns around the circular economy as a concept with diffused limits and unclear theoretical grounds, and about structural obstacles to its implementation (Corvellec et al, 2022). Thus, linkages between the circular economy, social justice and worker protection remain weak (Kirchherr et al, 2017). However, the conceptual and methodological polysemy of the circular economy has made it appealing to a wide audience and the debate on a circular economy has gained traction.

In practical terms, the intersection between waste pickers and the circular economy materialises in the implementation of EPR systems, especially in Latin American countries such as Brazil. To be part of inclusive EPR systems, workers need to be organised into cooperatives or associations and have their sales of recyclables formally registered. Brazil implemented a reverse logistics approach, enabling sector agreements in which the industry needs to meet environmental and social goals by designing programmes to support workers' cooperatives with infrastructure, capacity building and payment for services (Zisopoulos et al, 2023). Brazil's reverse logistics system has enabled worker cooperatives in many ways such as:

- increase in the average income of cooperative workers;
- increase in the efficiency of selective collection when carried out by waste pickers' organisations;
- improvement of the quality of material collected and sorted through capacity building and equipment.

Brazil's system has therefore made progress towards inclusivity. However, only one third of existing cooperatives can access investments in the reverse logistics system, leaving most of Brazil's 1,800 cooperatives at the margin of this circular economy initiative due to cumbersome registration processes and reporting criteria. The

situation worsens when autonomous workers (workers not affiliated to cooperatives) are considered, leaving an army of workers without investment policies in the sector.

Thus, if we are to move towards a circular economy in which livelihoods form a key dimension, we need to build systems from what already exists there, by acknowledging and recognising an army of environmental agents, organised and non-organised. We need to strengthen organising processes and existing organisations of the working poor as a pathway to formalisation. We need an integrated approach to formalisation in which informal waste-pickers have their right to work guaranteed effectively, in which procurement contracts are established between government, businesses and cooperatives for waste-related service provision, and in which an enabling environment for legalisation is built to support waste pickers in facing the many barriers they encounter to achieve sustainability.

### **One Health in the age of Anthropocene: a medicine for sustainable development – Amitabha Sarkar**

The COVID-19 pandemic has exposed the vulnerabilities of people in social, mental, physical and economic spaces. The pandemic was arguably the single most severe stressor in contemporary history affecting people across all socio-economic categories, as well as incapacitating governances in different geographies. In the wake of this worldwide catastrophe, the resilience of health systems is emerging as a new means to strengthen global and national strategies against the disruption of healthcare services and maintaining the momentum of development (Haldane et al, 2021; Sachs et al, 2022). Despite the growing use of resilience either as a conceptual category or as a 'development catchphrase', there is no uniform account of health systems resilience in existing literature (Fridell et al, 2020).

The common understanding of health systems is to make services available for people according to need. In the aftermath of a disaster (like earthquakes) or outbreaks of new or re-emerging diseases (such as Ebola Virus Disease), health systems are often shown to be less effective in meeting or exceeding service demand and responding to the immediate public health crises (Brolin Ribacke et al, 2016; Fukuma et al, 2017). Thus it is acknowledged that resilient health systems should anticipate as well as absorb shocks (public health emergencies) and accordingly adapt and transform to retain essential services (Kruk et al, 2015). In operative terms, the World Health Organization (WHO) objectivises resilience through seven policy recommendations to bolster Universal Health Coverage (for essential services) and reinforce global health security (from any emerging or re-emerging public health threat; WHO, 2021).

The present notion of health systems resilience to deal with any shock is twofold and defined mechanistically in terms of service delivery and public health preparedness. This definition has significant limitations as it implies that engineering of certain elements can (and should) make health systems return to a normal state (Folke, 2006). Importantly, resilience here is reduced to the level of functional properties of health systems (such as financing, health workforce, governance, medicine and technologies). Pertinent questions are raised: health systems resilience *of what* and health systems resilience *to what*?

The current frameworks of health systems in practice (such as the WHO's six building blocks or the World Bank's Control Knobs) still focus predominantly on the financing, governance and service delivery elements of medical care systems at

the cost of wider determinants of health and collaboration with other key sectors (education, urban development, environment, forestry and so on). Health systems are detached from the causal factors of disease production in their respective social, ecological, political and cultural landscapes, and diseases are addressed through expensive techno-managerial solutions. There is a need to reimagine health systems as a core of planet infrastructure, an assemblage of social institutions (planning bodies, socio-ecological institutions, communities and so on), which not only operate at the interface between the people and the structure of the state (Freedman, 2005), but also with nature.

On the other hand, the resilience debate questions our understanding of health and development in the aftermath of COVID-19 pandemic. The health system is the central policy plank in this understanding that plan/design, organise (including through financing) and operate healthcare services in order to ensure only productive human bodies for human development. Conversely, the growth model of economic development is often subject to scrutiny for its exploitative roles over nature (and natural resources) that cause climate change and biodiversity loss. So the design and content of health systems resilience will be incomplete if they do not consult the boundaries of socio-ecological systems and their complex relationships with social, political, cultural and economic institutions. The resilience debate needs to go beyond the framework correction exercises of health service management and organisational efficiency. It first needs to reposition health in the sphere of state–market–society interactions to understand how the alternative models of growth (such as green growth or de-growth) and different ideations of health (like planetary health, One Health, eco-health) could repurpose health systems to reverse the current inverse relationship of health and development. Health systems resilience depends on the capacity of mutual relationship that fosters health and development collectively.

Development discourses have been shaping the discipline of public health, as well as its practice, since its inception. Thus public health has been largely conceptualised within development studies as population health in order to be a part of a comprehensive human development index. With the advent of the COVID-19 pandemic and in the light of growing climate adversities, the significance of different imaginations of health, particularly One Health (consisting of human, animal and ecosystems health), in development studies is indicative (FAO et al, 2022; Sarkar et al, 2023). The notion of investing in health for human development is now slowly being altered with the vision of safeguarding the interests of human, animal and ecosystem health for sustainable ecosystem services. It is thus imperative to reconstruct knowledge systems wherein One Health and sustainable development may complement each other.

## **Conclusion – Sarah Bird, managing editor, *Global Social Challenges Journal***

*Global Social Challenges Journal* was founded to provide a space for dialogue across different disciplines and fields, to understand and disentangle the complexities of the urgent global societal challenges that we face. We were delighted to sponsor this symposium, bringing people from different geographies, communities of practice and academic backgrounds together to explore the interrelated themes of work, health, security, cities and finance, all within the framing of development studies.

We are very grateful to the audience of the symposium, whose contributions helped the authors to further shape their ideas when writing up their thoughts for publication. Their input was challenging and thoughtful, and this paper, the end result of this further engagement, is very much the richer.

Also, a conversation with a member of the audience as the symposium drew to a close led directly to the submission and acceptance of a Special Collection on ‘Exploring decolonial and relational pathways to sustainability’, which the Journal hopes to publish in 2024. As mentioned earlier, we very much hope that this symposium will stimulate further interest and engagement in the themes explored in this deliberately somewhat provocative manner. This could be addressing them individually or in combination. So, for instance, we would be delighted to receive papers on the green and circular economies in the context of climate/environmental change, or how climate/environmental changes are driving reconceptualisations of human security and/or planetary/One Health.

We would also like to extend our particular thanks to Mike Goodman, one of the organisers of the DSA conference, who had the original idea for *Global Social Challenges Journal* to sponsor this symposium.

### Note

<sup>1</sup> Capital Institute – Regenerative Finance and Economics; Regensis Institute – Regenerative Practice; Universidad de Cooperacion Internacional – Regenerative Development, Regenerative Entrepreneurship; nRhythm – Regenerative Organisational Design, Regenerative Leadership; Savory Institute – Regenerative Agriculture; Regenerators Academy – Regenerative Leadership.

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### Conflict of interest

The authors declare that there is no conflict of interest.

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