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Strategic localism for an uncertain world: A postdevelopment approach to climate change adaptation

Philip Ireland*, Katharine McKinnon

Department of Environment and Geography, Macquarie University, Sydney, NSW, Australia

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ABSTRACT

Adaptation to climate change is being planned and implemented across the developing world. As billions of development aid dollars are being mobilised around this new theme there are risks that adaptation efforts of the development sector will result in familiar problems. In this paper we draw upon postdevelopment perspectives that critically consider development aid and the role of the development sector to scrutinise emerging approaches to adaptation. We suggest that a postdevelopment approach to adaptation contributes a much-needed analysis of the agendas that are shaping adaptation discourses and helps us to see nascent possibilities for adaptation that are already unfolding in diverse localities.

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1. Introduction

As the development sector turns its attentions to the potential impacts of climate change in the developing world, a whole suite of new programmes are being funded under the designation of adaptation to climate change. At its best adaptation is focused upon enhancing the adaptive capacity of communities who are facing increasing uncertainties as the climate changes and their environment is transformed. At its worst, adaptation is merely the new catch phrase that is being applied to all kinds of development aid programs, whether they genuinely address climate change or not. Either way, adaptation is being rolled out across the globe. Within the United Nations Framework Convention on Climate Change (UNFCCC), developed nations have committed to providing around 100 bn USD per year from 2020 to support climate change adaptation and mitigation in the developing world (UNFCCC, 2009, 2011). To put it in perspective, this is an amount almost equivalent to total annual flows of overseas development assistance (World Bank, 2011).

One of the problems with adaptation, however, is that little work has been done to analyse the underlying assumptions of approaches to adaptation by the development sector. We see an urgent need to question the underlying assumptions of adaptation and to investigate the ideologies and agendas that are shaping adaptation discourses. Drawing on postdevelopment perspectives

we offer an analysis of adaptation in the development sector that reveals many familiar problems. In some instances adaptation is being used to reconstitute a growth driven development agenda without stopping to consider whether these approaches are appropriate in addressing either the challenges of climate change or the needs and aspirations of local communities. In order to demonstrate this point we draw upon recent statements of the World Bank and a review of a project related to adaptation in Tajikistan.

In this paper we explore how a rethinking of emerging approaches to adaptation through a postdevelopment lens can reveal possible alternatives for how to support adaptation processes in the developing world. Many communities are already struggling to adjust to climate change impacts such as increasingly unpredictable seasonal shifts and more intense climate events such as floods, droughts and storms (IPCC, 2012). Drawing on case studies from Nepal and Bangladesh we argue that many communities are already engaged in efforts to enhance their adaptive capacity to a range of challenges including climate change, but that these may be at odds with approaches supported by the mainstream development sector.

One of the challenges that we identify is that small-scale community efforts are seldom acknowledged to have impact beyond the local level. In the examples we discuss from Nepal and Bangladesh community led responses to environmental change are characterised by collective action, social networks, experimentation and advocacy. Such small-scale examples may seem inconsequential in the face of the global challenges of climate change adaptation, but a postdevelopment perspective contributes a way of seeing and valuing how these local examples could have global

* Corresponding author.

E-mail addresses: philireland@gmail.com (P. Ireland), Katharine.mckinnon@mq.edu.au (K. McKinnon).

implications. While postdevelopment has been criticised for offering nothing but a romantic and politically correct vision of 'the local' (Pieterse, 2010), we take a different view. Localism entails a commitment to and valuing of the things that people do in the places where they are, without relying upon an overarching framework to introduce, validate or extend such localised 'doings'. After all, when is anything not local? As geographers we cannot help but see how any and all development aid is grounded in place – whether it is the place of the doing of development in villages, towns and cities of the 'Third World', or other places where policies are made, funding decisions taken, or new themes and approaches circulated amongst development professionals.

Drawing on ideas of flat ontologies (Marston et al., 2005) in this paper we wish to think along the threads that connect actors across these diverse sites. A flat ontology rejects hierarchical models of scale and provides a framework for a strategic localism that challenges the idea that in order to be effective, climate change responses must be big. We wish to explore the possibility that global impacts can be achieved by local adaptation efforts while remaining engaged with the contingencies and specificities of local contexts, concerns and capabilities. We make use of poststructural social and political theory, particularly the work of Gibson-Graham (1996, 2006, 2011), Laclau (1991, 1996, 2000) and Butler (1993, 2000), to explore the idea of a strategic localism for climate change adaptation. Drawing on the idea that social change begins in the coming into being of new subjects, we explore how a resubjectivation of the embodied and emplaced persons doing development may be a first step towards effectively supporting local adaptation efforts.

2. Climate change adaptation

There is significant international consensus that greenhouse gas emissions from humans during the past 200 years are changing the earth's climate. In 2007 the Intergovernmental Panel on Climate Change (IPCC), a body formed out of the World Meteorological Organisation and United Nations Environment Program, stated that anthropogenic climate change is "unequivocal". The rapidly increasing wealth of peer-reviewed literature on climate change has identified a range of significant changes that will unfold over the coming years and decades (Garnaut, 2008; IPCC, 2007, 2012; Richardson et al., 2011). Many of these changes have begun to occur and are having real impacts on communities around the globe.

The concern to adapt to climate change has been taken up by the development sector through a set of policies and practices that have come to be known as adaptation. Many theorists have drawn attention to the fact that there are many different definitions and conceptualisations of adaptation (Smit et al., 1999; Yamin et al., 2005; Fussler, 2007; O'Brien et al., 2008; Ireland, 2010, 2011). The most widely used definition is that of the IPCC (2001) which defines adaptation as "adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm and exploits beneficial opportunities". The IPCC also recognises that there are different types of adaptation including, anticipatory, reactive, public, private, autonomous and planned (IPCC, 2001). The IPCC's definition is a broad interpretation of adaptation that captures many different actions including longer term strategies such as planning for expected or predicted changes and short-term responses to extreme events which involve simply coping with impacts (Blaikie et al., 1994; Schipper, 2004). Various approaches and concepts, relevant to adaptation, are already being applied to address challenges related to climate variability.

There are a number of pre existing terms and concepts that have been drawn upon in order to understand and implement adaptation. For example, the concept of vulnerability has been an

important feature in the development of adaptation theory and practice (for reviews of other key concepts see: Kelman and Gaillard, 2010; Gaillard, 2010). Burton et al. suggest that adaptation "refers to all those responses to climate change that may be used to reduce vulnerability" (1998, p. 5). When applied to social systems, vulnerability is broadly defined as the function of exposure and sensitivity to certain conditions. Within the adaptation literature the concept has been used to draw attention to the significance of the pre-existing context (Adger, 1999; Allen, 2006). Many communities face a range of long term challenges, such as conflict, poor governance and land degradation that pre-date or are unrelated to climate change. Drawing upon this context Ireland has explored how existing approaches to development are being considered as potential contributions to adaptation, (Ireland, 2010, 2011, 2012b; Ireland and Thomalla, 2011).

Different actors invariably focus on different aspects of adaptation and it is evident that the sheer breadth of adaptation conceptualisations is enabling vastly divergent approaches. Various development institutions are approaching adaptation in a wide range of different, and at points contradictory, ways (Ireland, 2012b). Some organisations suggest that adaptation should focus on large scale projects such as the construction of dams (Oxfam, 2011) or the climate proofing of infrastructure (Heltberg et al., 2009). Others argue that approaches to adaptation should be community based (Care International, 2012; IISD, 2011; Percy, 2011). The NGO CARE International argues for 'community based adaptation' which incorporates non-discrimination of marginalized and vulnerable communities; active, free and meaningful participation; and increased accountability in decision making (Percy, 2011). In this vein, a CARE employee stated at a conference on community based adaptation: "Adaptation is something that is radically new... ODA [Overseas Development Assistance] has been considered charity and not a high priority where promises have not been met... [Adaptation is] a movement of people seeking change" (CBA Conference, 28 March 2011). This perspective posits that adaptation efforts can avoid being yet another development approach predicated upon First World advisers, facilitators, and consultants helping impoverished and needy Third World subjects. For CARE adaptation lends itself to partnerships in which the "people seeking change" may come from anywhere.

3. Postdevelopment

In this paper we explore how postdevelopment perspectives could make an important contribution to the formulation of approaches to adaptation in the developing world. To date, much of the literature on climate change adaptation and development aid has reflected developmentalist paradigms. That is, the literature is often framed within a logic that situates idea of development aid (and often the development sector) as legitimate, natural and necessary. Examples include arguments to mainstream adaptation into development (Huq and Reid, 2004; Klein et al., 2007; Sietz et al., 2011) and also to integrate adaptation into disaster risk reduction (Thomalla et al., 2006; UNISDR, 2008; Venton and Trobe, 2008). Recent guidelines for the monitoring and evaluation of emerging adaptation efforts are also often framed in terms of what the development sector could do 'better' (Lamhugue et al., 2012; McGray and Spearman, 2011), rather than questioning problematic aspects of existing development aid frameworks. We suggest that these literatures, whilst making a contribution to adaptation theory and practice, often miss important political and ideological dimensions of development aid (Escobar, 1995a; Ferguson, 1990; Sachs, 1992). As we will explore, postdevelopment offers a unique set of perspectives on development aid that are critically mindful of dominant development discourses. These help us to scrutinise

emerging adaptation approaches in the light of development politics and ideology.

Postdevelopment is a field of debate rather than a cohesive body of work with core principles and approaches. However, there are a shared set of concerns and interests that characterise postdevelopment contributions to the literature. The first is to engage in a critical rethinking of development drawing on poststructural and postmodern perspectives. In some sense development has never not been subject to critical rethinking, much of it under the rubric of alternative development and Marxist inspired analyses of uneven relationships between the “First World” and “Third World”. From World Systems Analysis and Dependency theory to Women in Development (WID), Gender and Development (GAD) and Participatory Learning and Action (PLA) – development theory and practice has been constantly under scrutiny for how well broad goals of development are being achieved. The nature of those goals too has been the subject of debate: whether development is intended to help impoverished regions of the world ‘catch up’ with the relative wealth and privilege of the developed world; whether it should be about diminishing global inequities and empowering the poorest of the poor; or whether it is about meeting the Millennium Development Goals (MDGs), eliminating poverty, or creating new sustainable livelihoods for all. As Ferguson (1994) notes, debates about development tend to focus upon what development is and what it *really* does – tallying up its successes and failures against the central assumption that development ought to be in the business of making life better for the poor, the marginalised and the disadvantaged. Whether the problem is that development is in fact exploitative and destructive, or that it is badly carried out, or structured around the wrong kinds of interests (say, those of consultants and elites rather than the ‘poorest of the poor’, Chambers, 1983, 1997) ‘the argument is still organised around the politically naïve question: “Do aid programs really help poor people?”’ (Ferguson, 1994, p. 12).

The scrutiny to which postdevelopment puts development thinking is slightly different. Rather than question what development is ‘really doing’, postdevelopment critiques tend instead to focus upon how development functions as a discourse: how it was imagined into being, how it became a ‘thing’ that people did, with its own set of rhetoric, practices, literatures, interventions, all taking shape around the problematisation of poverty (Escobar, 1995a; Ferguson, 1994; McGregor, 2007; Ziai, 2007). It asks: how did development as a mode of understanding, and a set of practices, come into being? How does it continue to be sustained and reshaped in the world? And what does it do – how does it shape us and how are we shaped by it (Underhill-Sem, 2002)? This critical rethinking deliberately evades the question of value and whether development is doing what it ought. This is often seen as a cop out (Corbridge, 1998; Peirtese, 1998, 2010 for example) however, it is more usefully understood as a first step towards thinking differently, picking apart and identifying what is in order to see what might have been, what other ways and doing and thinking have been missed or suppressed, and what alternative views might be fostered, what new possibilities might be opened up as a result of seeing things differently (Gibson-Graham, 2005; McKinnon, 2010). It is a matter of seeing past the assumed naturalness or neutrality of development’s worthwhile and altruistic goals (such as “the single humanitarian project of producing a far better world” Peet, 1999, p. 1).

In this process of ‘picking apart’ many postdevelopment scholars are particularly attentive to the relations of power that are embedded in development in, for instance, the ways that development discourses brought into being a world of underdevelopment, occupied by ‘the poor’ and in desperate need of assistance from the developed world (see Sachs, 1992; Esteva, 1992; Escobar, 1995a, 1995b, 2004), or how professional subjectivities have been shaped

by expectation of doing good and making a difference in the world (McKinnon, 2006, 2007, 2011). In particular, postdevelopment draws upon postcolonial analysis to examine how colonial relations of inequity and oppression have been re-legitimised through the language and mechanisms of development (Simon, 2006; Sidaway, 2007).

However, being attentive to power relations does not necessarily mean being attentive only to relations of domination and oppression. It is more a matter of being attentive to the ways that forms of power come into being in and through shifting discourses. In other words it is a matter of being attentive to what Butler (1993) calls the performativity of discourse. For us this means the manifold representations of development in text, speech and image across policy, academic literature, popular media, project reports and so forth. And more than this, it is about how those representations exist in intimate relation with the diverse practices of development – including how discourse is practiced in the making of policy, the planning of programs, and the action undertaken with communities on the ground. The rhetorics of development are thus seen as being intimately linked with the ‘doings’ of development.

By exploring how discourse shapes the world of development many postdevelopment scholars are engaged in what Foucault termed a ‘history of the present’ (1977, p. 31). Histories do not usually provide a clear path for moving forward, and recently postdevelopment scholars have been focusing on a more hopeful project of moving beyond critique to efforts to reshape and reimagine development, to engage in ways of doing what has been called ‘development’ differently (Escobar, 2007; Gibson-Graham, 2005; Matthews, 2007; McKinnon, 2011; Parpart, 2002). These efforts have much in common with alternative development approaches: they are based in community engagement and participatory approaches and they inevitably rely upon the local as the starting point. Attempts to concoct new postdevelopment practices would not be possible without the groundwork of alternative development approaches. What alternative development approaches have done is to identify who was missing out on the supposed benefits of development, and to encourage new development practices that would allow these groups to gain from the interventions of the development sector (Chambers, 1983, 1992, 1997; Friedmann, 1980; Kothari, 2002). Among them are participatory development approaches, Women in Development (WID) and Gender and Development (GAD), Indigenous Knowledge Asset Based Community Development (ABCD). All of these approaches seek to value and respect the diversity of local knowledges and perspectives while at the same time codifying development practices that can be implemented universally. At the same time they tend to be bedded within a universalising ideal of global justice – desiring a moral utopia of empowerment and equity.

For postdevelopment practices the disjuncture emerges at this point – for the poststructuralist the moral claims of alternative development cannot be positioned as innately true. They are always in themselves ideological and political and as deserving as any other discourse of critical analysis and a mindful interrogation. For postdevelopment there can be no easy reliance upon the validity of these moral claims to justice.

The refusal to make a moral claim is all very well when one is engaged in critique. The problem that many commentators have with poststructural scholarship is that it tends to stop at critique of society. While such critiques may open up the idea that things could have been otherwise, they often refuse to prescribe what the world ought to be. For the poststructural scholar there is no privileged position that one can occupy from which to see the right or true path forward – everything and everyone is subject to the machinations of power and politics that shapes our social world and our understandings of what is right and true.

The lack of a position of moral certainty outside of politics does not, however, doom us to inaction. Rather, what postdevelopment scholars are exploring is how to move ahead *uneasily* – without confidence that any particular approach is the ‘right’ one, and with the knowledge that any development work is always already embedded in politics (Gibson-Graham, 2005, 2011; Kapoor, 2008; McKinnon, 2007). Moving ahead on these terms means that formulating action upon a rethinking and reframing development, a critical rapprochement of what development is and what it could be that engages with the performative power of development discourses. Such efforts must maintain a tension between hope and critique: the hope that it is possible to partner across the majority (‘3rd’) and minority (‘1st’) worlds in order to “produce a far better world” (Peet, 1999, p. 1), and the critical understanding of how development was and is imagined and enacted in and through an often neo-imperial and paternalistic politics.

The picking apart of development discourse invokes a critical awareness and mindfulness of claims to truth, knowledge and power in development. Living, as we do now, in the Anthropocene, mindfulness in development must also extend to consideration of the impacts that a modernised economy has had upon our planet (Dalby, 2007; Gibson-Graham, 2011) and the actions being taken to address these impacts. Adaptation is one of these and the exploration of these new discourses and how they are being used is only just beginning.

4. The discursive practices of adaptation: The World Development Report 2010 and the Pilot Programme for Climate Resilience in Tajikistan

Adaptation is at risk of becoming an addition to the plethora of development tools and approaches that facilitate outcomes that have little to do with either poverty eradication or adaptation. Postdevelopment perspectives contribute to existing critiques of how adaptation is being conceptualised and utilised (see Adger et al., 2009; Adger and Barnett, 2009; Ireland, 2010, 2012b; Mercer, 2010; Moser, 2009) by focusing on the political and ideological dimensions of how the development sector is engaging the topic of adaptation. In this section, we utilise a postdevelopment critique to demonstrate that the ways some development organisations are approaching adaptation are bedded in pre-existing assumptions about the way development aid *should* happen. We explore how postdevelopment perspectives can contribute to scrutiny of emerging approaches to adaptation.

Our first example comes from the World Bank’s “World Development Report” of 2010. The World Development Reports are the Bank’s flagship publication and carry out the difficult task of both presenting the Bank’s conclusions on a particular theme while reflecting the “ideological preferences of its constituencies” (Wade, 2001, p. 1435). As well as reflecting the positions of both World Bank policy makers and key donors, the document itself is enormously influential and is intended to shape the policies of governments in developing countries (Rigg et al., 2009; Paalman et al., 1998) as well as other organisations working in development aid. At this point it should be noted that the World Bank is subject to ongoing critique for its role in adaptation financing (Bretton Woods Project, 2012a). For example, in mid 2012 a range of prominent international NGOs called for the World Bank to withdraw from its flagship ‘Climate Investment Funds’ citing issues such as poor process, inadequate transparency and disregard for indigenous peoples (Bretton Woods Project, 2012b). Postdevelopment perspectives contribute a way of understanding and exploring why these issues may be emerging and offer a potential pathway forward. We firstly draw our attention to the 2010 World Development Report that focused on the theme of ‘Development and cli-

mate change’. In this report the World Bank mapped out how public policy and development can change to help people better cope with new and worsened risks.

The report reflects a pre disposition towards economic growth as both an overarching goal of development, and a central mechanism for its achievement. This sentiment is evidenced through language in the very first pages such as “climate policy cannot be framed as choice between growth and climate change. In fact, climate smart policies are those that enhance development, reduce vulnerability, and finance a transition to low-carbon growth paths” (viii). Similarly, the report stresses the role of carbon markets and emissions trading through statements such as “Pricing carbon... and trading of emission rights will be needed if growth and poverty reduction in the developing countries are not to be impeded in a carbon-constrained world” (xi). These quotes contain an obvious overarching assumption of the need for economic growth in development approaches. The individual policy proposals, such as pricing carbon and emissions trading are also consistent with this approach.

A reliance on market mechanisms, reflecting the neoliberal stance of the Bank and its members, is evident throughout the report. In broad terms, neoliberalism is an approach to economics, that has also been applied to development, that emphasises the role of the private sector and the market as the central planks of societal, political and economic organisation (Watts, 2000, p. 547). The World Development Report reflects this perspective by emphasising that public investments are insufficient and need to be complimented by “market-pull” policies and “private sector incentives” (x). Furthermore, the report alludes to the need for reduced state intervention and the opening up of markets. This is evidenced by such comments that praise the “removal of agricultural subsidies”(x) and reference the need to “remove distortions price signals” more generally (x). The report also argues the need for enhanced agricultural productivity and references the benefits of the Green Revolution¹ (pp. 150–151). Whilst the report identifies some problems with the Green Revolution, such as environmental damage stemming from overuse of water and chemicals, they largely blame government policy by referring to the negative impact of “perverse subsidies and pricing and trade policies” (p. 151). Given the wide range of negative impacts the Green Revolution is thought to have had – including rising costs for farmers, increasing use of chemical pesticides and fertilizers, loss of biodiversity, loss of local seed stocks, and the dramatic expansion of global agricultural corporations associated with increasing indebtedness and shrinking autonomy of farmers in the developing world (Lipton, 1989; Sen and Dreze, 1989; Watts, 2000). This affirmation of the Green Revolution as a good model for climate change adaptation is significant. It demonstrates to us that the World Bank may be varnishing a familiar growth driven development agenda with an adaptation tint.

The perspectives presented in the World Development Report are also evident in the planning and implementation of actions named as adaptation. An early example of this is found in one of the world’s first and largest climate change programs: the Pilot Program for Climate Resilience (PPCR). The PPCR was established during 2008 by several multi-lateral development banks (MDBs), including the World Bank, Asian Development Bank (ADB) and the European Bank for Reconstruction and Development (EBRD), in coordination with a range of governments. The stated purpose of the PPCR is to pilot and demonstrate ways in which climate risk and resilience can be integrated into development in addition to

¹ This term was coined during the 1960s and refers to the development of high yielding crop varieties. These high yielding seeds we utilised in development projects around the world with the aim of increasing food output per capita. The long term value of the Green Revolution remains contested.

producing knowledge and experience for scaling-up adaptation measures.

Tajikistan is one of nine target countries included in the PPCR and provides an early example of PPCR efforts, and approaches to adaptation more broadly. A number of concerns have been raised by local and international NGOs, including Christian Aid and Oxfam, about the way the program is being implemented. These concerns pertain to the lack of community participation, the particular actions that were funded and lack of consideration given to gender. Firstly, there was a range of concerns raised around civil society participation. For example, during the planning of projects in Tajikistan, civil society consultation was limited to short meetings with expatriate staff for which there was no prior provision of relevant PPCR planning documentation (Conference Participants, 2010; Oxfam, 2011, pp. 14–16). In addition, there were no in-country focal points for the PPCR amongst those leading (World Bank/ADB/EBRD) the PPCR process in Tajikistan. Many Tajik organisations expressed that they were substantially limited from accessing information and lobbying time as most of the staff involved in the projects were based at headquarters in other countries (Oxfam, 2011, p. 14).

The lack of civil society participation has been a consistent concern with the PPCR (Bretton Woods Project, 2011). The selection of projects in the Tajikistan PPCR demonstrated a bias towards big infrastructure and an inadequate consideration of local views. Oxfam (2011) notes that the PPCR focused on large-scale hydropower rather than on small-scale hydropower and renewable energy. The declaration from a conference with Tajik civil society organisations states that the PPCR programs were “mainly aimed at further implementation of existing projects of ministries and multilateral banks with slight climatic rebranding” (Conference Participants, 2010, p. 1). The apparent predisposition of these multilateral development institutions towards certain was also reflected by The Academy of Sciences of Tajikistan who suggested that their existing work on renewable energy was not properly taken into account in PPCR planning. An employee of the Swiss Agency for Development and Cooperation also reflected these concerns and suggested that the PPCR could have done more to replicate and disseminate effective existing practices from Tajikistan instead of imposing technologies developed outside the country (Oxfam, 2011).

In the case of the PPCR and the World Bank's World Development Report, it is evident that adaptation is being applied in ways that are far from a postdevelopment mindfulness and deliberate uncertainty. Rather, in seeking to respond to climate change the World Bank seems to have found ways to reaffirm what they were already certain of: that economic growth is central and a top-down, ‘think big’ approach (akin to the Green Revolution) is the best way forward (Sachs, 2010; Pieterse, 2010).

But what would a postdevelopment perspective contribute and where might it take adaptation efforts? In the four examples of community-based adaptive programs, discussed below, we consider what a post-development perspective might tell us about the value of these local efforts and explore what lessons from the community might be applied ‘up’ to the ‘powerful bureaucracies’ that Staudt has termed the ‘masters’ of development (2002). These four examples add to an existing academic literature on postdevelopment practice (Carnegie et al., 2011; Gibson-Graham, 2005; Gibson et al., 2008; McGregor, 2007; McKinnon, 2007, 2011; Yapa, 2011). Like these, the community programs discussed below are examples of development efforts that are moving away from the universalising discourses of development and traditional aid delivery mechanisms, to act in and with the specific assets and aspirations of local groups and communities.



Fig. 1. A community garden on common land, Banishanta, Bangladesh.

5. Local climate change adaptations

Many communities are already responding to the pressures of increased climate variability by learning to act in response to the increasing uncertainties associated with changing weather patterns. Below we consider four such cases, two from Bangladesh and two from Nepal. In these responses to climate vulnerability a postdevelopment lens sees not ‘just’ a local (insignificant) example of climate change adaptation, but a rhizomatic array of actions to be valued, fostered and supported.

The following examples are drawn from a period of fieldwork in Nepal and Bangladesh that was conducted as part of a larger doctoral research project. A core component of this research was an investigation into how different communities perceived and were responding to climatic factors. Working through a number of local NGOs the research utilised a range of qualitative methods including participant observation, focus groups and semi-structured interviews. In this section we draw upon four examples from sites in Nepal and Bangladesh in order to illustrate how some local groups are responding to environmental challenges, including climate change. We acknowledge that there are multiple layers of social, cultural and economic complexity in these contexts and by no means want to imply that everything that happens locally is per se positive. Rather, we suggest that these examples reflect nascent possibilities for communities to begin a process of adaptation to climate change.

5.1. Adaptive villages

A small Bangladeshi NGO is leading the establishment of small adaptive ‘eco-villages’ in disaster prone areas in the coastal region. These ‘villages’, consisting of 4–10 dwellings and families, are employing a number of new and old practices to enhance their capacity to prepare for and cope with climate related disasters such as floods, cyclones and storms. They were established and initially funded by the local NGO and are now largely self-sufficient through small scale agriculture and micro-enterprise. One of the measures that has been introduced by one such village near the town of Banishanta is the revegetation of roadsides and dwellings. Revegetation provides shelter from storms and helps prevent erosion of banks and rises etc. During a focus group with this village one member noted “after Sidr [2007 cyclone] and Aila [2009 cyclone] we knew we had to plant more trees at [next to] the roads... the roads with no trees had been washed away and left many people [stranded]”. In association with this approach this eco-village had also begun collectively paying one of its members from their micro-enterprise funds to water and guard the young trees that they planted as in the past most trees were cut down for firewood. Correspondingly the village had also started to use portable

efficient clay stoves to reduce firewood use and pollution. The small stoves are made from local clay, are mostly enclosed to use wood fuel more efficiently and are easily transportable for when people need to relocate in response to disasters. These actions are small, yet significant examples, of how communities are trying to do some things differently in the context of a challenging environment (Fig. 1).

5.2. Community experiments to reduce vulnerability

In the same region another small local NGO is developing strategies with the community to reduce vulnerability to extreme weather events such as floods, cyclones and storms. The IPCC (2007) notes that the intensity and frequency of floods and storms in the South Asian region, including Bangladesh, has been increasing in recent decades. Several of the NGO employees also referenced the high number of recent extreme weather events that have damaged housing, crops, farming land and poisoned fresh water sources as a motivation for trying to develop new approaches for reducing vulnerability to the weather. The NGO is performing and facilitating 'experiments' in a large garden area (including a pond) behind their HIV and TB clinic. One employee noted "we had all this space out the back of the clinic and wanted to better use it. . . it started with just a few gardens being grown by patients at the clinic but after a while some local people wanted to try some new ideas".

These new practices include developing local crop varieties, floating vegetable gardens, large storage pots embedded in houses and hanging gardens. The development and saving of local crop varieties avoids the cost of commercial seeds and, at points, produces relatively high yielding crops suited to the local environment. Floating vegetable gardens made of local materials in local drinking ponds rise and fall with the water level and reduce the risk of food being destroyed during floods. Embedding locally produced clay pots into house floors and walls provides a relatively safe food and water storage location during disasters. When the pot is filled it is sealed up and then reopened after the disaster providing emergency sustenance. Hanging gardens in suspended pots or on roofs protect plants from flooding and potentially increase cropping area. Whilst variations of these actions may have been utilized previously in other places, the way they have emerged in this community at this time is significant. A local NGO and local community members have worked collaboratively to develop strategies in response to perceived environmental pressures, related to climate change. In contrast to the Tajikistan case study, these self-seeded initiatives, that draw upon local resources and expertise, enhance the community's capacity to deal with the ongoing uncertainties of climate change (Fig. 2).



Fig. 2. A floating vegetable garden, Banishanta, Bangladesh.

5.3. Women's collectives to build capacity

In the rural town of Nepalganj, Nepal a group of collectives are engaging a diverse range of actions to reduce their vulnerability to both environmental and socio-economic challenges. These collectives were initially facilitated by a small Nepali NGO to explore issues they face and identify potential solutions using the 'group action process'. Most of the participants of these collectives have recently internally migrated to the regional capital of Nepalganj due to political instability and conflict in Nepal. They do not generally own land and do not have significant financial or material assets. Many of the participants of these collectives are vulnerable to extreme weather events due to their reliance non-irrigated agriculture and habitation of environmentally sensitive areas of the town such as adjacent to drains and river beds. After several years of facilitation by the local NGO, the majority of the collectives are now self-sufficient. They are engaging a range of local activities in order to respond to old and new environmental challenges including flooding during the monsoon and drought during winter.

In recent years the community has noticed that there is less rain during the winter and that the monsoon is more unpredictable with less frequent but more intense rain events (Ireland, 2012a). In response, several of the savings and loans collectives are working together to raise local pathways and increase their food security. Raising local pathways enables communities to move around in times of flood without moving through dirty flood water. One particular collective went as far to lobby their local government to provide cement for construction and they provided the labor. In response to food security challenges, another collective has purchased land in order to produce some of their own food. Most collective members are landless and rely upon insecure day-to-day work for income to purchase food. These collectives are bringing their individual resources together to support a range of different locally based activities that are helping them cope with environmental change. Interestingly, these communities were largely unfamiliar and disassociated with the concept of 'climate change'. Statements such as "climate change is an issue of the elites" or "that's [climate change] what rich people talk about" (Ireland, 2012a) suggested that many participants did not think that climate change was an issue that was relevant to their day to day lives. Ireland (2012a) found that this disassociation was coupled with a distrust of international development organisations in their community. These perceptions further identify the complexities of externally driven development interventions, such as in the World Bank example, and highlight the important role for action that emerges from within local contexts (Fig. 3).



Fig. 3. Raised walkways built by local collective, Nepalganj, Nepal.

5.4. Savings collectives and disaster assistance networks

Finally, we consider the case of local social networks in engaging the complex challenges of climate change. In the rural town of Kholpur, Nepal a small set of collectives are working together to better cope with extreme weather through the development of social networks. These groups were initially convened by a local NGO utilising the Asset Based Community Development (ABCD) approach. With the help of a local facilitator these groups were able to identify challenges facing their community and consider solutions together. In the first instance these groups established themselves as savings and loans collectives. After several floods a number of these groups recognised that the network they had established was crucial to coping during floods. In one focus group an individual noted that the friendships they had developed were just as important as their savings; “now we talk to each other and tell each other information about the floods... We help each other to get to safety”. As a result of their experiences this group has established a disaster assistance network whereby they divide responsibilities to check on each other and their neighbours during disasters. This outcome is a long way from the initial savings and loans collective and reflects the exponential capacity and potential of some communities. In this situation they established their disaster network based on their lived experience in the relatively unique context of rural Nepal. This example contrasts approaches like the World Bank in Tajikistan by being a dynamic, unexpected and locally driven initiative (Fig. 4).

In the case of adaptation, locality is especially important as the approach relies upon a global network of localised actions to prepare for the impacts of climate change. A wide range of literatures argue that adaptation needs to be context specific and locally based (Aalst et al., 2008; O'Brien et al., 2008; Mercer et al., 2008). As the examples from Nepal and Bangladesh begin to show, local responses to climate change are already underway as communities begin to deal with the increasing uncertainty in their environment. The examples suggest that rather than looking to a codified set of tools or approaches, a diverse, and perhaps unexpected set of practices may be appropriate in the process of adaptation to climate change. A key lesson that emerges from these examples is around the role of collective action and social networks. Across the examples, it is evident that the cultivation of social networks through collectives, or otherwise, can enhance community capacity to deal with climate-related disasters (also see Ireland and Thomalla, 2011). The creation of new social networks can provide new relations of support in times of climatic stress and facilitate the dissemination of new knowledge and practices for an uncertain context. Other possible lessons from these examples include the experimentation with local resources and skills, accepting that



Fig. 4. Women's disaster assistance network, Nepalganj, Nepal.

some efforts may not work, to build on local knowledge to enhance adaptive capacity to climate change. It should also be acknowledged that there are many challenges for these communities as they respond to climate change. For example a lack of knowledge about the longevity of climate change may lead to temporary adjustments rather than sustained efforts (see Ireland, 2012a). Similarly, in some of these cases it was apparent that without some external support, such as through NGOs, some initiatives could not survive as government lacked capacity and resources.

These four local examples of practices that may support adaptation reveal the paucity of some current approaches that remain entrenched in a vision of market led 'progress'. These cases demonstrate diverse local responses to increasing uncertainties. Contrary to Pieterse's (2010) view, in which these local practices are merely local practices, we see them as accumulating towards a diverse set of climate change adaptations that enact important alternatives to the emerging norms of adaptation. A postdevelopment lens helps us to see the legitimacy and value of these local actions without necessarily requiring that they be replicable elsewhere or be amenable to being 'scaled up' to larger scale regional or global programs. The context of adaptation efforts is undeniably shaped by ideas of hierarchical scale, with relations between development actors, funding agencies and policy makers fitting with Howitt's model of relational scale formations (Howitt, 1993, 1998, 2002). However, the examples we have presented above seem to us to be significant not for how they are positioned or are potentially influential within scale relations, but for how they signal an accumulation of local and diverse practices that, although disparate and disconnected, may be building towards a significant response to what is a global challenge.

5.5. Strategic localism

In its focus on the local, postdevelopment is not so different from alternative development approaches, such as participation and gender empowerment, as both prioritise the local as the scale at which significant change happens. What is different is that a postdevelopment perspective, whilst acknowledging there may be common features and lessons for particular development issues, does not seek to 'scale up' these examples to a universal model for development practice. This of course is what lands postdevelopment in some trouble with its detractors. For the critics the absence of a universalising tendency can lead only to self-defeating localism, incapable of creating or enacting the kind of global change that development is all about. We argue that on the contrary development is always of necessity embedded in the local: from the locality of development programs, the places where development efforts are carried out to the locality of the offices in which World Bank bureaucrats write their policies. Global discourses of development are always simultaneously local discourses and practices, played out as much in the fields and villages and NGO meeting rooms of the 'Third World' as they are in the offices and conference halls of 'First world' donors and policy makers.

Furthermore, postdevelopment is not only local but it is personal. The other aspect that distinguishes a postdevelopment approach is that it places the subject as the starting point for change (Gibson-Graham, 2005, 2006). This is more than the old Gandhian adage of 'being the change you want to see in the world'. It is in a process of resubjectivisation that change becomes possible: one of the first steps to altering the social structures that create poverty is to alter how people see themselves and what actions they believe are possible. The capacity to deal with climate change rests just as much on what is believed to be possible. For adaptation to be effective, sustainable and appropriate it will rely upon many people taking action to alter the ways they manage their livelihoods, run their households, conduct their businesses, or

construct the organisations they are part of. It will require that people, across the First World-Third World divide, seek different ways of being human, to respond to climate change by finding ways to “go onward in a different mode of humanity or not at all” (Plumwood, 2007, p. 1, see also Gibson-Graham, 2011).

The question of localism is especially poignant in relation to climate change adaptation. As a global phenomenon climate change is set to transform the particularities of every life in almost every locality. The precise shape and depth of those impacts are unknown and unknowable – even the best climate science contains uncertainty, attempting to forecast into the future on the basis of data from the past. The latest report from the IPCC reflects this uncertainty and talks in terms of a ‘confidence scale’ and degrees of likelihood (2012, p. 19). The report states that ‘average tropical cyclone maximum wind speed is likely [66–100% probability] to increase, although increases may not occur in all ocean basins’ (p. 11). Climate change is the Lacanian Real of the physical world, it eludes knowledge, defining our present and future worlds in ways we simply cannot completely grasp. The closest we can come is in the ways this universal phenomenon is being experienced and responded to in a myriad of particular localities around the world.

As climate change is a Universal threat, local actions are easy to dismiss. One would assume that such a big problem requires a big solution. Yet despite better than ever conditions for a global political response, the international community has been unable to rally around the need to address this amorphous threat by reducing emissions. Perhaps governments are too used to modernist certainties and bureaucratic responsibility, the uncertainties associated with climate change are too daunting. It seems to us that the certainty with which some growth and market driven responses to climate change are being pursued by the World Bank, and other major donors, do not mesh well with the current uncertainty of future climate change impacts.

In this paper we have explored how a postdevelopment approach might open up new ways of seeing adaptation efforts that are taking place in local communities. It seems to us, however, that it is not these diverse local initiatives that need the most attention but the complementary localities of those who set the policies, who finance adaptation, and thus determine the broad shape of the discourses. In the face of the uncertainties of climate change, and as yet unknown challenges of a future in the Anthropocene, we argue that the development sector must learn from the villagers of Nepalganj and learn to act *in and for* acute uncertainty. In these uncertain times it is only appropriate that many of these agencies revise their *raison d’être*. We suggest that they must now, as Gibson-Graham (2005) put it, refuse to know too much: to refuse to know exactly what should be done or how. Relying on the diverse and often spontaneous innovations of specific communities is not something that the development industry does well. There is a tendency to rely on targeted programs, monitoring outcomes against predetermined targets, and measuring progress towards the ideal goal. This inevitably relies upon setting targets, and utilising recognised tools and methods to work towards them. While most agencies are looking for some certainty in relation to the value for each aid dollar spent, we are advocating uncertainty as a starting point. Instead, now more than ever, it is vital that development professionals look to alter their own practices and perspectives and by association the operations of the organisations they work for. The most urgent changes are not needed in the developing world but among the policy makers of donor nations. It is here that new kinds of donor subjectivities must be found, and new ways of funding climate change programs, bedded not in familiar certainties but in a new effort to move uneasily, supporting the diverse practices of local communities as they respond in their own particular ways to the universal threat of climate change.

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