



## A sustainable livelihoods framework for the 21st century

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### ABSTRACT

This paper proposes a reformulation of the Sustainable Livelihoods Framework (SLF) fit for the 21st century. The article explores the rise and usage of the original SLF, highlighting how its popularity among development practitioners emerged both from its practical focus, and its depoliticization of wider shifts in the development landscape at the time. Distilling the various critiques that have emerged around the use of the SLF and sustainable livelihoods approaches, the article highlights problems of theory, method, scale, historical conceptualisation, politics, and debates on decolonising knowledge. It further explores two key shifts in the global development landscape that characterise the 21st century, namely the impacts of climate change on rural livelihoods, and the shifts wrought by globalisation, before highlighting the structural and relational turns in critical development literature. In speaking to both historical critiques and more recent debates, we present a SLF for the 21st century, foregrounding a structural, spatially-disaggregated, dynamic and ecologically-coherent approach to framing rural livelihoods. We offer a framework and not an approach, hoping that that our SLF leaves open the possibility for different theoretical traditions to better work with emerging rural livelihoods.

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## 1. Introduction

Since its introduction in the early 1990s, the sustainable livelihoods approach (SLA) (DFID, 1999) – or the sustainable livelihoods framework (SLF) (UNDP, 2017) – has become a mainstay of both academic and applied fieldwork, especially in rural areas of the global South. It is set out as an ‘approach’, rather than a method; and a ‘framework’, rather than a theory. It is, however, more than either of these in three ways. First, it embodies an epistemological position that values local knowledge, engages with local people and, in Robert Chambers (1983) term, seeks to ‘put the last first’. This may have since become part of common development parlance, but the result is that it is all too easy to overlook how radical the approach was at the time of its formulation. Second, while the SLA is not a method, it does privilege certain methods, emerging as it does out of Rapid Rural Appraisal (RRA) and later methodological innovations, such as Participatory Learning and Action (PLA). Thirdly, the SLA that became popularised from the late 1990s onwards found clear theoretical origins in Sen’s (1985) Capabilities Approach, with a focus on individuals as the locus for development (Scoones, 2009).

‘Livelihoods’, as a term, an approach or framework, and as an epistemology, has been extensively critiqued (see below). But, even so, it continues to be very broadly used – or practised – and often in a manner quite close to its original formulation. It remains highly popular, if popularity is measured in terms of use. As Scoones (2015: 10) writes, it “seems livelihoods approaches are now applied to literally everything”. Yet arguably, its approach and focus on village life and individual capabilities render it somewhat dated in capturing the shifts that have occurred in rural livelihoods over recent years. As globalisation has captured and integrated villages more closely into global markets, and countries in the global South have rapidly shifted towards industrial and services sector-led growth, processes of labour migration, remittances, and small-scale commercial agriculture progressively characterise rural life (Borras, 2009). Furthermore, the proliferating impacts of climate and environmental change and natural resource extraction upon rural livelihoods have seen farming become increasingly risky for millions of smallholders, in a wider context of retreating state support for agriculture (Taylor, 2015).

In this paper, as the title suggests, we propose a reformulation of the livelihoods approach, one that seeks to recognise its strengths, acknowledge its weaknesses and, importantly, also render it appropriate for the 21st century. In part, we seek to revitalise some of the approach’s original intent; but we also recalibrate the

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approach for an era where changes that were only nascent in the 1990s have sedimented across the globe. To these ends, the paper addresses the need to: bring structural factors more centrally into the framework; pay particular attention to the relational; and situate rural livelihoods within a set of more expansive (global), permeable (rural–urban) and therefore dynamic spatial axes.

It should be emphasised that we do this as long-term users of both the term and/or the approach. While we are sensitive to the critiques of SLA, we also value its practical qualities and appreciate its academic strengths. And however much the paradigms, modalities and nomenclature of development may have moved on since the advent of sustainable livelihoods in the 1990s, the changes that people are living through, how they make a living through those changes, and what kind of life that gives them access to, seem to us as central to what development is as it has ever been. Before we get to the portion of the paper where we propose this new livelihoods approach for the 21st century, we set out the livelihoods ‘stall’ by outlining how it evolved and what it means, before summarising the criticisms that have been laid at its door. We then turn to what has changed in the three decades since the sustainable livelihoods approach was first broached, before proposing the contours of a sustainable livelihoods framework for the 21st century.

In the paper we use three terms: Sustainable Livelihoods (SL) as a catch-all to cover conceptualisation, approach, and method; the Sustainable Livelihoods Approach (SLA) to refer to the sedimentation of SL in research, policy and practice; and the Sustainable Livelihoods Framework (SLF) to refer to the operationalisation of SL in methodological terms, most obviously reflected in the sustainable livelihoods flow chart (see [Figure 2](#)).

## 2. Sustainable livelihoods: Emergence, sedimentation and critique

This section of the paper has three objectives: first, to offer a brief review of the emergence of sustainable livelihoods as a focus for development; second, to summarise the critiques that emerged from the early 2000s; and third, to chart the shifts in economy, society and politics reflected in the turn from ‘international’ to ‘global’ development ([Horner & Hulme, 2019](#), [Horner, 2019](#)). In a final section, we then reflect on the enduring strengths of the original SLF, notwithstanding these critiques and changes.

### 2.1. Sustainable livelihoods: What is it and where did it come from?

Sustainable Livelihoods (SL) is closely associated with Robert Chambers. The foundational publication was a 1992 working paper that he co-authored with Gordan Conway: “Sustainable Rural Livelihoods: Practical Concepts for the 21st Century”, published by the Institute of Development Studies.<sup>1</sup> As they note, this working paper drew on earlier work of an advisory panel to the World Commission on Environment and Development (WCED), and the resulting Brundtland report *Our common future* (WCED, 1987) anticipates the sustainable livelihoods ‘turn’. But the Brundtland report does not define what comprises a livelihood, let alone a sustainable livelihood, although the report uses both these terms. A second key publication that is sometimes regarded (see [Solesbury, 2003](#)) as instrumental in setting out the sustainable livelihoods agenda is the first [UNDP Human Development Report \(1990\)](#).<sup>2</sup> Like the Brundtland report, the 1990 *HDR* uses the term only in passing

and provides no definition. Nonetheless, these important reports do provide two key ingredients: a concern for sustainability and the notion of capabilities. More broadly, the years from the late 1980s saw a coalescing of views about development, many of which came to be reflected in the SLA. Further, these were associated as much with development organisations like the UNDP and commissions such as the WCED as they were with academics working in the field of development studies. The SLA, therefore, emerges from – and is rooted in – dominant development thinking *and practice* at the time, which is relevant when it comes to considering some of the criticisms levelled at the SLA.

In their working paper, Chambers and Conway write (1992: 5, and see [Chambers, 1995](#): 174, [Scoones, 1998](#): 5) that a “livelihood in its simplest sense is a means of gaining a living”. On the next page they provide a fuller ‘working definition’:

“A livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living; a living is sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long term.”.

The Chambers and Conway working paper does go further than the WCED report in turning an idea into an approach, not least in providing a working definition, although it was yet to become a framework, practice and a methodology. Curiously, given its links to the Brundtland report, Chambers and Conway refer to socially, not environmentally, sustainable livelihoods.<sup>3</sup> The progressive transformation of the Sustainable Livelihoods Approach into the Sustainable Livelihoods Framework (SLF) occurred during the course of the 1990s as it was taken up by development organisations, both governmental and non-governmental: Oxfam in 1993, Care International in 1994, and the UK’s Overseas Development Administration (ODA) in 1995 ([Solesbury, 2003](#)).<sup>4</sup> The sub-heading of the Chambers and Conway paper provides an indication of its aims and, therefore, its intended audience: ‘practical concepts for the 21st century’. The SLA was not, from the very start, politically progressive and when it was taken up by institutions of national and global governance, such as the UK’s Department for International Development (DFID) in 1997, it was further de-politicised ([De Haan, 2017](#), [Solesbury, 2003](#)). Early critics were quick to highlight that the approach reproduced a particular politics of development, rooted in the foregrounding of the poor as arbiters of their own fate, tending to underplay the structural factors underpinning rural poverty.

The transformation of sustainable livelihoods from an approach (SLA) into a framework (SLF) occurred with the publication in 1998 of a second IDS working paper, by Ian [Scoones \(1998\)](#). The visualisation of the framework ([Figure 1](#)) placed ‘institutions and organisations’ at the centre of the diagram. In a later book, [Scoones \(2015\)](#) acknowledges that, at this point, the livelihoods “bandwagon had gained too much momentum and the critical friction of debate was lacking”, lamenting that “there was little to argue with, it seemed” (page 37). A year later, DFID took this one step further, distilling out some of the nuance of Scoones’ original diagram and turning his framework into something closer to a methodology ([Carney, 1999](#)). This first iteration ([Figure 2](#)) has come to represent the visual embodiment of the approach, and is reproduced in myriad publications in its original form. At the centre of this diagram is

<sup>3</sup> [Solesbury \(2003\)](#) working paper provides a full history of sustainable livelihoods and its adoption by development practitioners.

<sup>4</sup> Livelihoods became central to the work of the UK’s Department for International Development (DFID) in 1997 with the publication of a White Paper on international development (‘Eliminating World Poverty: A Challenge for the 21st Century’), under New Labour ([Odi, 1998](#)).

<sup>1</sup> As of March 2022, the working paper had been cited close to 8,000 times (Google Scholar).

<sup>2</sup> There is no mention in Chambers and Conway’s working paper of the 1990 *Human Development Report*, although Amartya Sen’s work is discussed.

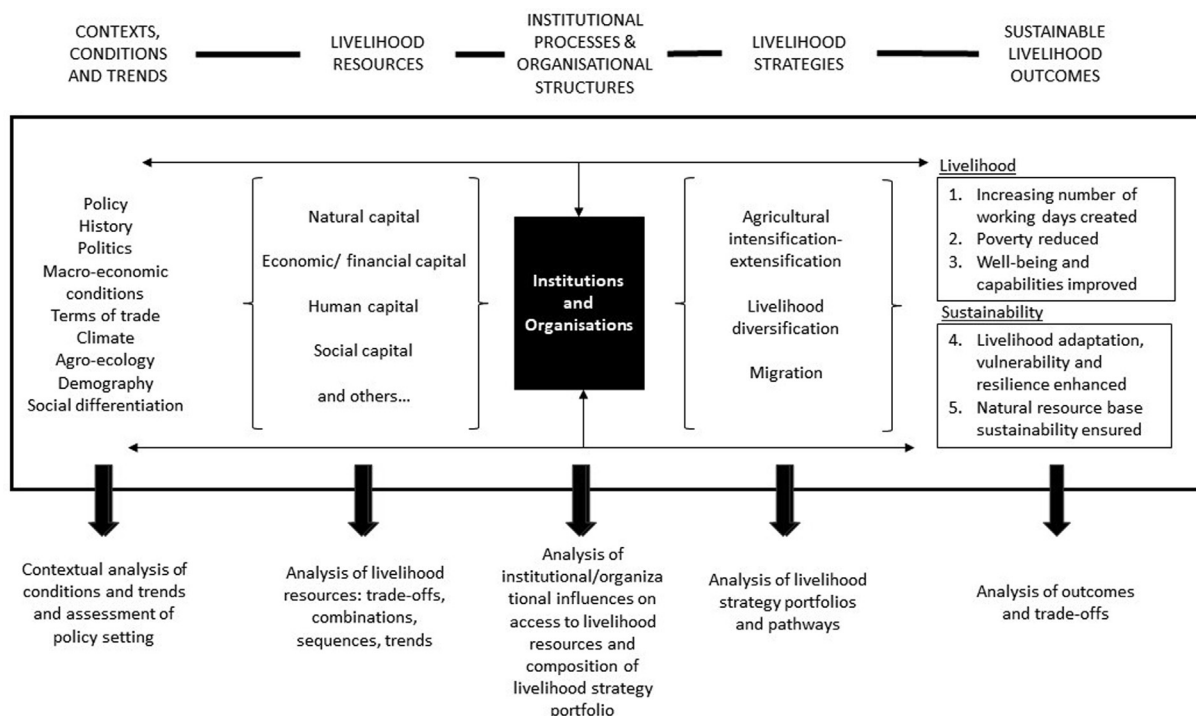


Fig. 1. Sustainable rural livelihoods: a framework for analysis (Scoones 1998) (Source: redrawn from Scoones 1998: 4).

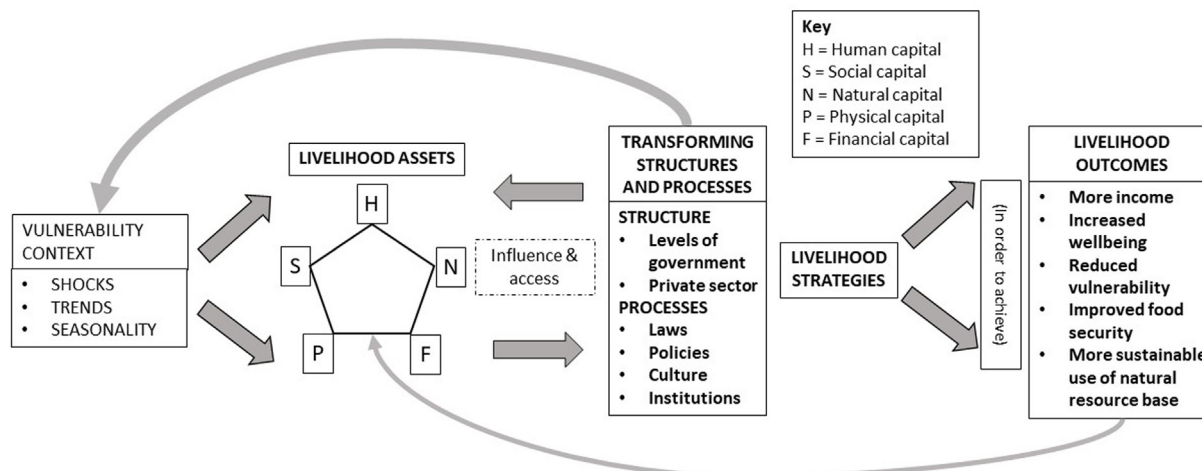


Fig. 2. The DFID Sustainable Livelihoods Framework (SLF) (Source: redrawn from DFID 1999).

‘transforming structures and processes’ comprising government and private sector, and laws, policies, culture and institutions, respectively.

The practical importance of the sustainable livelihoods ‘turn’ is clear. The SLA has directed the development interventions of governmental, multi-lateral and non-governmental organisations; shaped how scholars and practitioners think about conditions in the rural South; provided a framework for data collection and informed survey methods; and justified the allocation of billions of dollars of international assistance at livelihoods-focused programs and projects. It has also played a leading role in other related developments, such as the participatory and empowerment turns in development studies, and an ideological reorientation that has placed emphasis on poor households as drivers of poverty alleviation in lieu of more structural analyses. To be sure, SLA thinking

was more drawn to the conceptual repertoire of entitlements, capabilities, relational inequality, well-being and new institutional economics (i.e. Leach, Mearns, & Scoones, 1999). However, the approach was subsumed into the broader turn towards methodological individualism inherent in neoliberal development policy at the time (Harriss, 2001). For Solesbury (2003: 14, and see Small, 2007: 36), the sustainable livelihoods concept has “all the qualities of a classic ‘paradigm shift’”. But even this was not enough to challenge the near-axiomatic status neoliberalism acquired in the 1990s, partly because the overall notion of power relations and to a certain extent power asymmetry are overlooked in the SLA. In line with new institutional economic thinking, SLA positions institutions, markets, policies, and their role in (re)shaping livelihood options as matters of technical rather than political concern.

**Table 1**  
From idea to method – the emergence and development of sustainable livelihoods.

Sequencing	Key sources	Working definition or phrases
Conceptualisation	WCED, 1987	'sustainable', 'stable', 'secure' and 'adequate' livelihoods all used
↓	↓	↓
Definition	Chambers & Conway, 1992	'sustainable livelihoods' normalised
↓	↓	↓
Framing	Scoones, 1998	'a framework for analysis'
↓	↓	↓
Operationalisation	Carney, 2003	'methodologies for SL approaches'

As Table 1 sets out, over the space of around a decade during the 1990s, SL went from being a loose idea to an approach, a framework, and then a methodology, permitting it to be operationalised in practice, foreshadowed in the subtitle to Chambers and Conway's, 1992 working paper. This 'practice' encompassed both the applied, where it started, and the academic. A notable aspect of the emergence and hardening of the SLA was how smooth it all was; the approach did not encounter great resistance.<sup>5</sup> Our impulse is that this is due both to the approach's packaging as practice rather than theory, and its relative lack of dissonance with a wider turn away from structural approaches to poverty alleviation in this period. As O'Laughlin (2004: 387) argues, the 'micro-focus' of the SLF "does not directly challenge the basic lines of macro-economic policies recommended by the IFIs [International Financial Institutions]".

2.2. Critiques and weaknesses of the livelihoods approach: A distillation

In this section we summarise the academic critiques of the SLA to provide a critical benchmark for the discussion in the second half of the paper.<sup>6</sup> These critiques have coalesced around five overlapping areas:

- theory;
- method and scale;
- history and time;
- politics; and
- knowledge.

All of the above elements find their echo, individually, in other papers and books. That said, structuring our critique in this manner traverses questions of method, approach and theory in a manner which is novel in its presentation and articulation.

2.2.1. Theoretical grounding (or lack thereof)

An initial set of concerns foreground the absence of explicit theory in SL (e.g. Small, 2007). The approach is full of principles – it claims, for instance, to be participatory, holistic, people-centred, localist, and empowering – but there is little focus among proponents on the theoretical principles that underpin these methods and approaches. In terms of implicit theory, the framework's proliferation in the late 1990s drew on grounded theory and saw the emphasis on human capitals take on particular resonance, playing down a focus on institutions and socio-political processes (Scoones, 2009). Drawn from Sen's (1985) Human Capabilities approach, this theoretical underpinning situates the locus of analysis within the household, and beyond this, the individual. Structural determinants of poverty are under-addressed, both in

mapping livelihoods and concurrently in devising development programmes. This is not made wholly clear however, with SLA-led analysis tending to obscure the theoretical choices made within its analytical approach. Arising from this, structural and political development issues are rendered technical, and poverty depicted as apolitical (Li, 2007).

2.2.2. Method and scale

Methodologically, the SLA was a departure from approaches that were prevalent at the time. It sought to illuminate how populations 'get by' through a people-centred, holistic, participatory and inclusive view of matters, seeking to understand what people have, what they do, why, and with what consequences for their quality of life. While this may seem rather run-of-the-mill today, at the time it was novel, even revolutionary. This strength, however, also leads to a key weakness: an unremitting focus, almost a reification, of the local and by extension of community, and therefore a tendency to overlook how local livelihoods are also, and increasingly, embedded in and reproduced by networks and relationships that transcend the local. Echoing the point made with regard to theory, this diverts attention from macro-processes and structural factors (Challies & Murray, 2011: 31) which are problematically reduced to a box labelled 'context' (Scoones, 2015: 38).<sup>7</sup> The reasons why a household is poor or a livelihood vulnerable, or indeed rich and resilient, can only be fully discerned and understood in terms of processes that are situated at scales beyond the local, even if it is at the local where such processes and the conditions they produce are experienced (Carney, 2003: 23). Attention needs to be paid to the intersections between macro forces and micro processes and outcomes (see Burawoy, 2009), and to look beyond simply describing these. As Scoones (2009: 188) argues, the SLA needs to "ask how particular forms of globalisation and associated processes of production and exchange – historically from colonialism to contemporary neo-liberal economics – create both processes of marginalisation and opportunity". Only in this way can livelihood studies escape the tyranny of the local where generalisation and meta-analytical explanation is eschewed (De Haan, 2012) and where the goal of the SLF is, too often, "helping the poor to help themselves" (O'Laughlin, 2004: 387).

This is not to argue that the SLA and the SLF completely ignored these matters: they are there, in the original. Nor is it just to say that more attention needs to be paid to the structural and the global: though that is important. Our point, rather, is that the livelihoods approach shapes and informs the methods adopted (local, participatory, action-oriented...), the methods adopted determine the nature of the data generated, and the data generated colour the perspective and the tenor of the analysis that then follows. Thus, while it may be the case that diversification and delocalisation of livelihoods were recognised in the original SLA, too often they were either downplayed or expunged from the explanatory script because of the way that livelihoods knowledge is organised, frames of understanding are constructed, and the livelihood 'case' thereby emerges:

"Fields of analysis often develop a convention for introducing their object. Such tropes come to be seen as too obvious and straightforward to question. ... Objects of analysis do not occur as natural phenomena, but are partly formed by the discourse that describes them. The more natural the object appears, the less obvious this discursive manufacture will be." (Mitchell, 2002: 210, and see Lund, 2014: 224-5).

<sup>5</sup> Arguably, something similar has happened with the more recent mainstreaming of 'resilience'.

<sup>6</sup> For critical reviews see: Small, 2007, Carney, 2003, Scoones, 2009.

<sup>7</sup> Scoones (2015: 39) writes: "Much livelihoods analysis, and associated frameworks, has veered to the local agency and practice end of the spectrum, relegating structural relations and politics to 'context'. This, as this book argues, is a mistake."

At a very different scale and for different reasons, the use of the household as the unit of analysis has been critiqued by gender theorists for failing to recognise and appreciate the role of gendered labours of social reproduction within the household, and how this drives and (re)shapes our understanding of livelihood reproduction (Bhattacharya, 2017). Geographers and other spatial theorists also argue that it overlooks the importance of seeing households as 'split', 'translocal' or 'multi-sited', rather than co-residential, with their livelihoods similarly dispersed (Challies & Murray, 2011: 31, Steinbrink & Niedenfuhr, 2020). Work on telecoupling or teleconnection (Fox, Nghiem, Kimkong, Hurni, & Baird, 2018), for example, pays attention to how land use changes in one geographical site are linked – or coupled/connected – to land use changes in another. The need to track such linkages and their effects across space can also be seen in scholarship on the 'invisible economies of care', where migrant work (and exploitation) is sustained and made possible by 'spatiotemporally divided households' (Shah & Lerche, 2020). These criticisms have implications for livelihoods methodologically. The former requires livelihood research to look into the 'black box' (Folbre, 1986) of the household to better valorise formerly invisible, gendered labours; and the latter, to track household relations and resource flows across space through, for example, multi-sited ethnography. As Steinbrink and Niedenfuhr (2020: 37) argue, "although livelihood research has long and intensively dealt with *sectoral income diversification*, the approach has hardly been able to capture the *spatial diversification of livelihood systems*" (emphases in original).

### 2.2.3. History and time

There are also criticisms of the SLA that focus on matters of history and time. The role of historical processes in shaping contemporary livelihoods, both *longue durée* and widescale (e.g. colonialism) and shorter term (e.g. structural adjustment policies) and more local (e.g. land dispossession), are often overlooked given the tendency in SLA to focus on the here-and-now. This includes, in particular, how the structures underpinning rural livelihoods are produced (and undermined) over time. This means we need to understand not just what livelihoods are, but also how they have come to be: through what processes, policies and mechanisms, both short term and longer duration. The interest in explicating livelihood *pathways* (e.g. Vicol, 2018) grew out of this concern and interest in understanding livelihood *making* (De Haan & Zoomers, 2005: 43).

### 2.2.4. Insufficient attention to the political

A fourth area of concern, and perhaps the issue that has attracted the most critical comment, is that the SLA is not sufficiently 'political' (Scoones, 2009; 2015). This is not to say that politics was entirely eschewed, but that the instrumental tone of the SLA rendered politics as background noise: everywhere but, at the same time, nowhere. If anything, this issue became more acute over time as attention in development practice focused on policies rather than politics, and on so-called good governance rather than on inclusion, equity and social justice.

We see this political reductionism operating in two ways. Locally, there is a tendency to reify the community as a coherent body, playing down issues of class, gender and other power relations that shape livelihoods within communities. As van Dijk writes (2011: 101), the SLA "tells us little about structural determinants and power relations between and within communities that need to be understood for interventions to be more effective" (van Dijk, 2011: 101, see also De Haan, 2012). In looking for 'community', livelihood researchers risk overlooking the questions worth asking about life in most places.

More widely, and linking back to the issue of scale, local livelihoods are fashioned by political factors at the local, national and

supra-national levels which may, for example, create an urban (or rural) bias in policy. The framework is rarely deployed by radical scholars or organisations arguing for structural solutions to rural poverty. Work addressing wages, working conditions, the regulation of financial services, state investment in agriculture, and global market integration largely overlooks the SLA (O'Laughlin, 2004). Furthermore, the instrumentalist and materialist tone of the SLA, with its focus on 'strategies' and 'assets' or 'capitals', methodologically-focussed on the poor themselves, has contributed to this tendency to shy away from issues of power, politics and the relational which cannot easily be seen and measured. This resonates with a broader concern (noted above) with development work in general; that it renders problems that are at core political, technical (Li, 2007, Mosse, 2005, Carney, 2003: 36). In an edited study taking a political economy approach to livelihoods in the context of humanitarian crisis and conflict, Collinson (2003: 3) writes:

"A political economy approach should incorporate a wide historical and geographical perspective, explain why the relative power and vulnerability of different groups changes over time, and explain how the fortunes and activities of one group in society affect others. The view that it encourages is therefore dynamic, broad, longitudinal and explanatory."

### 2.2.5. Decolonising knowledge and practice

A fifth, and broader theme concerns knowledge in general, and the need to decolonise knowledge and its (re)production in particular. The SLA emerged as part of the 'post-structural moment' within development studies. This questioned the extent to which development, defined as the achievement of modernity, was a teleological unfolding of a universally applicable process that some societies had already undergone, and that once other societies had reached the same point, would signal the end of history (Escobar, 2007). It was, rather, a set of discourses that emerged at a particular point in history (the mid-20th century), rooted in longer historical processes (colonialism and capitalism), and a worldview associated with particular peoples/nation states (Europeans and North Americans descended from Europeans) (Escobar, 1995, Crush, 1995, Rist, 1997). The post-structural turn subsequently brought into question the status and legitimacy of the 'expert knowledge' development practitioners brought to places that, in relation to development discourse, had been constructed as 'the Third World', and whose own ways of knowing and being, which might provide strikingly different visions for development, had subsequently been devalued and marginalised.

It is against this background that Noxolo argues, 'knowledge is not "universal and independent of context", but is always deeply imbricated in power, and in the contingencies of its time, location and relations of production' (Noxolo, 2017: 318, quotation from: Mbembe, 2016: 33). There are aspects of the original SLA that speak to principles of the more recent decolonisation literature. Notably, Robert Chambers, one of its foundational thinkers, draws inspiration from the post-colonial thinking and praxis of Paulo Freire and Orlando Fals Borda, advocating the decentring of knowledge production and pedagogy to marginal voices. Nevertheless, in being so frequently applied apolitically and ahistorically within mainstream development policy and practice, and representing as it does a means of rendering rural livelihoods legible to development scholars and experts, both the function and usage of the SLF leave it arguably at odds with the aims of decolonial thinking.

### 2.3. Shifts in livelihoods and livelihoods-related research

In addition to these critiques of the original SLA and SLF, we highlight in this section the most relevant shifts in both global development and in development research, with a view to empha-

sising the limits of the original SLA in capturing livelihoods today. Two empirical cases are used to illustrate the general points.

### 2.3.1. Neoliberal globalisation and development

The onset of neoliberal globalisation since the late 1970s, felt most keenly through the imposition of conditional loan programmes, has radically transformed rural livelihoods. Countries across the global South have transitioned from agrarian to industrial and services-sector led economies, accompanied by a retrenchment of state support for agriculture, social safety nets, and labour regulation and a concomitant ascendancy of markets (Harvey, 2005, Breman & van der Linden, 2014). As a result, rural life is more intimately connected with national and even global circuits of capital accumulation. The spatial integration of countries, regions, villages, households and individuals, and the attendant mobility of the latter two categories, mean that seeking to understand livelihoods through spatially corralled units of analysis and entry points will be increasingly limited in their explanatory power.

Neoliberalism is implicated in geographically uneven patterns of social uplift, chronic stasis or deterioration in livelihood circumstances. Most of the world's extreme poor are no longer to be found in low-income countries. In 1990, 94 per cent of the global poor lived in countries defined as low-income; in 2013, the figure was 34 per cent, some 258 million (World Bank, 2016: 40, Sumner, 2013; 2016).<sup>8</sup> Alongside this, and across low-income and middle-income countries, the deepening of agrarian capitalism has resulted in rural dispossession, as rural classes differentiate into winners and losers, leaving millions of rural poor to reproduce themselves through precarious and spatially-fragmented waged work in the farm and non-farm sectors (Bernstein, 2006). Countries may be 'progressing' to middle-income status, taking their poor with them, but poverty is also being produced and reproduced in new ways, requiring different approaches to thinking about the processes of, and locations for, poverty-making.

The thoroughgoing urbanisation of the world and therefore of livelihoods requires a fuller engagement with the urban and rural-urban relations and interactions (Jones, 1997; Jones, 2018; Gillen, Bunnell, & Rigg, 2022). Furthermore, processes of climatic and environmental change (explored further below) and the encroachment of global finance in the everyday lives of the working poor have often deepened livelihood insecurity in rural areas. On the latter, the rise of financialization – that is the spread of capital accumulation derived from interest-bearing capital under neoliberalism (Fine & Saad-Filho, 2017) – has reshaped rural life in numerous ways which intimately connect the global and local. From unregulated and often exploitative microfinance loans leading to rising rural precarity (Taylor, 2015), to climate finance schemes such as forest conservation programmes which render indigenous livelihoods more fragile in their bid to 'conserve' forests and harness sequestered carbon to generate financial instruments (Asiyanbi, 2016), global finance increasingly penetrates the everyday lives of the rural poor, exposing them to new forms of risk.

### 2.3.2. Household and livelihood reconfigurations and re-spatialisations

The result of these shifts is that even basic analysis of rural household livelihood reproduction increasingly requires tools that are attentive to structural shifts in markets, state welfare and regulation, global finance, and more. Consequently, multi-level, multi-scalar and structural analysis is now a pre-requisite for understanding rural livelihoods. Whilst such changes were already well underway in the late 1990s when the SLA was popularised, the

ensuing SLF, as highlighted earlier, coalesced around a set of principles that saw the global and the structural shrink back behind the individual. All this means that some of the implicit values attached to the SLA – such as the emphases on the local context, people's knowledge and non-market activities – and which have informed the methods that underpin the livelihoods approach, now appear problematically narrow. A comparison of two cases from rural Thailand offer a representation of the limits of the former SLF in this regard.

Figures 3 and 4 are visual representations of two household livelihoods from villages in north-east Thailand. The first is drawn from an interview in 1983 from a village in Mahasarakham province; the second in 2015 from a village in Khon Kaen province. Figure 3 visually depicts the livelihood of Nai Nit Khaman's household. It is co-situated, with production and consumption spatially situated within the geographical confines of the village. Rice is produced largely for own consumption and labour is focused on agricultural endeavours (such as livestock raising) and *in situ* farm-based activities (such as mat-making). This labour is either family labour or community labour accessed through long-standing norms of reciprocity. The household is co-residential (all members living under one roof) and the spatial parameters of the village and surrounding lands, in effect, capture this household's livelihood. Generationally, the assumption – at the time – was that the livelihoods of younger generations (children) would, in time, come to mirror those of older generations (parents).

The SLA, with its participatory, holistic, people-centred, localist and empowering ethos is amply suited to delineating the livelihood of a household like that of Nai Nit Khaman. In effect, production, reproduction, consumption, (re)distribution and wealth intersect in the geographical space of the village, which was largely comprised of households much like Nai Nit Khaman's. The household, in a material, emotional and historical sense, 'belonged' to the village.<sup>9</sup> It was defined by the propinquity of its members and the activities that comprised household livelihoods.

Figure 4 reveals a very different livelihood footprint, one that illustrates the limitations of the SLA in Thailand in the second decade of the 21st century. Five key differences emerge. First, the village as a settlement does not map neatly and clearly onto household livelihood. Land is still owned and farmed, and a couple – along with one grandchild – live in the village and work that land. But what is of interest when it comes to delineating the livelihood and material conditions of this household lies off-site, away from the village-as-settlement, entering distant urban as well as rural spaces. This means, second, that the household is no longer co-residential, but multi-sited or *trans-local*. It might be debated how far some of those individuals in the figure are members of the household (for example, the 37-year-old son who works as a delivery driver, lives 110 km away, and only occasionally remits money), but others are functionally and emotionally, if not spatially, component members.

Third, there has been a diversification of livelihood activities, spatially and sectorally. Many of the household members in Figure 4 are not farmers. They comprise a delivery driver, factory worker and NGO employee, while the children of the household are staying in education for longer than older generations to prepare for work outside farming and beyond the village. In addition, in the interim, the Thai government had introduced a universal health care system (the 30-baht scheme) in 2002, and a modest level of support for the elderly through the Old Age Allowance in 2009 (Knodel, Teerawichitchainan, Prachuabmoh, & Pothisiri, 2015, Rigg, 2019: 113-115). Certainly, the original SLA does

<sup>8</sup> The 1990 global poverty data are based on a \$1.25 poverty line; the 2013 data on a \$1.90 poverty line.

<sup>9</sup> This picture of the sedentary peasant and the coherent village can be taken too far. There was a degree of mobility, cash was widely earned and used, and the village, even then, was more porous than such a characterisation allows.

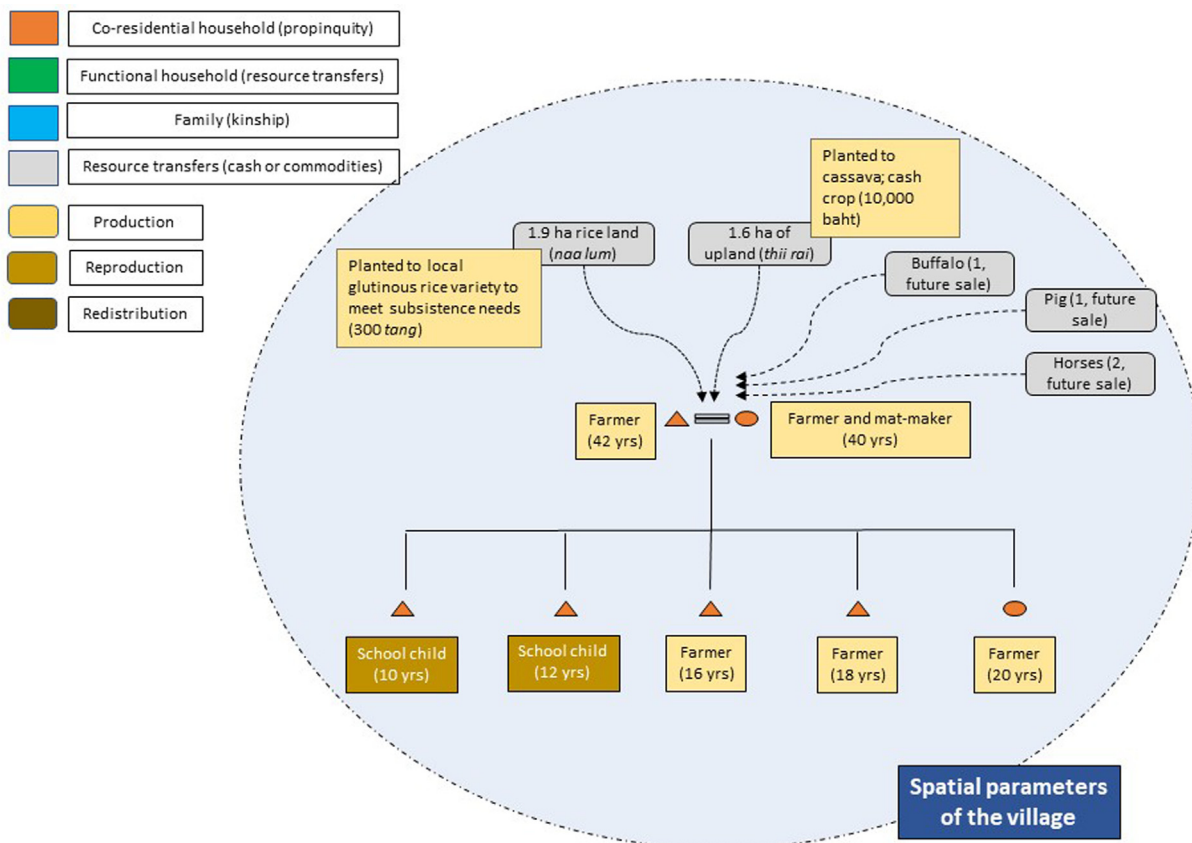


Fig. 3. The livelihood footprint of Nai Nit Khaman's household (1983) (Source: interview 29th January 1983 [BNT05]).

acknowledge that migration and diversification may be important elements in livelihoods (and both are present in Scoones' original diagram – see Figure 1). Indeed, there is substantial work that predates the (1992) Chambers and Conway paper that draws attention to the role of household income generated by migration (see, for example, Stark, Taylor, & Yitzhaki, 1988),<sup>10</sup> while Ellis' (2000) scholarship is particularly attuned to the point that livelihoods have become increasingly spatially and sectorally catholic. But, and as we argue above, the SLA's local focus sets-up a framework of understanding that both pushes such perspectives to the margins,<sup>11</sup> and/or views them in a negative light. With regard to the 'research implications' of rural livelihoods and migration, for instance, Chambers and Conway write: "Understanding better how more people can want and be able to continue to gain their livelihoods in rural areas, how to prevent distress migration to urban areas, and how to support voluntary reversals of rural–urban migration" (page 24). The emphasis here is on limiting migration, keeping people 'in place', even encouraging some to return. The experience of the last three decades has been quite the reverse.

This highlights a fourth difference: that the livelihoods of the past do not foreshadow the livelihoods of the present and the future. Finally, Figure 4 shows a complex choreographing of production, reproduction and redistribution, the significance of which can only be fully discerned when labour (productive and reproductive), cash and (agricultural) production are tracked across space. These changes have not just 'happened' but have been shaped by

national and international policies from the liberalisation of the Thai economy to the appreciation of the Japanese yen against the US\$ following the Plaza Accord of 1985. Broadly similar processes can be seen operating across the global South.

### 2.3.3. The 'relational turn(s)' in development thinking

Since the late 1990s, there has been a turn towards the relational on two fronts. First, it finds expression in the resurgence of 'structural' approaches from the 1960s and 1970s, which foreground the wider relations conditioning social, political and economic life. Second, it emerges in the 'relational ontological turn', which from very different philosophical underpinnings contends that existence itself is irreducibly relational and plural, with fundamental implications for how we understand 'the social' (and indeed questioning the cogence and utility of this very category, see Latour, 2005). Both perspectives move away from the primacy of the methodological individualism that crept into the operationalisation of the SLA and across predominant, neoliberal development thinking more broadly. In this regard, they both provide valuable resources for rethinking livelihoods in the 21st-century.

Critical development scholarship has paid growing attention to how political economy factors and power relations constrain and limit the abilities of the rural poor to seek out better livelihoods. The role of class, caste, gender and race relations in explaining why certain rural groups accumulate whilst others face pauperisation, and how these two processes are linked, is central (Mosse, 2010). For example, research on agrarian change in India repeatedly highlights how the accumulation of capital for certain rural classes has relied upon caste and gender-based exploitation of marginalised Dalit and lower-caste communities, and how such exploitation is engendered through a variety of relations, including

<sup>10</sup> The Stark et al. (1988) paper, however, does not use the term 'livelihoods', referring instead to household 'income'.

<sup>11</sup> Steinbrink and Niedenfuhr (2020: 38) write: "Conventional livelihood studies have had great difficulty in conceptualizing the new mobilities in the rural periphery of the Global South".

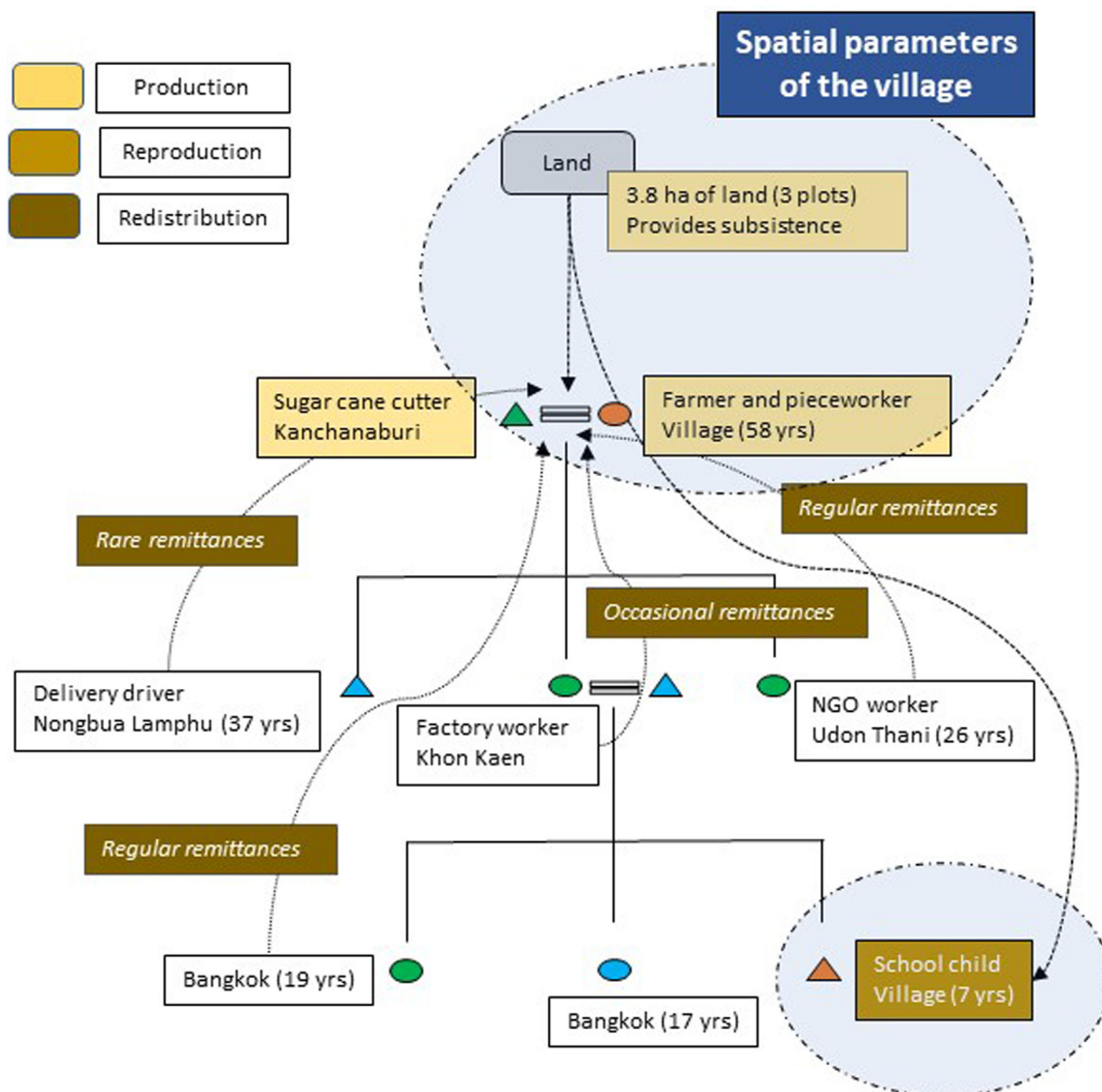


Fig. 4. The livelihood footprint of Mae Thong's household (2015) (Source: adapted from Rigg 2020: 34).

debt-bondage, sharecropping, tied labour arrangements and exploitative trading practices (Patnaik 1990, Harriss-White, 2007, Breman, 2007). The introduction of market liberalisation in 1991 has been shown sometimes to deepen such processes of exploitation, enabling classes of capital more easily to privatise land, industrialise farming and develop enterprise, whilst marginal classes have seen their reproduction eroded through the removal of social safety nets, state welfare and agricultural investment in collective infrastructure (Harriss-White, 2008, Lerche, 2013).

The structural turn in development scholarship therefore brings back Marxist thinking from the 1960s and 1970s and theorises the relational nature of poverty and livelihoods within it, where relations are material structures of power. Mosse's (2010: 1156-7) work on explaining 'durable poverty' argues that "persisting poverty can be viewed as a consequence of the exclusionary and expropriating aspects of long-term processes of capitalist transformation". The emphasis is therefore on how poverty is produced through processes beyond the control of the poor themselves. In a similar vein, Hickey and du Toit (2007) highlight through the concept of 'adverse incorporation' that rather than seeing poverty

emerging due to an exclusion from markets, the incorporation of the poor into markets on adverse terms – through processes of exploitation and appropriation – can itself result in poverty. This latter approach is crucial in highlighting how the integration of the rural poor into markets, as labourers, petty entrepreneurs and debtors, has generated deeper poverty for some. For example, Taylor (2015) draws on the concept of adverse incorporation to highlight how smallholder farmers take credit from local merchants, landlords and moneylenders in order to invest in commercial cropping, only for climatic vagaries to plunge them into unsustainable debt when harvests fail, leading lenders to reap the benefits. In this regard, adverse incorporation highlights not only how integration into markets causes adversity for some, but also how such adversity enriches others. Hickey and Bracking (2005: 851) further stress the centrality of politics to understanding relational poverty, asking, "in what ways do political actors, processes, institutions, and discourses both reproduce and reduce poverty?"

In the 21st century, the term 'relational' has also been invested with greater significance, as a result of the relational ontological



'turn' set in motion at the end of the 20th century in science and technology studies (STS). Relational ontologies are associated chiefly with attempts to reassert the importance of socio-material agency, assemblages and networks in the face of the post-structural focus on discourse (Latour, 1993, Mol, 2010), a blurring of the boundaries between the human and non-human (Haraway 1991; 2016), and the postulation of ontological pluralism (cf Law, 2015). Relational ontologies tend to coalesce around a rejection of dualist thinking (i.e. maintaining nature and society as distinct categories), the notion that there are 'things-in-them-selves', and the subject-object schema – i.e. a separate human subject capable of knowledge about 'things in the world' (objects) – underlying this notion. A relational ontological approach has found purchase in efforts to (re-)think what development is, perhaps most evidently in the work of scholars such as Escobar (2010) or de la Cadena (2015). Relational approaches have also taken root more directly in the study of livelihoods. For instance, Hanrahan (2015) roots a feminist ethics of care approach to understanding the ways in which women organise livelihood choices and activities around caring responsibilities, arguing that understanding how social relations of care affect livelihoods is better served by an ontological shift from a "self-versus-other" to a "self-in-and-through others ontology" (Tong, 1993: 51, cited in Hanrahan, 2015: 385).

#### 2.3.4. Global environmental change

Given the acknowledged influence of *Our common future* on Chambers and Conway's (1992) working paper (see above), it is not surprising that sustainability is a central theme. This, however, encompasses social and environmental sustainability, with the emphasis rather more on the former than the latter. Second, while the working paper does discuss 'global warming', this is rolled in with pollution, the ozone layer and over-use of non-renewable resources. Moreover, and as they write, "In this paper, we are concerned mainly with the local level, and mainly in the South... [where] ...the main challenge is to enhance the sustainable livelihood-intensity of resource use, especially in...rural areas..." (page 9).

If Chambers and Conway (1992) focus more on social than environmental sustainability, prominent SLA advocates have been careful to redress the balance (i.e. Leach and Mearns 1996, Tiffen, Mortimore, & Gichuki, 1994). Yet some decades into the 21st-century, it is easier to see that a deeper engagement with the ramifications for livelihoods of human-induced global environmental change, most prominently in the guise of climate change, needs to advance on (at least) two fronts. First is understanding the profound and increasing force of impact on livelihoods. Second is to recognise the relational character of these phenomena and impacts, drawing on both the structuralist and relational-ontological traditions of thought identified in the previous section. To sketch the form this line of analysis might take, we use a case study from Zimbabwe documenting the implications of climate change for patterns of tobacco production already radically altered by the Fast-Track Land Reform Programme of the early 2000s, situating it in a wider discussion of these issues.

Increased instances of extreme weather events – in particular droughts and floods – have rendered agriculture increasingly unstable and therefore livelihoods unsustainable, as farmers are exposed to the vagaries of climate change (IPCC, 2018, Olsson et al., 2014). Furthermore, anthropogenically-driven environmental change in the form of depleting groundwater, acidification of rain, soil salinity, desertification, and declining pollinator populations have all increased in severity, transforming rural environments (IPCC, 2018). Rural livelihoods are thus exposed to growing climatic shocks and stresses, and rising prices for natural resource appropriation, in a period when states have retrenched

decades of state agricultural support and marketized areas such as seed and irrigation provisioning (McMichael, 2010, Weis, 2010). As such, rural households are forced to take on coping strategies in farming, leading many into debt (Taylor, 2015), even to leave agriculture altogether or, and contentiously, to become 'climate migrants'. Understanding how such livelihood vulnerabilities engendered by climate change are determined as much by "structural inequalities, power imbalances, and intersecting axes of privilege and marginalization" (Olsson et al. 2014: 819) highlights the need to take a structural, not just a localist, approach to livelihoods and global environmental change.

In Zimbabwe, many of these dynamics are all too evident. Recent research has identified a warming and drying trend in most of the country especially pronounced after 1982, a shortening of the rainy season by 30 days, a decrease in consecutive rainfall days and increased frequency of dry spells of up to 20 days (ZINGSA, 2020). These trends are so profound that they have led to a re-classification of the size, distribution and characteristics of Zimbabwe's agro-ecological zones (ZINGSA, 2020), with a substantially greater proportion of Zimbabwe's land now located within "drier and less productive categories" (ibid., p.vii).

Recent research in Mazowe, a centre of tobacco production, reveals the difficulties that these changes are presenting for tobacco production (Newsham, Shonhe, & Bvute, 2021). When grown under rain-fed rather than irrigated conditions, tobacco is amongst the riskiest crops that can be grown, both from a climate and a commercial perspective, even in one of Zimbabwe's more favourable agro-ecological zones. This has coincided, as a result of land reform, with a dramatic increase in the number of small-holder farmers producing tobacco (TIMB, 2018), and a corresponding rise in the proportion of tobacco grown under rainfed conditions. Controversial though post-2000 land reform has been (Matondi, 2012), the adoption of tobacco by small-scale farmers, especially amongst the 1.3 million farmers given plots of between 5 and 10 ha known as A1 land, has been seen as a promising livelihood strategy for reducing poverty and food insecurity (Ngarava, 2020). Yet Newsham et al. (2021) found the shortening of the growing season and the increasingly erratic rainfall leading to higher instances of either crop failure, or sharply reduced production. Increasingly, mitigating the growing climate risk of tobacco production hinges on access to sufficient labour and irrigation, without which abandoning tobacco appears an increasingly likely prospect for growing numbers of communal area and A1 farmers.

It is now more widely established that the impacts of climate change upon rural livelihoods are stratified along social lines (Natarajan, Brickell, & Parsons, 2019). Ribot and Peluso's (2003) notion of structural and relational access mechanisms, along with Taylor's (2015) work on relational vulnerability, help to explain the starkly differentiated access to what we might call the means of adaptation found across Zimbabwean tobacco production. The largest scale tobacco producers have access to capital, land, markets (increasingly in China), industrial irrigation systems, payment in US dollars and, often, good connections to Zimbabwe's political elite (Shonhe, 2019). Contrast this with a communal farmer growing tobacco on the margins, barely able to access even minimal inputs, dependent upon the vagaries of the rainy season and whose price for their crop is often set by contract farming or the Makoonyera (black-market traders).

The social relations governing access to livelihood adaptation in Zimbabwe are not removed from the globalisation of a set of human-environmental relations centred on growth and accumulation through greater levels of commodifying and consuming nature. These are as fundamentally implicated in generating the Anthropocene conditions (Steffen, 2018) threatening some livelihoods more than others as they are in the highly uneven distribution of livelihood precarity and opportunity. This is the challenge of

a relational understanding of climate and environment with which the SLA has yet to engage.

#### 2.4. What of value remains?

To end this section, it is worth reiterating the strengths of the SLA. As is regularly the case when it comes to scholarly critiques, two sleights of hand are evident in the work cited above, one narrowing and the other winnowing. The winnowing tendency involves sifting out the cautionary caveats in the original that might detract from the critique. So, for example, the original (1992) Chambers and Conway working paper *does* pay attention to historical factors, is concerned with questions of structure, is attendant to matters of power and politics, and *does* address relational issues. It is just these are *sotto voce*. The second tendency is to narrowly focus on the shortcomings without noting the strengths.

Livelihoods research did much to make it clear that (rural small farmer) livelihoods (in the global South) are diverse and characteristically multi-stranded, requiring an interdisciplinary (holistic) understanding of the links between the different fields and activities that make up a livelihood.<sup>12</sup> It did much to challenge the top-down, expert-led approach to development and development research, fostering instead a more democratic and participatory ethos that took local people's views seriously. And it also made clear and evident that there is much in rural livelihoods that cannot be reduced to matters of income. In this way, local knowledge was valued in a manner that it had not been until that moment, helping in the process to turn research/development objects into research/development subjects, and research/development subjects into research/development partners. Finally, even the critiques of the framework have contributed to an enriching of our understanding of rural livelihoods, thus providing a focal point for debate. These are very considerable achievements which, taken together, make the case for revising, not rejecting, the framework.

### 3. A Sustainable livelihoods framework for the 21st century

#### 3.1. Principles and philosophical underpinnings for a new sustainable livelihoods framework

##### 3.1.1. Principles

The starting point for our reformulation is deciding on the scope of the sustainable livelihoods framework (SLF), which self-evidently cannot be all things to all people. There is good reason to be realistic about how far the SLF can be reformulated. In coming to a view on what is 'in' and what is 'out', we are guided by two principles.

First, we wish to leave our adapted SLF 'open' in terms of what livelihood effects – strengthening or eroding – particular development processes or interventions might have (e.g. market integration, commoditisation, contract farming, labour migration). The framework is not, therefore, underpinned by a normative position on capitalism, or on processes such as migration, and indeed as authors we do not share a common perspective. We do not propose that a reformulated sustainable livelihoods framework could, in itself, settle the question of whether market integration ultimately reduces or reproduces poverty. However, the effects of capitalist relations in shaping livelihoods and livelihood outcomes are fundamental and cannot be overlooked.

<sup>12</sup> The words in parentheses indicated the focus of much livelihoods research: on rural smallholders in the global South. It is worth noting that there are an estimated 510 million smallholders across the world (Lowder, Sánchez, & Bertini, 2021), constituting perhaps 2.5 billion people.

Second, we aim to ensure that the SLF remains a workable framework, useful to and hopefully enriched by engagement with the variety of disciplines, modes and traditions of inquiry from which analysts might come at this framework, encouraging analytical pluralism above privileging a single perspective. This is not to say that our own biases are wholly absent from the framework. For instance, it does attempt to correct for what we see as the under-privileging of structural or collective processes, and over-privileging of individual capabilities we think are inherent in the original framework. Nevertheless, the framework is offered not as a definitive resource, but as an initial step in a shift from the sustainable livelihoods approach to sustainable livelihoods approaches.

Linked to this we propose that the process through which involvement in knowledge (co-) construction is engendered is at least as important as the broader research traditions on which it draws (see Smith, 2012, Klenk, Fiume, Meehan, & Gibbes, 2017). It is incumbent upon us to be explicit about what Mignolo (2007) has called the 'loci of enunciation'. That is, despite our emphasis on the importance of local perspectives, ways of knowing and being and priorities in life, the intellectual resources that we use to reformulate the livelihoods framework predominantly emerge from Euro-American traditions of thought. Furthermore, the framework's usage within the broader system of development knowledge production, which is shown to reproduce colonial hierarchies of race in its very structure (Wilson, 2012), constrains the decolonial aspirations of the framework. Therefore, we offer it as a starting point, a prompt for further engagement with and potential reformulation by people who, should they deem it a fruitful exercise, are better equipped to bring in alternative ways of knowing and being, from beyond the Euro-American 'canon'. It also offers scope to act as a tool for rendering livelihood struggles visible for the purposes of radical transformation, enabling as it does a greater recognition of structural and relational power.

##### 3.1.2. Approaches to 'the relational'

As foreshadowed by section 2, we argue that livelihoods need to be understood fundamentally in terms of relations. We have muddied the waters somewhat by using this term to refer to structural and relational ontological approaches to relations which can be taken as irreconcilable in their metaphysical commitments (see Latour, 2005 and contrast with Malm, 2016). We need, therefore, to clarify how we approach this term, and what it means to us. Consistent with our principle of openness, we do not seek to resolve the contradictions between or fully reconcile these perspectives. Nor do we see a basis on which either should form the *exclusive* basis for understanding 'the relational'. Rather, we seek to invite engagement with the framework from scholars working in or across these traditions. Our concern is with *which* relations are most relevant to charting how livelihoods are changing in the 21st-century. This, we contend, leaves scope for admitting of more overlap between these approaches than is commonly acknowledged, or at the very least for holding them in an 'essential tension' along the lines suggested by Chagani (2014).

In our own conceptualisation of relations, our bias here is closer to, if not exactly analogous with, the 'structural'. Fundamentally, we do not propose to abandon the subject-object schema, despite its 'intriguing limitations' (Bloor, 1999: 82), for two reasons. First, if only for the purposes of analysis, we need to be able to distinguish between one 'thing' (such as a livelihood activity) and another (such as an asset), even whilst recognising that there are relations of influence, ordering, sense-making, agency-production and negotiation, that constitute those 'things' such that they cannot ultimately be understood in isolation. In that way, both relations and their components can be specified. Second, retaining the notion of a knowing subject and the known object more persua-

sively keeps in view the under-determined character of competing knowledge claims and the (ontologically) important political and power dimensions of knowledge privileging. These considerations lead to an understanding of the relational which focuses on how people, processes and things collectively alter and are altered by each other, with attention to material structures of power, blurring at the edges. We hope our relational take on global environmental change (see above) helps demonstrate how such thinking can deepen our understanding of livelihood change in the 21st-century.

### 3.2. Reformulating the sustainable livelihoods framework

Figure 5 is our revitalised SLF, responding to the critiques and points outlined earlier. Scoones (1998) also set out an 'extended' livelihoods approach in a 1998 IDS Working Paper, revisited in his book (2015) *Sustainable livelihoods and rural development*. Rather than revising his original 1998 visualisation, Scoones instead appends six questions (page 84) against different parts of the diagram, drawing on Bernstein et al.'s (1992: 24) four guiding questions of political economy: Who owns/has access to what? Who does what? Who gets what? What do they do with it? To these Scoones (2015) adds two further questions: How do social classes and groups in society and within the state interact with each other? And: How do changes in politics get shaped by dynamic ecologies and vice versa? Here, we further develop Scoones' 'extended' livelihoods approach and build in some of his, and other scholars', concerns. As a revision, Figure 5 suffers (as well as benefits) from the representational approach taken in the original. In this section, we identify the elements in the original DFID diagram (Figure 2) that we regard as requiring revision and explain the motivations behind our alternative representations.<sup>13</sup>

The original SLF (see Figure 2) consists of six inter-linked elements:

- Vulnerability context
- Livelihood assets
- Influence and access
- Transforming structures and processes
- Livelihood strategies
- Livelihood outcomes

The original Vulnerability context localises the causes of and solutions to vulnerability, overlooking structural conditions. At the same time, the couching of context as one of vulnerability, with livelihoods constantly at risk of being degraded and run-down, overlooks the scope and possibility of upward livelihood transformation. Our reformulation cements the 'livelihood context', which demands a delineation of the wider setting within which livelihoods take shape. 'Vulnerability' is now understood to be dynamic and includes the notion of 'opportunity' to complicate the original, negative framing. Furthermore, to bring the structural into our understanding of 'vulnerability', some of the elements which were underemphasised in the original SLF are specified in the cross-cutting Transforming structures and processes at the foot of the figure. This encompasses policies/norms and institutions/social groups (both formal and informal), public and private. They materially represent the political economy of rural livelihoods – enabling elaboration for example on how livelihoods are embedded in and reproduced by shifts in state support, large-scale infrastructure development, financialization, market liberalisation and social policy. This box is not just cross-cutting but also tacitly multi-scalar speaking to transforming structures as macro-forces and micro processes.

<sup>13</sup> We use the DFID diagram (Figure 2) as our sounding board rather than Scoones' version (Figure 1) because it is the DFID diagram that has come to represent the SLF.

The original livelihoods assets pentagon, by putting social, human, financial etc capital at the heart of the framework predisposes it to a tacit acceptance of capitalism (see Fine & Lapavistas, 2004). Instead of taking a view on it from the outset, our framework provides an entry point to explore the effects of capitalism on livelihoods. To that end, in the new SLF we narrow assets to financial and physical and add two further pentagons: 'relational power' and 'climate and environment context/relations' (see Figure 5).

We take relational power, referring to class, gender, ethnicity, caste, and other material power relations, to be an equally critical, and all-too-easily overlooked, element in building, shaping and sustaining livelihoods – and therefore also in understanding livelihoods. We ask how material and other power of and within the household are forged through wider structural forces, paying heed to the prominence of such approaches in critical development thinking, as highlighted previously. Relational power addresses critiques of methodological individualism, inspired by the structural turn in development thinking, thus putting more emphasis on unpacking the relationship between structure, agency and power (Giddens, 1979; 1984).

'Climate and environmental context/relations' recognises the need to both elucidate local-level climate and environmental contextual factors and also to do so in a relational sense, understanding how these are shaped by broader forces, and also how they shape rural livelihoods (Olsson et al. 2014: 819). This addition reflects what has been argued previously in this article around the need to foreground changes to climate and environment in any exploration of rural livelihoods at a broader level. By keeping this element at the centre of the framework and thus tied to local-level analysis, we suggest that there remains scope for those using the framework to decide how best to understand local climate and environment, and how it relates to, for example, 'Transforming Structures and Processes'.

The original assets pentagon (see Figure 2) viewed 'capitals' as slices of the same cake, suggesting that they can be added to, and are inert and unrelated one to the other. In our new SLF, the pentagons have become porous (indicated by the dashed lines between each pentagon), to represent a dynamic nesting of assets, climate and environmental context/relations, and relational powers which are not held in geometric shape but can be built, eroded and transformed over time. Segmenting them in this manner does continue – albeit in a more nuanced fashion – the tendency to box and categorise livelihood components, but it does highlight the point that livelihoods cannot be smoothly computed from capitals, without better understanding how the latter are (re)produced and changed through human action embedded in wider society's socio-economic and political structures and in local environmental context.

Influence and access are probably the least discussed aspects of the SLF. They ask for a consideration of the links between livelihood assets on the one hand and transforming structures and processes on the other. This under-considered element of the SLF goes some way to explaining the critical stance of many scholars towards the original SLF, given the centrality of political processes of resource capture such as land grabbing (Kenney-Lazar, 2018), and participatory exclusions (Mansuri, Rao, and the World Bank, 2013), all of which are under-addressed by SLF-related literature. These are the processual and often power-laden explanatory factors that go a considerable way to explaining unequal livelihood outcomes for groups, households and individuals, particularly in an era of neoliberal globalisation. The rather innocuous 'Influence & access' needs to be accorded more weight, as signified by critiques of the insufficient attention to politics highlighted previously. As such, our reformulation sees this moved to a horizontal box cross-cutting livelihood groundings and pathways. It is, in

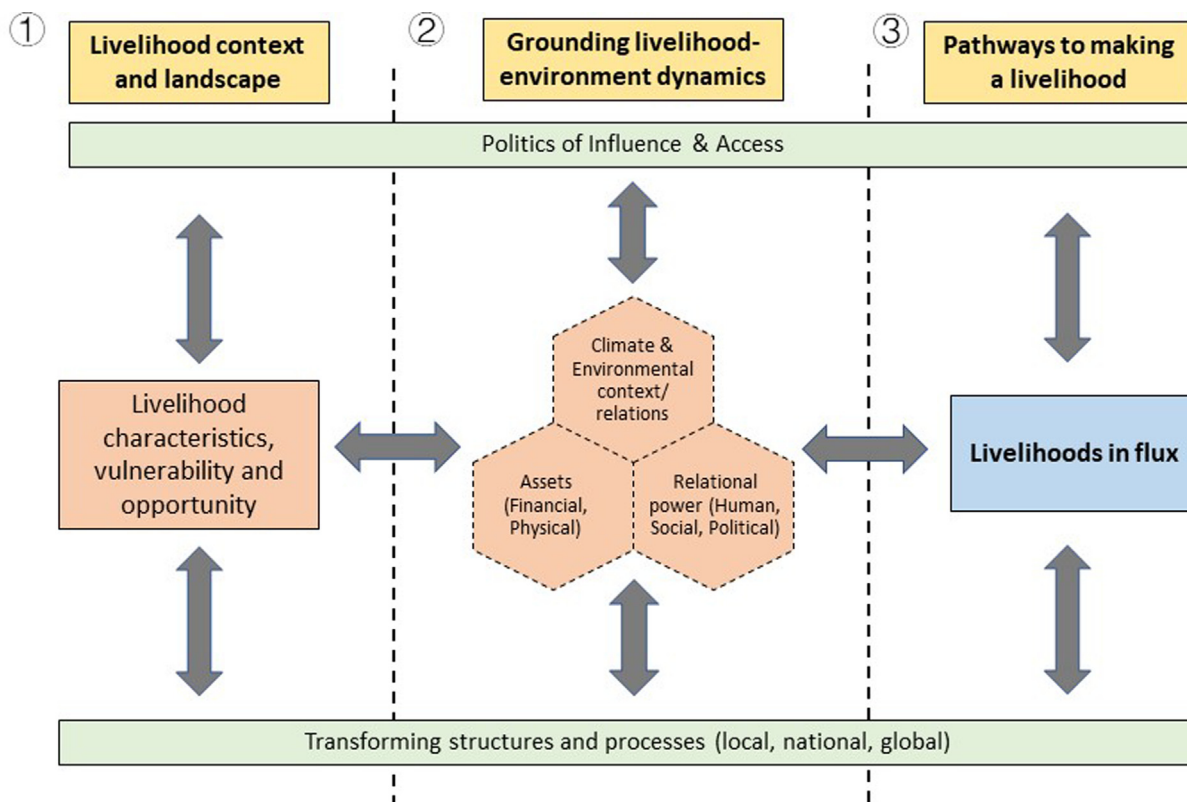


Fig. 5. A sustainable livelihoods framework for the 21st century.

effect, the explanatory fulcrum between these sections, not just providing the what and where of livelihoods, but explaining the who, how and why.

Finally, with regard to the original Livelihood strategies, there are two matters that need clarifying. First, the use of the word ‘strategy’ betrays little sense here of the contingency, serendipity and obstacles that fashion and constrain a household livelihood. Second, livelihoods are continually in flux, being revised and reformed both in the light of changing short-term conditions (e.g. changes in crop prices, pest infestations, flooding, even pandemics) and long-term transformations (e.g. structural change in the economy, ageing populations, climate change). The term ‘strategy’ not only implies consideration and planning, but also a degree of fixity, when flux is more likely. Linked to this is the original Livelihood outcomes element which also obscures the turbulence of livelihoods. It implies a certain finality that does not correspond to experience. As such, our revised framing allows for a more open Livelihoods in Flux, capturing some sense of the livelihood ‘moment’ without imposing considerations of a stationary or agentic livelihood.

Overall then, our revised SLF, whilst still at risk of oversimplification and the instrumentalization of what are often complex and contradictory realities, offers significant progress beyond the original SLA. The diagram offers a jumping-off point for scholars from different theoretical and ontological traditions to explore rural livelihoods, whilst also remaining tied to core beliefs and principles which reflect upon historical critiques and shifts in global development.

4. Conclusions

“In almost every domain of human life, change is accelerating. ... conventional or normal concepts, values, methods and beha-

viour prevalent in professions are liable to lag further and further behind... future conditions [will] become harder and harder to predict. In this flux and future uncertainty, we can expect that change will continue to accelerate, that much professionalism will continue to be behind the times, and that we will continue to be out of date and wrong in our anticipation of the future” (Chambers & Conway, 1992: 1).

These sentences are taken from the opening paragraph of Chambers and Conway’s original working paper. Our article embraces this ethos and introduces a reinvigorated and revitalised sustainable livelihoods framework for the 21st century. In doing so, the article explores the genealogy and critiques of the original framework, as a means of situating the SLF vis-à-vis wider development thinking and practice, and understanding the drivers behind both SLA advocates, and its detractors. We appreciate that these critiques have been articulated in other places, but they have not been brought together in a revised visualisation of the Sustainable Livelihoods Framework, as we do here. This revised visualisation pays attention to key shortcomings in the original SLF, centrally addresses them in the diagram, draws out their interlinkages, and sets local livelihoods more systematically against structural conditions and global processes, including political economy and global environmental change.

We have highlighted the initial dissonance between the first SLA, which was conceived of through arguably radical ideas pursuant of understanding local context and elevating local voices in the planning of development interventions, to the more popularised SLF which foregrounded a more methodologically-individual approach to understanding and alleviating poverty. In taking this forward, and asking why the initial SLF was so widely-used, we highlight the self-avowed packaging of the SLA as a framework rather than a theory or concept, combined with

the SLF's alignment with the broader turn towards mainstream (or neoliberal) development thinking and the focus on individualised poverty programming. We further highlight the critiques of the SLA which emerged as it became more popular. Most notably, the approach's lack of adequate focus on the structural drivers of poverty, intra-household relations, historical forces and spatial dynamics of livelihood reproduction were key weaknesses in the SLF from the very start, becoming more acute over recent years.

In moving beyond this, the article looks to highlight how the context of and thinking around development has altered in the past 20 years. The onset of and deepening of neoliberal globalisation has integrated rural life more tightly with global forces and has complicated analyses of rural livelihoods as bounded processes. Furthermore, the increasing attention to the impacts of global climate change and environmental degradation, felt most keenly among the vulnerable, render it a central feature of any analysis of rural livelihoods. Finally, the increasing acknowledgement of relations, both in terms of structural analyses of poverty and how individuals are embedded in relations of class, caste, gender and race, as well as the relational ontological turn in development thinking, speak to the need for a more focused relational approach to poverty in any new SLF.

Acknowledging both historical critiques and more recent shifts in development thinking and practice, our final section develops a sustainable livelihoods framework for the 21st century. In summary, our (new) framework has four key features that separate it from the original. Each one, in effect, constitutes a different form of 'opening up'. An opening up of the social (households) and geographical (village) units that represent the methodological building blocks of the framework; an opening up of the temporalities of livelihoods both in terms of the historical roots of contemporary conditions and (divergent) emergent pathways; an opening up of the relational to make it clear that even global processes, whether climate change or COVID-19, have jagged and uneven social and local signatures; and an opening up of what this means for poverty and prosperity, now and in the future.

What are the implications for future livelihoods research? The focus on opening up to global processes and local consequences suggests the suitability of comparative research on livelihoods change. This is not the first time that going beyond the largely local focus of livelihoods studies has been proposed, most notably by de Haan in his call to "deduce conclusions...that surpass the local level and aims at generalisation" (2012: 352). At first glance, proposing comparative research looks to be one way to answer de Haan's call. We, however, diverge from his methodological approach, which calls for *meta-analysis* of livelihood studies for the purposes of generalisation. A corollary of this objective is, for him, injecting greater methodological rigour into livelihood studies, on the basis that much of it is insufficiently sound to permit *meta-analysis*. To the extent that *meta-analysis* is associated with "universalist methodologies that promised to find laws, regularities or stages of development that would be applicable to cultures or to humanity at large" (Gingrich & Fox, 2002: 20), such a project is at risk of perpetuating precisely the kind of knowledge-power dynamics that even the original framework was alert to, and that efforts towards decolonising western knowledge have decried. There are other ways of thinking about comparison which do not necessarily entail such universalising tendencies. One such would be to adopt 'medium-scale' (Gingrich & Fox, 2002) theory-building, which emphasises the high degree of variation that can characterise comparative units, without ruling out the possibility of the comparison. Another might be to 'hand over the framework' to groups of people in different regions, better able than us to engage with and/or rework it from an alternative *cosmovisión* or worldview, and bring these efforts into conversation inductively. Whatever the methodological strategy might be, the need to

understand and engage with the ramifications of changing rural lives and livelihoods remains undiminished.

### CRediT authorship contribution statement

**Nithya Natarajan:** Writing, Visualization. **Andrew Newsham:** Writing, Conceptualization. **Jonathan Rigg:** Conceptualization, Visualization, Writing – original draft. **Diana Suhardiman:** Writing, Visualization.

### Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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### References

- Asiyandi, A. P. (2016). A political ecology of REDD+: Property rights, militarized protectionism, and carbonized exclusion in Cross River. *Geoforum*, 77, 146–156.
- Bernstein, H. (2006). Is there an agrarian question in the 21<sup>st</sup> century? *Canadian Journal of Development Studies*, 27(4), 449–460.
- Bernstein, H., Crow, B., & Johnson, H. (Eds.). (1992). *Rural livelihoods: crises and responses*. Oxford: Oxford University Press.
- Bhattacharya, T. (2017). Introduction: Mapping social reproduction theory. In T. Bhattacharya (Ed.), *Social reproduction theory: Remapping class, recentering oppression*. London: Verso Press.
- Bloor, D. (1999). Anti-Latour. *Studies in the History and Philosophy of Science*, 30(1), 81–112.
- Borras Jr., S.M.B. (2009). Agrarian change and peasant studies: Changes, continuities and challenges – an introduction. *The Journal of Peasant Studies*, 36(1), 5–31.
- Breman, J. (2007). *Labour bondage in West India: From past to present*. New Delhi: Oxford University Press.
- Breman, J., & van der Linden, M. (2014). Informalizing the economy: The return of the social question at a global level. *Development and Change*, 45(5), 920–940.
- Burawoy, M. (2009). *The extended case method: Four countries, four decades, four great transformations, and one theoretical tradition*. Berkeley: University of California Press.
- Carney, D. (1999). *Livelihoods approaches compared: A brief comparison of the livelihoods approaches of the UK Department for International Development (DFID), CARE, Oxfam and the United Nations Development Programme (UNDP)*. London, Department for International Development.
- Carney, D. (2003). *Sustainable livelihood approaches: Progress and possibilities for change*. London: Department for International Development.
- Chagani, F. (2014). Critical political ecology and the seductions of posthumanism. *Journal of Political Ecology*, 21(1), 424–436.
- Challies, E. R. T., & Murray, W. E. (2011). The interaction of global value chains and rural livelihoods: The case of smallholder raspberry growers in Chile. *Journal of Agrarian Change*, 11(1), 29–59.
- Chambers, R. (1983). *Rural development: Putting the last first*. Harlow: Longman.
- Chambers, R. (1995). Poverty and livelihoods: Whose reality counts? *Environment and Urbanization*, 7(1), 173–204.
- Chambers R. and Conway, G. (1992). Sustainable rural livelihoods: Practical concepts for the 21st century. IDS Discussion Paper no 296, Institute of Development Studies, Sussex, UK.
- Collinson, S. (2003). *Power, livelihoods and conflict: Case studies in political economy analysis for humanitarian action*. HPG Report 13, Humanitarian Policy Group, Overseas Development Institute, London (February).
- Crush, J. S. (1995). *Power of development*. London: New York, Routledge.
- De Haan, L. J. (2012). The livelihood approach: A critical exploration. *Erdkunde*, 66(4), 345–357.
- De Haan, L. J. (2017). Livelihoods in development. *Canadian Journal of Development Studies/Revue canadienne d'études du développement*, 38(1), 22–38.
- De Haan, L. J., & Zoomers, A. (2005). Exploring the frontier of livelihoods research. *Development and Change*, 36(1), 27–48.
- de la Cadena, M. (2015). *Earth beings: Ecologies of practice across Andean worlds*. Durham, NC: Duke University Press.
- Dfid (1999). *Key sheets for sustainable development: Overview*. London: Department for International Development.
- Ellis, F. (2000). *Rural livelihoods and diversity in developing countries*. Oxford: Oxford University Press.

- Escobar, A. (1995). *Encountering development: The making and unmaking of the Third World*. Princeton: Princeton University Press.
- Escobar, A. (2007). 'Post-development' as concept and social practice. In A. Ziai (Ed.), *Exploring post-development: Theory and practice, problems and perspectives* (pp. 18–31). Abingdon: Routledge.
- Escobar, A. (2010). Latin America at a Crossroads. *Cultural Studies*, 24(1), 1–65.
- Fine, B., & Lapavistas, C. (2004). Social capital and capitalist economies. South-Eastern Europe. *Journal of Economics*, 2(1), 17–34.
- Fine, B., & Saad-Filho, A. (2017). Thirteen things you need to know about neoliberalism. *Critical Sociology*, 43(4–5), 685–706.
- Folbre, N. (1986). Cleaning house: New perspectives on households and economic development. *Journal of Development Economics*, 22(1), 5–40.
- Fox, J., Nghiem, T., Kimkong, H., Hurni, K., & Baird, I. G. (2018). Large-scale land concessions, migration, and land use: The paradox of industrial estates in the Red River Delta of Vietnam and rubber plantations of Northeast Cambodia. *Land*, 7. <https://doi.org/10.3390/land7020077>.
- Giddens, A. (1979). *Central problems in social theory: Action, structure, and contradiction in social analysis*. Berkeley and Los Angeles: University of California Press.
- Giddens, A. (1984). *The constitution of society: Outline of the theory of structuration*. Berkeley and Los Angeles: University of California Press.
- Gillen, J., Bunnell, T., & Rigg, J. (2022). Geographies of ruralization. *Dialogues in Human Geography*. <https://doi.org/10.1177/20438206221075818>.
- Gingrich, A., & Fox, R. G. (2002). *Anthropology, by comparison*. London: Routledge.
- Hanrahan, K. B. (2015). Living care-fully: The potential for an ethics of care in livelihoods approaches. *World Development*, 72, 381–393.
- Haraway, D. J. (1991). *Simians, cyborgs, and women: The reinvention of Nature*. London: Routledge.
- Haraway, D. J. (2016). *Staying with the trouble: Making kin in the Chthulucene*. Durham, NC: Duke University Press.
- Harriss, J. (2001). Public action and the dialectics of decentralisation: Against the myth of social capital as 'the missing link in development'. *Social Scientist*, 29(11/12), 25–40.
- Harriss-White, B. (2007). *Rural commercial capital: Agricultural markets in West Bengal*. New Delhi: OUP.
- Harriss-White, B. (2008). Introduction: India's rainfed agricultural dystopia. *The European Journal of Development Research*, 20(4), 549–561.
- Harvey, D. (2005). *A brief history of neoliberalism*. Oxford: Oxford University Press.
- Hickey, S., & Bracking, S. (2005). Exploring the politics of chronic poverty: From representation to a politics of justice? *World Development*, 33(6), 851–865.
- Hickey, S., & du Toit, A. (2007). *Adverse incorporation, social exclusion and chronic poverty*. Manchester: Chronic Poverty Research Centre, No. 81.
- Horner, R. (2019). Towards a new paradigm of global development? Beyond the limits of international development. *Progress in Human Geography*, 44(3), 415–436.
- Horner, R., & Hulme, D. (2019). From international to global development: New geographies of 21st century development. *Development and Change*, 50(2), 347–378.
- IPCC (2018). *Global Warming of 1.5 °C: An IPCC special report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty*. Geneva: Intergovernmental Panel on Climate Change.
- Jones, G. W. (1997). The thoroughgoing urbanization of East and Southeast Asia. *Asia Pacific Viewpoint*, 38(3), 237–249.
- Jones, G. W. (2018). The thoroughgoing urbanization of East and Southeast Asia revisited. In T. Bunnell & D. P. S. Goh (Eds.), *Urban Asias: Essays on Futurity Past and Present* (pp. 297–304). Berlin: Jovis Verlag GmbH.
- Kenney-Lazar, M. (2018). Governing dispossession: Relational land grabbing in Laos. *Annals of the American Association of Geographers*, 108(3), 679–694.
- Klenk, N., Fiume, A., Meehan, K., & Gibbes, C. (2017). Local knowledge in climate adaptation research: Moving knowledge frameworks from extraction to co-production. *WIREs Climate Change*, 8(5) e475.
- Knodel, J., Teerawichitchainan, B., Prachuabmoh, V., and Pothisiri, W. (2015). *The Situation of Thailand's Older Population: An update based on the 2014 Survey of Older Persons in Thailand*. Population Studies Center Research Report 15-847. Ann Arbor, MI, University of Michigan.
- Latour, B. (1993). *We have never been modern*. Harlow: Longman.
- Latour, B. (2005). *Reassembling the social: An introduction to actor-network-theory*. Oxford: OUP.
- Law, J. (2015). What's wrong with a one-world world? *Distinktion: Journal of Social Theory*, 16(1), 126–139.
- Leach, M., & Mearns, R. (Eds.). (1996). *The lie of the land: Challenging received wisdom on the African environment*. Oxford: International African Institute in association with James Currey.
- Leach, M., Mearns, R., & Scoones, I. (1999). Environmental entitlements: Dynamics and institutions in community-based natural resource management. *World Development*, 27(2), 225–247. [https://doi.org/10.1016/S0305-750X\(98\)00141-7](https://doi.org/10.1016/S0305-750X(98)00141-7).
- Lerche, J. (2013). The agrarian question in neoliberal India: Agrarian transition bypassed? *Journal of Agrarian Change*, 13(3), 382–404.
- Li, T. M. (2007). *The will to improve: Governmentality, development, and the practice of politics*. Durham: Duke University Press.
- Lowder, S.K., Sánchez, M.V., and Bertini, R. (2021). Which farms feed the world and has farmland become more concentrated? *World Development* 142.
- Lund, C. (2014). Of what is this a case? Analytical movements in qualitative social science research. *Human Organization*, 73(3), 224–234.
- Malm, A. (2016). *Fossil capital: The rise of steam-power and the roots of global warming*. London: Verso.
- Mansuri, G., Rao, V., & the World Bank (2013). *Localizing development: Does participation work?* Washington: D.C., World Bank.
- Matondi, P. B. (2012). *Zimbabwe's fast track land reform*. Uppsala: Nordic Africa Institute and London: Zed Books.
- Mbembe, A. J. (2016). Decolonize the university: New directions. *Arts and Humanities in Higher Education*, 15(1), 29–45.
- McMichael, P. (2010). Introduction, food, energy, environment: Crisis of the modern world-system. *Review (Fernand Braudel Center)*, 33(2/3), 95–102.
- Mignolo, W. D. (2007). Delinking. *Cultural Studies*, 21(2–3), 449–514.
- Mitchell, T. (2002). *Rule of experts: Egypt, techno-politics, modernity*. Berkeley: University of California Press.
- Mol, A. (2010). Actor-network theory: Sensitive terms and enduring tensions. *Kölnler Zeitschrift für Soziologie und Sozialpsychologie. Sonderheft*, 50(1), 253–269.
- Mosse, D. (2005). *Cultivating development: An ethnography of aid policy and practice*. London: Pluto Press.
- Mosse, D. (2010). A relational approach to durable poverty, inequality and power. *The Journal of Development Studies*, 46(7), 1156–1178.
- Natarajan, N., Brickell, K., & Parsons, L. (2019). Climate change adaptation and precarity across the rural-urban divide in Cambodia: Towards a 'climate precarity' approach. *Environment and Planning E: Nature and Space*, 2(4), 899–921.
- Ngarava, S. (2020). Impact of the Fast Track Land Reform Programme (FTLRP) on agricultural production: A tobacco success story in Zimbabwe? *Land Use Policy*, 99.
- Newsham, A., Shonhe, T., and Bvute, T. (2021). Commercial tobacco production and climate change adaptation in Mazowe, Zimbabwe. APRA Working Paper 64, Brighton: Future Agricultures Consortium, DOI: 10.19088/APRA.2021.023.
- Noxolo, P. (2017). Introduction: Decolonising geographical knowledge in a colonised and re-colonising postcolonial world. *Area*, 49(3), 317–319.
- Odi (1998). *The UK White Paper on international development - and beyond. Briefing Paper 2 (May)*. London: Overseas Development Institute.
- O'Laughlin, B. (2004). Book reviews. *Development and Change*, 35(2), 385–403.
- Olsson, L., M. Opondo, P. Tschakert, A. Agrawal, S.H. Eriksen, S. Ma, L.N. Perch, and S.A. Zakiideen (2014). Livelihoods and poverty. In: *Climate Change 2014: Impacts, Adaptation, and Vulnerability*. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, edits C.B. Field et al. Cambridge University Press, Cambridge, pp. 793–832.
- Patnaik, U. (Ed.). (1990). *Agrarian relations and accumulation: The 'mode of production' debate in India*. Bombay, Delhi, Calcutta, Madras: Oxford University Press.
- Ribot, J., & Peluso, N. (2003). A theory of access. *Rural Sociology*, 68(2), 153–181.
- Rigg, J. (2019). *More than rural: Textures of Thailand agrarian transformation*. Honolulu: Hawaii University Press.
- Rigg, J. (2020). *Rural development in Southeast Asia: Dispossession, accumulation and persistence*. Cambridge: Cambridge University Press.
- Rist, G. (1997). *The history of development: From western origins to global faith*. London: Zed Books.
- Scoones, I. (1998). Sustainable rural livelihoods: A framework for analysis. IDS Working Paper no 72, Institute of Development Studies, Sussex, UK.
- Scoones, I. (2009). Livelihoods perspectives and rural development. *The Journal of Peasant Studies*, 36(1), 171–196.
- Scoones, I. (2015). *Sustainable livelihoods and rural development*. Rugby, UK: Practical Action Publishing.
- Sen, A. (1985). *Commodities and capabilities*. Amsterdam: North Holland Publishing.
- Shah, A., & Lerche, J. (2020). Migration and the invisible economies of care: Production, social reproduction and seasonal migrant labour in India. *Transactions of the Institute of British Geographers*, 45(4), 719–734.
- Shonhe, T. (2019). The changing agrarian economy in Zimbabwe, 15 years after the Fast Track Land Reform programme. *Review of African Political Economy*, 46(159), 14–32.
- Small, L.-A. (2007). The sustainable rural livelihoods approach: A critical review. *Canadian Journal of Development Studies/Revue canadienne d'études du développement*, 28(1), 27–38.
- Smith, L. T. (2012). *Decolonizing methodologies: Research and indigenous peoples*. London: Zed Books.
- Solesbury, W. (2003). *Sustainable livelihoods: A case study of the evolution of DFID Policy*. London (June): Overseas Development Institute.
- Stark, O., Taylor, J. E., & Yitzhaki, S. (1988). Migration, remittances and inequality. *Journal of Development Economics*, 28, 309–322.
- Steffen, W. et al. (2018). Trajectories of the earth system in the Anthropocene. *Proceedings of the National Academy of Sciences*, 115(33), 8252–8259.
- Steinbrink, M., and Niedenführ, H. (2020) *Africa on the move: migration, translocal livelihoods and rural development in Sub-Saharan Africa*. Cham, Switzerland: Springer.
- Sumner, A. (2013). Poverty, politics and aid: Is a reframing of global poverty approaching? *Third World Quarterly*, 34(3), 357–377.
- Sumner, A. (2016). *Global poverty: Deprivation, distribution and development since the Cold War*. Oxford: Oxford University Press.
- Taylor, M. (2015). *The political ecology of climate change adaptation*. Abingdon: Routledge.

- Tiffen, M., Mortimore, M., & Gichuki, F. (1994). *More people, less erosion: Environmental recovery in Kenya*. Chichester, UK: John Wiley.
- TIMB (2018). *Annual Statistical Report 2018*. Tobacco Marketing Board of Zimbabwe <https://www.timb.co.zw/storage/app/media/Annual%20Stats%20Report/2018%20ANNUAL%20STATISTICAL%20REPORT.pdf>.
- Tong, R. (1993). *Feminine and feminist ethics*. Belmont, Calif.: Wadsworth Pub. Co.
- Undp (1990). *Human Development Report 1990. Published for the United Nations Development Programme (UNDP)*. New York and Oxford: Oxford University Press.
- UNDP (2017). *Guidance note: Application of the sustainable livelihoods framework in development projects*. Panama City: United Nations Development Programme, Regional Centre for Latin America and the Caribbean.
- van Dijk, T. (2011). Livelihoods, capitals and livelihood trajectories: A more sociological conceptualisation. *Progress in Development Studies*, 11(2), 101–117.
- Vicol, M. (2018). Potatoes, Petty Commodity Producers and Livelihoods: Contract Farming and Agrarian Change in Maharashtra, India. *Journal of Agrarian Change*, 19(1), 135–161.
- WCED (1987). *Our common future*. Oxford: Oxford University Press.
- Weis, T. (2010). The accelerating biophysical contradictions of industrial capitalist agriculture. *Journal of Agrarian Change*, 10(3), 315–341.
- Wilson, K. (2012). *Race, racism and development: Interrogating history, discourse and practice*. London: Zed Books.
- World Bank (2016). *Poverty and shared prosperity 2016: Taking on inequality*. Washington DC: World Bank.
- ZINGSA, (2020). *Technical report on revision of Zimbabwe agro-ecological zones*. Harare: Government of Zimbabwe under Zimbabwe National Geospatial and Space Agency (ZINGSA).