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**Getting the Resilience Right:
Climate Change and Development Policy in the ‘African Age’**

Abstract:

Founded on a call to place climate change adaptation and climate risk management at the heart of contemporary development practice, the World Bank’s *Africa Climate Business Plan* presents an ambitious agenda for coordinating \$19bn of loans, grants and investment over the coming decade. The centrepiece of this recasting of development thinking is the notion of resilience, which ties together the various activities proposed under the *Plan*. Resilience must respectively be strengthened, empowered and enabled in order for African countries to withstand climate change impacts. In this paper we subject this new climate-resilient development discourse to critical scrutiny. Using the theoretical lens of post-politics, we caution how the ill-defined category of resilience is deployed to reinforce a profoundly depoliticising agenda in which climate change is posited as an external threat to an otherwise seamless narrative of African advancement. In so doing, we illustrate how the Bank obscures the contested histories of African development and uses the discourse of climate-resilient development to perpetuate its neoliberal agenda within the continent.

Keywords:

Climate Change – Adaptation – Resilience – Development –
Africa – Risk – Post-politics – World Bank

1. Introduction

Through a raft of new global governance frameworks, leading international institutions are rapidly consolidating the development and climate change agendas into a single platform. Nowhere is this clearer than in the case of development financing for African countries. As the World Bank (2015) has recently argued, a unified programme of investment is necessary to scale up the continent's ability to manage extreme weather patterns in ways that safeguard future growth and poverty reduction. To achieve this aim, the institution has created a new governance framework aimed to secure and coordinate a projected \$19 billion of public-private investment into key development sectors across the continent by 2020. The aim of the initiative – known as the *Africa Climate Business Plan* – is two-fold. First, it seeks to help close the funding gap between an estimated \$2 billion annual inflow of climate-development investment into Africa vis-à-vis a projected need of \$10 billion. Second, it sets an agenda for action, pinpointing the core policy concerns, governance frameworks and investment needs necessary to promote what the Bank calls 'climate-resilient development.' In no uncertain terms, the document presents an ambitious statement of priorities for the African continent in an era of pronounced anthropogenic climate change.

While we do not question the need to further the (re)distribution of international resources towards meeting climate change challenges in the Global South, this paper interrogates the representational politics that underpin the World Bank's synthesis agenda. As we emphasise, the central discursive device used to elicit a convergence of climate and development is the concept of resilience. Repeatedly, the escalating threat

of climate change is projected by the Bank to evoke a pressing need to build resilience within countries, economic sectors, households, communities, regions, landscapes and other units of analysis. Across its publications, however, the qualities and characteristics of this projected resilience remain fundamentally opaque. A paradox emerges in which resilience is repeatedly lauded as a self-evident good and a key object of development intervention, yet its analytical and normative underpinnings are left starkly underdeveloped. This ‘resilience fetish’, we highlight, is particularly evident in the *Africa Climate Business Plan*. The latter is founded on the goals of ‘strengthening’, ‘powering’ and ‘enabling’ resilience without defining, contextualising or elaborating what the term means and how it reshapes development practice and normative aims. By analytically unpacking this key document in its fullness, we illustrate how deeply embedded the discursive strategy of ‘building resilience’ has become within international policymaking and highlight its normative political consequences.

Specifically, we argue that two core implications stem from this discursive strategy centred upon resilience. First, by foregrounding the concept so strongly, building resilience implicitly becomes synonymous with development. This presents an evolution of neoliberal development thinking from ‘getting the prices right’ in the 1980s period of market liberalisation, to ‘getting the institutions right’ in the 1990s, to ‘getting the resilience right’ in the present. Second, this representational shift has immediate political importance because it shapes the types of projects that are foregrounded and funded and what is excluded from discussion. We emphasise how reducing resilience to an empty signifier facilitates the consolidation of development planning as a fundamentally technocratic exercise, stripped of political content, in

which the spectre of climate change is used not to rethink development categories but to confirm existing biases. At a time when pressing debates about development trajectories across the African continent need to be opened up, we caution that the Bank's use of the resilience concept elicits a pronounced discursive closure in which longstanding agendas are reframed as new solutions for contemporary challenges.

This discursive strategy facilitates what can be termed 'post-political' development in which policymaking is stripped of any meaningful political dimension (Jasanoff 2010, Swyngedouw 2011). Post-politics is a governance configuration in which contentious political deliberation is replaced by aggressively apolitical decision-making rooted in techno-managerialism and characterised by furthering technological and institutional solutions to what are projected as technical problems (Kenis and Mathijs 2014). While such depoliticisation is a longstanding tendency within development projects on the African continent (for example, Ferguson 1994), we illustrate its presence at the heart of the climate-resilient development agenda. To do so, the paper moves through three sections. The first positions resilience building within the context of World Bank knowledge production about development, markets, institutions and environmental change. This allows us to demonstrate both the continuities and tensions implicit within 'getting the resilience right'. The second unpacks the *Africa Climate Business Plan* in detail by focusing on its proposals surrounding climate-smart agriculture, climate-resilient landscapes, clean technologies and data management. We point to specific examples of how the Bank uses the resilience concept to strip away the contested political economy of development to smooth the path for technocratic solutions. The third section pulls the various streams of analysis together. Using the framework of post-politics, we question what is obscured in the Bank's technocratic

framework and, drawing on critical political economy traditions, emphasise the relational dimensions of poverty and development.

2. Resilience within the World Bank's Development Theory

Prepared in the run-up to COP21 in Paris, the 165-page *Africa Climate Business Plan* aims to help the Bank meet its internal commitment to increase the share of financing dedicated to climate action by one third at the close of 2020 (World Bank 2015, p. x). It does so largely by collecting various existing adaptation and mitigation activities and projects within a single framework. Through the mobilization of financial resources, technical expertise and stakeholder engagement, the *Plan* synthesises development financing towards a unitary purpose of increasing Africa's resilience to climate variability and change (World Bank 2015). To achieve this aim at a practical level, the *Plan* anticipates the mobilization of over \$19 billion USD between 2016 and 2020 with an additional \$21.2 billion by the year 2024. As of November 2017 close to 90 percent had already been secured, although this includes many existing financial commitments that were subsequently brought under the scope of the *Plan* (World Bank 2015, 2016a, 2017).

This financing is intended to facilitate three action clusters tasked respectively with strengthening, powering and enabling resilience (see: Table 1). The first and most expansive cluster seeks to increase the resilience of Africa's natural, physical and human capital. Specifically, the *Plan* envisions introducing climate-smart agriculture (CSA), promoting forested landscapes, and establishing the African Resilient Landscape Initiative (ARLI) to integrate 'multiple sectoral initiatives, facilitating

linkages and coordinating among them’ (World Bank 2015, p. 36). This cluster is also concerned with promoting integrated watershed management, fostering climate-smart ocean economies (or ‘blue economies’), developing climate-smart cities and climate-resilient transport, and enhancing the resilience of West Africa’s coastal zones. This part of the *Plan* also seeks to support human capital through boosting social protection and addressing the drivers of migration.

The second cluster – powering resilience – introduces measures to promote renewable energy production in Africa. Here, the Bank will become involved in ‘investing both on and off the grid, crowding in private sector investment, and leveraging mainstream and emerging technologies in the renewable space’ (World Bank 2015, p. 99). The third cluster is composed of two initiatives aimed at strengthening ‘the data and knowledge base for integrating climate variability and change in a variety of decision-making processes at the local, national, and regional scales’ (World Bank 2015, p. 115). These projects are designed to support African countries’ ability to anticipate and cope with hydrological and meteorological (‘hydro-met’) hazards, including through end-user (e.g. early warning), knowledge and advisory services supplemented by the establishment of the Africa Climate-Resilient Investment Facility that will focus on enhancing institutional capacity for effective risk management.

[Table 1 near here]

In thoroughly incorporating resilience into its conceptual lexicon as a new normative goal of development, the Bank has greatly expanded its remit. Resilience is now projected as a latent and valued quality of all societies to be proactively strengthened

by effective development planning. In short, it has become what Timothy Mitchell termed a new ‘object of development’ upon which the transformative practices of organisations and institutions can be set to work (Mitchell 2002). Within this agenda, resilience is projected to be a natural and positive quality that applies universally across cultural contexts and units of analysis. It has become what David Mosse (2011) terms a ‘travelling rationality’ that is produced and circulated within international agencies as a ‘plug and play’ concept that can be imported into any given setting to rationalise standardised policy planning across socio-ecological contexts. It is immediately notable, for example, that the term is never defined within the *Plan* despite providing the discursive glue that patches together the disparate elements of a pan-African development strategy. As with other World Bank publications, the term is used in an implicit manner to project a strongly positive value without any clearly articulated analytical underpinnings (Taylor 2014).

This fundamental vagueness surrounding what is now a principal explanatory category within the World Bank’s agenda setting has been a consistent feature of its knowledge production over the past decade. As Romain Felli has charted, there were virtually no uses of the term within major World Bank documents until the early 2000s. The term then slowly gained traction before it was swiftly and comprehensively incorporated into the Bank’s discourse in 2008, resulting in over 200 uses annually across key documents (Felli 2016). The immediate context for the term’s rapid ascendancy was the outbreak of the ‘triple crisis’ of food, fuel and finance in 2007-8. After several decades of promoting deep institutional reforms to advance what the Bank viewed as the necessary legal, political and social foundations for competitive market societies, the outbreak of systemic crisis generated a pressing

need for new conceptual tools to address the ostensible fragility of the global liberal order. With food and fuel prices spiking and financial contagion unleashing a deep recessionary period, Bank president Robert Zoellick had pointedly argued that the world was entering a ‘danger zone’ with potential for a systemic breakdown (Taylor 2009).

In these circumstances, the concept of resilience appeared to be a strong fit for the Bank’s needs. While there are diverging notions of what resilience entails across different bodies of literature (Brown 2016), the Bank typically draws on the concept’s natural science origins to argue that resilience is ‘the ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self-organization, and the capacity to adapt to stress and change’ (World Bank 2009). On this measure, resilient systems are characterised as ones with high adaptive capacity to ‘absorb disturbance and reorganise while undergoing change so as to still retain essentially the same function, structure, identity, and feedbacks’ (Walker *et al.* 2004). This foundation in models of self-organising systems could be relatively easily appended to its neoclassical vision of the market as a naturally equilibrating system that produces efficient outcomes (Cote and Nightingale 2012). By drawing the two together, an expanded development agenda emerges in which the process of institution building to facilitate efficient markets must also consider the ability of such institutions to withstand or recover from external shocks and stresses.

On these grounds, resilience was introduced as a supplement to, rather than a reworking of, the Bank’s longstanding approach to development. Pointedly, the Bank

breaks decisively from approaches that posit potential trade-offs between achieving resilience and maximising output (Biggs *et al.* 2015). Rather than moderate the need for rapid economic growth, the Bank argues that resilience depends upon deepened market liberalisation and institution building to further a growth objective. As established in its signature analysis of climate change, the Bank made it clear that without growth there could be no effective resilience. Growth, it argued, ‘is necessary to reduce poverty and is at the heart of increasing resilience to climate change in poor countries’ (World Bank 2009, p. 7). As a result, the gist of contemporary development planning shifted towards finding ways to bring resilience goals into synergy with the existing paradigm of market liberalisation, good governance, capital mobility and foreign direct investment that had been consolidated under the New Economic Partnership for African Development (NEPAD) agenda in the early 2000s (Adesina *et al.* 2006). This faith in the existing paradigm remains despite noted concerns that the growth achieved during the 2000s – the ‘Africa Rising’ narrative – was based on a boom in primary commodity-exports and service sector that was profoundly uneven, highly concentrated in its wealth creation, and ultimately short-lived (Taylor 2016a). It is notable, for example, the percentage of population suffering from malnutrition and hunger remained stationary and even grew at a continent-wide level between 2013 and 2017 (FAO 2017).

For the Bank, the mediating link between the growth and resilience agendas – key to fashioning a more sustainable paradigm – is risk management. As established in the signature *World Development Report 2014*, risk management is an ‘essential tool for development because people in developing countries are exposed to many risks, and an inability to manage those risks can jeopardise development goals, including

economic growth and poverty reduction’ (World Bank 2013, p. 55). On the one hand, embracing risk – the Bank contends – is a natural and necessary facet of progress inherent to the pursuit of market opportunities. On the other, governance structures must establish a clear division of responsibilities for identifying and mitigating the potential ill effects of different types of risk so as to build resilience (Taylor 2016b). This idea of risk management as resilience building – with its emphasis on individual responsibility for micro-risks, governmental responsibility for systemic risks, and the invocation of the private sector as a primary vehicle of risk management – is signalled from the very start of the *Africa Climate Business Plan* where it is presented as the first of four pillars that underpin regional development.

Despite the seeming naturalness of ‘resilience through risk management’ coupling, a number of normative assumptions are already encoded into the concept that quietly yet markedly shape subsequent policy frameworks. First, for policy makers, the abstract idea of systems that face the risk of external shocks and stresses is highly attractive because it is an eminently fungible placeholder that can be readily switched between units of analysis. From households to countries, cities, a region, an industry, a community, or a population – anything and everything can be labelled as having or lacking resilience to an externally constituted threat. While this is politically expedient for creating standardised policy agendas with universal scope – as occurs throughout the *Plan* – at an analytical level it produces a simplified framework based on isolated units responding to external shocks that provides no substantive grounds in which to understand how risks are generated internally through relations of power and inequality (Watts, 2014). It therefore neatly sidesteps how risks at one level may be purposely or inadvertently transferred to others, as a means in which more

powerful actors secure their relative security at the expense of the vulnerability of others (Taylor 2014).

Second, this internal/external or society/nature dichotomy (Castree 2005) inherent to resilience thinking simultaneously allows institutions such as the World Bank to discursively posit ‘external’ and ‘environmental’ shocks and stresses as the driver of development challenges, therein naturalising the social and historical contexts of contemporary development inequities. Building on insights into the post-politicization of climate governance by Erik Swyngedouw (2010), it becomes evident that the *Africa Climate Business Plan* uses this dichotomy to present a naturalised narrative of African development imperilled by the external force of climate change to which it must be made resilient. The *Plan* forcefully states at its outset that “climate drivers are involved in most of the shocks that keep or thrust African households into poverty” (World Bank 2015, p. 3). In this rendering – reaffirmed at the start of both subsequent status updates – poverty is projected to be an enduring condition that reflects the innate vulnerability of African populations to natural hazards that are further empowered under climate change. The list of risks stirred up within this environmentally-deterministic paradigm is plentiful: natural disasters, health shocks, crop losses, and food price shocks.

While the disquieting impacts of climate change upon livelihoods and welfare cannot be doubted, presenting climate as the primary author of social futures follows a longstanding tradition in which environmental determinism is deployed to naturalise inequalities that have long and complex socio-historical causes (Hulme 2011, Rodger Fleming and Jankovic 2011). By ascribing poverty to proximate environmental

impacts ushered in by climate change, the Bank neatly sidesteps longstanding issues in the political economy of development that focus on local inequities of access to resources such as land, water and credit; through to the macro-level questions of continuing national indebtedness, corruption and clientelism, oligopolistic global market structures and the starkly uneven legacies of structural adjustment (Harrison 2005, Bond 2006, Hilary 2010, Konings 2011, Rodney 2012, Taylor 2016b). On the contrary, under the guise of climate change as an unexpected and external threat, the Bank is able to point to a ‘resilience deficit’ that is explained in terms of insufficient technical, technological, institutional or financial capacity. This discursive approach quietly legitimises the dominance of remedial strategies that are techno-managerial by nature, according to which Africa and Africans must be made resilient to climate impacts through the Bank’s “technical work, investment financing, policy dialogue and resource mobilization” (World Bank 2015, p. 3). These depoliticising tendencies of the *Plan* become clear when assessing its three core activity clusters hinged around the resilience concept. We now touch on the respective categories of strengthening, powering and enabling resilience in turn.

3. The *Africa Climate Business Plan* in Focus

Strengthening Resilience

The project of strengthening resilience coheres around the idea of protecting natural, human and physical capital in the face of climatic shocks and stresses. As noted above, the range of impacts the Bank projects for agriculture, for example, are startling: a 10 percent reduction in per capita crop production and a decline of up to 20 percent in

yields of major staple crops; the loss of 40–80 percent of suitable cropping areas for cultivars of maize, millet, and sorghum; a 15–65 percent increase in levels of undernourishment; increasing drought risk and a potential for the rate of season failure in southern African crop farming to increase to every other year (World Bank 2015). On the basis of these projections, the Bank argues that African agriculture needs approaches that strive to attain a so-called ‘triple win’ of ‘dramatically increasing productivity, enhancing the resilience of farming systems, and achieving lower emissions’ (World Bank 2015, p. 23). This triple-win scenario stands as the foundation of what the Bank and Food and Agriculture Organisation (FAO) term ‘climate-smart agriculture’. Within the rubric of climate-smart agriculture, any agricultural method or institutional innovation that moves one or more of the triple win objectives forward can be considered as ‘climate-smart’. As endorsed in the 2014 Malabo Declaration – in which African states pledged to transition 25 percent of farmers towards climate-smart agriculture by 2025 – CSA is now the predominant rubric for institutional planning around agriculture and development at an international level.

In the abstract, the triple-win prescription of increasing yields while building resilience and reducing greenhouse gas emissions is undoubtedly a worthy goal. The substantive question, however, is what types of frameworks and practices are included within the climate-smart rubric, who gets to determine them, and how the pursuit of CSA shifts priorities within agriculture and development policymaking. As a number of analysts have pointed out, a platform this encompassing gives considerable latitude for incorporating wide and often contradictory agendas (Pimbert 2015, Chandra *et al.* 2017, Taylor 2018). Analysed discursively, two key features of this CSA discourse in

the *Plan* are notable. Firstly, the CSA rubric argues that the problems facing agriculture are primarily technical ones that revolve around finding ways to produce greater amounts of food in climatically challenging conditions. While yield increases are a worthy goal, by framing agricultural development as primarily a question of technological enhancements aimed to produce more, the rubric simply sidesteps an essential set of political questions surrounding the production, distribution and consumption of food. Specifically, addressing rural poverty and hunger through supply-side interventions avoids the thorny political question of access to both the means to produce and consume food. In so doing, the policy process under CSA is reduced to identifying ‘smart’ techniques, technologies and practices that can be generalised at scale.

This leaves unquestioned the underlying power relations that shape the production, distribution and consumption of food both in local contexts and internationally. On the production side, it refrains from interrogating who has access to the resources (land, water, labour, knowledge) to effectively use the new technologies and management practices (Cavanagh *et al.* 2017). On the consumption side, it does not question who has access to the food that may already be produced in significant quantities, yet is so unevenly distributed both regionally, nationally and globally (Taylor 2018). Silenced within this framework focused on new production technologies is the broader political economy of agricultural trade in which African countries face substantive disadvantages that have long historical provenance and yet are consistently reproduced within contemporary global trading regimes, including the European Union’s Common Agricultural Policy (ODI 2011).

Secondly, while much of the rhetoric accompanying climate-smart agriculture calls for a transformational approach, a notable facet of the *Plan* is how it buttresses policy frameworks that closely resemble the institution's longstanding agenda of market liberalisation accompanied by the incorporation of smallholders into global value chains and the entry of Western biotech corporations as primary suppliers of inputs and other technologies (Newell and Taylor 2018). In its companion document – the 2016 *Climate Action Plan* – the Bank establishes an encompassing agenda for agricultural policy that restates a strong commitment to technology-driven fixes in which climate-smart agriculture will be delivered at scale “with a focus on hybrid seeds and carbon capture practices; high-efficiency/low-energy use irrigation programs; livestock productivity; energy solutions for agribusiness; and mainstreaming of risk management” (World Bank 2016b, p. ix). Previously this agenda was advanced under the idea of market efficiency and poverty reduction (Akram-Lodhi 2008, World Bank 2007, for critiques, see: Murray Li 2009). Now the same agenda is argued to be necessary as a means to build resilience to climate change.

While the agenda may be familiar, the *Plan* nonetheless consolidates an on-going shift in the means of designing and implementing agricultural policy frameworks. A major emphasis is placed on the role of public-private partnerships as driving a modernisation agenda on the basis that these actors now hold an advantage in providing technologically driven solutions. As William Moseley notes, these projects form part of a new and unprecedented commitment to public–private partnerships in which donors promote private sector solutions and enhance links between African farmers, input suppliers, agro-dealers, agro-processors, and retailers (Moseley *et al.*

2015, p. 1). It is for this reason that the CSA concept has received significant backing from the private sector, including the formation of a Climate-smart Agriculture working group chaired by PepsiCo, Monsanto, Olam and the Kellogg Company, and featuring key agri-business interests from supermarket giant Walmart to input firms such as Syngenta and Monsanto (World Business Council for Sustainable Development 2015). This convergence of corporate interests around climate-smart agriculture in Africa occurs in separation from an interrogation of how such business-as-usual practices intensify emissions, therein causing the very climate change to which they are subsequently conscripted to help build resilience (Newell and Taylor 2018).

Without doubt, such policy agendas are not written in stone. As they meet the cut-and-thrust of national, regional and local political processes, they are frequently contested and sometimes subverted. Stephen Whitfield charts how climate-smart initiatives have become a new arena of discursive contestation between varied actors and interests within African agriculture (Whitfield 2016). Similarly, Peter Newell et al. illustrate how climate-smart projects in western Kenya underwent a process of transformation as they were decentralised from international to local levels wherein they were re-shaped by the conflicts endemic to the local agricultural political economy (Newell *et al.* 2018). While the idea of climate-smart agriculture is not static and can shift in response to political pressures and local realities, it is nonetheless striking that the discursive refusal to engage issues of power and equity reinforce a techno-managerial approach to change that is highly congruent to business-as-usual scenarios. Even at a superficial level, the rubric has remained deaf to questions of

equity and inclusion, therein eschewing the explicitly political dimensions of alternative paradigms such as agroecology (Pimbert 2015, Karlsson *et al.* 2018).

This depoliticisation of development is reinforced in the Bank's discussion of climate-resilient landscapes, which forms the second prong of its strengthening resilience activities. Presented in terms of positive-sum outcomes, the Bank argues that adopting a holistic landscape approach to resource use that connects agriculture, woodlands, agro-sylvo-pastoral lands, croplands, and irrigated terrain allows policymakers to promote 'productivity, resilience, carbon sequestration, biodiversity, water regulation and quality, national security, and regional stability' (World Bank 2015, p. 36). Once again, throughout this win-win rhetoric, there is a conspicuous silence on the politics of resilience that surround what aspects of a landscape are to be made resilient and for whom. As indicated above, there may be intense tensions or trade-offs between resilience at different scales and between differently positioned social groups within any given landscape (cf. Krätli 2015). Ultimately, what analysts may term 'resilient systems' can often be highly inequitable socio-ecological orders precisely because the qualities identified as 'resilience' are a function of engrained power relationships that institutionalise the displacement of risk and power between social groups. In such cases – which are typical of real world development projects – resilience might instead be considered as an institutionalisation of power differentials in which an uneven distribution of risks and rewards are built into the socio-ecological relations of a landscape (Taylor 2014). Although silenced in the *Africa Climate Business Plan*, these scenarios are typical of the contested politics of conservation and carbon sequestration across the continent which have raised strong concerns around land grabbing and persistent social exclusion (Tienhaara 2012).

The absence of clear emphasis on questions of inclusion and equity surfaces in other aspects of ‘strengthening resilience’. For the task of designing social protection policies, for example, the Bank employs a risk management perspective aimed at increasing the ability of individual households to respond to climate-induced shocks with a focus on countries in the Sahel deemed particularly vulnerable to medium-term climate stresses. The framework employed by the Bank strongly reflects features put forward in its earlier risk management prescription wherein the Bank promotes a threefold approach to mitigating climatic threats (World Bank, 2013). First, households must become effective micro risk-managers by pooling assets among community networks and purchasing the most appropriate financial tools to both facilitate new livelihood opportunities while mitigating potential harmful events. Second, the private sector – both domestic and foreign – is charged with the task of developing more efficient products and delivery methods to offer risk solutions to households, government agencies and other businesses alike. Third, governments must take measures to improve the institutional environment for effective risk management and to ensure that systemic risks – those unable to be mediated at an individual level or through the private sector – are recognised and regulated.

Through government and donor initiatives to formalise social protection programmes predicated on building risk management capacities, the Bank aims to “significantly increase the resilience of poor and vulnerable households by responding to disasters and building resilience at the household level so that households are better equipped for risk and better able to respond to disaster and adapt to climate change” (World Bank 2015, p. 87). While a worthy aim, this framing is inadequate to the task at hand

because it removes vulnerability from its political economic contexts. By reducing vulnerability to a clash between malevolent climatic forces and under-resourced households, the Bank reinforces an environmental determinism that seeks to separate out climatic forces into a discernible series of shocks or stresses that can be analysed and addressed in estrangement from their socio-economic context. By such means, strengthening resilience is rendered as simply a function of protecting individuals from the natural environment. This representation has long been challenged by political ecologists, specifically in the context of dryland Africa where the Bank seeks to focus its programming (Watts 1983, 2014, Bohle *et al.* 1994). Harry Verhoeven, for example, has pointedly analysed how narratives of Sudanese endemic vulnerability to climatic shocks scrupulously abstract from the role of concentrated governmental and privately-held power in reshaping the political economy of the region's resource use in ways that greatly increased household insecurity for marginal social groups (Verhoeven 2011).

Powering Resilience

The second cluster of the *Plan* focuses on measures to scale up solar, hydro and geothermal energy generation, setting an ambitious goal to increase installed output in Africa by 2.9 GW – an 8 percent increase – by 2026 (IRENA 2018). In the Bank's view, access to low-carbon energy is one of the key drivers of security, productivity, job creation, and poverty reduction. In addition to the clear climate mitigation benefits, renewable energy is expected to provide “the power needed to tackle the access challenge and improve resilience” (World Bank 2015, p. 99). That renewables will inevitably play a greater role in Africa's development is not contestable in and of

itself. However, the modality in which the Bank plans to achieve this goal and the alternative pathways that it forecloses warrant critical scrutiny, particularly given longstanding concerns about the marginalisation of energy justice concerns across the continent (McDonald, 2009).

First, the cluster makes clear that the Bank retains its historical preferences for both large-scale energy projects and public-private partnerships as the key driving forces of African energy futures. While hydro- and geothermal energy development is usually capital-intensive and highly concentrated, the flexibility provided by solar power offers an opportunity to benefit from decentralization in ways that can foster more equitable patterns of generation and distribution (Sovacool 2016, Burke and Stephens 2018). Despite this potential to open new energy horizons within the continent, the Bank plans to spend almost 90 percent of funds earmarked for solar energy on large, centralised, utility-scale projects (World Bank 2015). Thus, while the Bank has shifted its institutional priorities towards renewable energy development, this change has been accompanied by a retained insistence on large or mega- projects.

Second, the *Plan* underscores the important role the private sector is to play in expanding renewables on the continent., Public-private partnerships (PPPs) are duly foregrounded as an appropriate avenue for project financing, with foreign companies spearheading investments into the energy sector therein furthering the penetration of foreign capital on the continent. As an example, the Nachtigal Dam in Cameroon spotlighted by the *Plan* (which is expected to cost \$1 billion USD) is being developed by a consortium formed by the national government and two Western corporations, one French and one Australian-British (World Bank 2015).

Conceptually, the Bank's vision of Africa powered by utility-scale renewable energy through PPPs is an expression of what Jasanoff and Kim (2009, p. 120, 2015) dub 'sociotechnical imaginaries,' or 'collectively imagined forms of social life and social order reflected in the design and fulfilment of nation-specific scientific and/or technological projects.' These serve not only to describe current and new energy systems, but more importantly to structure, materialise, naturalise and reify them (Cloe et al. 2017). In the context of the *Plan*, this has the effect of imposing a specific vision for Africa's sustainable energy future over others, such as those proposed by energy justice or energy democracy movements (Weinrub and Giancattarino 2015, Burke and Stephens 2018). It is notable, for instance, how the Bank ignores the ways in which highly centralised projects can lead to concentrated rent-seeking alongside processes of enclosure and exclusion (Hesse *et al.* 2016, Nadesan and Pasqualetti 2016, Sovacool 2016). This contrasts strongly with the broad consensus among critical energy researchers that, while the process of adding renewables to the global energy mix is necessary, it can be deeply inequitable if it is not accompanied by a resolute focus on questions of energy justice (McDonald 2009, Sovacool 2016). Despite decades of advocacy and critical research, the Bank strongly downplays the socio-political complexity of energy systems. Instead it regards the transition to sustainable energy as a technical fix whereby the currently dominant source of energy (fossil fuels) is incrementally replaced with a more sustainable one (solar, hydro, or geothermal).

This is politically problematic because, within the *Plan*, the urgency to build resilience and the need to 'power it' with renewable energy is deployed as a

legitimizing rationale for controversial projects such as the Souapiti Dam and the aforementioned Nachtigal Dam included in the *Plan*. In this manner, the Bank's preference for large-scale projects and concentrated power distribution is presented as a natural technical feature of power generation, with the modest exception of introducing off-grid solar projects in 9 Sahel countries (World Bank 2015). The appropriate context for understanding such investments, however, is the World Bank's longstanding record of financing socially and environmentally destructive, large-scale hydro-projects (Goodland 2010, Pottinger 2013, Meissner 2016, Manorum *et al.* 2017).

Altering this top-down energy development trajectory – a model the Bank has cultivated in the Global South for decades – would arguably be seen as too politically and socially contestable and, from an operational perspective, more difficult to streamline. However, it is clear that large-scale, renewable energy projects can be as inequitable and oppressive as non-renewable ones, especially if the sociocultural context of the energy system is misunderstood or underappreciated by external actors. In the words of Nadesan and Pasqualetti (2016, p. 602), 'alternative energy technologies that are not responsive to community concerns will likely result in the foundation of new complexes that operate with little regard for potentially catastrophic risks.' Indeed, the way in which energy is produced, distributed, and accessed matters at least as much as whether or not it is renewable. In short, renewability, in this case, does not equal sustainability.

Although it is resilience that is proclaimed to be 'powered' in the *Plan*, the approach to energy policies strongly indicates that the latter stands as a metaphor for continued

economic growth which replicates the business-as-usual model of development and poverty alleviation preferred by the Bank. In this sense, resilience is crucial for the process of imposing the Bank's sociotechnical imaginary of Africa's low-carbon future. Paradoxically, climate change – a symptom of unbridled capitalist expansion – allows the Bank to solidify its neoliberal model of growth in Africa, with the sole difference being how this growth is to be powered. In line with the arguments of energy justice and energy democracy advocates, this constitutes a missed opportunity for challenging and ultimately breaking with African energy systems' dependence on foreign capital investment, expertise and technology through a more democratic and decentralised configuration of renewable energy production (Cloke *et al.* 2017, Burke and Stephens 2018). This narrow vision of what Africa's renewable energy future should entail has the ultimate effect of depoliticizing energy policy by silencing contentious issues of access, affordability, ownership and justice across different scales.

Enabling resilience

The final cluster of activities contained in the *Plan* focuses on 'enabling resilience' and features two components: an integrated modernization of Africa's hydromet hazards programme and early warning systems (EWSs) and establishing an Africa Climate-Resilient Investment Facility (AFRI-RES). Both components are to strengthen 'the data and knowledge base for integrating climate variability and change in a variety of decision-making processes' across multiple scales of governance (World Bank 2015, p. 115). According to the *Plan*, floods and droughts are responsible for heavy losses of livelihood and life on the African continent. Hydromet

data, forecasts and warnings are therefore highlighted as crucial in reducing such natural risks by providing better decision-making in risk management or, as the *Plan* puts it, for enabling resilience to climate impacts. EWS is also favoured due to its stated positive cost-benefit ratio of between 1:3 and 1:15 (World Bank 2015, p. 118).

The strong focus on the provision of hydromet data and the establishment of EWSs clearly reflects the Bank's cognitive entrenchment in the aforementioned dualist nature-society ontology (Castree 2005), according to which early warning systems are to allow African decision-makers to understand and predict the incidence and intensity of natural disasters, seen here as exogenous natural forces acting on their vulnerable countries. Having the capacity to identify and describe the elements of the climate system, and consequently to predict its behaviour, is considered a necessary step to achieving resilience. Importantly, this is to be done through the application of specialist knowledge (the provision of which is to be facilitated by AFRI-RES, among other institutions) subsequently delivered to end users through what the *Plan* refers to as the 'last mile' (Huggel *et al.* 2012, World Bank 2015). Here, the Bank identifies the lack of capacity to forecast future climate change as the defining cause of local struggles with its impacts and, by extension, of poverty. On the other hand, hydromet and EWSs are considered as overarching, cross-sectoral enablers of climate resilience. The *Plan* lists a range of societal benefits they can help deliver to *all* citizens directly or indirectly, which include, next to higher disaster preparedness, improved public health, food security, nutrition, water management, energy security, transport and communications, trade and competitiveness, employment generation, governance and state-building (World Bank 2015). More specifically, hydromet data and EWSs are to particularly benefit climate-smart agriculture and hydro-energy generation, which

both rely on the availability of climate information – a link established to help the Bank present the *Plan* as a comprehensive resilience package for the continent. Thus, hydromet and EWSs enable resilience by allowing Africans to understand their unruly climate, seen as the key culprit of poverty and vulnerability.

A number of analytical issues arise with this goal to ‘enable resilience.’ On an ontological level, the drive to eliminate uncertainty from climate policy and planning is arguably futile. It has been suggested that this fetishization of certainty in climate policy and practice should be abandoned and instead replaced by approaches that integrate the unpredictability of climate impacts *as well as* of human responses to these impacts. For instance, Hilde (2012) notes that precisely due to this uncertainty, the only way for adaptation to be successful is for it to be based on democratic and decentralised principles in contrast to the currently dominant top-down approaches reflected in the *Plan*. This shift to governing from the bottom up, he argues, would help ensure the appropriateness of adaptive measures for local contexts – an issue frequently flagged in critical adaptation scholarship (Adger *et al.* 2007, Mertz *et al.* 2009, Gentle and Maraseni 2012, Mikulewicz 2018).

Critical arguments of this kind that bring to the fore the complexity inherent in the adaptive process are also echoed by scholars concerned specifically with EWSs who see the functioning of these systems as a convoluted social process rather than a linear techno-fix (Kelman and Glantz 2014, Ibrahim and Kruczkiewicz 2016). Such authors do not necessarily question the ability of EWSs to predict climate impacts (or indeed the need for these systems), but rather the ways in which they are implemented. In this case, by invoking the challenge of the ‘last mile’ – where the system is already in

place but is unable to deliver the produced information to final end users (be it institutions or individuals) – the *Plan* reveals the Bank’s preference for top-down climate and weather data provision systems characterised by a unidirectional flow of knowledge. Yet, ‘last mile’ approaches are being debunked and questioned by research suggesting ‘first mile’ or ‘backcasting’ as the way forward in early warning provision (Kelman and Glantz 2014, Ibrahim and Kruczkiewicz 2016). Otherwise, critics warn, hydromet and EWSs will remain detached from the communities that need them the most and ignore the local knowledge that may greatly enhance the value and functioning of such systems (Collins 2009, Macherera and Chimbari 2016).

In the *Plan*, the lack of information on climate is to be overcome not just by the introduction of hydromet data services or early warning systems, but also by increasing the technical capacity of African decision-makers who currently are seen as unable to understand climate change, let alone integrate it into policy and practice across sectors. This is to be achieved by AFRI-RES. As ‘an Africa-based networked centre of technical competence and excellence with the overall objective to strengthen the capacity of African institutions,’ AFRI-RES constitutes another symbol of the Bank’s devotion to techno-managerialism. Geared towards the public and private sectors alike, it is tasked with increasing their capacity to integrate climate change considerations into investment planning, design and operation in Africa (World Bank 2015). This is to be achieved through creating an open data and knowledge platform for project developers, with cross-sector technical and organisational support (World Bank 2015). Arguably, however, this is hardly an innovative approach, as it merely replicates the common trend among large development agencies (such as UNDP’s

Climate Change Adaptation Platform) to establish knowledge exchange mechanisms for high-level decision-makers.

The ultimate goal of AFRI-RES is to streamline the process of ‘climate screening’ or ‘climate-proofing’ development. While the positive effects of such entities is hard to quantify, the *Plan* explicitly suggests a direct positive relationship between the resilience of (now) climate-proofed development and the resilience of the communities and countries that depend on their services (World Bank 2015). Moreover, despite being favoured by multiple bilateral and multilateral aid agencies as well as NGOs, the technocratic practice of climate-proofing has been widely criticised for underplaying the complexity of adaptation, serving as a mode to open up new markets, and consequently preserving global development’s problematic status quo (McMichael 2009, Ayers and Dodman 2010, Brown 2016).

This cluster of the *Plan* clearly demonstrates the Bank’s conviction that one of the key reasons for insufficient levels of resilience in Africa is the widespread lack of climate data and information combined with the inability to use that data by decision-makers. However, as David Chandler (2016, p. 76) points out, such ‘data-led understandings of development and adaptive capacities for choice-making are clearly at the heart of contemporary neoliberal constructions of resilience, adaptation, and vulnerability.’ Indeed, the neoliberal approach followed by the World Bank understands poverty as capability failure (including the inability to access data) rather than insufficient income or material shortages (Nussbaum 2013). Put simply, access and ability to use climate information may address some symptoms, but would not solve the root social

and political problems faced by marginalised communities and individuals that cause vulnerability in the first place (Ribot 2009, Taylor 2014, Mikulewicz 2018).

4. Conclusion

If we accept that depoliticization is predominantly produced at the level of discourse (Kenis and Lievens 2014), then it becomes imperative to investigate representations that contribute to the formation and perpetuation of post-political development. In this paper, we sought to uncover how the resilience concept acts as the driver for a post-politicization of climate and development policy in Africa. To exemplify this, we specified how the *Africa Climate Business Plan* stages climate change as a force of nature that threatens to push the continent off an assumed trajectory towards prosperity. According to this problematisation, climate impacts are understood as explicitly environmental risks to which Africa and Africans are to be made ‘resilient.’ More importantly, we demonstrated the material and political implications of this integration of climate and development into a unified agenda. Using the empty signifier of ‘climate-resilient development,’ technology, technical expertise and institutional solutions are inherently privileged in the *Plan*, which prescribes higher yields, new dams, and more data in order to secure the continent against an uncertain and unstable climate future. Worryingly, the Bank offers the ‘subjects of resilience’ (Chandler and Reid 2016) a deceptive sense of security grounded in the belief that resilience experts will solve Africa’s (under)development conundrum by means of technocratic agility.

In contrast, the complex histories that have produced contemporary African countries as sites of uneven and unequal development are swept aside under the narrative of societies seeking resilience to an external threat emanating from the natural world. This recourse to technocracy is able to prosper by marginalising the relational processes that give rise to inequality, exploitation, or vulnerability within development – issues that, in our view, should be made centre stage in development policy and practice. Crucially, we argue that clouding the politics of vulnerability and underdevelopment with discourses of efficiency, productivity, and resilience is unlikely to reduce rising inequalities within African countries by rectifying the highly fragmented and selective nature of their current socio-economic trajectories.

Such tensions between development, climate change and neoliberalism are being tackled by critical and radical research traditions such as political ecology or climate justice that have made the relational nature of responses to climate impacts their analytical cornerstones (Bond 2010, Magrath 2010, Barrett 2013, Burnham *et al.* 2013, Chatterton *et al.* 2013, Taylor 2014, Meikle *et al.* 2016). In so doing, they seek to counter the hegemony of the narrow, growth-oriented approach to development, adaptation and resilience espoused by key international actors that obscures the uneven politics of development (Ireland 2012). Our own analytical contribution to this effort suggests that the resilience-centred vision of African progress that guides the *Africa Climate Business Plan* mirrors the traditional conceptions of development from the past, and is unlikely to enable the continent to, in the words of the Bank (World Bank 2015, p. 3), ‘deliver on its promises’. While playing into the widely popularised if fundamentally inadequate ‘Africa rising’ narrative (Sylla 2014, Pillay 2015, Beresford 2016, Taylor 2016a), the Bank’s self-proclaimed mission to strengthen,

power and enable resilience does not offer the continent anything new beyond a shift in discourse.

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