# What can adaptation policy in sub-Saharan Africa learn from research on governance and politics?

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#### 1. Introduction

Sub-Saharan Africa has been dealt a particularly cruel hand with respect to climate change. It has played virtually no part in the making of the problem, and even now contributes less than 4% of greenhouse gas emissions associated with fossil fuel use. But at the same time many parts of the continent are likely to be hit particularly hard by climate trends and extremes. It is precisely recognition of these kinds of asymmetries that has led to the establishment of the Green Climate Fund, intended to help pay for adaptation to climate change in the world's poorest countries, many of which are in sub-Saharan Africa.

There is now a large and increasing academic literature on adaptation and development (some of which is reviewed below), and many international aid agencies are wrestling with the issue of how to support adaptation to climate change in practice, in anticipation of the hoped for \$100 billion a year that will flow through the Fund by 2020. However, what is striking about much research and donor practice is how little thinking there has been about the political context in sub-Saharan Africa, what this means for the quality of governance, and the capacity to plan and deliver what are often quite complex policies and programmes. This is all the more surprising given the quantity and depth of what is already known about politics and governance in Africa. This paper asks what can be learned from that body of knowledge and experience that is relevant for adaptation policy. It is very much a preliminary analysis and rather than presenting clear evidence for particular conclusion, it mainly points to a research agenda to be pursued.

The primary conclusion is that, by failing to acknowledge the constraints of the political and governance context, much thinking about adaptation policy in Africa is unrealistic, and much donor activity is likely to have little effect. Indeed, in some cases, a large increase in climate finance may have a perverse effect, sustaining political systems that undermine the capacity of states to build adaptive capacity. It is argued that a perspective on adaptation informed by political analysis helps not only to anticipate where particular problems are likely to be encountered, such as specific sectors or locations in a country, but also to point to more effective responses.

In this paper I focus on adaptation policy, but much of the analysis would also apply to mitigation, or low-carbon development policy. However, the latter would involve a much deeper consideration of the private sector in African countries and the complexities of the relationship between politicians, the state and the private sector.

In the next section I briefly set the context, explaining why climate change will be so important for sub-Saharan Africa. Section 3 then explores the nature of adaptation policy,

and existing perspectives on why successful adaptation in low-income countries may be difficult to achieve. Here, I introduce the argument that adaptation policy can be characterised as the delivery of public goods, services and policies that shape incentives, and therefore questions of governance should be paramount in considering that policy.

In section 4 I then examine the problem of governance in sub-Saharan Africa, looking in turn at the record since the 1960s, arguments that root poor governance in patrimonial politics, and the role of aid. I also look specifically at the question of whether and how Africa may be changing. The analysis in sections 3 and 4 sets up the discussion of implications of African political systems for adaptation policy in section 5, and possible responses in section 6. Section 7 concludes.

## 2. Climate change in sub-Saharan Africa

Although there is considerable uncertainty about the detail, sub-Saharan Africa is likely to be particularly badly affected by climate change (Parry et al 2007, Ch 9). The region is expected to warm more than the global average and experience major changes in average rainfall, with drying in the sub-tropical regions and increased rainfall in the tropics. At the same time, many of Africa's economies are heavily dependent on sectors that are highly exposed to climate change, especially rainfed agriculture which generates around 60% of employment and in some countries approaching 50% of GDP (Collier et al 2009). Evidence on the impacts of already existing climate change since the 1950s on economic growth suggests that poor countries (most of which are now concentrated in sub-Saharan Africa) have experienced a significant negative effect, with wide-ranging effects on agricultural and industrial output and investment (Dell et al 2008). A recent review of the literature on the poverty impacts of climate change concludes that Africa (along with South Asia) is expected to see "substantial increases in poverty relative to a baseline without climate change" (Skoufias et al 2011: 22).

Impacts (both current and expected future) will fall across a wide range of sectors and contexts (Parry et al 2007 Ch 9, Collier at al 2009). It is often argued that the <u>direct</u> impacts on agriculture, livestock management and eco-systems (with implications for rural economies and food security), on water and on health (with the spread of malaria and dengue in tropical regions being a particular concern) will be the most important for the livelihoods of the mass of the population. However, other impacts are also likely to have a crucial effect on long-term poverty reduction and economic growth. For example, recent integrated assessment model studies of Ethiopia, Ghana and Mozambique by the World Bank have pointed to the critical role played by road infrastructure in Africa and the potential disruptive impacts of heavy rainfall on roads. Energy supply could also potentially be unusually sensitive to climate change, because of sub-Saharan Africa's current reliance on and massive potential for hydro-electric power (Eberhard et al 2011). Similarly important will be long-run impacts on tourism, industry and coastal zones (because most large African cities are coastal).

Sub-Saharan Africa's particular vulnerability to climate change lies not only in more anticipated severity of and exposure to adverse climatic trends and climate-related shocks. As the IPCC's Fourth Assessment Report notes:

"this vulnerability is exacerbated by existing developmental challenges such as endemic poverty, complex governance and institutional dimensions; limited access to capital, including markets, infrastructure and technology; ecosystem degradation; and complex disasters and conflicts. These in turn have contributed to Africa's weak adaptive capacity, increasing the continent's vulnerability to projected climate change." (Parry et al 2007: 435)

Thus, while climate change is not a problem of Africa's making, many African countries are likely to be hit particularly hard, and at the same time their capacity to adapt to climate change is weak (Collier et al 2009: 140). In principle, the responsibilities of wealthier industrialised countries are clear – to mitigate climate change by radically reducing emissions (Birdsall et al 2005) and to help African countries adapt to climate change that is already inevitable.

# 3. The nature of the adaptation challenge

# 3.1 Approaches to adaptation policy

The challenge for adaptation policy can be framed in various different ways. One is the idea that its key role is to support "autonomous" adaptation by households and communities in the face of climatic changes that threaten to overwhelm local efforts (World Bank 2010a: 87). A second is that what matters is not so much the delivery of specific *actions* needed to adapt to particular climatic changes ("adaptation") as the building of *capacity* to plan and undertake those actions ("adaptive capacity") (West and Gawith 2005, Adger et al 2003, Yohe and Moss 2000).<sup>2</sup> An alternative formulation is that policy should seek to build "resilience" to climate shocks and trends.<sup>3</sup>

Closely related to these approaches is the idea that, although climate change introduces new complexities and uncertainties (Mitchell and Maxwell 2010), the best kind of adaptation policy is largely "good development" or, for some, economic growth (e.g. World Bank 2010b, Bowen et al 2011, UNDP 2007). As this suggests, a third interpretation of adaptation policy is that it should aim at "mainstreaming" or "integration", i.e.: "to facilitate the successful integration and implementation of mitigation and adaptation in sectoral and development policies." (Klein et al 2005: 584. See also Lemos et al 2007).

These approaches to what adaptation policy should aim at have largely defined objectives in relationship to climate shocks and trends, or in relationship to sectoral or wider development policies. However, from a public policy viewpoint, at a deeper level, it is also possible (and I believe useful) to think of adaptation policy as simply as providing *public goods and services, both directly by government, and via setting incentives* (see Table 1 for some examples). Effectively, some elements of successful adaptation involve

solving collective action problems. Some of these problems can be solved by non-state actors, such as local informal institutions for managing natural resource systems, and in the absence of a well-functioning state these may well be the only option available.<sup>5</sup> However, an effective central state is still very important for adaptation, because it will be needed for the larger, non-local collective action problems, and its absence can also undermine or reduce the effectiveness of local institutions.

Table 1
Adaptation measures as public goods, services and policies

Example of measure	Public or quasi-public good	Public service	Public policy setting incentives
Establishing climate science units to provide better and more relevant modelling	X	X	
Developing climate screening tools for use at project level	X	X	
Disaster risk management plans and emergency relief specifically focused on extreme weather events		X	X
Social protection schemes incorporating elements to strengthen adaptive capacity		X	
Adapting agricultural extension services to provide support for more drought-resistant crop varieties		Х	
Price regulations of crops and use of various agricultural technologies to foster diversification and limit farmers' risks			X
Support to better water storage		X	X
Vector control programmes focused on new areas at risk of e.g. malaria, dengue		X	
Revising regulations and standards (e.g. building codes) to reflect climate change risks			X
Constructing roads able to withstand more intense rainfall	X		
Increased coastal protection	X		
Supporting forest protection and afforestation		X	X
Policies to incentivise and support manufacturing and services to diversify the economy			х

What is involved in practice, whether it is providing accurate and relevant information about changing future weather patterns, developing scenarios about a range of possible future climatic effects and applying these in planning or policy, a different approach to agricultural extension, or restructuring economic growth away from sectors vulnerable to climate change, is of this nature. A question of critical importance for adaptation policy

in a developing country context is therefore one that applies to public policy more widely: what are the barriers that prevent the formulation and implementation of policies providing public goods and services, and how might these barriers be overcome?

# 3.2 Why might adaptation to climate change in Africa be difficult?

Much of the existing literature and donor practice on adaptation policy in developing countries tends to answer this question in terms of a lack of technical capacity (see also Tanner and Allouche 2011: 2). A fairly common approach is think about adaptation policy in terms of lists of analytical, planning and delivery processes (e.g. West and Gawith 2005, Agrawal and van Aalst 2008, UNDP 2007: 173, Mitchell and Maxwell 2010). This administrative view is well summed up in a recent formulation from the UK-based Climate and Development Knowledge Network (CDKN):

"There could be a four-stage process to secure climate-resilient development. First, policy makers would assess climate risks and uncertainties. Second, they would develop and evaluate measures to address those risks and uncertainties. Third, they would prioritise the most effective measures and, finally, integrate them into development strategies" (Mitchell and Maxwell 2010: 4)

Defining the adaptation policy process primarily in a linear and rational way as a set of essentially bureaucratic tasks leads to the view that the most serious barrier to successful adaptation is a lack of technical and managerial capacity, and thence to the need for technical assistance, including guides and "toolkits" for adaptation planning (which is indeed the approach taken by CDKN and also the Danish funded UNEP/UNDP DARE programme<sup>6</sup>). An increasing number of such frameworks have appeared in the last 2-3 years (e.g. UNEP/UNDP 2011, Chaum et al 2011. For a review of toolkits see IDS and Ecofys 2011).

Such technical assistance and guides will almost certainly be needed in many African countries, because technical capacity is often weak, climate change is a new challenge and its effects are highly complex, especially on natural systems (e.g. Eriksen et al 2011, Yohe and Tol 2002). For example, just in agriculture, the policy challenge may include: understanding the complexities and uncertainties of climate projections at national or lower levels; relating these to changing seasonality (Devereux et al 2012) and impacts on farming systems; supporting farmers in switching crops, or varieties of crops, in changing tillage practices and in adopting agro-forestry; providing weather-indexed crop insurance, and changing food distribution, all in ways which are pro-poor and gender-aware (e.g. Fritschel 2007, Thornton et al 2011).

However, it is not clear that, at present, a lack of technical capacity in most African countries is the most binding constraint on adaptation policy, especially given the range of donor-funded technical assistance on offer. For technical assistance to be effective, governments really have to be interested in adopting and applying it to public policy. For guides and toolkits to be useful, there has to be demand for them from a policy actor

sufficiently senior and sufficiently committed to the public good. There is some evidence to suggest that, with a few exceptions, this demand is not present.

For some years, external actors have recognised that unless developing country governments "own" a policy agenda, it is hard for donors to make much progress on that agenda. The OECD's Development Assistance Committee developed a set of principles to guide aid practice in conferences in Paris and Accra in the 2000s, and country ownership is one of the most important, both on normative and practical grounds. The OECD has subsequently recognised that this principle should also apply to adaptation policy, i.e. that this policy should be consistent with country governments' own strategies and visions for development (OECD 2009). Likewise, the recent evaluation of the Global Environmental Facility's Least developed Countries Fund notes the importance of high level political interest in adaptation (DANIDA/GEF 2009). But a recent review of climate finance relationships in 6 African countries show low levels of country ownership (OECD 2011), as do separate analyses on Tanzania and Kenya (Agulhas 2010, 2011). Programmes offering technical assistance for adaptation strategies and projects are finding demand in most sub-Saharan African countries weak and poorly expressed.

Some thinking on adaptation and adaptation policy in developing countries, and increasingly, some evaluations, do point to the importance of non-technical processes. This is sometimes expressed in terms of the importance of "institutions", as the quote from the IPCC's Fourth Assessment Report above indicates (see also Halsnæs and Verhagen 2007, Chaum et al 2011, DANIDA/GEF 2009, Osman and Downing 2007). Brooks et al (2005) argue that adaptive capacity is associated with strong governance, and civil and political rights. Yohe and Moss (2000) argue that adaptive capacity is determined, *inter alia*, not only by the capacity of decision makers to manage information, but also the credibility of the policy process and of policy makers themselves.

However, while the role of institutions in building adaptive capacity is increasingly recognised, there appears to be relatively little research on exactly what the institutional problems are and what underlies them. Evaluations of adaptation strategy processes point to problems arising from the institutional architecture of government, especially ministerial silos (e.g. DANIDA/GEF 2009, Osman and Downing 2007) but do not explore the dynamics of governance and institutions in any depth.

There have also been some calls for adaptation policy to engage with the underlying causes of vulnerability of poor people, and indeed with the roots of poverty and inequality (e.g. Schipper 2007, Mitchell and Tanner 2008). Attempts have been made to bring a number of different frameworks for understanding those roots to bear on adaptation and adaptation policy, including the livelihoods framework (Sabates-Wheeler et al 2008), a rights-based approach (Polack 2008), gender analysis (Demetriades and Esplen 2008) and the assets framework Prowse and Scott 2008).

These contributions are important, not least because they begin to connect debates about adaptation and adaptation policy with existing bodies of knowledge and analysis about

the development process. In the words of Sabates-Wheeler et al (2008), there is both a need and an opportunity to "avoid repetition" in the climate policy sphere. However, to date, there has been no attempt in any depth to contextualise debates about adaptation policy in what has been learned about governance and politics in sub-Saharan Africa (and indeed other parts of the developing world) over the last 30 years. Dianna Cammack's (2007a) opinion piece points the way, but is very brief. The 2011 IDS Bulletin special issue on the political economy of climate is also a landmark in introducing thinking about political economy to international and national climate policy, but does not fully engage with the literature on governance and politics in Africa. It is to this body of knowledge that I now turn.

# 4. Governance and politics in sub-Saharan Africa

Over the last two decades, from a range of different perspectives, governance, institutions and politics have come to be seen as a core part of development. There is now a very large body of research and analysis on governance, institutions and politics in development. Here, it is possible only to draw out some of the key insights from this literature.

# 4.1 Africa's governance record

The first of these is the empirical observation that, for at least four decades, many sub-Saharan African countries suffered from very poor governance across a range of different dimensions. This history has been reflected and recorded in a series of official reports from the late 1980s onwards, including the World Bank's *Sub-Saharan Africa: From Crisis to Sustainable Growth* (1989) and *Can Africa Claim the 21st Century?* (2000) and the Commission for Africa's *Our Common Interest* (2005)

Throughout the period from 1960 to the end of the last century, large-scale conflicts, some externally fuelled in the Cold War phase, and often involving state collapse and warlordism, were fairly widespread (Bates 2008). Other countries did not experience conflict, but suffered from poor economic management, with consequences for poverty reduction and resources for public services. Again, up until the mid-2000s, Africa's economic growth and poverty reduction record was very weak (Collier and Gunning 1999, Sandbrook 1985, Lall 2000). Average real GDP per head in Sub-Saharan Africe in 2000 was roughly the same as it was in 1975, at \$950 in 1995 prices (Herbst and Mills 2003). Oil exporting countries, despite greater income from natural resources, did worse than the average.

Corruption also became endemic in most countries over the period, ranging from the top, with well known cases of leaders such as Mobutu, Bokassa and Abacha enriching themselves with public resources, down to demands for bribes in return for access to everyday state functions and services, including schools, clinics, police and local courts. Bayart et al (1999) went so far as to characterise African states as "criminalised". Corruption and brain drain were linked to an erosion of state capacity from what was

already a very low baseline at independence (Lienert and Modi 1997, Crook 2010, Van de Walle (2001: 130).

Public services, not only education and health, but also other areas such as agricultural extension and provision of water and sanitation, suffered accordingly. <sup>8</sup> By the 1980s, school enrolments stagnated, and progress in reducing infant and child mortality slowed (Cornia and Mwabu 1997). By the late 1990s, more than half of sub-Saharan Africa's countries were off-track to meet the Millennium Development Goals (Carceles et al 2001). The AIDS epidemic was reversing life expectancy in many countries.

# 4.2 The political roots of poor governance

A second insight from the literature on sub-Saharan Africa is that the roots of this poor governance lie in the nature of politics and the state. A widespread analysis is that post-colonial politics<sup>9</sup> in most sub-Saharan African countries can be characterised as what has come to be known variously as clientelism, neo-patrimonialism or prebendalism (Bates 1981, Sandbrook 1985, Hyden 1983, Diamond 1987, Bayart 1993, Chabal and Daloz 1999, van de Walle 2001). These terms describe a political system based on exchanges between political patrons, dispensing "privileged access to state resources, rationed by state leaders following a strict political logic" (van de Walle 2001: 50) and clients offering political support and allegiance in exchange (Allen 1995: 304-5, see also Cammack 2007b, Clapham 1982.). State resources were thus used not only for personal self-enrichment (although this certainly went on) but for political purposes. Patrimonial politics had a number of consequences:

- A strong "winner-takes-all" dynamic: "to have power was to have the means to reproduce it; to lose power, however, was to risk never having the means to regain it" (Allen 1995: 304). The stakes were particularly high where countries had natural resources such as oil, diamonds and gold and for many years the willingness of multi-national companies to pay natural resource rents supported regime leaders in power. In cases where no one faction established strong central control, political competition became increasingly violent and the system increasingly unstable as it moved towards "spoils politics" with extreme levels of looting of state resources.
- Weak state capacity and rent-seeking: In line with existing arrangements in many cases, most African governments controlled or took over control of large parts of the economy, including agricultural input and marketing boards. While expansion of state capacity was urgently needed in areas like infrastructure, health and education, appointments and spending were made on a political basis, not a meritocratic one. There was a ballooning of state expenditure and state offices, including large Parliaments and Cabinets (van de Walle 2001). When many countries faced simultaneous debt, inflation and balance of payment crises at the beginning of the 1980s, the real value of salaries plunged (Lienert and Modi 1996) and shortages of goods and foreign exchange began to appear. In these circumstances, the value of a government post no longer lay in the wage, but in

the ability to seek rents i.e. extract bribes, and petty corruption became endemic, and further undermined economic performance.

• Hybrid states: African legislatures and executives took on all the formal features of modern state, but these coexist with informal personalised relationships and patronage – what anthropologist Emmanuel Terray called the "politics of the veranda" (Kelsall 2002). Informal relationships in bureaucracy are again fairly widespread, but in many African contexts their importance is much greater, and sanctions against rent-seeking and patronage are weak. Chabal and Daloz (1999: 95) maintain that the state in sub-Saharan Africa is "nothing other than a relatively empty shell", while van de Walle (2001: 128) argues that formal and informal institutions "coexist, overlap and struggle for control of the state in most countries".

Overall, patrimonial politics in sub-Saharan Africa produced states that could be characterised as "non-developmental" (Leftwich 2000) or "anti-developmental" (Lockwood 2006), in explicit distinction from the "developmental" states of East Asia (White and Wade 1984, Johnson 1999). <sup>10</sup>

This general description of African politics and the consequent nature of the state in Africa need to be qualified in certain ways. Importantly, there have been considerable variations in developmental performance between regimes were all based on patrimonial politics (Allen 1995, Crook 2010, Kelsall and Booth 2010). Some countries have seen state collapse and barbaric conflict; other have had greater stability and much better economic performance and development outcomes than the African average (Kelsall and Booth 2010, Booth and Golooba-Mutebi 2011). Recent work by David Booth and colleagues base their explanation for why some regimes were more developmental than other on two factors. First, their leaders were able to centralise control over rent-seeking and political patronage. Secondly, their leaders took a longer-term more disciplined perspective on rent-seeking, with elements of investment, rather than a short-term view focused purely on consumption (Kelsall and Booth 2010: 6-11. See also Gray and Khan (2010) for the case of Tanzania). However, it is also the case that more developmental patrimonial regimes in sub-Saharan Africa have typically not been sustained for very long, often not beyond the death of the regime head.

### 4.3 The role of external actors

External actors and the external context have played a major role in allowing the persistence of anti-developmental regimes in sub-Saharan Africa (Moore 2009, Centre for the Future State 2010: 18-20). The role of multinational companies in realising rent from oil and minerals was noted above. A combination of secrecy and an increasingly liberal regulatory regime in international finance has meant it has been easy for elites to manage their rents more safely, and has facilitated major capital flight (Collier et al 1999).

The role of aid has been slightly different and rather more complex. Economic crisis saw the large scale entry of international donors into Africa from the 1980s and many countries (especially in non-oil exporters) became very aid dependent. With the majority of the budget coming from external finance, aid soon became an important source of rent. At the same time, donors (and NGOs) contributed to the undermining of state capacity by exacerbating brain drain, through paying much higher salaries than governments could, and by attempting to micro-manage policy processes.

Donors attempted to instigate a number of reform processes. An initial and mostly successful round of reforms was aimed at restoring macro-economic stability. A further round, far less implemented in practice, were a set of "structural adjustment" reforms aimed at reducing government intervention in the economy, cutting public expenditure and introducing user fees for services (Killick 1995, 2004, OED 1997). Since these reforms threatened the system on which political patronage was based, regimes resisted, undermined or distorted reform (van de Walle 2001), often playing a cat-and-mouse game, in which aid was repeatedly suspended and then re-instated. Overall, where there was a contest between domestic political imperatives and donors, domestic politics won out (Deverajan et al (2001), and see Hutchful (1995) for the case of Ghana).

A third round of reforms were about the form (although not the content) of politics, and about governance. The fall of the Berlin Wall in 1989 led to major pressures on one-party regimes for political reform, and most shifted to systems that were formally speaking multi-party democracies in the 1990s, but with varying degrees of real political competition. At the same time, donors were beginning to realise the importance of the poor quality of institutions, and started a new round of reforms aimed at improving governance, including attempts to restructure the civil service and reduce corruption. However, as with economic adjustment reforms, the results of governance reforms have fallen short of donors' expectations. Repeated assessments of reform programmes have shown limited effects (Berg 2000, Poldiano 2001, OED 2004, Evans 2008, Crook 2010). A recent review for the OECD concludes that: "there is a consensus across the literature and in the findings of most major evaluations and reviews of PSGR [public sector governance reform] activity that PSGRs have tended to be unsuccessful" (Scott 2011: 8). Crucially, governance reforms have focused on formal institutions, rather than the informal relationships at the heart of patrimonial politics (van de Walle 2001, Persson et al 2010).<sup>13</sup>

#### 4.4 Has Africa changed?

Despite the history outlined above, aspects of Africa's generally weak development performance have begun to change since the late 1990s. There has been a sharp decline in the number of countries with armed conflict, and a surge in economic growth. Radelet (2010) heralds the emergence of 16 African countries that he argues have experienced dramatic changes since the mid-1990s. These countries have seen an average growth in incomes *per head* of 3.2 per year between 1996 and 2008. Sala-i-Martin and Pinkovskiy (2010) argue that poverty rates estimated from GDP data have fallen sharply, from almost 45% of people living on under a \$1/day in the 1980s to around 32% in the mid-2000s.

There has been substantial progress since 1990 in increasing educational enrolment and reducing child mortality rates (Melamed and Sumner 2011). The education and health sectors have been especially targeted by donors, partly because of the Millennium Development Goals, and these results probably reflect the increase in aid to sub-Saharan Africa from \$12 billion in 2000 to \$42 billion in 2009.

There is no doubt that there have been important positive changes in many African countries over the last decade. However, there are three major qualifications to this picture. First, it is uneven. The total picture may be better than in the "lost decade" of the 1980s, but as Kaufmann (2012) emphasises, there is a high degree of variation within Africa in economic performance, political stability and the developmental effectiveness of institutions. At the same time, estimates of poverty reduction based on more accurate household consumption survey data suggest that the GDP-based estimates over state the extent and degree of poverty reduction and that there is no systematic improvement in inequality (Mackay 2011). Conventional governance indicators suggest that improvements in transparency, accountability, corruption, quality of public administration, property rights and rule-based government have been slow or non-existent (Kaufmann et al 2009, Arbache and Page 2010: 16-17, Kaufmann 2012). The big, resource-rich countries such as Nigeria and DRC in particular have seen little change.

Second, it is not clear that it will be sustained. Most African countries are still highly commodity dependent (Arbache and Page 2012: 18), and increased growth over the last decade has partly been the result of a boom in commodity prices driven by increasing demand from Asia. So far, growth has not brought any structural transformation in African economies. On average, manufacturing as a proportion of GDP in African low-income countries is still lower now than in 1985 (Page 2012).

Third, it is not clear that the improvements in growth, poverty reduction and health outcomes really are the outcome of new, more developmentally minded regimes in Africa. Outright state collapse has become less common over the last ten years, but there are still few examples of the kinds of developmental patrimonial regimes of South East Asia that combined central control or coordination of rent-seeking with a long term view on building economic and social outcomes. In Ghana, for example, seen as one of Africa's strongest performers (and one of Radelet's emerging African "lions"), economically and institutionally, clientelism remains competitive and short-term in nature, producing growth without economic transformation (Whitfield 2011).

### 5. Some implications for adaptation policy

The literature on politics and governance in Africa outlined above suggests that the political context of many African countries, and the consequences for the motivation and capacity of states to deliver public goods and services, have major implications for the adaptation agenda. If we take politics and its governance implications seriously, what might the issues for adaptation policy be?

A preliminary point is that there is not, as yet, much experience of adaptation policy on the ground in Africa. There is also, as yet, relatively little money. The much discussed Green Climate Fund, with anticipated revenue of around \$100 billion a year, will not start until 2020 (and it is still not clear where the revenue will come from). There is currently some donor funding pledged under the "Fast Start" mechanism, but not very much has actually been disbursed, and much of what has is aimed at funding low-carbon energy projects. There is certainly no body of evidence (e.g. through evaluations) on the *delivery of programmes*, as opposed to the formulation of adaptation *strategies* (for example in the form of National Adaptation Plans of Action for the UNFCCC and the Least Developed Countries Fund of the Global Environmental Facility). Much of what follows may therefore be regarded as a set of expectations or hypotheses that could be tested as more evidence is gathered.

# 5.1 Political context matters for adaptation policy

A first implication is the political context matters a lot for adaptation policy. This can be seen at a number of levels. First, the value of technical assistance for adaptation is likely to be highly conditional on political context. Treating adaptation and building adaptive capacity as primarily technical problems in sub-Saharan Africa is clearly problematic, given what we know about politics and the nature of governance. There is an increasing amount of expert knowledge and capacity building resource available in the relevant areas, from climate modelling to infrastructure planning, but if the real constraints to capacity and delivery are driven by the political context, technical assistance is likely to have little real effect. Such factors are also likely make the "demand" for technical assistance weak and incoherent. In the hybrid states of many African countries, technical advice tends to work through formal institutions, does not engage with informal institutions and relationships and will be undermined by them (see also Cammack 2007a).

More broadly, a second issue is that the concept of "ownership" is problematic and complex. One early piece of evidence about climate policy making is that levels of "ownership" by most country governments are low, with donors pushing the issue in many cases. As Booth (2011c) notes, problems with ownership, which is at the heart of the Paris Declaration on aid effectiveness, arise from the fact that the Paris agenda assumes the existence of developmental regimes whereas in many cases they are absent. At the same time, increasing amounts of climate finance may encourage what looks like ownership, but is in fact rent-seeking (see below). Where adaptation problems are visible and pressing, there may be steps that external actors can take to help build institutions to tackle collective action problems (see below section 5), but these are likely to involve considerable attention to understanding local context better.

It is also clear that the existence of a developmental state will be especially important for *long-term* adaptation in a country. As noted above, economic management was also distorted, and the result was that African economies remained dependent (as they still largely do today) on a narrow range of low value commodities for export earnings (Arbache and Page 2012). As noted above, successful economic development, and especially diversification of the economy away from agricultural production, is a central

part of building long-term adaptive capacity. Managing the diversification of the economy – which like successful adaptation is a long term transformation - is one of the defining characteristics of the types of developmental state seen in East and South East Asia. However, most African states have precisely failed to do this so far, and unless they take on a more developmental nature, they will therefore not be able to deliver either goal. A related issue is the reduction of poverty and the building of human capital through health and education, which again are a key part of building adaptive capacity across the mass of the population. Although these were not necessary primary goals for developmental regimes in East and South East Asia, they have often been delivered, often for political reasons. By contrast, anti-developmental regimes in Africa have maintained scarcity and limited access to public services as a political strategy (Bayart 1993, van de Walle 2001). The result has been persistent high levels of poverty and high levels of inequality.

# 5.2 A critical challenge in many countries will be agriculture and the rural economy.

On the one hand, agriculture is particularly vulnerable to climate change, particularly Africa's rain-fed agriculture. It is also central, in most countries, to the livelihoods of a majority of people, and to national economies. It is therefore at the heart of the adaptation policy challenge. On the other hand, African anti-developmental regimes have historically taxed agriculture heavily through price controls and overvalued exchange rates and state marketing boards were frequently loss-making, drawing off scarce public resources from other possible uses (Rodrik 1998, Bates 1981). Extension services had already deteriorated significantly by the 1980s and in many cases were then closed down by donor-inspired adjustment programmes (see Crook (2010: 493) for some vignettes of hopelessly under-resourced agricultural extension offices in rural Ghana and Senegal). More widely, rural economies have suffered systematic underinvestment.

Van Donge et al (2012) argue that high levels of investment in rural areas (and in some cases land reform) in South East Asia was primarily political in origin, based mainly on fear of communist revolution in the 1960s and 1970s, whereas in Africa the threat to regimes has tended to come from cities rather than the countryside. This view is consistent with Mamdani's point that post-colonial political continuities were strongest on the countryside, where the notion of citizenship and rights were weakest.

Van Donge et al (2012) identify a set of three conditions that were central to sustained and broad based growth in South East Asia: macro-economic stability, a market-based system that allows smallholder farmers economic freedom, and heavy pro-poor spending on agriculture and rural infrastructure. The last of these is the most important distinction between the two regions.

In South East Asia, spending on agriculture and the rural economy (i.e. research, extension, input credit, irrigation, drainage, roads and land settlement) was between 10% and 20% of the development budget, and in some cases up to 30%. By contrast, spending on agriculture by African states averaged 4.5% in 2002 (Akroyd and Smith 2007: 3). Public expenditure as a proportion of agricultural GDP (i.e. a measure of the public investment rate in the sector) in 17 African countries was below 6% in 1990 and 2000,

and stood at 6.7% in 2002, compared with 10.6% for 11 Asian countries and 11.6% for 16 countries in Latin America and the Caribbean (Akroyd and Smith 2007: 2). There was also a huge range within Africa, from a massive 73% in Botswana in 2002, down to 0.8% in Cameroon and 0.7% in Ghana, again pointing to the importance of understanding context. Agricultural R&D in sub-Saharan Africa, excluding South Africa, is extremely low, and has declined relative to other regions (Pardey et al 2006). It should be noted that underinvestment was also due to donor disengagement with agriculture in the 1980s and 1990s, especially in areas such as support to agricultural science and training.

There are some signs that this underinvestment is beginning to be reversed, in some countries. In the 2003 Maputo Declaration, AU members made a commitment to increase spending on agriculture to 10% of budgets. However, progress is uneven and partial (NEPAD 2010). In 2006, about half of Africa's countries were still spending less than 5% of public expenditure on agriculture.

The overall point here is that if a prerequisite for successful adaptation policy is investment in agriculture and the rural economy, a political dynamic that leads to underinvestment in agriculture is a fundamental block to successful adaptation. Bates and Block (2011) argue that the politics of rural development are now changing in some countries, and that increased political competition in countries like Malawi is leading to increased productivity and yields. Thus a crucial step for assessing the prospects for adaptation policy in rural areas is understanding the underlying political dynamics in each particular country, and whether and how it is changing.

# 5.3 Fragmentation across government departments is likely to be particularly bad

Van de Walle (2001 pp 101-109) argues that one aspect of patrimonial regimes in Africa has been large cabinets:

"In most countries, a ministerial appointment is an important position for a member of the political elite, bringing with it patronage opportunities as well as significant perks and status-enhancing privileges. African states have long been notorious for their large cabinets, with ministerial appointments that often have little relevance to policy-making priorities or the size of actual budgets. Large cabinets....typically...seek to facilitate compromise and cohesion within the political class." (van de Walle 2001: 103)

He noted a steady upward trend in the size of cabinets through the 1980s and 1990s, with the average by 1996 being around 23 members, excluding heads and deputy heads of state.

Although there are some exceptions, including Ethiopia and some southern African countries, cabinets of this size and larger are still quite common in sub-Saharan Africa. Ghana's cabinet (excluding heads of state and prime ministers) currently has members, Tanzania 30, Nigeria 32 and Zimbabwe 36. The Democratic Republic of Congo the cabinet contains no fewer than three deputy prime minsters and 40 ministers representing line ministries. Kenya's cabinet has 42 ministers. However, the largest cabinet appears to

be Uganda's, with an astonishing 70 ministerial members. These figures compare with cabinet sizes in much larger economies of, for example, 15 in Germany, 22 in France and 23 in the UK.

The relevance of bloated executive branches for adaptation policy is that the proliferation of ministries, each competing for resources and policy control, drives duplication and makes coordination more difficult. Adaptation by its nature is a multi-sectoral, whole-of-government challenge, and even in countries were patronage plays no significant role, departmental siloing is a barrier to effective adaptation policy. In African countries where clientelist politics drives the multiplication of such departments, coordination is likely to be even more difficult.

# 5.4 Adaptation policy is likely to be particularly difficult to deliver well in some geographical areas and in some sectors

In many African countries, patrimonialism has been strongly shaped by ethnic identity (Chabal and Daloz 1999, Boone 2003). Ethnic communities can be politically relevant, either because they form the basis for patrimonial networks for the ruling elite, or because they constitute threats that the elite takes seriously. (Scarritt and Mozaffer 1999). However, other, often smaller groups in peripheral and environmentally marginal areas are effectively politically irrelevant.

As Raleigh (2010: 74) notes "This variation produces a 'topography of government power'. Such a topography underscores public good distribution nationally and locally" (see also Habyarimana et al 2007). Politically marginal areas (for example north-westermn Kenya) receive fewer government services and goods, and suffer more from rent-seeking by officials (including the diversion of food aid) than do areas in the political heartlands. Frequently, such areas will also be more vulnerable to climate trends and shocks, and include arid lands. Pastoralist groups are also more likely to be politically irrelevant. Despite the greater need for support to adaptive capacity, anti-developmental patrimonial rule implies that populations in such areas will be less likely to receive it.

Political incentives are also likely to distort policy in certain sectors more that others. Where unproductive rent-seeking is an important part of the political dynamic, policy is likely to be more distorted in sectors where rent-seeking and political interference is strongest. For example, there is some evidence that aid effectiveness in the health sector may be higher than average, and corruption lower, because regimes recognise that it is the sector donors care most about, and one where opportunities for rent-seeking are lower (Dietrich 2011). By contrast, adaptation investments in infrastructure, involving large capital expenditures and the construction industry, "long considered among the most corrupt industrial sectors" according to Lewis (2011: 255), are likely to be made substantially costlier, less efficient and possibly ineffective. As Hass et al (2007: 7) note, "The ability of the infrastructure sector to generate large rents and to provide vital services that are highly prized and highly political creates a fertile breeding ground for corruption". Corruption that negatively affects the quality of infrastructure is more

damaging than corruption that simply adds costs, and it is arguably the former type that is more common in situations where, as in many sub-Saharan African countries, rent-seeking is not centrally coordinated (Kelsall and Booth 2010).

Direct evidence on corruption is often hard to obtain, but a sense of the weakness of governance in one of the most important infrastructure sectors – road building – can be gained from the World Bank's review of "red flags" (e.g. unreasonable prequalification requirements, delays in selecting bid winners, alteration of specification after contract awarded etc.) in 12 countries from sub-Saharan Africa, showing the range of potential opportunities for corruption and the frequency with which they arise (Alexeeva et al 2008). On average, every single World Bank-funded contract reviewed had around 3 "red flags", rising to almost 5 per contract for Mozambique and Kenya.

# 5.5 Climate finance poses a dilemma

In climate policy circles, it is often taken for granted that climate finance for adaptation purposes should be available to poor countries on an unconditional basis, because of the historical responsibility of industrialised countries in causing the climate change problem. It is now proposed that the Green Climate Fund should be governed through the UNFCCC, rather than a donor institution like the World Bank, precisely because of this principle. The target that has been set for the Green Climate Fund is \$100 billion a year by 2020, which is about 80% of current official aid from OECD countries. The adaptation element (about 30%, or \$30 billion a year), should be proportionately more directed to regions and countries with more severe adaptation challenges. This might mean that sub-Saharan African countries receive something of the order of \$20 billion a year more than would otherwise be the case.

However, from a perspective based on a political analysis, this is a significant increase in international rent, of a form more akin to oil than aid (Collier 2006). In developmental regimes, while some of these resources may be diverted, much of it is likely to be used effectively, and this would buttress the legitimacy of such regimes. However, for anti-developmental regimes, a big increase in international potentially works the other way, providing a perverse incentive (Moore 2009), providing more resources for political patronage and regime survival. It is unlikely to mean that poor people benefit through effective adaptation policies and measures.

This is one reason why donors have so far tried to retain control over adaptation funding so far, and in the case of advance funding (such as the World Bank's Pilot Program for Climate Resilience (PPCR) administered through the multi-lateral development banks), has led to the usual attempts at micro-management (as well as distortion by incentive structures in the donor institutions themselves). Shankland and Chambote's (2011) case study of arguments over the allocation of PPCR funding in Mozambique illustrates this point very well.

This set of implications for adaptation policy of the body of research on politics and governance in sub-Saharan Africa is quite preliminary. There may be many others. However, it gives a sense of the nature of problems that are likely to be encountered in different settings. It begins to give a guide to the type of contexts in which problems are likely to be most acute. It also raises the question of what, if anything, might be done by external actors about problems of anti-developmental politics and governance where they are a major constraint on successful adaptation.

## 6. Possible responses

Viewing the potential problems for adaptation policy arising from the experience of politics and governance in Africa raises the question of what might be done, especially by external actors who want to ensure that adaptive capacity is built and more successful adaptation achieved. Here again, previous experience, especially on governance reform and aid effectiveness, points to various possible avenues to explore.

A first, basic point is the importance, both for researchers and for donors interested in adaptation policy, of understanding the wider political and governance context in a country or locality. As argued above, the value of technical assistance will depend strongly on this context, as will the nature and degree of ownership of the adaptation agenda. Understanding the political context will provide an important guide to whether or not some deep-rooted constraints to implementing adaptation policies in practice are likely to be encountered. This is not to say that other aspects of adaptation policy, such as understanding the complexities of eco-systems or farming systems are not important, but it is to say that a grasp of these aspects in isolation from the political context will not get you very far.

A second area worth thinking about is the potential role of external actors in helping to build institutions that can support adaptive capacity, even within regimes that are more broadly non-developmental. The recent literature on politics, institutions and development provides a number of findings that are relevant here. One is that, in Booth's (2011a: s11) words, "history suggests that institutions change slowly and mostly endogenously" and that aid often doesn't help, or indeed may make things worse (Shirley 2008). Another important findings is that trying to impose a standard set of "best practice" institutions will not work (Rodrik 2007, Centre for the Future State 2010). Instead, much current thinking in governance and development research implies that external actors seeking to support institutional reform should seek the "best fit", paying close attention to how existing institutions (informal and hybrid as well formal) in countries actually work, and which work better or worse in the provision of public goods and services (Booth 2011a).

Grindle (2011) points to some practical resources for how to find the "best fit", based on Moore's characterisation of states according to their degree of failure, and their stability capacity, and legitimacy. She makes the not unreasonable argument that in failed states, where there is no effective central control, no personal security or security of property, then more complex institutional reforms are bound to fail and are not a priority.

Certainly, many of the kinds of policy or institutional changes implied by adaptation policy would seem to require what in Moore's typology are called "minimally institutionalised states".

Where the basics of state capacity are found, Crook and Booth (2011) argue for "working with the grain", by identifying existing institutions that are succeeding at least partially in providing public goods and services, and finding ways of strengthening them. This may well not include financial support – rather, Booth (2011c) emphasises the potential of external actors as helping to "unlock logjams" that block collective action problems being resolved and finding mutual gains, giving examples of projects in Tanzania, Nigeria and elsewhere.

They are often hybrid institutions, bringing together formal local government organisations and informal networks. In the recent research described by Crook and Booth, these institutions include examples such as groups that provide security for market traders in Malawi, maternity services in rural Niger and local justice in Ghana, but the arguments and possibilities could equally apply to institutions providing public goods and services for adapting to climate change.

Indeed, this approach may to an extent overlap with the community-based adaptation (CBA) agenda, which also focuses attention on the idea of supporting local institutions that help solve collective action problems in the creation or deliver of public goods and services for adaptation (Huq and Reid 2007). CBA may also be a kind of response to the problems of official climate finance noted above, if it involves routing resources directly to poor people instead of governments. However, these ideas need some caution, since a standpoint informed by a political and governance analysis can look somewhat different from the usual CBA approach. First, there will be limits to how far CBA is able to produce public goods and services for adaptation. For some of these, functioning, developmental national government will be needed. Second, an institutional perspective will be more concerned with the wider institutional landscape in which "community" sits than the classic CBA approach. Local institutions are not always consonant with "community", so for example, local governments may be involved. Third, local and community actors themselves are not immune to rent-seeking and clientelism also operates at this level.

Another variant of this approach is the idea of working with what Crook (2010) calls "islands of effectiveness" – parts of government that work well even within a wider context of civil service decay and politicisation. Leonard (2008) argues that it is not well understood how and why such islands or pockets of good practice exist, but argues that management and leadership are likely to play a key role. Crook (2010) argues that the organisational culture created by individual managers is important, and that providing more staff and more resources to such managers, creating incentives for the model they provide, is an important way to spread this culture.

He also argues that while more accountability to service users can also play a role in improving the performance of front line service workers (a major theme in the 1994

World Development Report), it has to be combined with demands from above by managers (see also Booth 2011b). In the area of adaptation policy, the need for driving change from above is probably greater than in policy areas such as health or education, largely because articulated demand is likely to be very weak in comparison with those other areas. Understanding of the future impacts of climate change (as opposed to current changes in seasonal patterns) is inherently uncertain, and local people will often lack access to good information about what they are likely to need 10 or 20 years hence. Even where they do have this information, future climate impacts may well have less salience for them than other, more immediate, priorities.

# 7. Conclusions and a research agenda

In the development sphere, climate change is seen by some as a "game changer", i.e. that it will transform all aspects of the development process, development policy and aid programming. However, the analysis presented here suggests that the opposite is true – that responses to climate change will actually fit into existing "rules of the game" (North 1990), the political institutions that shape wider development experience. Even where climate change might exacerbate pressures on resources and help fuel conflict, it does so in ways which are determined by existing political relationships, rather than leading to qualitative changes in those relationships (Raleigh 2010, Verhoeven 2011). A massive increase in climate finance may provide a new source of rent, and may help sustain anti-developmental patrimonial regimes in some sub-Saharan African countries, but again this would not be a new phenomenon.

Despite the identification of "complex governance and institutional dimensions" in IPCC's Fourth Assessment Report as important factors determining vulnerability, current approaches to adaptation policy rarely engage with political and institutional realities. Even within OECD countries, adaptation policy is not easy. Many barriers exist, including scientific uncertainty, a low political priority being attached to the issue and siloing between institutions and government departments (Clar et al 2012). However, the argument made here is that 30 years of research on politics and governance in sub-Saharan Africa suggests that for many countries these problems are likely to be particularly acute, because of the nature of politics in those countries.

Much of the current policy debate on adaptation takes place in an unrealistic framework in which the political dynamics and deep rooted governance problems seen in Africa are abstracted from. Both amongst academics and in donor agencies a lot of effort is expended in debates about how emissions reduction, adaptation and poverty reduction can be achieved through "low carbon climate resilient development" and "triple wins". These are fine as ideal goals, but have little relevance in contexts where the elite settlement means that regimes are uninterested a long term developmental agenda. Whether regimes are developmental or not should be of primary importance in thinking about adaptation policy. This is especially the case because the challenge of adaptation planning in the face of uncertainty, over long time periods and across sectors is so demanding. This approach remains relevant since although governance and economic

management have improved somewhat in the region, many if not most African regimes are still not developmental in nature.

The argument presented in this paper is suggestive and preliminary. The approach points to the need for the climate and development policy world to catch up with the institutions agenda, both in research terms and donor practice, and at the same time for political scientists and governance advisers in donor organisations to begin to pay more attention to climate policy. The review undertaken here has sketched out the main issues, and pointed towards a considerable potential future research agenda.

Comparative research should be at the heart of this agenda, reflecting what has come to be recognised as the variable nature of African patrimonial politics. There is a need for research that examines adaptation policy, financing and implementation processes from the perspective of the wider political and governance context, across a range of different likely contexts in Africa. A focus on the agricultural sector and the rural economy would be a good place to start, reflecting both their importance for adaptive capacity and the tendency for anti-developmental patrimonialist regimes to be under-invest in them. Another priority would be a comparative assessment of adaptation policy between politically central and politically marginal regions of a particular country, to test the hypothesis that the "topography of government power" will have a significant distorting impact. And yet another would be a comparative study of delivery of adaptation policy in different sectors, perhaps health and roads.

#### References

- Acemoglu, D. and Robinson, J. (2008) *The Role of Institutions in Development and Growth* Working Paper No. 10, Commission on Growth and Development, World Bank, Washington DC.
- Adger, W. N., Huq, S., Brown, K., Conway, D. and Hulme, M. (2003) "Adaptation to climate change in the developing world" *Progress in Development Studies*, 3, 3: 179-195
- Agrawal, S. And van Aalst, M. (2008) "Adapting development cooperation to adapt to climate change" *Climate Policy* 8: 183-193
- Ake, C (1996) Democracy and Development in Africa Washington D.C.: Brookings Institution
- Akroyd, S. and Smith, L. (2007) *Review of public spending to agriculture: a joint DFID/World Bank study* Oxford Policy Management, <a href="http://www1.worldbank.org/publicsector/pe/pfma07/OPMReview.pdf">http://www1.worldbank.org/publicsector/pe/pfma07/OPMReview.pdf</a>
- Alexeeva, V., Padam, G. and Quieroz, C. (2008) *Monitoring road works contracts and unit costs for enhanced governance in Sub-Saharan Africa* Transport Paper TP-21, World Bank, Washington D.C. <a href="http://siteresources.worldbank.org/INTTRANSPORT/Resources/336291-1227561426235/5611053-1229359963828/tp\_21.pdf">http://siteresources.worldbank.org/INTTRANSPORT/Resources/336291-1227561426235/5611053-1229359963828/tp\_21.pdf</a>
- Allen, C (1995) "Understanding African politics" *Review of African Political Economy* 65: 301-20
- Arbache, J and Page, J (2010) "How fragile is Africa's recent growth?" *Journal of African Economies* 19, 1: 1-24
- Bahadur, A., Ibrahim, M. and Tanner, T. (2010) *The Resilience Renaissance? Unpacking of resilience for tackling climate change and disasters*. Strengthening Climate Resilience Discussion Paper 1, Brighton, UK. <a href="http://community.eldis.org/.59e0d267/resilience-renaissance.pdf">http://community.eldis.org/.59e0d267/resilience-renaissance.pdf</a>
- Bates, R (1981) Markets and States in Tropical Africa: The Political Bias of Agricultural Policies Berkeley, Ca: UCP
- Bates, R (2008) When Things Fell Apart: State failure in late-century Africa Cambridge: CUP

- Bates, R and Block, S (2011) "Revisiting African agriculture: institutional change and productivity growth" <a href="http://www.econ.yale.edu/conference/neudc11/papers/paper\_075.pdf">http://www.econ.yale.edu/conference/neudc11/papers/paper\_075.pdf</a>
- Bayart, F (1993) The State in Africa: the politics of the belly London: Longman
- Bayart, F, Ellis, S and Hibou, B (1999) *The Criminalization of the State in Africa* Oxford: James Currey
- Berg E. (2000) "Aid and failed reforms: the case of public sector management" in *Foreign Aid and Development: Lessons Learned and Directions for the Futures*, F. Tarp (ed.) Routledge: London
- Birdsall, N, Rodrik D and Subramanian A (2005) "How to help poor countries" *Foreign Affairs* 84, 4: 136-52
- Boone, C. (2003) Political Topographies of the African State Cambridge: CUP
- Booth, D. (2011a) "Aid, institutions and governance: What have we learned?" Development Policy Review 29 (S1): S5-S26
- Booth, D (2011b) "Towards a theory of local governance and public goods provision" *IDS Bulletin* 42, 2
- Booth, D (2011c) Aid effectiveness: bringing country ownership (and politics) back in Working Paper 336, Overseas Development Institute: London
- Booth, D and Golooba-Mutebi, F (2011) *Developmental Patrimonialism? The case of Rwanda* Working Paper 16, Africa Politics and Power Programme, London: Overseas Development Institute
- Bowen, A., Chatterjee, S. and Fankhauser, S. (2009) "Adaptation and economic growth" Paper prepared for the Department for International Development,
- Brooks, N, Adger W N, and Kelly, M (2005) "The determinants of vulnerability and adaptive capacity at the national level and the implications for adaptation" *Global Environmental Change* 15: 151-63
- Cammack, D (2007a) Understanding the political economy of climate change is vital to tackling it Opinion paper 92, Overseas Development Institute, London
- Cammack, D (2007b) "The logic of African neopatrimonialism: What role for donors?" Development Policy Review 25, 5: 599-614
- Carceles, G., Fredriksen, B. and Watt, P. (2001) Can Sub-Saharan Africa Reach the International Targets for Human Development? World Bank, Washington D.C.,

- Centre for the Future State, (2010) *An upside down view of governance* Institute of Development Studies
- Chabal, P and Daloz, J-P (1999) *Africa Works: Disorder as political instrument* Oxford: James Currey
- Chang, H-J (2002) Kicking Away the Ladder London: Anthem Press
- Chaum, M., Faris, C., Wagner, G., Buchner, B., Falconer, A., Trabacchi, C., Brown, J. and Sierra K. (2011) *Improving the effectiveness of climate finance: key lessons* Environmental Defense Fund/Climate Policy Initiative/ODI/Brookings, <a href="http://www.edf.org/sites/default/files/Effectiveness\_of\_Climate\_Finance.pdf">http://www.edf.org/sites/default/files/Effectiveness\_of\_Climate\_Finance.pdf</a>
- Clapham, C (1982) "Clientelism and the state" in C. Clapham ed. *Private Patronage and Public Power* London: Frances Pinter
- Clar, C., Prutsch, A., Struer, R. (2012) "Barriers and guidelines in adaptation policy-making: taking stock, analysing congruence and providing guidance" Paper presented at a conference on the Governance of Adaptation, March 22-23, Amsterdam, <a href="http://www.adaptgov.com/wp-content/uploads/2012/03/Clar-Barriers-guidelinesinadaptation-policy-A86-Tscience.pdf">http://www.adaptgov.com/wp-content/uploads/2012/03/Clar-Barriers-guidelinesinadaptation-policy-A86-Tscience.pdf</a>
- Collier, P (2006) "Is aid oil? An analysis of whether Africa can absorb more aid" *World Development* 34, 9: 1482-97
- Collier P, Conway C and Venables T (2009) "Climate change and Africa" in D. Helm and C. Hepburn (eds.) *The Economics and Politics of Climate Change* Oxford: OUP
- Collier, P and Gunning, J (1999) "Explaining African Economic Performance" *Journal of Economic Literature* 37: 64-111.
- Collier, P, Hoeffler, A, and Patillo, C (1999) *Capital flight as a portfolio choice* Working Paper 2066, World Bank, Washington DC
- Cornia, G and Mwabu, G. (2001) *Health status and health policy in sub-Saharan Africa:*A long term perspective Working Paper 141, WIDER, UNU,
  <a href="http://www.wider.unu.edu/publications/working-papers/previous/en\_GB/wp-141/\_files/82530852733263664/default/WP141.pdf">http://www.wider.unu.edu/publications/working-papers/previous/en\_GB/wp-141/\_files/82530852733263664/default/WP141.pdf</a>
- Crook, R. (2010) "Rethinking civil service reform in Africa: 'islands if effectiveness' and organisational commitment" *Commonwealth & Comparative Politics* 48, 4: 479-504

- Crook, R and Booth, D (2011) "Working with the grain? Rethinking African governance" *IDS Bulletin* 42, 2
- DANIDA Evaluation Department and GEF Evaluation Office (2009) *Joint External Evaluation: Operation of the Least Developed Countries Fund for Adaptation to Climate Change* Global Environmental Facility
  <a href="http://www.thegef.org/gef/sites/thegef.org/files/documents/GEF.LDCF\_.SCCF\_.7">http://www.thegef.org/gef/sites/thegef.org/files/documents/GEF.LDCF\_.SCCF\_.7</a>
  <a href="http://www.thegef.org/gef/sites/thegef.org/files/documents/GEF.LDCF\_.SCCF\_.7">http://www.thegef.org/gef/sites/thegef.org/files/documents/GEF.LDCF\_.SCCF\_.7</a>
  <a href="https://www.thegef.org/gef/sites/thegef.org/files/documents/GEF.LDCF\_.SCCF\_.7">https://www.thegef.org/gef/sites/thegef.org/files/documents/GEF.LDCF\_.SCCF\_.7</a>
  <a href="https://www.thegef.org/gef/sites/thegef.org/files/documents/GEF.LDCF\_.SCCF\_.7">https://www.thegef.org/gef/sites/thegef.org/files/documents/GEF.LDCF\_.SCCF\_.7</a>
- Dell M, Jones, B, and Olken B (2008) *Climate change and economic growth: evidence from the last half century* Working Paper 14132, National Bureau of Economic Research
- Doucouliagos, H and Paldam M (2009) "The aid effectiveness literature: the sad results of 40 years of research" *Journal of Economic Surveys* 23, 3: 433-61
- Devarajan, S, Dollar, D and Holmgren, T (2001) *Aid and Reform in Africa* World Bank, Washington D.C.
- Devereux, S., Sabates-Wheeler, R., and Longhurst, R. (2012) *Seasonality, Rural Livelihoods and Development* London and New York: Earthscan
- Diamond, L (1987) "Class formation and the swollen African state" *Journal of Modern African Studies* 25, 4:
- Dietrich, S. (2011) "The politics of public health aid: Why corrupt governments have incentives to implement aid effectively" *World Development* 39, 1: 55-63
- Eberhard et al (2011) *Africa's Power Infrastructure* Washington DC: World Bank, <a href="http://www.ppiaf.org/ppiaf/sites/ppiaf.org/files/publication/Africas-Power-Infrastructure-2011.pdf">http://www.ppiaf.org/ppiaf/sites/ppiaf.org/files/publication/Africas-Power-Infrastructure-2011.pdf</a>
- Eriksen, Siri; Aldunce, Paulina; Bahinipati, Chandra Sekhar; Martins, Rafael D'Almeida; Molefe, John Isaac; Nhemachena, Charles; O'brien, Karen; Olorunfemi, Felix; Park, Jacob; Sygna, Linda; Ulsrud, Kirsten (2011) "When not every response to climate change is a good one: Identifying principles for sustainable adaptation" *Climate and Development* 3: 7–20
- Evans, A. (2008) 'Civil Service and Administrative Reform: Thematic Paper', Background Paper to *Public Sector Reform: What Works and Why? An IEG Evaluation of World Bank Support*, Washington D.C, World Bank.
- Fritschel, H. (2007) "How will agriculture adapt to a shifting climate?" International Food Policy Research Institute, <a href="http://mtnforum.net/sites/default/files/pub/1276.pdf">http://mtnforum.net/sites/default/files/pub/1276.pdf</a>

- Grindle, M. (2011) "Good enough governance revisited" *Development Policy Review* 29 (S1): S199-S221
- Gray, H and Khan, M (2010) "Good governance and growth in Africa: What can we learn from Tanzania?" in V. Padayachee, (ed.), *The Political Economy of Africa*. London: Routledge
- Habyarimana, J, Humphreys, M, Posner, D and Weinstein, J (2007) "Why does ethnic diversity undermine public goods provision? An experimental approach" American Political Science Review 101: 709-25
- Halsnæs, K. and Verhagen, J. (2007) Development based climate change adaptation and mitigation conceptual issues and lessons learned in studies in developing countries, *Mitigation and Adaptation Strategies for Global Change* 12: 665–684
- Herbst, J. and Mills, G. (2003) *The Future of Africa: A new order in sight?* International Institute of Strategic Studies/OUP
- Hubbard, P (2007) Putting the power of transparency in context: Information's role in reducing corruption in Uganda's education sector Working Paper 136, Center for Global Development
- Huq, S. and Reid, H. (2007) *Community-Based Adaptation* Briefing Paper, IIED, <a href="http://pubs.iied.org/pdfs/17005IIED.pdf">http://pubs.iied.org/pdfs/17005IIED.pdf</a>
- Hutchful, E (1995) "Why regimes adjust: the World Bank ponders its 'star pupil" Canadian Journal of African Studies 29, 2: 303-17
- Hyden, G (1983) No Shortcuts to Progress: African Development Management in Perspective London: Heinemann
- IDS and Ecofys (2011) Guiding climate compatible development: User-orientated analysis of planning tools and methodologies Analytical report London: CDKN/IDS/Ecofys, <a href="http://www.climateplanning.org/sites/climateplanning.org/files/attachments/Ecofys%20%20IDS%202011\_TM%20for%20CCD\_main%20report%20format.pdf">http://www.climateplanning.org/sites/climateplanning.org/files/attachments/Ecofys%20%20IDS%202011\_TM%20for%20CCD\_main%20report%20format.pdf</a>
- Johnson, C (1999) "The developmental state: odyssey of a concept" in M. Woo-Cummings (ed.) *The Developmental State* Ithaca, NY: Cornell UP
- Kanbur, R (2000) "Aid, conditionality and debt in Africa" in F. Tarp (ed.) Foreign Aid and Development London and New York: Routledge
- Kaufmann, D (2012) "On Africa's new dawn: From premature exuberance to tempered optimism" Brookings Institution

- Kaufmann, D, Kraay, A and Mastruzzi, M (2009) Governance Matters VIII: Aggregate and Individual Governance Indicators Policy Research Working Paper 4978, World Bank, Washington D.C.
- Kelsall, T and Booth D, with Cammack, D and Golooba-Mutebi, F (2010) Developmental Patrimonialism? Questioning the orthodoxy on political governance and economic progress in Africa Working Paper 9, Africa Politics and Power Programme, London: Overseas Development Institute
- Khan, M. and Jomo, K.S. (2000) Rent, Rent-Seeking and Economic Development: Theory and Evidence in Asia Cambridge: CUP
- Killick, T (1995) *IMF Programmes in Developing Countries: Design and Impact*, London and New York: Routledge
- Killick, T (2004) "Politics, evidence and the new aid agenda" *Development Policy Review* 22, 1: 5-29
- Klein, R., Schipper, L. and Dessai, S. (2005) "Integrating mitigation and adaptation into climate and development policy: three research questions" *Environmental Science & Policy* 8: pp579–589
- Leach, M. (2008) *Re-framing resilience: A symposium report* IDS/University of Sussex: STEPS Centre, http://www.steps-centre.org/PDFs/Resilience.pdf
- Leftwich, A (2000) *States of Development: on the Primacy of Politics in Development*, Cambridge: Polity Press.
- Lemos, M.C., Boyd, E., Tompkins, E.L., Osbahr, H. and D. Liverman (2007) "Developing adaptation and adapting development" *Ecology and Society*, 12 (2): 26
- Leonard, D. (2008) Where are 'pockets' of effective agencies likely in weak governance states and why? A propositional inventory IDS Working Paper 206
- Lewis, J (2011) "Climate-proofing development: Corruption risks in adaptation infrastructure" in *Global Corruption Report 2011: Climate Change* London: Transparency International, http://www.transparency.org/publications/gcr/gcr\_climate\_change2#Full
- Lienert, I and Modi, J (1997) *A decade of civil service reform in sub-Sahara Africa* IMF Working Paper WP/97/179
- Lin J and Nugent (2009) "Institutions and economic development" in Rodrik and Rosenszweig (eds.) *Handbook of Development Economics*

- Lockwood, M. (2005) The State They're In Rugby: Practical Action Publications
- Lockwood, M. (2006) "Trade, aid and the state: What stops Africa following East Asia?" in S. Page (ed) *Trade and Aid: Partners or Rivals in Development Policy* London: Cameron and May
- Mackay, A. (2011) "Is poverty in Africa really falling quickly" Presentation given at Sussex University, March 2011
- Melamed, C and Sumner, A (2011) "A post-2015 global development agreement: why, what, who?" Paper prepared for an ODI/UNP workshop, Cairo October 2011, <a href="http://www.odi.org.uk/resources/docs/7369.pdf">http://www.odi.org.uk/resources/docs/7369.pdf</a>
- Mitchell, T. and Tanner, T. (2008) "Defining a future research agenda on pro-poor adaptation" *IDS Bulletin* 39, 4: 130-132
- Mitchell, T. and Maxwell, S. (2010) *Defining climate compatible development* Policy Brief 2010/A, London: Climate & Development Knowledge Network, <a href="http://cdkn.org/resource/defining-climate-compatible-development/">http://cdkn.org/resource/defining-climate-compatible-development/</a>
- Moncrieffe, J. (2004) *Beyond categories: Power, recognition and the conditions for equity* Background paper for the World Development Report 2006
- Moore, M. (2009) "Perverse Incentives: Globalisation and the Elites of Weak States", Paper presented at UNU-WIDER conference on 'The Role of Elites in Economic Development', Helsinki 12-13 June 2009.
- Ndulu, B and O'Connell, S (1999) "Governance and growth in sub-Saharan Africa" *Journal of Economic Perspectives* 13, 3: 41-66
- NEPAD (2010) CAADP Review: Renewing the commitment to African agriculture Final Report March 2010, <a href="http://www.nepad-caadp.net/pdf/CAADP%20Review%20-%20March%2020101.pdf">http://www.nepad-caadp.net/pdf/CAADP%20Review%20-%20March%2020101.pdf</a>
- North, D. (1990) *Institutions, Institutional Change and Economic Performance* Cambridge: CUP
- North, D. et al. (2008) *Governance, Growth and Development Decision Making*, Washington, D.C.: World Bank.
- OECD (2009) Policy guidance on integrating climate change adaptation into development cooperation Paris: OECD
- OECD (2011) Realising the Potential: Making the most out of climate finance A synthesis report from six country studies: Cameroon, Ghana, Kenya, Morocco,

- South Africa and Tanzania, Draft report http://www.oecd.org/dataoecd/27/38/48597031.pdf
- Operations Evaluation Department (1997) Adjustment lending in Sub-Saharan Africa: An update World Bank, Washington D.C.
- Ostrom, E. (2010) "Polycentric systems for coping with collective action and global environmental change" *Global Environmental Change* 20: 550-557
- Osman, Elasha, B. and Downing, T. (2007) Lessons learned in preparing national adaptation programmes of action (NAPAs) in Eastern and Southern Africa. European Capacity Building Initiative. <a href="http://www.eurocapacity.org/downloads/ecbi\_NAPA\_PA\_Project\_2007.pdf">http://www.eurocapacity.org/downloads/ecbi\_NAPA\_PA\_Project\_2007.pdf</a>
- Page, J (2012) "Can Africa industrialise?" *Journal of African Economies* 21, 2 (Supp.): ii86-ii125
- Pardey, P., Beintema, N., Dehmer, S. and Wood, S. (2006) *Agricultural research: A growing global divide?* IFPRI, Washington D.C. <a href="http://www.ifpri.org/sites/default/files/publications/pr17.pdf">http://www.ifpri.org/sites/default/files/publications/pr17.pdf</a>
- Parry, M. L., O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson (eds) (2007) *Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge, United Kingdom and New York, NY, USA: Cambridge University Press
- Persson, A, Rothstein, B and Teorell, J (2010) *The failure of anti-corruption policies: a theoretical mischaracterization of the problem* Working Paper 2010: 19, Quality of Governance Institute, Gothenburg
- Poldiano C. (2001) Why Civil Service Reforms Fail. IDPM Public Policy and Management Working Paper 16, Institute for Development Policy and Management: University of Manchester, Manchester.
- Radelet, S (2010) *Emerging Africa: How 17 Countries are Leading the Way* Center for Global Development, Washington, D.C.
- Raleigh, C (2010) "Political marginalization, climate change and conflict in African Sahel states" *International Studies Review* 12, 69-86
- Rodrik, D. (2007) One Economics, Many Recipes: Globalization, Institutions and Economic Growth Princeton, N.J.: Princeton University Press
- Sabates-Wheeler, R, Mitchell, T and Ellis, F (2008) "Avoiding repetition: Time for CBA to engage with the livelihoods literature" *IDS Bulletin* 39, 4: 53-59

- Sala-i-Martin, X and Pinkovskiy, M (2010) *African Poverty is Falling...Much Faster than You Think!* Working Paper 15775, National Bureau for Economic Research
- Sandbrook, R (1985) The Politics of Africa's Economic Stagnation Cambridge, CUP
- Scarritt, J and Mozaffer, S (1999) "The specifications of ethnic cleavages and ethnopolitical groups for the analysis of democratic competition in contemporary Africa" *Nationalism and Ethnic Politics* 5: 82-117
- Schipper, E.L. (2007) Climate Change Adaptation and Development: Exploring the Linkages. Tyndall Centre for Climate Change Research, Working Paper 107 Available online at: <a href="http://www.tyndall.ac.uk/sites/default/files/wp107.pdf">http://www.tyndall.ac.uk/sites/default/files/wp107.pdf</a>
- Scott, Z. (2011) Evaluation of public sector governance reforms 2001-2011: Literature review OECD, http://www.psgr.org/project-outputs/literaturereview/
- Shankland, A and Chambote, R (2011) "Prioritising PPCR investments in Mozambique: the politics of 'country ownership' and 'stakeholder participation'" *IDS Bulletin* 42, 3:
- Shleifer, A and Vishny R (1993) "Corruption" *Quarterly Journal of Economics* 108, 3: 599-617
- Skoufias E, Rabassa M and Olivieri S (2011) *The poverty impacts of climate change: a review of the evidence* Policy research Working Paper 5622, World Bank, Washington DC
- Staatz, J. and Dembélé, N. (2007) "Agriculture for development in sub-Saharan Africa" Background paper for the 2008 *World Development Report*, <a href="http://siteresources.worldbank.org/INTWDRS/Resources/477365-1327599046334/8394679-1327599874257/StaatzJ&DembeleN\_AgriForDevtInSSA\_ve19.pdf">http://siteresources.worldbank.org/INTWDRS/Resources/477365-1327599046334/8394679-1327599874257/StaatzJ&DembeleN\_AgriForDevtInSSA\_ve19.pdf</a>
- Tanner, T. and Allouche, J. (2011) "Towards a new political economy of climate change and development" *IDS Bulletin* 42, 3: 1-14
- Therkildsen, O. (2006) "Elusive public sector reform in East and Southern Africa" in Y, Bungura and G. Larbi (eds.) *Public Sector Reform in Developing Countries* Palgrave Macmillan
- Thornton, P., Jones, P., Ericksen, P. and Challinor, A. "Agriculture and food systems in sub-Saharan Africa in a 4 °C+ world" *Philosophical Transactions of the Royal Society A* 369, 117-136

- UNDP (2007) Human Development Report 2007/2008 Fighting climate change; human solidarity in a divided world. United Nations Development Programme, New York
- UNEP/UNDP Poverty-Environment Initiative (2011) *Mainstreaming Climate Change Adaptation in Development Planning: A guide for practitioners* <a href="http://www.unpei.org/knowledge-resources/publications.html">http://www.unpei.org/knowledge-resources/publications.html</a>
- Van de Walle, N. (2001) African Economies and the Politics of Permanent Crisis 1979-1999 Cambridge: CUP
- Van Donge, J, Henley, D and Lewis, P (2012) "Tracking Development in South East Asia and sub-Saharan Africa: the primacy of policy" *Development Policy Review* 30, Supp: s5-s99
- Verhoeven, H (2011) "Climate change, conflict and development in Sudan: global neo-Malthusian narratives and local power struggles" *Development and Change* 42, 3
- West, C. and Gawith, M. (eds.) (2005) Measuring Progress: Preparing for Climate Change through the UK Climate Impacts Programme UKCIP, Oxford
- White, G and Wade R (1984) "Developmental states in East Asia: capitalist and socialist" *IDS Bulletin* 26, 2: 27-36
- Whitfield, L (2011) Growth without Economic Transformation: Economic Impacts of Ghana's Political Settlement Working Paper 2011:28, Danish Institute for International Studies
- World Bank (2004) World Development report 2004: Making Services Work for Poor People Washington DC: World Bank
- World Bank (2010a) World Development Report 2010: Development and Climate Change Washington DC: World Bank
- World Bank (2010a) *Economics of Adaptation to Climate Change: Synthesis Report* Washington DC: World Bank
- Yohe, G. and Moss, R. (1999). "Economic sustainability, indicators and climate change". Presented at the IPCC Expert Meeting on Development, Equity, and Sustainability at Columbo, Sri Lanka, April 27-29. http://hdgc.epp.cmu.edu/publications/abstracts/sustainability.htm
- Yohe, G. and Tol R. (2002) "Indicators for social and economic coping capacity: moving toward a working definition of adaptive capacity" *Global Environmental Change* 12: 25-40

"Human development itself is the most secure foundation for adaptation to climate change. Policies that promote equitable growth and the diversification of livelihoods, expand opportunities in health and education, provide social insurance for vulnerable populations, improve disaster management and support post-emergency recovery all enhance the resilience of poor people facing climate risks. That is why climate change adaptation planning should be seen not as a new branch of public policy but as an integral part of wider strategies for poverty reduction and human development." (UNDP 2007: 172)

"most anti-corruption strategies being devised in the policy community simply assume that there is a rational-legal logic at the apex of these states that will be available to carry out the strategy; in fact, all too often, leaders at the apex of the state choose to undermine these strategies, which threaten practices they find useful and profitable".

<sup>&</sup>lt;sup>1</sup> http://climatechange.worldbank.org/content/country-case-studies-economics-adaptation-climate-change

<sup>&</sup>lt;sup>2</sup> These views are fairly widespread in the UK's international development ministry (DFID), for example <sup>3</sup> See Leach (2008) and Bahadur et al (2010) for reviews of the on-going debate on the appropriateness of

<sup>&</sup>lt;sup>4</sup> As the 2007 *Human Development Report* puts it:

<sup>&</sup>lt;sup>5</sup> For a similar argument about mitigation see Ostrom (2010)

<sup>6</sup> http://www.ccdare.org

Some the wider literature is reviewed in Booth (2011), Grindlee (2011), Centre for the Future State (2010), Rodrik (2007), North et al (2008), Acemoglu and Robinson (2008), and Leftwich (2008)

<sup>&</sup>lt;sup>8</sup> A series of public expenditure tracking surveys in the 1990s revealed how much money was going missing between legislatures approving expenditure centrally and its arrival at the point of delivery. In a particularly well-known case, almost 90% of funds voted for primary schools in Uganda in the early 1990s were being diverted (Hubbard 2007).

<sup>&</sup>lt;sup>9</sup> Much of the nature of African politics was formed in the relatively short period of independence from colonial rule, when nationalist leaders had to throw together coalitions extremely rapidly (Allen 1995). Inevitably, such alliances relied heavily on the existing class of tribal leaders and chiefs which had been created under indirect colonial rule. As a result, in almost all cases, the mode of governance in newly independent African countries carried over many characteristics of politics under colonial rule. These included the status of the people as subjects of authority rather than citizens with rights of free association and political representation, the use of a mix of patronage and repression to maintain order, and an accentuation of ethnic identity (Mamdani 1996).

<sup>&</sup>lt;sup>10</sup> These latter states were not democratic or transparent in governance, but they delivered high levels of inclusive economic growth, extraordinary diversification of exports and industrial structure, rapid poverty reduction, and massive investments in education and health, all in marked contrast to Africa's lack of developmental progress until very recently.

developmental progress until very recently.

11 The concept of developmental patrimonialism is also informed by analyses of South East Asia. This region had many economic similarities with sub-Saharan Africa in the 1960s, with similar, or even lower, income levels and similar economic structure, including large natural resource endowments. Nevertheless, many countries in South East Asia, such as Malaysia, Thailand and Indonesia have followed East Asia towards rapid economic growth and poverty reduction and large investments in physical and human infrastructure, leaving African comparators far behind (van Donge et al 2010). This contrast did not mean, however, that the developmental states in South East Asia were free from rent-seeking and patrimonialism; indeed, these were widespread. Khan and Jomo (2000) explain this apparent paradox partly along the same lines as Booth and colleagues. They focus on the degree of centralisation of rent seeking (building on Shleifer and Vishny 1993), on the type of rents mobilised, and on the use of rent. The contrast between the more successful countries (e.g. Malaysia) and the less successful (e.g. Philippines) is then between regimes that centrally controlled rent-seeking, mobilised more than monopoly rents created by state institutions, and used rents for long term investments rather than consumption.

<sup>&</sup>lt;sup>12</sup> Often partly because of institutional incentives to disburse within donor organisations – see e.g. Kanbur 2000)

<sup>&</sup>lt;sup>13</sup> As van de Walle (2001: 127) pointed out:

<sup>&</sup>lt;sup>14</sup> Radelet's view is that there are another group of 'threshold' countries, including Kenya and Senegal, that could soon join the "emerging Africa" category, leaving behind a smaller number of central African

countries. He separates out the oil exporters, amongst whom recent economic growth experience is quite diverse.

15 See <a href="https://www.cia.gov/library/publications/world-leaders-1/index.html">www.climatefundsupdate.org</a> for details

16 https://www.cia.gov/library/publications/world-leaders-1/index.html