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Enabling modernisation, marginalising alternatives? Kenya's agricultural policy and smallholders

Fredrick Ajwang[1] | Saurabh Arora[2] | Joanes Atela[3] | Joel Onyango[3] | Mohammad Kyari[4]

[1]Department of Political Economy, Bush House, King's College London, London, United Kingdom

[2]Science Policy Research Unit, University of Sussex, Brighton

[3]African Centre for Technology Studies, ICIPE Duduville Campus, Nairobi, Kenya

[4]African Union Scientific Technical Research Commission, Abuja, Nigeria

Correspondence
Saurabh Arora, Science Policy Research Unit, University of Sussex, Falmer, Brighton, UK.
Email: s.arora@sussex.ac.uk

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Abstract

To address intensifying social and environmental challenges, development policy must learn from inclusions and exclusions of past discourses. We analyse Kenya's post-colonial agricultural policy discourse. Our analysis reveals a near-exclusive focus on the promotion of *agricultural modernisation* based on industrial farm inputs, a bureaucratic state and/or 'the liberalised market'. It was with this thrust to modernise that smallholders (and other farmers) were generally seen as aligning. Smallholders' agency to diverge from modernisation was thus marginalised in the policy discourse. Overall then, the promotion of diverse agroecological and other farmer-led directions of development was largely missing from Kenya's policy landscape.

KEYWORDS
agricultural development, directions of development, discourse analysis, smallholders' agency, sustainability, sustainable development goals

1 | INTRODUCTION

Agriculture is the mainstay of Kenya's economy. It accounts for roughly 51% of the country's gross domestic product, both directly and indirectly through linkages with other sectors (Kenya National Bureau of Statistics

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[KNBS], 2018; World Bank, 2019). Within this, smallholder farming forms 70% of total marketed agricultural production in Kenya (KNBS, 2018; World Bank, 2015). As 75% of Kenyans earn all or part of their income from agriculture, the sector's development affects a larger section of the population than any other economic sector (Alila & Atieno, 2006; Government of Kenya, 2015, 2019). Agriculture therefore has been central to Kenya's policies for economic development and poverty reduction (see Alila & Atieno, 2006; Government of Kenya, 2009; Wiggins et al., 2010). Agriculture is also at the heart of Kenya's efforts to meet the United Nations' (2015) Sustainable Development Goals (Government of Kenya, 2019).

Effective policymaking to realise sustainable development requires that lessons be learnt from policy *framings* of the past (de Hoop & Arora, 2021). Framings can help trace the ways in which particular actors and relationships are promoted in policy discourses and which others are marginalised or excluded (Callon, 1998). Such an examination of framings of different actors and interests is currently neglected in the literature on Kenya's agricultural policies. The present paper is an attempt to address this neglect. In particular, we ask how Kenya's agricultural policy discourses frame *smallholders' agency* and shape agricultural development.

We define agency as the capacity to transform social, ecological and technical processes. This capacity is enabled and constrained by people's relations with others (Arora et al., 2021), which are structured by political institutions, social norms, cultural values, economic interests, natural resources, technical artefacts and knowledge systems (Giddens, 1984). Using this definition of agency to analyse Kenya's agricultural policy discourses since the 1970s, we find that smallholders were framed firstly as passive beneficiaries of state-led *modernisation* interventions. These interventions were seen as organised mainly through the state. They focused on providing modern industrial inputs such as 'improved' seeds, synthetic fertilisers and chemical pesticides to enable farmers' agency to grow food. This changed in the 1980s with the rise of 'liberalisation' when the focus shifted to 'the market' as the main source of industrial farm inputs. Policy framings started viewing farmers as actively pursuing rational learning and resource allocation in response to incentives from deregulated markets for crops (Hazell et al., 2007). This thrust of modernisation through the liberalised market was further entrenched in the 1990s (Bernstein, 2004; Mwega & Ndung'u, 2002).

Our findings suggest that Kenya's post-colonial policy discourse, consistently framed smallholders' agency as comprehensively *aligning with modernisation*. Such framings pushed smallholders' possible divergence from modernisation out of the picture. Smallholders were approached as actors whose agency was constituted only by the state and the market. Thus, the enabling of smallholders' agency through their diverse relations with each other, with civil society organisations and with 'nature', were pushed out of the picture. The vitality of smallholders' agency was thereby restricted by framing them as compliant followers of development directions set by policy 'experts' and institutions promoting modern science and technology as well as markets made through the discipline of economics (cf. Mitchell, 2002, 2008).

We argue that by framing smallholders' (and other farmers') agency as aligned with modernisation alone, Kenyan agricultural policies silenced complementary models and marginalised alternative directions of sustainable development based on farmer-led options in agroecology, organic agriculture, agroforestry and the like (e.g., see Alliance for Food Sovereignty in Africa [AFSA], 2016; Arora et al., 2019; de Bont et al., 2019; Goldberger, 2008; Richards, 1985). In irrigation, for instance, alternatives to modernisation may be based on a range of farmer-led techniques documented by Woodhouse et al. (2017). These include 'furrow irrigation systems' that divert water from mountain streams and 'shallow groundwater or wells' in the bottom of valleys (in contrast to modern pumps and borewells promoted by agencies like the World Bank). Rather than supporting development based on farmer-led techniques and knowledges, mainstream initiatives like the Alliance for a Green Revolution in Africa (AGRA) driven by large philanthropic organisations and the state remain focused on entrenching agricultural modernisation (AGRA, 2012; Wise, 2021).

Our analysis is informed by the general insight that agency of farmers and other societal actors can support multiple directions of development in any area of activity (Schot & Steinmuller, 2018; Stirling, 2009). Crucially, in order to realise sustainable development, these directions can unfold within and beyond modernisation (Arora et al., 2019;

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Escobar, 2018). Kenyan agricultural policy discourse exclusively promotes modernisation and overlooks alternative possible directions of development. This normalises modernisation as *the only way* to 'improve' and appraise agricultural performance (cf. Arora et al., 2019; Mitchell, 2002).

In the following, we approach agricultural policy as measures defined and undertaken by the state to direct, guide, supervise and regulate agricultural development (Hebinck, 1990, p. 32). These measures are often claimed to facilitate the growth of agricultural productivity and output (and general economic growth of a country). Agricultural modernisation may be defined as process of development based on technology and industrialisation (Bernstein, 1989; Matunhu, 2011). This definition may be further elaborated to approach modernisation as those directions of social, ecological and technical development, to which *imaginations of control* are central. These include the control imagined over reason by science, territory by state, organisation by bureaucracy, production by industry and society by 'the economy' (Arora & Stirling, 2020; Mitchell, 2008; Stirling, 2019). Control may be aimed through a wide range of modern technologies too: from pesticides to genetically engineering crops and 'precision' agriculture based on artificial intelligence and data analytics (Arora et al., 2020). As part of modernisation, such technologies can be promoted through state-led developmen (with support from aid agencies and philanthropic organisations) or through an expanding private sector (Mitchell, 2002).

As a critical background to our analysis, we begin with a brief overview of colonial agricultural policy. We then analyse post-colonial policy debates up to the current discourse of devolved system of governance. The roots of post-colonial agricultural policies, according to Lofchie (1989), are to be found in Kenya's colonial agriculture. These 'roots', however, are not fixed but rather adjusted into the context of later policies by different institutions and agencies (Arora et al., 2014). They are thus entangled with dominant policy paradigms of the 1960s and 1970s (state-centred development), 1980s–1990s (from market-oriented reforms to full-blown neoliberalism) and the 'post-reforms' era of 21st century Kenya.

2 | SETTLER FARMING AND AGRICULTURAL MODERNISATION IN COLONIAL KENYA

Agriculture in colonial Kenya consisted of a well-developed agro-export sector driven by European settlers and a neglected sector based on African smallholders (Fahnbulleh, 2006). The colonial state established a bureaucratic apparatus, including agricultural parastatals, to finance and provide inputs and research support to settler farmers (Hebinck, 1990). Settler agriculture was based on the model of land appropriation and consolidation by white farmers and the prohibition of Africans from cultivating high-value export crops (Leys, 1996). African smallholder agriculture was expected to complement and not compete with settler agriculture, but it was offered limited support by the state (Thurston, 1987).

The colonial policy bias resulted in increased deprivation among African farmers and is claimed to be a central reason behind peasant revolts against the colonial state as part of the Mau Mau uprising in the 1950s (Bradshaw, 1990; Hebinck, 1990; Leys, 1996). To quell the uprising, the colonial state commissioned and implemented the Swynnerton Plan of 1954, to intensify and develop African agriculture through land consolidation, incorporation of smallholders into cash crop farming and the availing of improved farm inputs (Bradshaw, 1990). This was done by directing aid to an emerging (middle) class of loyalist African farmers.

The Swynnerton Plan is considered to have provided the basis for much post-independence agricultural policymaking in Kenya (see Hebinck, 1990). In particular, the Plan is regarded as a cornerstone of policies aim to modernise smallholder agriculture in Kenya (Minot & Ngigi, 2004; Nyangito & Okello, 1998). Agricultural modernisation in Kenya thus has its roots in the colonial period. This history is often overlooked in policy discourses. The implementation of Swynnerton Plan is claimed to have produced a twofold increase in smallholder output between 1955 and 1964, ostensibly as some smallholders were integrated into the agro-export sector (Bradshaw, 1990). Critics observed that the positive outcomes were restricted to farmers with larger parcels of land who could acquire credit

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using land titles as security (Bradshaw, 1990; Leys, 1975). Arguably, a crucial outcome from the Plan was the stabilisation of the state's 'bureaucratic' approach to modernising Kenyan agriculture (Atela et al., 2018).

As we document below, Kenya's post-colonial agricultural policymaking displays significant continuities with the Swynnerton Plan and other colonial institutions. Post-colonial Kenya inherited a well-organised group of bureaucrats who were members of the civil service under the colonial administration. For these administrators, Kenyan development required economic growth that was best achieved through modern 'technology transfer, planning, social engineering, pragmatism, open markets, and industrialization' (Fourie, 2014: 557). In pursuing these central aspects of modernisation, early post-colonial policymaking focused on the *adoption* by farmers of technologies that were promoted, rather than on farmer-led *adaptation* of technologies to diverse socio-ecological contexts of Kenya (Atela et al., 2018). In the following, we ask how this framing of farmers' agency as simply adopting things promoted by the state (and later by markets) relates to the setting of development directions. Do policy discourses approach smallholders largely as powerless followers of state- and market-led development directions? Is smallholders' agency framed as generally aligning with, rather than diverging from, modernisation agendas set through the state and/or the market?

3 | FRAMING AGENCY

Human understandings of social and environmental phenomena are approached as *framings*. Depending on the particular methods, models, assumptions, interests and values involved in the development of understandings (Leach et al., 2010), multiple framings of the same reality are possible. This means that any single framing of a social/environmental phenomenon is generally incomplete. While some aspects of a phenomenon may be prominently included in a framing, other aspects may be marginalised or excluded (Goffman, 1974). The politics of such inclusions and exclusions in policy framings can offer useful insights into dominating trends of particular eras such as neoliberalism (Callon, 1998; Mitchell, 2002). For instance, political ecologists have highlighted how dominant policy framings not only help legitimise mainstream development (and conservation) projects but also marginalise alternative solutions based in 'local' people's knowledges and practices (e.g., Baka, 2014; Massarella et al., 2018). Therefore, policy framings can wield power by helping inspire and legitimise some directions of development, while stifling other possibilities (de Hoop & Arora, 2021; Stirling, 2009).

Agency as a concept has a long history in social theory. To review these different understandings is beyond the scope of this paper (for necessarily partial overviews, see Emirbayer & Mische, 1998; Robb, 2010). Here, we briefly outline a relational and a structural conceptualisation of agency.

Human beings are embedded in relations with other humans and with nonhumans in ecology and technology. This implies that agency as the *capacity to transform social, ecological and technical processes* is enabled and constrained by relational webs connecting different humans and nonhumans (Arora et al., 2021). These relational webs are *situated* in specific practices such as pest management and seed production, which are performed on and beyond farms. This means that a relational approach can help map variations in the performance of agency, in the 'same' practice (e.g., sowing of seeds; sale of crops), between different farmers and across diverse socio-ecological settings (Arora et al., 2013).

In contrast to the sensitivity to difference potentially afforded by relational approaches, structural approaches to agency are geared towards grasping regularities in human action over time and space. Structures such as social norms alongside built and natural environments are viewed as enabling and constraining human agency. In turn, as agency is performed, it constitutes (and adapts) structures (Giddens, 1984). This mutual constitution of structure and agency is referred to as structuration. In policy framings, both structures and relations constituting agency can be overlooked to *reduce agency to individual* capacity. Such marginalisation of structures and relations is also common in disciplines like neoclassical economics where individual agency can be associated with a profit-maximising firm or utility-optimising consumer (Callon, 1998).

In the following, we map how agency is framed in Kenyan agricultural policy discourses. We map if smallholders' (and other farmers') agency is framed as *aligning* with modernisation promoted through public and private

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interventions. We also map if farmers' agency is observed as *divergent*, carrying the potential of moving agricultural development away from modernisation as prescribed. Framings of divergent agency can include recognition of farmers' creative adaptation of industrial technologies in ways that deviate from modernisation as prescribed by the state and/or the private sector (Atela et al., 2018). In terms of alternatives to agricultural modernisation, farmers' divergent agency can also be framed as contributing to development directions such as agroecology and organic agriculture. In considering such directions of development, how farmers' agency is constituted by relations with non-governmental organisations and farmers' organisations may also be included (Goldberger, 2008).

In addition, where policy framings attribute agency to a group of actors, we map if and how within-group differences are taken into account. Groups of actors can include smallholders, farm workers, the state, extension officers and firms. Such a group may be homogenised, if differences within it are denied. Differences among smallholders can include genders, ethnicities, domestic responsibilities, farm sizes, access to water, climatic zone and soil quality.

4 | METHODOLOGY

We use discourse analysis to examine framings of agency in Kenyan agricultural policies while also reviewing the academic literature on the policies. Discourses shape (boundaries of) thought and action (Foucault, 2001). They describe social and physical realities using a 'specific ensemble of ideas, concepts and categorizations' (Hajer, 1995, p. 44). As justifications for decisions, discourses can make some issues and aspects seem problematic. In this way, they can lend support to specific policy actions over others. They can also help in the formation of certain coalitions (e.g., for and against a particular policy), while making others less likely (Hajer & Versteeg, 2005).

Critically, discourses help assign different roles to specific actors and groups (Gee, 1999). For example, smallholders may be assigned the role of credit takers and technology adopters, rather than knowledge producers and movement builders. In this way, discourses imagine a world in which certain roles are considered beyond the pale for some actors. Through relationships with other elements (ecological, technical and social) in practices (Chiapello & Fairclough, 2002), discourses help realise the world they imagine (Gee, 1999).

Our data are from two sources. First, we used the Kenyan national government's policy documents for our discourse analysis. Complementing these documents, we reviewed relevant academic literature. For selecting the academic literature, we used Scopus, searching for 'Agricultural Policy' AND 'Kenya' between 1970 and 2019. This search yielded 60 articles. Going through the abstracts of the 60 articles, we identified those that directly address *Kenyan agricultural policy* (rather than policy in another part of the world while marginally mentioning Kenya). This resulted in 39 relevant academic articles. We reviewed these articles closely to focus on how smallholders' roles were framed in older policies: what things were smallholders represented as doing and with what effects (Arora, 2017). The same mapping was carried out for our discourse analysis of three recent policy documents of the national government: the 2004 Strategy for Revitalising Agriculture (SRA); the 2010–2020 Agricultural Sector Development Strategy (ASDS); and the 2013 Agriculture, Fisheries and Food Authority (AFFA) Act.

By focusing on these national policies, we do not assume that Kenyan agricultural policy has been insulated from international discussions at the African Union and other multilateral agencies. It may also be true that Kenyan policymakers have in part tried to emulate developments in middle-income countries like Malaysia (see Fourie, 2014). We assume that the influence of these international discussions and developments is reflected in the national policies themselves. Unfortunately, it is beyond the scope of this paper to directly trace the connections between Kenyan national policies and international trends.

The second sources of data we used were semi-structured interviews with key actors. These helped us to bring the analysis to the present and validate the results of the discourse analysis. In January–February 2019, we interviewed four agricultural policymakers including a Senior Agricultural Officer in Machakos County, a Principal Agriculture Policy Officer from the Ministry of Agriculture headquarters in Nairobi, a member of Agriculture Committee in the Council of Governors secretariat and a member of the Joint Agriculture Sector Consultation and Cooperation

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Mechanism (JASCOM).[1] In August 2019, we conducted five additional interviews with other Kenyan agriculture 'experts'. These included an international NGO employee working on environment and climate issues in agriculture, an officer of the Kenya Agricultural and Livestock Research Organisation (KALRO) and three mid-level policymakers from the national government's agriculture ministry in Nairobi.

For purposes of narration, we follow Cabral and Scoones (2006) in dividing our analysis into four main agricultural policy periods in Kenya. These include state-led planning (late 1960s and 1970s), the period of liberalisation (1980s–1990s) and the post-liberalisation era in the first decade of the 21st century. This is followed by the most recent (2013–2019) Devolution era. However, we note that these periods are not independent of each other. Instead there are overlaps and connections between policies of different periods. We conclude by discussing the implications of our findings for future agricultural policies for sustainable development in Kenya.

5 | EARLY POST-COLONIAL STATE-LED MODERNISATION

Having inherited colonial institutions like the civil service and inspired by the Swynnerton Plan (as discussed above), Kenya's post-colonial policy discourse adopted a bureaucratic approach to managing agricultural development. This management was attempted largely through government departments and parastatal organisations (Atela et al., 2018; Bates, 1989; Lofchie, 1989; Nyangito, 1999). In this process, research programmes, agricultural extension, credit facilities and marketing systems were established and expanded. New crops and technologies including 'improved' varieties, fertilisers and farm implements were promoted. The overall aim was to extend the *modernisation* of smallholder agriculture, with the ostensible aims of achieving food self-sufficiency and expanding production for export to ensure that the agricultural sector brought in foreign exchange earnings (Hebinck, 1990; Lele, 1989). These earnings were considered crucial for wider industrialisation and rapid economic growth of the country.

5.1 | Import substituting industrialisation

The Kenyan government's overall development strategy was articulated in the sessional paper no. 10 of 1965 titled *African Socialism and its Application to Planning in Kenya* (Jabara, 1985; Ochieng, 2007). This strategy was aimed at achieving national income growth through modernisation based on Import Substitution Industrialisation (ISI). To distribute the growing income equitably among the population, it sought to tackle 'deficiencies' in education, health and other sectors (Heyer, 1981; Jabara, 1985). Under ISI, agriculture as the mainstay of Kenya's economy was expected to generate surplus to be channelled towards industrialisation in multiple areas of activity (Gitau et al., 2008; Gow & Parton, 1995).

In the early 1970s, the ISI strategy was expanded. The import of modern farm inputs such as synthetic fertilisers and chemical pesticides was restricted, while the fledgling local farm inputs manufacturing industry was promoted. The import of agricultural commodities was controlled to stimulate local productivity (Cox, 1984; Gerdin, 2002; Gitau et al., 2008; Nyangito, 1999). Crop prices were also controlled, for example, through favourable pricing of agricultural output procured by the government. Under these controls, smallholders were expected to benefit from low-cost agricultural inputs (manufactured domestically) and from higher crop prices realised due to import restrictions and crop price regulation (Gitau et al., 2008; Mosley, 1986). New maize varieties were seen to be developed by public research institutes, now under the Kenya Agriculture Research Institute (KARI), while seed production was in the hands of the public-sector Kenya Seed Company (KSC). Framed as passive 'beneficiaries' of agricultural modernisation driven by such organisations, smallholders were *not* approached as political mobilisers for land redistribution and agricultural transformation, a form of divergent agency they had clearly exercised in the colonial era through the Mau Mau uprising.

[1]JASCOM was formed in 2017 with the mandate to coordinate agriculture policy and interventions between the national and county governments.

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The adoption of modern inputs among smallholders was considered uneven, depending on differences in farm sizes and in agroecological potentials across different regions in terms of climate, soil quality and water availability (Gerhart, 1975). Adoption of 'improved' maize varieties was reported to be widespread among smallholders but only in high maize potential regions in the Kenyan highlands (Orvis, 1989). The use of chemical fertiliser was seen as constrained by its lack of affordability for most smallholders and by the dearth of agricultural extension services (Gerhart, 1975; Howard et al., 1999; Wolgin, 1975). In this context of uneven adoption of modern technologies, an annual increase in smallholder production of 4.92% was reported between 1964 and 1972, which was realised mainly through the expansion of land area under smallholder cultivation (Nyangito, 1999; Orvis, 1989).

Also aligning with the Swynnerton Plan of the colonial period, private land tenure was promoted (Mwega & Ndung'u, 2002). It was expected that private tenure would increase the number of smallholders who accessed formal credit. Adoption of private tenure was reported to be high among smallholders in Central Kenya than in other areas. However, the promotion of private tenure was considered a failure as most farmers were reluctant to use their land as collateral against loans (Barrows & Roth, 1990). As a one-size-fits-all strategy for modernisation, private tenure was also extended to pastoralist communities, ignoring the fact that these communities had relied on communal land ownership systems for centuries (Hebinck, 1990). Pastoralists' resistance to private tenure meant that they ended up receiving little in terms of state support for development (Hogg, 1986). In this way, alternative directions of development driven by pastoralists' agency constituted by their communal land tenure systems were not supported by the state.

By the late 1970s, the expansion of cultivated land by smallholder agriculture had slowed down (Lofchie, 1986). Also, an unintended negative impact of ISI had been observed: increasing costs of locally produced inputs. The high costs made the inputs unaffordable and inaccessible to most smallholders (Bates, 1989; Gerdin, 2002; Mosley, 1986). As a result, the ISI strategy was seen as a failure because it had ostensibly constrained smallholders' access to modern inputs and thereby failed to enable their agency to implement agricultural modernisation as expected. Even in this critical assessment, the agency of the state and of an inefficient local farm-input manufacturing sector was still framed as the real forces driving smallholder production.

Although smallholders' uneven adoption of modern agricultural inputs was observed, it was considered to be a function of differences in farm sizes, climate, soil quality and water availability. While these differences were acknowledged, smallholders were not framed as making an informed choice to adopt, adapt or indeed refuse modern farm inputs based on their farm's different ecological conditions. This overlooked smallholders' agency to adopt, adapt or refuse technologies, as constituted by their relations with local farm ecologies, water availability, climate variations and policy frameworks. By overlooking adaptation and refusal, policy framings also failed to recognise how smallholders' agency might diverge from state-supported agricultural modernisation. Smallholders' agency was instead framed as passively enabled by and complying with the state's modernisation strategies.

5.2 | Kenyan Green Revolution (GR)?

During the 1970s, it was reported that agricultural production grew at an average rate of 3.8% per year. This was one percentage point lower than the annual growth rate in the previous decade (Jabara, 1985). To explain the slowing down of growth, a late 1970s policy discourse deployed a Malthusian crisis framing, in which population growth was viewed to have outstripped agricultural production (Cox, 1984; Mosley, 1986; Orvis, 1989). Crucially, smallholder production was problematised for its low yields and for displaying very limited potential for the rapid productivity growth required to feed a growing population (Cox, 1984; Heyer, 1981). This Malthusian problematisation was used to further promote the modernisation of smallholder farming (cf. Escobar, 1995), under which rural development initiatives started being modelled along the Asian GR (Scoones & Thompson, 2011).

In this GR discourse, smallholders were framed as benefitting from a wide range of modernising interventions including formal credit, new technology (e.g., 'improved' seeds and fertilisers) and scientific knowledge delivered by extension services (Mosley, 1986; Scoones & Thompson, 2011). Smallholders' agency was framed as compliant, by

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adopting modern technology, markets and formal credit. Thus, smallholders were not framed as knowledgeable people who adapt what they adopt, in order to make it suitable for their socio-ecological contexts (Atela et al., 2018; Glover et al., 2016). Instead, as noted by a KALRO officer we interviewed, technologies such as 'improved' seeds were framed as necessary for all farmers, irrespective of their socio-ecological context.

The GR strategy thus was to standardise smallholder production despite their different ecological conditions. This standardisation was supported by framings of the 'same' problems facing all smallholders, which could be solved by the singular approach of modern technology infusion (Bernstein, 2004). Unlike the 1960s and early 1970s, smallholders' diverse contexts in terms of farm sizes, soil qualities, irrigation systems, climate, skill and knowledge development were overlooked in the GR discourse of the late 1970s (Muyanga & Jayne, 2014). Smallholders were also not approached as actors who learn and respond to the socio-ecological conditions around their farms. When their relationship with soils, agroecological knowledges and crop varieties was acknowledged, it was from the perspective of assumed 'deficiencies'. Smallholders were viewed as *lacking* the 'right' agricultural knowledge, skills, access to markets and productive resources (e.g., their soils were depleted, and they were unable to address the issue without external help) (Bradshaw, 1990; Cox, 1984; Gerdin, 2002). By depicting them as generally 'deficient', and by obscuring the diversity of smallholders, policy could promote the same *standardised GR package* of modern technologies and market access, which was claimed to alleviate their perceived shortcomings (Gerdin, 2002; Odhiambo & Wilcock, 1990).

At the adoption end of GR packages, it was reported that smallholders had increased their use of hybrid maize seeds (Anseeuw, 2010; Cabral & Scoones, 2006). However, they were seen as unable to afford the fertilisers that were meant to be used alongside the seeds (Ongaro, 1988). Given the dearth of extension support available, and the difficulty or reluctance of securing agricultural credit (Heyer, 1981; Lofchie, 1989), some critical academic studies later highlighted that the resilience of smallholders and their creative agency to learn and adapt was central to the growth of agricultural production in the 1970s (cf. Liniger, 1990; Mbogoh, 2000). But in these critical studies too, farmer-led alternatives to modernisation (e.g., agroforestry, agroecology and organic farming) were not foregrounded.

Overall, in the 1970s, divergent forms of smallholders' agency and farmer-led alternatives were marginalised in favour of framings of smallholders as potential adopters of modern technologies like fertilisers and improved crop varieties. To lower barriers to such technological adoption (e.g., due to smallholders' lack of access to capital), the role of parastatal organisations in subsidising synthetic fertilisers was emphasised (Anseeuw, 2010; Scoones & Thompson, 2011). So far as they could, smallholders were observed as complying with state interventions by adopting modern industrial fertilisers, which ostensibly enabled their agency to 'improve' soils, increase yields and alleviate poverty. Even smallholders' agency to learn was framed as dependent on state-led institutions such as East African Agricultural and Forestry Research Organization in the early post-colonial period and later the KARI (Cox, 1984; Heyer, 1981).

It is important to recognise that smallholders' agency was not marginalised in all studies we reviewed. For instance, smallholders were framed as collectively able to address constraints on their access to crop markets. In particular, it was recognised that smallholders can mobilise other farmers to form cooperative societies to access markets (Heyer, 1981) However, in this agency to form cooperatives, smallholders were regarded as enabled by their relations with the state's agricultural extension services. Also, smallholders' agency was imagined as homogeneously aligning with GR-style modernising interventions. In general then, we find that the agricultural policy discourse in this period denied that even a small portion of Kenyan smallholders might diverge from state-led modernisation to pursue alternative directions of development. They simply complied with the state by adopting the promoted ingredients of agricultural modernisation—technologies, science, credit, extension and markets—which were seen as enabling their agency to increase production and improve well-being (Anseeuw, 2010; Cox, 1984; Sitko et al., 2017).

6 | 1980S AND 1990S: DEEPENING LIBERALISATION

By the early 1980s, problematisations in policy discourses had begun to focus on state-led developmental models that were blamed for producing the macroeconomic crisis of high national indebtedness and general 'economic'

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malaise (Gow & Parton, 1995; Moeva, 2007; Sitko et al., 2017). At the same time, a series of droughts between 1979 and 1984 were framed as having led to a food production crisis (Cox, 1984; Mosley, 1986). State-led development was seen as having failed to address the crisis (also because it had failed to realise a GR in Kenya). In general, such problematisations were not used to challenge the strategy of agricultural modernisation *per se*, but rather to pave the way for its continuation through the private sector. The latter was consistent with policy guidelines from The World Bank (WB) and the International Monetary Fund (IMF) (Gitau et al., 2008; Nyangito & Okello, 1998).

Agricultural policy was subsumed under the overall goal of bringing about macroeconomic stability through WB- and IMF-supported 'structural reforms'. These included market liberalisation (particularly the loosening of regulations) and privatisation (including the withdrawal of state agencies from marketing activities) (Jayne et al., 2002). In this era of so-called reforms, the private sector was framed as taking the place of the state in agricultural development (Anseeuw, 2010; Jayne et al., 2002; Yami & Van Asten, 2017). This policy discourse framed farmers as individualised rational agents who respond to incentives from deregulated markets (Gerdin, 2002; Gow & Parton, 1995; Sitko et al., 2017). Crucially, while earlier post-colonial policy had distinguished between smallholders and large farmers, this distinction was abandoned in the policy discourse of the 1980s. Homogenisation was thus reinforced with all farmers framed to generally benefit from the 'structural reforms' (see Gitau et al., 2008; Lele, 1989, 1991).

The 4th, 5th and 6th Development Plans of post-colonial Kenya underscored the need of 'structural reforms'. In the 4th Plan (1979–1983), agriculture was divided into production and marketing. The state was to continue providing support on the production side. This support was expanded under a rural development programme (Cox, 1984; Mosley, 1986), which included extension services and subsidised inputs developed by public research institutions (Cox, 1984; Lele, 1991; Lofchie, 1989; Ojiambo, 1990). On the marketing side, however, calls were made for the state to completely withdraw itself to actualise full deregulation. Farmers were framed as homogeneous beneficiaries of market reforms that removed 'internal restrictions' on the circulation of crops and price controls. At the same time, public enterprises were viewed as requiring privatisation to make them innovative, efficient and competitive in the process of agricultural modernisation (Cabral & Scoones, 2006; Cox, 1984; Lofchie, 1989; Mosley, 1986).

In the 5th Development Plan (1984–1988), liberalisation was extended to both agricultural production *and* marketing, with the state expected to withdraw from directly supporting agricultural production (Mosley, 1986; Odhiambo & Wilcock, 1990). This withdrawal of the state was framed as crucial to address the worsening macroeconomic debt. The Plan emphasised institutional reforms including demand-driven and evidence-based policymaking and planning to realise higher standards of public management and to incentivise private firms to increase their participation in agriculture (Lele, 1989; Mosley, 1986; Scoones et al., 2005).

The aim thus was to promote neoliberalism through private agribusinesses, which was framed as beneficial for all farmers. No direct policy support was offered to farmers, however, to nurture their agency to develop 'indigenous' and agroecological farming systems. The latter can include farmer-led irrigation techniques and the planting of different crops near each other to realise the push–pull system of managing 'pests' without using chemical pesticides (see D'Annolfo et al., 2021; Woodhouse et al., 2017). It is now widely recognised that smallholders' seed conservation practices, and their use and sharing of biodiverse 'traditional' varieties of crops like maize, are crucial for developing climate resilience (e.g., Altieri et al., 2015; Swiderska et al., 2011).

The 6th Development Plan (1989–1993) continued to deepen liberalisation in agriculture (Sitko et al., 2017; Smith & Karuga, 2004). The ostensible aim was to increase the efficiency of agricultural institutions for the benefit of farmers. In particular, parastatals providing marketing, credit and subsidised modern inputs were framed as requiring privatisation (Odhiambo et al., 2004; Winter-Nelson & Argwings-Kodhek, 2007). Higher prices for maize crops were claimed to result from such privatisation to the benefit of all farmers (Odhiambo & Wilcock, 1990). Agency to improve farmers' well-being and productivity was considered to rest with private agribusinesses that ostensibly enabled farmers to derive benefits from (neoliberal) modernisation based in liberalisation and privatisation. In this process, possibilities of privatisation's adverse effects on farmers, particularly smallholders, were marginalised. Such adverse effects can, for example, arise due to collusion by private maize traders to keep crop prices low

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(Odhiambo & Wilcock, 1990). Ultimately, neoliberal modernisation as articulated in the 4th, 5th and 6th Development Plans was shown to have worked only for large commercial farmers rather than for smallholders (Hakizimana et al., 2017; Recha, 2019).

Arguably to justify the failure of such modernisation in 'improving' smallholder agriculture, it was later argued that the neoliberal reforms were only inadequately implemented (Bates, 2014). This partial implementation was framed to be a result of political interests aligned with state-led approaches entrenched in the 1960s and 1970s. The latter approaches were argued to have created a dense web of relationships between the state and farmers which could not be disentangled to service the (neoliberal) economy (Berry, 1993; Bradshaw, 1990). In this way, the state was largely blamed for the lack of the reforms' success in terms of benefitting smallholders. The battle lines for controlling modernisation were thus drawn between the state and the private sector, while smallholders (even farmers as a whole) continuing to be framed as the silent compliant partners.

7 | EARLY 21ST CENTURY: POST-REFORMS ERA?

As agricultural growth rate declined to just 1.2% in 2000 (Odhiambo et al., 2004), smallholders were framed as undergoing a crisis and the overall agricultural sector in a poor state (Jayne et al., 2002). Therefore, a new dilemma for policymakers was posed: *How to get agriculture moving again*, given that neoliberalism of deregulated markets and commercial privatisation had not worked as expected (Gerdin, 2002; Gitau et al., 2008)? In this 'post-adjustment' era (Cabral & Scoones, 2006), a number of new policies were unveiled. We focus on the two most prominent of these policies: the SRA and the ASDS.

SRA was launched in 2004. It was replaced in 2009 by the ASDS. Both the SRA and ASDS maintained the earlier focus on agricultural modernisation through commercialisation of smallholder agriculture, in the name of poverty reduction and rural employment (Government of Kenya, 2009; Poulton & Kanyinga, 2014). In both SRA and ASDS, farmers were divided into three different categories: large, medium and small. Based on farming practices and agro-ecological zones, smallholders were also recognised through the categories of pastoralist farmers, smallholder export farmers and subsistence farmers (Government of Kenya, 2004, 2009).

The SRA and ASDS acknowledged smallholders' agency to learn and improve their production practices, but this was seen as enabled by the purchase of new technological inputs from agro-industrial firms and by financial support from private credit providers (Alila & Atieno, 2006; Government of Kenya, 2004, 2009). As part of the latter support, for example, a scheme called Kilimo Biashara Loan Scheme was launched in 2008 by the government collaborating with the private lender Equity Bank and the AGRA. The aim was to offer credit to maize farmers and enable them purchase modern inputs, ostensibly for improving farm productivity.

In addition, contract farming was promoted (Ajwang, 2020a, 2020b), under which firms (including those contracting farmers as out-growers) were framed as helping create access for farmers' crops to local and export markets. Alongside the private sector and farmer cooperatives, the state was framed as providing extension and advisory support services to farmers (Boulanger et al., 2018). A 'demand-driven' extension system was proposed, in which smallholders had the agency to diagnose their problems and individually seek extension support (Government of Kenya, 2004). Smallholders were thus framed as actively seeking modern technological and market-based solutions. They could also mobilise other farmers to form cooperatives (Government of Kenya, 2009).

Smallholders' agency was thus recognised in the SRA and ASDS, even though it was considered to be generally enabled by support from private firms and extension services. Critically, however, smallholders' agency was still framed as aligning with agricultural modernisation as *the* development direction. Alternative directions of agrarian development based, for example, on farmers' seed-sharing networks for agroecological and agroforestry practices were excluded from the SRA and ASDS (Bishaw et al., 2013; also see Swiderska et al., 2011). In developing these alternative directions, any support that smallholders received from non-governmental organisations was also left out of the policy discourse.

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In ASDS, while smallholders were recognised as active seekers of modernisation, their efforts were deemed as inadequate. They were framed as using inappropriate crops and livestock husbandry practices, their water management was considered poor and their use of farm-machinery ('improved tools and technologies') was argued to be limited (Government of Kenya, 2009). These framings of deficiencies were linked to smallholders' ostensible aversion to credit. This aversion was argued to lie behind the limited reach of programmes such as the Kilimo Biashara credit scheme that reached just 45 288 farmers (far short of the targeted 2.5 million farmers) (AGRA, 2011). The deficiencies of smallholders as framed in ASDS largely replicated the 1970s narratives on smallholders' agency but with one critical difference: the 'deficiencies' of the 21st century were observed after decades of modernisation efforts led by the state and the private sector.

Yet state- and industry-led modernisation was not blamed for the fact that smallholders' agricultural problems were persisting and exacerbating in the 21st century. Instead, smallholders' own assumed inadequacies were once again seen as the problem. The state's imagined solution was more modernisation. However, modernisation in the first decade of the 21st century was not just framed as delivered to smallholders by an enlightened state or by an efficient market. It was instead seen as being actively sought by smallholders themselves. Smallholders were framed as exercising their agency to learn and become modern 'innovative' commercial farmers who effectively responded to market incentives and cooperated with state institutions (Government of Kenya, 2004, 2009). Smallholders' agency while no longer passive in this period was still framed as aligning with modernisation as the only possible direction of development.

8 | SINCE 2013: THE ERA OF DEVOLUTION?

A new governance architecture was initiated in 2013 consisting of a 'devolved system of government' across 47 counties (Government of Kenya, 2016). In order to bring governance 'closer to citizens', agriculture was among the activities that were devolved to the counties. For appraising how smallholders' agency is considered in the move to a devolved system of government, we rely on our interviews with policymakers in the Kenyan national and Machakos county governments. We also examine the 2013 AFFA Act (Government of Kenya, 2013).

In the 2013 Act, consistent with the broader thrust of devolution, farmers' agency was configured primarily as participation in policymaking through registered farmers' organisations (Government of Kenya, 2013). Regarding participation, we ask a similar question as above: Are smallholders (or even farmers as a whole) framed as participants who align only with modernisation promoted by the state and market? Or are possibilities enabled for smallholders to participate in ways that enable divergence from modernisation? Arguably, admitting divergent forms of agency will require participation to be democratic, in the sense that even the most marginalised farmers are able to raise their voice in ways that do not just conform with powerful visions of the government and/or the private sector (Chilvers et al., 2018; de Hoop & Arora, 2021; Stirling, 2014). However, rather than enabling such participation, the Act promoted the government as providing the '*procedures* for internal democracy in the farmers' organisations and developing rules to ensure that any agreements between farmers' organisations and third parties are respected'. (Government of Kenya, 2013: A11A-19).

That the 2013 Act was aimed at controlling farmers' agency through procedures and rules, rather than enabling it to diverge through democratic participation, becomes clearer by recognising the power vested through the Act in the parastatal AFFA. Here, AFFA was framed as having the agency to make general rules that prescribed how farmers 'shall manage their land' and 'farm their land in accordance with rules of good husbandry' (Government of Kenya, 2013: A11A-13). It was AFFA that was given regulatory control over most crops including tea, coffee, cereals and horticulture. Thus, AFFA was placed in the driving seat of agricultural development, to centralise agency in the hands of a single entity in an era of ostensible devolution.

Arguably to dampen criticisms of this centralisation of agency, AFFA's management board was framed to include eight representatives elected by farmers. Little was specified regarding how this major electoral exercise involving more than half of Kenya's population was to be conducted, beyond noting that the eight representatives were 'to

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represent the major crop subsectors in Kenya' (Government of Kenya, 2013: A11A-7). Unfortunately, no specific representatives of smallholders or marginal farmers were deemed necessary. Also critically, the agency to make AFFA's decisions did not rest with the elected farmer representatives but rather with a Director General (DG). The DG was to be recruited through 'a competitive process' and have 'the requisite agricultural expertise'. Here again, bureaucratic control was sought within a process of ostensible devolution.

A similar process of centralisation of agency was afoot in the wider 'devolved system of government'. Some of our interviewees argued that attempts had been made to co-opt county governments into national policymaking since 2017. This attempted co-optation reproduced a hierarchical structure that has kept the agency of policy design with the national government. It remains to be seen how farmers' roles in governance are conditioned by the politics of policymaking between the central and 'devolved' governments. But one thing is clear: The agenda for farmers' participation in devolved governance is not being set by them but rather by the central and county governments (see Boulanger et al., 2018, pp. 6–10). Overall then, it appears that farmers' agency is still marginalised amidst the rhetoric of participation of devolved governance (Brownhill et al., 2016). This marginalisation is particularly acute in the case of smallholders.

To further understand farmers' participation, we briefly explored the making of two agricultural policies: one in Machakos County and another at the national level. In late 2018 and early 2019, Machakos County formulated a food security policy, named 'A Quarter an Acre', aimed at promoting small-scale irrigation among farmers. Beneficiary farmers were to convert one quarter of their farm into a dam by using financial support from the county government. The dam was then to be used for irrigation to support the cultivation of vegetables.

From a senior Machakos County Agricultural Officer, we learnt that the 'participatory' formulation of the policy was only on paper. In practice, however, it was a top-down process. The conceptualisation of the policy was credited to the county governor, with Machakos County agricultural experts operationalising the idea through a selective consultation process with a group of farmers. These farmers were already part of an ongoing irrigation project. They did not exercise the agency of setting the agenda for participatory policymaking. Additional farmers participated in a consultation that was focused on seeking their compliance with the county government's agenda, rather than being an adaptive process that was open to the articulation of divergent agendas by farmers and other civil society representatives. Participatory policymaking was conceptualised as focused on getting farmers to comply with the devolved governments' predetermined agenda, rather than a bottom-up process of consultation as envisaged under devolution.

At the national level in 2019, the government announced a new policy called the Agricultural Sector Transformation and Growth Strategy (ASTGS). During one of our interviews, a senior officer in the Ministry of Agriculture highlighted that participation in policymaking was enacted through registered farmers' organisations. While these organisations are ubiquitous in Kenya, the politically active ones tend to be associated with large farmers. However, even the agency of these farmers' organisations in participatory policymaking was marginal in comparison to the national government, the counties and international partners (or donors). The farmers' groups were not consulted in the initial setting of policy agendas and priorities. They were recruited later as stakeholders to help in testing and validating the policymakers' view. Therefore, just like in the earlier decades discussed above, farmers' agency was approached as *enabled by and aligning with* the government. Under the devolved system, this alignment was couched in the rhetoric of participation, but the possibilities of farmers' divergent agency to set policy agendas were missing from the picture. Possible alternatives to agricultural modernisation to realise sustainable development were once again overlooked by the national and county governments.

9 | DISCUSSION AND CONCLUSIONS

Since Kenya's independence from British rule, across different eras of agricultural policymaking, our findings show that smallholders were repeatedly framed as being enabled by—and enabling of—*agricultural modernisation*. This modernisation was constituted by bureaucratic control, industrial farm inputs and neoliberal marketisation. In the early post-colonial era, Kenyan policymakers inherited colonial institutions shaped by imaginations of control. The

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state's bureaucracy was framed as controlling the organisation of agricultural knowledge production, technological development and transfer, credit provision and crop marketing. In general, control was imagined of agricultural production by the pursuit of modern industrialisation (led by the state and the private sector).

In the 1980s, policy emphasis within modernisation shifted to the imagined control of agriculture by 'the market economy' and macroeconomic discipline, which was extended into the 1990s. And in the 21st century, economic liberalisation and bureaucratic control were continued, while the language of policy started emphasising participatory devolution. Throughout the last six decades, policy promoted modernisation by framing it as beneficial to *all* smallholders (if not farmers as a whole). It was seen as 'improving' farmers' cultivation practices, helping smallholders attain higher yields, reducing their poverty and generally addressing their assumed 'deficiencies'. In contributing to these ends, smallholders' agency was homogeneously imagined to be aligning with agricultural modernisation as promoted, while their agency to diverge from modernisation was silenced.

Yet it is this divergent agency that is central to a wide range of agroecological practices such as:

a. the preparation and use of local manure and other materials for organic agriculture (AFSA, 2016; Goldberger, 2008);
b. evolving and sharing 'traditional' plant varieties that are drought tolerant and valuably nutritious (AFSA, 2016; Swiderska et al., 2011);
c. developing and maintaining irrigation techniques like rainwater harvesting, furrow systems in mountainous areas and shallow groundwater in valley bottoms (Woodhouse et al., 2017);
d. 'non-pesticidal' management of pests, using multiple crops that variously attract and repel insects (D'Annolfo et al., 2021); and
e. wider networks for knowledge sharing and organisational support in civil society (AFSA, 2016; Goldberger, 2008).

In general, the silencing of farmers' divergent agency in policy framings promotes *control over directions of agricultural development* (so as to focus all efforts on modernisation alone). In this process, support for agroecological, organic and other farmer-led directions of development is marginalised. These alternative directions continue to survive in Kenya, sustained by farmers' agency that is often constituted by enabling relations with non-governmental organisations and with local farm ecologies (e.g., AFSA, 2016; Goldberger, 2008). In order to actualise the full potential of these alternatives for climate resilience and wider sustainability (e.g., D'Annolfo et al., 2021; Swiderska et al., 2011), policy discourses must take smallholders' divergent agency seriously. By doing this, policy support may be enabled for directions of sustainable development beyond agricultural modernisation.

Unfortunately however, together with the Kenyan government's agricultural policy since the colonial era, powerful transnational arrangements such as AGRA continue to privilege modernisation by repeating the mantra of inputs like 'improved seeds' (also using genetic engineering and new genome editing techniques), precision agriculture based in digital technologies and synthetic fertilisers (Acosta et al., 2019; Wise, 2021). As these new technologies are glorified for sustainability, their possible adverse effects are marginalised (Arora & van Dyck, 2021). In general, national policies and powerful alliances have thus far failed to promote and support alternative directions for sustainable development beyond modernisation. This lack of policy innovation represents a failure to learn from past experiences. Transformations for sustainable development require much more than recycling and intensification of control-based frameworks that have their roots in modern colonialism (Arora et al., 2020; Patel, 2021).

Kenya is obviously not alone in this historic marginalisation of diverse directions of development beyond agricultural modernisation (for studies from other parts of East Africa, see, e.g., Lefort, 2012 on Ethiopia; Isgren & Ness, 2017 on Uganda; Mdee et al., 2019 on Tanzania; and de Bont et al., 2019 on irrigation in Mozambique and Tanzania). Alternative directions, particularly those rooted in smallholders' practices and knowledges in the Global South, have been historically framed as backward, unorganised and lacking the capacity to innovate without the adoption of modern science and technology (Arora, 2019; Mdee et al., 2019). This 'inferiorisation' is deeply entrenched. It also manifests in the form of powerful narratives that stress the 'superiority' of continued modernisation to address the unsustainability challenges emphasised in the UN's (2015) Sustainable Development Goal (Arora & Stirling, 2020).

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Such narratives often obscure that modernisation promoted in the past century may be constitutive of many of the unsustainability challenges addressed in the SDGs (Arora & Stirling, 2020). Examples of challenges in agriculture include the loss of agricultural biodiversity and declining water tables (due to excessive groundwater extraction) that are observed in the GR areas of India (Bidwai, 1991; Kumar, 2019); heavy indebtedness among smallholders due to integration in erratic markets, commercial value chains and high costs of modern cultivation using industrial inputs (Misra, 2021; Vasavi, 2012); and widespread toxicity that harms agrarian environments on which roughly six million tonnes of chemical pesticides are used each year globally (FAOstat, 2021).

To address these complex challenges, it may be necessary to move beyond technologies and markets of modern industrial agriculture (Arora & van Dyck, 2021), to support smallholder-led practices and techniques grounded in diverse agroecological knowledges and contexts. To this end, rather than reducing the ongoing devolution in Kenya to instrumental participation by farmers (including smallholders), in which the practice of participatory exercises is driven by modernisation agendas of national policymakers and transnational agencies, devolution must be used as an opportunity to transform development. This transformation means that participation is mobilised for pluralising the directions of development beyond the entrenched direction of modernisation. A starting point in this process may be the recognition of farmers' agency to produce and use knowledges, which diverges from what is imagined for them by extant policy. This may require policymaking to approach farmers' knowledges to be as valid as the outputs of agricultural scientists. Based on a diversity of equally valid knowledges, then, multiple diverging directions of development may be promoted. This multiplicity can include further modernisation in such a way that it does not encroach on alternatives. Ultimately, without support for multiple directions of development that diverge from modernisation, our collective efforts to realise sustainability might remain seriously limited.

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DATA AVAILABILITY STATEMENT

Anonymised interview data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

Saurabh Arora https://orcid.org/0000-0001-8836-6821
Joel Onyango https://orcid.org/0000-0002-8948-8190

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