A very real and practical contribution? Lessons from the Kalimantan Forests and Climate Partnership

Erik Olbrei and Stephen Howes

Abstract

On 9 September 2007, Australian Ministers and the Indonesian President announced a $100 million Kalimantan Forests and Climate Partnership (KFCP). This would involve protecting 70,000 hectares of peat forests, re-flooding 200,000 hectares of dried peatland, and planting 100 million trees in Central Kalimantan, Indonesia. Since then, the ambitions of KFCP have been quietly but drastically scaled back. The area expected to be re-flooded by the project is now just over 10 per cent of the original target. And little progress has been made on the ground. Four years on, blocking of the large canals required for re-flooding has yet to commence, and only 50,000 trees have been planted against the initial target of 100 million. What has happened to what was labelled at its launch as “a very real and very practical contribution”, one which would yield “immediate and tangible results”? We analyse KFCP both as an aid “announceable” and as a REDD (Reducing Emissions from Deforestation and Degradation) demonstration project, and reach two main conclusions. First, KFCP illustrates the damage that an emphasis on announcing new projects and a lack of attention to reporting on project progress can cause aid. Not enough has been done to publicly reposition KFCP as a much smaller, demonstration project. Second, slow progress made in implementing KFCP (and other REDD projects), when juxtaposed against the continued rapid rate of land conversion in Indonesia, suggests that the current approach is not working. There is no easy solution. Reducing deforestation in Indonesia is a difficult task because the drivers of deforestation – which range from weak governance to a strong industry lobby and the attractive economics of palm oil – are strong and difficult to tackle. If it is worth continuing, then the focus on pilots and processes which has characterised Australia’s engagement in Indonesia’s forestry sector in recent years should be re-oriented towards a more ambitious engagement. This should be supported by a vigorous high-level policy dialogue and at least the realistic prospect of a large amount of public funds.
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Finally, we hasten to add that responsibility for the conclusions and perspectives set out in this paper rests with the authors alone.
1. Introduction

On 9 September 2007, then Australian Minister for Foreign Affairs, Alexander Downer, then Minister for Environment and Water Resources, Malcolm Turnbull, and the Indonesian President, Susilo Bambang Yudhoyono, announced the $100 million Kalimantan Forests and Climate Partnership (KFCP). KFCP, they announced, would protect 70,000 hectares (ha) of peat forests, re-flood 200,000 ha of dried peatland, and plant 100 million trees in Central Kalimantan, Indonesia. It would lead to a reduction of 700 million tonnes of greenhouse gas emissions over a period of 30 years (Antara 2007; Downer 2007). It would, as Minister Downer put it, make “a very real and very practical contribution to improving our environment” (Downer 2007a).

Four years on, the emissions-reduction ambitions of KFCP have been quietly but drastically scaled back, and little progress has been made on the ground. KFCP is now described as a demonstration project, and the area to be re-flooded is now just over 10 percent of the original total. The blocking of large canals required for re-flooding of deforested peatland has not yet commenced, development of reference emission levels is incomplete, and only a modest start has been made with re-planting of peatland species.

What has happened to a project which promised, according to Minister Downer in September 2007, “immediate and tangible results”? This is an important question. Foreign aid is particularly subject an emphasis on “announceables” (Easterly 2002). The recent Australian Independent Review of Aid Effectiveness noted that “The aid program has always been prone to a strong focus on announcements by ministers”, and recommended that an “effectiveness culture focused on results, rather than an announcement culture leading to fragmentation, should drive the aid program” (Hollway et al. 2011:256). There is little in the public domain to suggest that the KFCP objectives have been changed, and little indication that it is not on track to meet its new, much more modest objectives. Case-study analyses such as this are important to promote accountability for aid spending.
An analysis of KFCP also promises to throw light on both the Indonesian and the international effort to reduce emissions from deforestation and degradation (REDD)\(^1\) in tropical developing countries. Land-use, land-use change and forestry (LULUCF) is estimated to contribute 12–15\% of all global anthropogenic greenhouse gases (GHGs), about the same as transport and agriculture.\(^2\) And most emissions from deforestation and forest degradation are in developing countries. Indonesia is both one of the highest emitters as a result of deforestation and a leading REDD supporter.

The Bali Action Plan, agreed at the 2007 United Nations Framework Convention on Climate Change Conference (UNFCCC 2008), hosted by the Indonesian Government, generated a wave of optimism in relation to efforts to reduce forestry-related emissions. Much effort has subsequently gone into developing the processes and practical approaches needed to implement REDD. A large number of “preparatory” and “readiness” activities, involving development of national plans, methodologies, policies, and pilot or demonstration projects, are under way. These are intended to lead to an implementation phase with payments through an international carbon market for quantified forestry-related emission reductions against agreed reference levels (Angelsen et al. 2009; Ministry of Forestry 2010; RECOFTC 2010). One survey counted over 100 readiness activities and around 80 demonstration projects aimed at trialling REDD institutions, mechanisms and implementation strategies as at October 2009 (Cerbu 2010). Indonesia is the most prominent among REDD host countries, with around half of all global REDD activities (Wertz-Kanounnikoff and Kongphan-Apirak 2009).

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1. REDD is now often referred to as ‘REDD+’ to indicate that sustainable forestry has been added to the agenda (in addition to reducing emissions by avoiding deforestation and forest degradation). However, for simplicity, we continue to use the acronym ‘REDD’ throughout this paper, except where ‘REDD+’ appears in quotes.

2. LULUCF emissions have long been thought to be around 18\% of all emissions, but this has recently been revised. A re-calculation for 2008 using IPCC methods but using updated (lower) estimates for deforestation and degradation from FAO resulted in lower CO\(_2\) emission estimates for the sector. At the same time, emissions from fossil fuel have increased more than predicted, again reducing the LULUCF share. This study estimated the LULUCF share to be 15\% of all emissions (Van Der Werf, 2009). Against that, the World Resources Institute’s Climate Analysis Indicators Tool (CAIT) data for 2005 (its most recent data which includes land-use change) estimates total global emissions of 44 Gt, of which electricity and heating comprise 28\%, agriculture 13.8\%, transportation 12.2\% and LULUCF 12.2\% (WRI 2011).
Although a number of broad international surveys of REDD project experiences have been written to date (Wertz-Kanounnikoff and Kongphan-Apirak 2009; Westholm et al 2009; Corbera 2010), we have been unable to find any in-depth studies of individual REDD projects, as opposed to broad studies across groups of projects. A common theme across various surveys is that progress has been slower than expected (Creed and Nakhooda 2011). Another study notes confusion as to how lessons learnt from pilot activities will feed into national REDD development (REDD-net 2010).

A small but valuable literature is also emerging which draws on lessons from related fields. The Centre for International Forestry Research (CIFOR) in Bogor has produced reports on the lessons for REDD from Indonesia’s $8 billion Reforestation Fund (Barr et al. 2010), and from efforts to control illegal logging in Indonesia (Luttrell 2011). Country studies of PNG (Howes 2009) and of Ghana (Hansen CP et al. 2009), as well as international surveys (McCarthy and Cramb 2009: 41, 44; Li 2011; World Bank 2011a), studies of earlier forestry reform efforts (Chomitz et al. 2007, Hansen, CP et al 2009; Goers-Williams et al. 2011), and studies of Indonesia (Verchot et al. 2010) all point to systemic issues which will need to be addressed if rates of deforestation are to be brought down. These include corruption, illegal logging, land tenure uncertainty, the power of forestry industry lobbies, weak enforcement of laws, and the economics of oil palm. One clear conclusion is that “fundamental governance issues must be addressed if REDD+ is to be effective” (Luttrell et al. 2011:52-56). In general, the literature casts doubts on the view that REDD is “a significant, cheap, quick and win-win way to reduce greenhouse emissions” (Angelsen 2008: 15-16).3

Given the importance of these systemic forces, whether focusing on demonstration projects and readiness activities makes sense depends on both the success of the initial activities, and the broader context. A demonstration project which is quick to show success, and which is undertaken in a static context, makes more sense than a project which is slow to show results in a deteriorating context. The relevant context is both Indonesian (what is

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3. The Australian Government itself has claimed that REDD is “one of the most cost-effective means to reduce emissions in the short term” (Australian Government 2008).
happening to the forestry sector?) and international (what are the prospects for a REDD market?). An assessment of KFCP therefore requires an analysis not only of the progress of KFCP itself but also of contemporaneous developments in Indonesia’s forestry sector and in REDD negotiations.

The structure of this paper reflects such an approach. Section 2 builds on this introduction by setting the context for the study with an overview of Indonesia’s deforestation challenge. Section 3 then begins the analysis with an examination of the origins of KFCP and explains the downsizing of objectives from the original announcement to the documented project design. Section 4 documents and explains the slow progress KFCP is making. Section 5 analyses recent trends and developments in international REDD negotiations, efforts to address deforestation in Indonesia, as well as developments in Central Kalimantan. Section 6 concludes.

The research reported in this paper is based on two visits by the first author to Indonesia, in November-December 2010 and September 2011. The research involved meetings in Jakarta with KFCP project personnel, the AusAID Jakarta office, Indonesian Government personnel from various agencies, NGOs, and research personnel from the Centre for International Forestry Research in Bogor. It also involved visits to Palangkaraya, the capital of Central Kalimantan, for discussions with KFCP personnel and provincial government officials, discussions with district officials at Kuala Kapuas, and a field visit to two KFCP project locations, Mantangai Hulu and Katunjung, where discussions were held with project personnel and representatives from the local communities. A list of interviewees is at Annex 1.

2. Indonesia’s Deforestation Challenge

This section describes the relevant context in Indonesia prior to the KFCP project, up to 2008. More recent contextual developments are covered in Section 5, after discussion of KFCP.

Although Java has long been deforested, Indonesia’s less populated Outer Islands retained most of their forest cover until the 1960s. Large-scale exploitation of
outer island forests began in 1967, when Suharto’s New Order regime effectively nationalised Indonesia’s forests through the introduction of a concession system under the Basic Forestry Law (Barr 2001; Neilson 2010: 29; see also Arnold 2008). Logging was the first of the forest industries to take off. By the mid-1970s Indonesia supplied 44 per cent of the world hardwood log market. Some 585 concessions covering 62 million ha (mha) were issued over a 30-year period. In the 1980s the pulp and paper industries began a dramatic expansion, with production capacity increasing by 600% between 1987 and 1997 (Barr 2001, pp. 22-37). Also in the 1980s, Indonesia’s palm oil industry embarked on the growth path that led to Indonesia becoming the world’s largest oil palm producer. The area under oil palm increased from just 250,000 ha in 1978 to 3 mha by 1997, and 6.3 mha by 2007 (FPP/Sawit Watch 2006, World Bank 2010).

These industries impacted heavily on Indonesia’s forests. In the 1960s, the national forest estate comprised 130 mha, but by the time the Asian Financial Crisis brought about the end of the Suharto era in 1998, some 40 mha had been deforested (Barr 2001). In addition, vast areas of existing forest had been severely degraded.4

Indonesian deforestation rates are notoriously difficult to measure, but Hansen MC et al (2009) have recently developed some useful estimates. According to them, in the 1990s, the deforestation rate averaged 1.8 mha a year. In 2000, when poor economic conditions reduced demand for oil palm (Casson 2000) and with an oversupply of cleared land, the deforestation rate dropped sharply to below 0.5 mha. Annual deforestation rates climbed steadily thereafter, rising once again above 1 mha by 2005 (Hansen MC et al, 2009).5

Some 21 mha of forest was lost between 1990 and 2005. Around 75% of this took place in the lowland forests of Sumatra and Kalimantan (Hansen MC et al, 2009: 9). With much of Indonesia’s 22.5 mha of carbon-rich peat forest located

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4. Deforestation is often defined as a reduction of canopy cover below 10 per cent. By definition, then, almost 90 per cent of the forest cover can be removed and an area is still classified as forest, although degraded. (Kanninen 2007:15).

5. While Hansen estimates that deforestation rates averaged 0.71 mha/yr over the period 2000-2005, the FAO estimates Indonesia’s forest loss as averaging 1.87 mha/yr over the same period (FAO 2009).
in these areas, large areas of peatland were deforested. Forested peatland declined from 18 mha in 1985 to just 12 mha in 2006 (Hooijer et al. 2006).

The greenhouse significance of peatland deforestation lies in the fact that Indonesian peat swamp forests store 20 times more carbon than tropical rainforests on mineral soils (Jaenicke et al. 2010). And unlike forests on mineral soils, where most carbon is released upon deforestation, deforested and drained peatland releases high levels of carbon over many years after deforestation, as the peat decomposes or is burnt. Deep peat – where the peat extends to depths of 3-12 metres (Hooijer et al 2006) – poses particular environmental risks.

Indonesia is the world’s fifth largest source of greenhouse emissions, at over 2 billion tonnes (Gt) in 2005. Three quarters of these emissions (1459 Mt CO$_2$e) were from the land-use change and forestry sector and from deforested peatland. Just 398 Mt CO$_2$e were sourced from energy and transport. While estimates vary, Indonesia’s peatland emissions (from deforestation, decomposition and fires) are likely to be at least 1 Gt a year. This is nearly twice Australia’s emissions from all sources, and roughly equal to those of Germany (DNPI 2010, pp. 10-11; WRI 2011, p. ix).

One peatland swamp area of particular concern is the Ex-Mega Rice Project (EMRP) area in Central Kalimantan. In what is now described even in Indonesian government documents as “a phenomenal failure” (GOI 2010, p. 43), President Suharto in 1995 ordered that over one mha of Kalimantan peat swamp be drained for conversion to rice growing. The peatland was drained, but was

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6. Peat is an accumulation of large amounts of carbon-rich decayed vegetation matter. Geologically, it is a precursor to brown coal. Typically peat forms in wetland or marshy conditions where plant material is inhibited from decaying fully by acidic and anaerobic conditions. Up to 90% of peatland carbon is stored below ground. In peatland forests, peat builds up into domes over thousands of years.

7. The World Resources Institute’s CAIT database estimated Indonesia’s emissions at 2.042 Gt in 2005, thus fifth globally after China, USA, the EU and Brazil. Indonesia’s National Council on Climate Change provides a figure of 2.1 Gt in 2005 (DNPI 2010: 10; WRI 2011).

8. The DNPI provides estimates of emissions from peatland decomposition in 2005 at 300 Mt CO$_2$e, from fires at 472 Mt CO$_2$e, and from deforestation at another 250 Mt CO$_2$e (DNPI 2010). However, estimates of decomposition emissions alone range from 355 – 855 Mt CO$_2$e a year, with a mean of 632 Mt CO$_2$e, and some researchers now consider it more likely that these emissions are at the higher end of the range (Hooijer, pers. comm., 2/02/2011). See also Lutrell et al 2011: 14, citing discussion in Indonesia’s Second National Communication to the UNFCCC and World Bank 2008.
unsuitable for rice growing. The canals created to drain the swamp are now used for transport, and much of the peatland lies abandoned. Some is used for smallholder agriculture by the indigenous Dayak people who inhabit the area. The land continues to burn frequently, leading to transboundary haze and high levels of greenhouse gas emissions. During the 1997 El Nino, 474,000 ha of peatland burned, contributing to massive transboundary hazes with major health impacts across Southeast Asia (Page et al 2002). An increasing amount is being turned over to palm oil plantations. The EMRP area has been the subject of a number of projects and initiatives to revert it to its original condition, and was the location chosen for the KFCP.

By the mid-2000s, when global climate change discussions turned to mechanisms for reducing deforestation, the Indonesian Government took an active interest, and in 2007 emerged as a leading advocate of REDD. It established the Indonesia Forest Carbon Alliance (IFCA), a team of local and overseas experts which produced the IFCA Consolidation Report, a detailed blueprint for REDD in Indonesia (Ministry of Forestry 2008). The Ministry of Forestry also passed a number of regulations setting out procedures for REDD demonstration activities and for implementation of REDD (summarised in Luttrell et al. 2011: 17).

The IFCA study reflected an expectation that a carbon market would emerge and deliver revenues to Indonesia between US$650 million and $5 billion a year. It also devoted close attention to the problem of peatland emissions, noting that restoration of water tables, fire prevention, various governance challenges, and gaps in greenhouse accounting science would all need to be addressed before peatland could be taken up in a REDD scheme.

In line with the Bali Action Plan, the IFCA report proposed that a number of demonstration projects be undertaken, and that these should test how reference emission limits (RELs) might be established, how reductions in baseline emissions might be achieved, how monitoring and carbon accounting could be developed, and how payments could be made to those who achieved the

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9. The IFCA report presents a range of calculations (Ministry of Forestry 2008: 4, 54).
emission reductions (Ministry of Forestry 2008). The Kalimantan Forests and Climate Partnership became the first project in Indonesia of this type.

3. The fate of an announceable: KFCP’s origin and downsizing

In March 2007, in a press statement entitled “Australia to lead the world”, then Australian Prime Minister John Howard announced a $200 million Global Initiative on Forests and Climate (GIFC), heralding it as “a material advance in the global effort to tackle climate change” (Howard 2007). Australia’s overall forest carbon commitment grew after 2007 to $273 million, and was re-badged as the International Forest Carbon Initiative (IFCI) in 2008.

In September 2007, six months after the initial GIFC announcement, the KFCP project was announced as a $100 million partnership with the ambitious targets mentioned in the introduction. Funding would be contributed by Australia ($30 million) and by various other sources, unspecified except for BHP Billiton. It would be “the largest greenhouse abatement project to flow so far” from the GIFC (Downer 2007). In the following year, various Indonesia-related initiatives within IFCI (including KFCP) were gathered together and launched by Prime Minister Rudd and President Yudhoyono in June 2008 as the Indonesia Australia Forest Carbon Partnership (IAFCP 2008). The IAFCP initiatives totalled $70 million, increasing to $100 million with Australian government announcements at Cancun (Combet 2010). KFCP is the largest and clearly the flagship IAFCP initiative. Its initial budget of $30 million has been increased twice to reach $47 million or about half of the IAFCP total (see footnote 17). A second pilot (the Sumatra Forest Carbon Partnership) is budgeted at $30 million, but is still at a very early stage (Tapp 2011).

Following the KFCP announcement, a scoping mission took place in November 2007, and thereafter a “Framework Design Mission” was undertaken. Its May 2008 report retained the original targets while introducing a demonstration objective (IAFCP 2008a, p. 1).

The KFCP project design document (PDD) was finalised in June 2009 (KFCP 2009). According to it, the project was to be implemented within a peat dome of
120,000 ha in the Ex-Mega Rice Project area in Kapuas District in Central Kalimantan (see Figure 1). Most of this area is deep peat. The KFCP location falls largely within Mantangai sub-district and comprises two distinct areas: Block A Northwest (50,000 ha), mostly deforested and drained by a 300 km network of canals, and Block E (70,000 ha), which is forested although severely degraded by logging and draining, both by traditional informal canals (handil) and by the large Neraka Canal which extends 15 km into the area. The project area includes seven villages. The area is designated as “production forest” but is expected to be re-classified as a protected area (KFCP 2009, p. 3).
Figure 1: Ex-Mega Rice Project area of Central Kalimantan and KFCP project location

Above left: The EMRP area is divided administratively into 5 areas: Blocks A, B, C, D and E. The KFCP project location can be seen in the upper area, straddling Block E and Block A Northwest (NW). Source: KFCP 2009: ix)

Above right: KFCP project location, largely in Mantangai sub-district. Note the extensive drainage canals throughout Block A NW. The project location is about 65 km from north to south and 20 km across at the main canal dividing the two blocks. The main locations for initial interventions are Mantangai Hulu and Katunjung villages (southern and northern ends of Block A NW respectively). The vertical canal in Block E is Neraka Canal, which is the subject of a major planned project intervention. Source: IAFCP 2010a.
The project as defined in the 2009 PDD is quite different to the one announced in 2007. KFCP was officially repositioned as a demonstration or pilot project. The official objective of the KFCP was now: “To demonstrate a credible, equitable, and effective approach to reducing greenhouse gas emissions from deforestation and forest degradation, including from the degradation of peatlands, that can inform a post-2012 global climate change agreement and enable Indonesia’s meaningful participation in future international carbon markets” (KFCP 2009, p. 2). By contrast, the initial announcement made no mention of KFCP as a demonstration project and instead positioned it as valuable in its own right – an “example of practical climate change action that could deliver immediate and tangible benefits” (Downer 2007).

Consistent with this change, the use of quantitative objectives is greatly downplayed in the 2009 PDD. The closest it comes to having a quantitative target is an indication that available funding would support re-planting of 3,000 ha in Block A (KFCP 2009, p. 29).10 There are no other quantitative targets.11 For example, the PDD does not estimate how much of the peat forest in Block E would be preserved by the project.12 We were informed by AusAID staff in February 2012 that it was now expected that 25,000 hectares would be re-flooded in Block A. This is just over one-tenth of the original target of re-flooding 200,000 hectares.

Why was there this dramatic downsizing and re-positioning of KFCP?

First, the money allocated to the task was simply inadequate. It seems that, the detailed targets notwithstanding, there was little technical work undertaken

10. The original target for planting was 100 million trees. The PDD indicates that one tree will be planted every 9 square metres. This implies that the 3,000 hectares of re-planting would require about 3 million trees. An additional (unspecified) amount of trees would be re-planted in Block E “to facilitate regeneration”.
11. One adviser explained to us that even the 3,000 hectare figure did not represent a target project outcome. As a demonstration project KFCP aspired not to rehabilitate significant areas of peatland, but simply to show how this could be done. Therefore the number of hectares rehabilitated was of no particular significance.
12. At one point, the PDD states that additional funding is needed to protect “protecting remaining forest cover,” suggesting that in fact this is not part of the $30 million project. (KFCP, 2009, p.56)
prior to the 2007 announcement. More careful work undertaken in the course of project design shows a deep mismatch between initial funding and targets. The 2009 project design document notes that costs of rehabilitation through tree-planting alone are $1,112 per hectare. Thus rehabilitating 200,000 ha, as per the initial level of ambition, would cost some $222 million, plus the cost of flooding.

Second, the funding from other partners that was anticipated to flow to the project never materialised. The initial announcement stated an aim of increasing project funding from the $30 million contributed by Australia “to raise up to $100 million in funding over four years by working with other countries, international non-government organisations and the private sector” (Downer, 2007). The announcement stated that “The partnership has already attracted financial backing from BHP Billiton, which has joined as a founding partner and will focus its contribution on the protection of forested peat lands of high conservation value.” However, although a senior BHP Billiton representative participated in the project launch, that company seems to have played no further role in the project at all. Nor have any other partners come forward.

This is not surprising, since fundraising does not now feature prominently as part of KFCP’s brief. Fundraising is included as one project sub-component. However, the risk matrix for the project in the 2009 PDD indicates that it is likely that external funds will not materialise. However, the PDD rates this as being only of “minor” consequence, and therefore a low risk overall in terms of importance. If the view was that the funds probably would not emerge, but that this did not really matter, then clearly little effort would go into fundraising. Consistent with this, no funds have in fact been raised. Note that putting substantial effort into fundraising would also be inconsistent with the view of KFCP as a REDD demonstration project, under which scaling-up would occur not through project-specific fundraising, but through REDD markets.

13. Minister Downer mentioned at the press conference after the launch that the KFCP initiative came out of discussions he and then Indonesian Foreign Minister Wirajuda had had in Manila just a few weeks prior to the announcement (Downer 2007a).
Third, there were other demands on Australia’s $30 million. In the project design, less than $20 million was actually committed to tasks related to rehabilitating and preserving peatland. The rest went to REDD “readiness activities,” namely, efforts to measure greenhouse gas emissions from peatlands, establish baselines, develop government REDD capacity, and to other technical assistance and overheads.

Fourth, the agreement at COP13 (the Bali November 2007 international climate change conference) to develop a REDD program, and the call on all Parties to undertake demonstration projects and readiness activities, provided a new context within which it became attractive to reposition KFCP as a combined demonstration/readiness project. Although the initial KFCP announcement had no mention of the project being a demonstration or pilot one, the initial GIFC announcement, which preceded it, did have as one its objectives the “development of incentive-based pilot approaches” (AusAID 2007). Following Bali, it made sense to give greater weight to this objective in the formulation of KFCP.

Fifth, there was a change of government in Australia at the end of 2007. This reduced the political salience of the original Downer announcement. The PDD for KFCP makes no reference to the original targets, or even the original announcement in 2007. Rather the history of KFCP is traced back to the 2008 announcement of the Indonesia Australia Forest Carbon Partnership, an initiative of the then-current Rudd Government.

The Australian government has done little to signal the downsizing of the project. The PDD itself is a public document, but this is thanks to the Finnish aid agency, on whose website it can be found, in connection with a related Finnish project. The PDD is not available on any Australian government agency websites.

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Australian government websites show not the PDD but a KFCP “fact sheet,” available on the Department of Climate Change and Energy Efficiency (DCCEE) web-site. Unfortunately, this only perpetuates the myth that KFCP is about large-scale rehabilitation and preservation:

“Initial work will aim to avoid deforestation of 50,000 ha of peat swamp forest and rehabilitate an additional 50,000 ha of degraded peatland to create a buffer around the existing forest and reduce further degradation. These activities may be extended as other funding becomes available. The location and types of activities under the KFCP have been endorsed by Indonesia and Australia. Based on the original funding target of $100 million, the KFCP aims to preserve up to 70,000 ha of Kalimantan’s peat swamp forests and to re-flood, rehabilitate and reforest 200,000 ha of degraded peatland.” (DCCEE 2011)

The fact sheet creates the impression that the project is still as Minister Downer originally announced it. The numbers in the last sentence are precisely those which Downer announced back in 2007, even though as far back as 2009 these targets had been abandoned. Even the targets relating to “initial work” are far in excess of what the project is currently designed to achieve (25,000 ha rather than 50,000 ha is the current expectation for rehabilitation). Moreover, for the reasons given above, the original funding target of $100 million is no longer relevant.

Given the lack of effort to explain the shift in the project, it is not surprising that expectations regarding ambitious targets persist, both in Australia and Indonesia. Many continue to believe that the original targets still apply. They were reported widely in the Indonesian media at the time of the announcement (e.g. Antara 2007). They were also mentioned in the EMRP Master Plan of 2008, which, in considering how the Inpres 2/2007 reforestation targets might be met, noted the contribution that would be made by Australia’s proposed planting of 100 million trees under KFCP (Euroconsult and Deltas 2008, p. 57).
An article in the *Canberra Times* in June 2010 quoted the ambitious figures mentioned above and asked why little progress had been made (Malone 2010), while a December 2010 newspaper report in Indonesia covering Central Kalimantan’s selection as a focal province for Norway’s assistance repeats the claim that Australia is helping restore 100,000 ha of peatland in the province (Reuters 2010). Some NGOs even continue to report that the project receives funding from BHP (Lang 2011a).

Some Indonesians interviewed for this research who knew that the project had been so greatly downsized tended to dismiss it for that reason. Those who found out during the interview process that KFCP had been downsized were surprised.

It may be the case that project downsizing has reduced the prospects for project sustainability. The KFCP fire management strategy recognises that most fires occur close to canals, but the downsized project will only block an unspecified portion of the 300 km of canals criss-crossing Block A NW, leaving the rest of it highly vulnerable to the next El Nino. During the period 2002-2008, 5,270 fires were recorded in the sub-district of Mantangai alone (CARE 2009, p. 10).

Earlier projects in the EMRP area, such as the Climate Change, Forests and Peatlands in Indonesia project, active from 2002-2005, and the Central Kalimantan Peatland Project, active from 2005-2008, do not seem to have delivered sustainable outcomes. While project reports offer optimistic assessments of the achievements of the projects (CCFPI 2005; CKPP 2008), local people showed us failed project plantings lost to fire. A local community leader advised that there was little doubt that the peatland would burn again when the next dry season arrives. While KFCP is much bigger than either of these two projects, whether it is big enough to reduce the risks of fire sweeping through remains to be seen. The PDD stresses the need for a “whole of dome” approach,

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15. The PDD provides compelling evidence in a map which shows 600 hotspots during the 2006 El Nino, concentrated along the canals in Block A NW.
but, in fact, with the downsizing of the project a substantial amount of the dome is outside the scope of the project. 16

4. Progress of a demonstration project: How has KFCP fared?

In this section we provide an overview of KFCP progress, after more than three years of project implementation.

Apart from the issues discussed below relating to land tenure and the rights of indigenous people, KFCP’s progress, or lack of it, has been little discussed. AusAID’s 2010 performance report for Indonesia concludes on KFCP that “Despite procedural delays, Australia’s first demonstration activity in Central Kalimantan will make a significant contribution” (AusAID 2011, p. 39). An independent review of Australian aid to Indonesia was undertaken in 2011 as a background paper for the Independent Review of Aid Effectiveness. This paper mentions delays with the Department of Forestry, but also highlights “Australia’s well-advanced REDD demonstration on degraded peatlands” (Tapp 2011, p. 19). In February 2012 in answer to a Senate Estimates question, AusAID reported that KFCP had made “considerable progress” and was “producing outcomes” (Commonwealth of Australia 2012, p. 111). Based on our research, these assessments seem overly optimistic.

4.1. KFCP project design

KFCP commenced in January 2009 with a six-month “Early Implementation Phase” from January to June 2009 followed by a three-year “Implementation Phase” from July 2009 to June 2012.

The KFCP design comprises four project components to achieve the overall demonstration objective of the project given in the previous section. They are

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16. It is not easy to quantify how much. The dome comprises 120,000 ha, Block A NW is 50,000 ha, of which the project expects to re-flood some 25,000 ha. Block E is 70,000 ha, but how much of this is actually covered by the project is unclear (see footnote 12).
summarised below along with indicative budgets as per the design document (KFCP 2009: Annex 8).\textsuperscript{17}

1. \textit{Reduction of deforestation and degradation of peat swamp forest ($18.1 m)}: This entails 60 per cent of project funds. It involves engagement with communities, mapping of community land and property rights to address customary land tenure issues, strategies to reduce the incidence of fires in the area, developing methods to rehabilitate peatland and trialing these in selected locations, blocking canals to re-flood peatland, rehabilitating degraded and deforested areas by re-planting or encouraging natural regeneration, and improving local peoples’ livelihoods (KFCP 2009, pp. 24-31).

2. \textit{Establishment of greenhouse emissions estimation and monitoring program and its linking to the Indonesian National Carbon Accounting System – INCAS ($3.5 m)}: This addresses the need for better scientific knowledge relating to peatland emissions. It entails an initial methodological study of the requirements for estimation of peatland emissions, development of a methodology for estimating peatland reference emission levels (RELs), and developing RELs both for the project location and for the larger EMRP area. It also entails peatland emission monitoring and measurement, including measurement of emissions at project sites before and after interventions, and applying the approaches developed through the project to INCAS (KFCP 2009, pp. 31-35).

3. \textit{Demonstration of practical and effective REDD GHG payment mechanisms ($0.9 m)}: This component aims to develop and trial a REDD payment mechanism, which in time would be used to channel REDD payments to those who achieved emission reductions. It will take the form of a trust fund. Initially it will be used on an input basis to pay communities for undertaking project tasks (such as tree planting, canal blocking and fire management), and later on a performance basis.

\textsuperscript{17} Components 1-4 total $24 m. Some $5.8 million of overheads (technical assistance, travel, etc) plus $1.6m for early implementation phase studies take the total cost to $31.4 million, which is the initial $30 million, plus an additional $1.4 million allocated for monitoring and measurement from other IAFCP funds. As noted, in December 2010, another $10 million was allocated to KFCP. We were informed that the latest budget is actually $47 million. However, we do not know which components have benefited from these budget increases, or by how much.
for maintaining dams, protecting forest or reducing the incidence of fire, all as a proxy for future REDD payments (KFCP, 2009, pp. 35-39).

4. Development of REDD management/technical capacity and readiness at provincial, district, sub-district and village levels ($1.5 m): This involves building REDD capacity, management systems and institutions at all local levels (province, district, sub-district and village to enable local participation in future REDD carbon markets (KFCP, 2009, pp. 39-41).

4.2. KFCP progress to September 2011

This section summarizes progress under each of the four components.

4.2.1. Component 1: Reduction of deforestation and degradation of peat swamp forest

A large amount of valuable preparatory work was undertaken during the early implementation phase, aimed at providing a solid understanding of a range of critical project issues. This included studies of the socio-economic profiles of the local villages (e.g. (KFCP 2009a; KFCP 2009b); alternative livelihood options (KFCP 2010a; KFCP 2010b); community issues relating to canal-blocking (KFCP 2009c); land tenure in the EMRP area (Galu dra et al. 2009); peatland forest tree species silviculture and propagation (IAFCP 2010a, pp. 73-74); and the role of fire in local communities (KFCP 2009d). These studies were completed in a timely manner, in many cases by experts already familiar with the area, providing a strong conceptual basis for much of the work that followed. However, preparatory studies are much easier to control and direct than actual implementation, and as the project moved into implementation mode, progress slowed considerably.

As at September 2011, after nearly three years of project implementation, little evidence can be seen on the ground of any reductions in deforestation and forest degradation. Blocking of the large canals in Block A has not commenced, nor has blocking of Neraka Canal in Block E, despite the planned commencement date of
November 2010. The main reason for lack of progress in Block A NW has been a delay in obtaining environmental clearance, discussed further below. Permission from local land-holders for heavy excavating machinery to pass across village land also needs to be obtained (IAFCP 2010b.)

Some progress has been made in relation to the small traditional hand-dug canals (handil) scheduled for de-commissioning in Block E. Detailed design work relating to over 100 small canals in the northeast of Block E was completed at the end of 2010, and six were blocked as a demonstration activity in 2011. According to project personnel working in the area, local people are generally supportive of the canal-blocking efforts, although they have concerns regarding the negative impact that canal-blocking may have on their livelihood activities. The KFCP community engagement team is engaged in ongoing discussions with communities on these issues.

Modest progress has been achieved in relation to rehabilitation of deforested peatland. Following identification of suitable plant species, establishment of a nursery and delivery of local training in planting techniques, experimental plantings to test selected peat forest species were established in 2010 on two 25 hectare plots (KFCP 2010c; KFCP 2010d). In 2011, all seven project villages were reportedly engaged in propagating plant species. As of February 2012, AusAID reported that only 50,000 trees had been planted. A much larger number of seedlings (1.3 million) were being raised in community nurseries, with some $450,000 allocated for payments to villagers in this regard (Antara News 2011; Australian Embassy 2011; Commonwealth of Australia 2012).

The strongest achievements to date have been in relation to community engagement. Field officers based in project villages have engaged extensively with communities to explain and win support for the REDD concept (“REDD socialization”), to create awareness of the dangers of fire, to explain the aims and objectives of the project, and to improve local livelihoods. Considerable success

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18. All references to planned implementation dates refer to the indicative schedule provided in the 2009 PDD (KFCP 2009).
19. A report from a journalist who visited the area in November 2011 states that few plants had survived from the original 25 hectare plantings (Keller 2011). We are not in a position to verify this.
has been reported in improving incomes from local rubber production (IAFCP 2010b).

The project has, however, been subject to accusations by local Dayak people and environmental NGOs that KFCP has denied Dayaks their human rights and customary land rights, and failed to consult with them (AMAN 2011; FPP 2011). In June 2011, local indigenous people signed statements both of opposition and of support for KFCP. In some cases, the same people signed both letters (see Lang 2011a; Lang 2011b). AusAID’s response asserts that it works closely with indigenous leaders and communities (see Lang 2011c). One NGO has expressed hope that given a supportive provincial context, KFCP should be able to make a breakthrough in the recognition of community rights in land as well as recognition and empowerment of the community’s own social institutions, but others oppose KFCP and REDD generally (FOEI 2011; FPP 2011; Keller 2011; Muliadi 2011; Satriastanti 2011a).

A major part of Component 1 is focused on fire prevention, which is at once the greatest risk to peatlands and by far the cheapest mitigation option. The KFCP fire prevention strategy entails re-flooding peatland by blocking canals, re-establishing tree cover, developing alternative livelihood options, undertaking fire prevention activities in high risk areas (i.e. close to human activity) particularly along canals (since fires are closely associated with human activity), and providing performance payments for achieving reductions in fires (CARE 2009; KFCP 2009, p. 23, Att. 7).

The challenge is considerable. A member of the KFCP project team advised that local people still regarded fire as a tool for “cleaning” the land in preparation for planting-out for rubber plantations or horticulture. A study of Katunjung village reported that the community regarded fires as highly damaging and resulted in health problems (Yayasan BOS 2007), but villagers informed us that only financial incentives would protect the forest. The frank messages from local

20. Indonesia’s National Council on Climate Change, in its emission abatement cost curve analysis, estimated that peatland fire prevention would cost just US$ 0.35/tCO2e of emissions avoided (DNPI 2010: 17). The PDD states that the primary means to reduce deforestation and degradation of peatland is “by reducing fire risk and mitigating the frequency and severity of fire” (KFCP 2009: 4).
people indicated that only a long-term financing arrangement which provides villagers with compensation and an alternative income source, particularly if livelihood access is reduced through canal-blocking, will solve the problem.

This is precisely the strategy of KFCP, but little has been achieved so far. In the project villages of Katunjung and Mantangai, KFCP has supported the establishment of local Fire Management Units, production of fire awareness materials, and community awareness workshops (Fire Management Unit KFCP 2011). As far as we understand, no payments have been made yet to communities for fire prevention or management. A CARE project report notes various problems with fire management including the unavailability of local people due to their need to continue normal livelihood activities, and shortfalls in training (CARE 2009, p. 29).

4.2.2. Component 2: Establishment of greenhouse emissions estimation and monitoring program

Work on this component commenced well with two draft reports (Methodology for Estimation for GHG Emissions from Tropical Peat Lands in Indonesia and a Review of the science underpinning a methodology for GHG accounting in tropical peat lands) completed in February 2010. Both reports identified significant gaps in scientific knowledge which needed to be quickly addressed through further research (IAFCP 2010b, p. 16). However, as of September 2011 the additional work had not been undertaken, despite additional funding being allocated to KFCP and IAFCP at Cancun in December 2010 (Combet 2010). As of September 2011, project and district-level RELs had not been developed. Certainly district officials had no knowledge of any progress.

A peatland monitoring system is in place to measure peat depth, subsidence and water levels (but not GHG emissions) on a monthly basis (IAFCP 2010a, p. 15). We understand that some progress on remote sensing to determine forest cover change has been made, and that an aerial survey to measure changes in peat depth is expected to be undertaken in the near future. For above-ground carbon emissions, the KFCP is dependent on the completion of INCAS protocols for above-ground biomass assessment of peat swamp forests.
4.2.3. Component 3: Demonstration of practical and effective REDD payment mechanisms

A payment mechanism to finance tree-planting was established in 2011. With plant nurseries established in all project villages in 2011 and planting out of the scheduled 1000 ha for that year under way, the payment mechanism was launched by the District head in June 2011. This involved an initial payment of Rp 635 million ($A72,000) for village labour inputs, followed by a second payment of Rp 785 million ($A89,000) in September (Antara News 2011).

The PDD suggests that a trust fund be created to support disbursements for several years post-KFCP (KFCP 2009, Attachment 5-3), and the need for fire risk management support for at least 5-10 years is mentioned (KFCP 2009, pp. 7-4). A capital injection of $8.7 million has reportedly been provided for the fund (FOEI 2011, p. 8), presumably from the increased funding allocation to the project.

4.2.4. Component 4: Development of REDD management/technical capacity and readiness at provincial, district, sub-district and village levels

Mapping of the anticipated roles of various local government agencies in KFCP and REDD was undertaken during the “Early Implementation” phase (KFCP 2009e). However, progress in building local institutional capacity was slow during the first year of the project, with district and provincial officials reportedly unprepared to convene required working group meetings, and concerns at the provincial level over limited benefits to accrue to the province from KFCP (IAFCP 2010b, p. 21). Following a visit to Australia by the Head of Kapuas District, a much higher level of interest and enthusiasm become apparent. In September 2011, however, no REDD capacity was evident at the district level beyond the establishment of a KFCP working group. Officials said they had no personnel available nor any technical capacity to undertake REDD-related activity. At the provincial level, awareness of the work of KFCP was low, despite the project being based in Palangkaraya, the provincial capital. Officials were aware that the project was under way in Kapuas District, but were not
aware of any contribution the project was making towards REDD capacity building at the provincial level.

4.3. Summary

After nearly three years of implementation, the achievements of KFCP are modest. It has not yet demonstrated how deforestation and degradation of peat swamp forest can be reduced (Component 1), largely because re-flooding through large-canal-blocking has not commenced. Progress on GHG emissions estimation and monitoring (Component 2) is patchy. Although an extensive program of peatland monitoring is now in place, scientific work on peatland emissions and development of RELs, a basic cornerstone of a REDD scheme, is well behind schedule. Good results have been achieved in improvement of local livelihoods. A payment mechanism (Component 3) is being utilised to pay for labour inputs for re-planting. Community engagement has been intensively pursued, although the project has been subject to some protests from indigenous and community groups. Finally, little REDD management or technical capacity building has been achieved at local or provincial levels (Component 4).

Planned project expenditure from the commencement of the `early implementation’ phase through to June 2011 was $20,400,000 (KFCP 2009: Att. 8). Our understanding is that actual expenditure has been well below this figure.

In summary, apart from the preparatory studies, every aspect of the KFCP project has been affected by major delays. As per the original timeline developed for the project, reforestation (tree planting) was to commence in July 2010, and canal blocking was meant to commence in November 2010. The REL baseline was also meant to be approved that month, and the monitoring program was to be validated and operating. The REDD trust fund was to be established in July 2010, and the REDD credit certification system operating in October 2010. Overall, the project would seem to be more than a year behind schedule.

There are several causes for delay.
First and foremost, KFCP is a complex project, with multiple components and requires a high level of interaction with local communities. Local community consent is required in relation to fire-prevention activities, re-flooding and re-planting. KFCP’s experience of delays relating to establishment of complex new systems is consistent with the experience of other REDD projects as indicated in the surveys of REDD projects noted in Section 1.

Second, Indonesian law requires a completed environmental impact assessment (AMDAL) before any canal-blocking can commence. The AMDAL is intended to meet not only various Indonesian Government requirements but also Australian and World Bank requirements. Even agreement on the terms of reference (TORs) for the AMDAL proved to be difficult, with the provincial government unprepared to approve these until it had the support of the project district (Kapuas), and the district not prepared to proceed until it had formal advice (Surat Keputusan) from the Ministry of Forestry that it had approved the project area. In the event, approval of the TORs was given in December 2010, but as at February 2012, the EIA itself had still not been approved.

Third, it is clear that the relationship between IAFCP and the Ministry of Forestry, though it may now be improving, has been a difficult one. This has led to lengthy delays, including in relation to the AMDAL, peatland GHG monitoring and REL development.

Fourth, the project has been involved in controversies: first, as mentioned earlier, in relation to local communities and second in relation to canal blocking, where some scientists have objected to the mechanical methods proposed for this task (SEApeat 2011). It is possible that these controversies have added to the delays.

At the November 2010 Cancun international climate change conference, the Australian government announced an extension for KFCP by a year. In our judgment, it is unlikely that the project, even in its scaled-back form, will be complete by July 2013.

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21. In September 2011, the Australian Ambassador and the Indonesian Ministry of Forestry paid a joint tree-planting visit to the KFCP (Australian Embassy 2011).
5. In the meantime: KFCP in context

As noted in the introduction, evaluation of KFCP as a demonstration project cannot be restricted only to the progress which the project itself is making. It also requires investigation of the broader context. The greater the rate of deforestation and land conversion, the higher the costs of delay. Examining the prospects for scaling-up KFCP also requires a broader analysis.

To complete our assessment of KFCP, we therefore now turn to an analysis of recent developments in relation to: the global effort to establish an international REDD framework; deforestation in Indonesia; and peatland conversion in Central Kalimantan. Our focus is on the last three or four years.

5.1. REDD developments: uncertain prospects for an international market

The longer-term prospects for KFCP to contribute to REDD in Indonesia depend not only on the policy environment in Indonesia but on international REDD negotiations. In contrast to the brighter prospects of a few years earlier, there now appears to be little chance of an international REDD market being established in the near future to scale up a successful KFCP pilot or to drive REDD more generally in Indonesia.

First, following the 2011 Durban international climate change conference, a global agreement on emission reductions is unlikely to enter into force before 2020 (Chestney 2011). Second, many of the components of an internationally agreed REDD mechanism remain to be negotiated. The 2009 Copenhagen Accord called for the immediate establishment of a REDD+ mechanism (UN 2010), but the detail of this was left to the 2010 Cancun conference. The Cancun meeting in turn called for further work on REDD financing options, as did the Durban conference. At least for peatlands there are some positive developments, with the Durban conference agreeing to the inclusion of emissions from drained peatland in a future REDD+ agreement (Tol 2011a), following discussions on the issue in Cancun (Tol 2010; Tol 2011b).
More generally, there has been a shift in climate change negotiations away from the sort of “top-down” approach represented by the Kyoto Protocol, to a less formal but more inclusive “bottom-up” approach embedded in the Copenhagen and Cancun accords. A bottom-up approach is less likely to lead to a treaty, and is more likely to accommodate a range of approaches to reducing emissions, and metrics for measuring effort. The implications for this shift are still unfolding. However, it is certainly the case that in a bottom-up world, international cooperation and trading are more likely to be bilateral and regional rather than global.

This is not all negative. Countries’ bottom-up actions can be a source of REDD funding. Australia’s passage of a carbon pricing scheme, which is envisaged from 2015 to allow trading of carbon credits, could provide a strong source of demand for forestry credits from Indonesia.

It is also the case that public finance will play a greater role in a bottom-up regime, at least for some time, as it will take longer for markets to evolve organically than under a top-down template. Certainly most of the financing currently being provided by developed to developing countries in relation to climate change is through governments rather than markets. However, especially with the fiscal crisis pervading the OECD, reliance on public finance is risky (World Bank 2011c).

In summary, there could be sources of funding to scale-up REDD demonstration projects such as KFCP, but there is considerable uncertainty and it will not be through a global REDD market.

5.2. Indonesia’s campaign against deforestation: a losing battle?

Since Indonesia hosted the Bali UNFCCC meeting in December 2007, it has continued to play a leading role among developing countries in relation to reducing deforestation and tackling climate change more generally. At the September 2009 G20 meeting in Pittsburgh, President Yudhoyono announced a national goal for Indonesia of reducing emissions by 26 per cent against BAU by 2020, increasing to 41 per cent with international support (Yuhoyono 2009).
Achieving this target will depend largely on success with reducing emissions from deforestation. Indonesia’s National Council on Climate Change (DNPI) concluded that 75 per cent of Indonesia’s abatement opportunities lie in the forest sector and deforested peatland. The DNPI estimated that emission reductions of 566 Mt CO$_2$e/yr could be achieved in this way (DNPI 2010). In September 2011 President Yudhoyono re-affirmed his commitment to addressing deforestation, saying that this would be a key priority for the remaining three years of his presidency (Jakarta Globe 2011a).

Indonesia has received support from donors to pursue its goals, not only Australia, but also more recently Norway. In May 2010, Norway and Indonesia agreed on a $1 billion program in return for greater effort by Indonesia to protect its forests (GON and GOI 2010). Under the agreement, Indonesia was to develop a National REDD+ Strategy. This was released for a final round of public comment in August 2011 (GOI 2011). The Norway agreement also provided for a 2-year moratorium on new logging concessions. Central Kalimantan was selected as the first trial province for Norway’s support.

Ambitious targets and support from donors notwithstanding, the difficulties of actually reducing emissions from deforestation are acute for the range of reasons set out in Section 2. Recent events and developments illustrate the force of the drivers of deforestation in Indonesia.

Indonesia has implemented intensive efforts to address illegal logging, particularly since 2005 (Daviet et al. 2010; Luttrell et al. 2011). But a detailed 2011 study found that enforcement operations in timber-producing areas were undermined by vested interests and corruption, and that the extent of any reductions in illegal logging remained uncertain (Luttrell et al. 2011, pp. 6-9, 53-4). One study noted that illegal logging is still believed to comprise between 40-61 per cent of all logging in Indonesia (Lawson and MacFaul 2010, p. xvii).

Although the Indonesian Government has made a major effort to address corruption, with the establishment of the Corruption Eradication Commission (KPK) among other measures, the problem remains pervasive. Reports abound of instances of the Commission’s efforts being undermined (Kuncoro 2008; Barr
The forestry sector is particularly vulnerable to corruption, at both national and local levels of government. An assessment by the KPK pointed to inadequacies in various regulations which create opaqueness in the definition of forest areas and allow widespread illegal logging and illegal mining to persist (KPK 2010). In April 2011 it was estimated that 1,236 mining firms and 537 oil palm plantation companies were operating illegally in Central, East and West Kalimantan (Jakarta Globe 2011b). Another study showed that 20 per cent of the forest loss over much the same period took place in areas where clearing was prohibited or restricted (Broich 2011).

Oil palm is also a major driver of deforestation. As noted earlier, Indonesia is already the world’s largest oil palm producer. The area under oil palm plantation has increased from 6 mha in 2007 to 8 mha in 2009 (Jakarta Post 2009). The Indonesian Environment ministry has estimated that 18 mha of new oil palm plantations may be developed by 2020 (Verchot 2010, p. 7). An NGO study which compiled actual spatial planning data from provincial and district-level land-use plans found that an additional 20 mha has already been proposed for oil palm development (FPP/SawitWatch 2006, pp. 25-6). This poses great risks for peatland given ongoing encroachment by oil palm plantations.

Returns from oil palm may out-compete those from carbon sequestration (World Bank 2011a, pp. 40-41). A DNPI/McKinsey study of Central Kalimantan estimated that a carbon price of US$30/tCO$_2$e would be needed to avoid deforestation for palm oil (DNPI 2010a, p. 17). The strong returns from oil palm may help explain the Ministry of Forestry’s handling of the Rimba Raya voluntary carbon sector project proposal. This project, which provided for 90,000 ha of peatland in Central Kalimantan to be protected to generate carbon credits for sale under voluntary carbon trading, had been under development for several years. In mid-2011 the Ministry withdrew around half of the project area from the enterprise rendering it non-viable, and re-allocating part of the land for oil palm development despite it being on deep peat, which under Indonesian law is protected (Fogarty 2011).

22. Against this, Agriculture Minister Suswono reportedly said that a total of 18 mha of land could be used for oil palm (Jakarta Post 2011).
Turning to the paper and pulpwood industries, the Ministry of Forestry is planning for an additional 5 mha of industrial timber plantations to be established by 2016, and is reportedly considering approvals for up to 12 new pulp mills. But all previous efforts to increase timber plantations have fallen well below expectations, and if the 12 new mills are created, a substantial demand risk is likely to arise for illegally sourced timber as feedstock for these mills (Verchot 2010, pp. 4-5). This would represent a re-play of the problem of excessive capacity in Indonesia’s pulp mills driving illegal logging in the 1990s (Barr 2001).23

One study found that 2 mha of carbon-rich peatland was lost between 2000 and 2009 (FWI 2011). Another study found that this was due mainly to expanding oil palm and pulp and paper operations (Broich 2011).

Indonesia’s planning agency, Bappenas, has proposed a land-swap strategy aimed at shifting concession-holders from peatlands to degraded mineral soils (Bappenas 2009). The strategy notes that some 2.5 mha of deep peat is already under forestry, plantation and other leases. While economically rational because mineral soils are more productive for development than peat, especially deep peat,24 there is little sign of this option gaining traction.25

Data on deforestation since 2005 is conflicting.26 An assessment based on NASA satellite data for 2005-2010 found a downward trend, with annual deforestation declining from 1.1 mha in 2006 to 0.76 mha in 2009 (Hammer et al. 2010). A 2011 analysis of the ten-year period 2000-2009, again using satellite data,

23. Expansion of the paper and pulpwood industries is closely linked to an Indonesian strategy to achieve much of its emission reductions through reforestation and plantation development. Some 500,000 hectares of land are planned to be re-forested each year (Oktofani 2011). But the net effect of this effort would be a net increase rather than a decrease in carbon emissions (Sastriaristanti 2011b). The issue was closely analysed by CIFOR, which found that the only setting in which a (small) positive sequestration effect would result was where plantations were established on already deforested mineral soils (Verchot et al. 2010).

24. A cost-benefit analysis found that to match the opportunity cost of oil palm plantations on degraded mineral soil forests, a carbon price of US$57/tCO2e would be needed, but that a price range from US$2-10/tCO2e would be sufficient for plantations on degraded peat soils, given the carbon intensity of peatlands (Irawan et al. 2011).

25. There are many impediments to use of degraded land, including definitional issues, poor quality of data on degraded land, and problems arising from such lands already being occupied by spontaneous settlers giving rise to land claim issues (Luttrell et al 2011: 11).

26. Trends to 2005 were summarised in Section 2.
concluded that deforestation totalled 15 mha over the decade, averaging 1.5 mha/yr.

Measurement uncertainty notwithstanding, Indonesia’s current deforestation rate would appear to be equal to or in excess of recent deforestation rates in Brazil, where an estimated 746,400 ha (7,464 km²) was lost in 2008-09 and 700,000 ha in 2009-10 (INPE 2011).

While there is no doubt that parts of the Indonesian Government (including the President) are committed to addressing deforestation, the challenge is immense. Given the mixed results to date from Indonesian efforts to address a range of systemic governance problems, and major expansion plans for oil palm, biofuels and the paper and pulpwood industries, the prospects for reduced deforestation and reductions in emissions from forests and peatland appear uncertain at best.

The conflicting forces at work are well-illustrated by the implementation of the May 2010 Norway-Indonesia Letter of Intent, which includes an agreement that a two-year moratorium on new concessions for conversion of peat and natural forest would be implemented as of 1 January 2011 (GON and GOI 2010). On the day before the moratorium was slated to take effect, the Minister for Forestry approved 2.9 million ha of new concessions. Since these now had the status of being “previously approved concessions”, they fell outside the provisions of the moratorium under the agreement with Norway (Jakarta Post 2011b). In an action which effectively amounted to laundering of past violations of concessions, just 11 days after the moratorium actually took effect in May 2011, the Minister of Forestry issued a decree authorising a change of status for 1.67 mha of land in Central Kalimantan from forest land to non-forest, thus opening the way for oil palm plantations to be established (Greenomics 2011). And even as President Yudhoyono signed the moratorium, a palm oil enterprise was reported to be engaged in destroying peat forests in Central Kalimantan which were subject to the moratorium (Telapak 2011).
5.3. Central Kalimantan: disappearing peat

Central Kalimantan, the location of the KFCP pilot, is not only the obvious location for large-scale application of any methodology developed by KFCP, but also a microcosm for the struggle in relation to deforestation across Indonesia. Central Kalimantan has committed to sharply reduce its emissions. In 2010, the National Council for Climate Change and the provincial government (DNPI and GOCK 2010) released a paper proposing a low-carbon strategy which would reduce peatland emissions by 141 Mt CO\textsubscript{2}e per year by 2030 through elimination of fires and peatland rehabilitation, plus a further 135 Mt CO\textsubscript{2}e per year through other forestry abatement (DNPI and GOCK 2010, pp. 13-16).\textsuperscript{27} As noted previously, Central Kalimantan is the first demonstration province selected by Norway for its $1 billion fund.

Yet prospects for reducing emissions in Central Kalimantan appear bleak. The Forest Watch Indonesia 2011 satellite analysis mentioned earlier shows that Central Kalimantan and the Sumatran oil palm province of Riau are Indonesia’s deforestation hotspots. The report found that the greatest forest loss between 2000 and 2009 was in the four provinces of Kalimantan which lost 5.5 mha (out of a national total of 15 mha), with Central Kalimantan suffering the great loss at 2 mha (FWI 2011; Jakarta Post 2011c).

In September 2011 preparation of a REDD+ strategy for Central Kalimantan was under way (Ministry of Forestry 2011) as required under the Norway agreement. However, a large part of the province is under mining, oil palm and logging concessions, with much of the remainder in national parks (pers. comm., Arie Rompas, WALHI, 6 Sept 2011; see map in FOEI 2011:15). It is difficult to see where the province’s low-carbon strategy might be implemented.

One indicator of the difficulties in tackling peatland emissions in Central Kalimantan is the lack of progress with rehabilitation of the Ex-Mega Rice Project (EMRP) area. In 2007, President Yudhoyono issued a decree (Presidential Instruction 2/2007) requiring the rehabilitation and conservation of the area.

\textsuperscript{27}Its emissions in 2005 were estimated at 292 Mt CO\textsubscript{2}e, of which peatland emissions comprised 185 Mt CO\textsubscript{2}e and LULUCF another 101 Mt CO\textsubscript{2}e (DNPI 2010a: 13-16).
This was followed by development in 2008 of a comprehensive EMRP Master Plan to achieve this goal. The Master Plan called for all existing permits for palm oil plantations on deep peat to be revoked. These covered an area of 120,000 ha and contravened Presidential Decree 32 of 1990 (GOI 1990), which bans development on peat greater than 3 meters in depth. Most of them are in Block C, which is one of the largest sections of the EMRP and which has a substantial area of deep peat, and some are in Block B. The Plan called for Block C to be zoned for protection and limited development (Euroconsult and Deltares 2008: 17-18, 35-6, 127). Since then, however, various drafts of a revised spatial plan for Central Kalimantan have been prepared (though not yet finalised or released), and the aspiration to protect Block C has largely been dropped (Ministry of Forestry 2009, Ministry of Forestry 2010a). A large part of Block C is to be allocated to production forest or “other uses” without any of the protections proposed in the EMRP Master Plan. Parts of Block B are also proposed for “other uses”. A number of oil palm plantations are now visible from Google Earth in Block C. Plans to implement the EMRP Master Plan have been dropped altogether.

Concerns have frequently been raised regarding abuses of the concession system in the EMRP area and the province generally. In February 2011, the Ministry of Forestry stated that only 67 plantation companies out of 352 operated legally in Central Kalimantan, and only nine out of 615 mining concessions operated legally (Jakarta Globe 2011c). The central government has indicated its intentions to challenge these abuses, with a team of officials from a judicial task force, the Ministry of Forestry and the Corruption Eradication Commission launching an investigation into illegal activities. It was reported in February 2011 that 967 forestry firms in Central Kalimantan were reported to be under investigation (Jakarta Post 2011d). No action has since been taken.

Interestingly, one of the criticisms leveled by NGOs at KFCP is precisely that it is, in the words of one of them, “Missing the big picture of destruction”:

“... the KFCP project with a 120,000 hectares (half the size of Australian Capital Territory or ACT) project area pales in comparison
with the 15.1 million hectares of the total area in central Kalimantan, at least 83% of which will be converted or destroyed through either oil palm, monoculture pulp plantations or mining permits issued by the relevant authorities. ... Emissions from such a huge area will drastically overwhelm the insignificant and small reduction from the KFCP site...” (Muliadi 2011)28

The AusAID response is that KFCP is a demonstration project, and part of a "broader suite of efforts" (De Lacy 2011). This is true, but it is also the case that KFCP constitutes the largest component of the Australian forest carbon effort in Indonesia. We are now in a position to ask whether this makes sense.

6. Discussion and conclusion

As stated in the introduction, we are interested in KFCP from two perspectives, as an example of the role of “announceables” in the Australian aid program, and as a source of lessons for REDD. We address these in turn.

We have not come across a formal discussion of an “announceable,” and for our purposes it suffices to define it simply a project which is launched with fanfare. An announcement culture is one in which aid announceables rather than results are given prominence. KFCP was an announceable back in 2007, and its experience shows the damage which an announcement culture does to the aid program.

As we have shown, KFCP as implemented bears very little relation to the project as announced. The former is not only much less ambitious than the latter; it is also now primarily conceived of as a REDD demonstration project.

It would have made more sense to announce, at the outset, targets that were broadly consistent with the funding that was being made available, and not to have to subsequently downsize targets by an order of magnitude. If the original targets were required to signal ambition, then they also should have been

28. Note the exaggeration in the size of the project area, due to the failure (discussed in Section 3) to communicate that the project has in fact been downsized.
labelled as long-term or aspirational, and more realistic targets indicated for KFCP as a project.

It would also have been sensible for the Australian government to have been more explicit about the subsequent change in orientation and ambition of the project. That would at least have allowed a defence to be mounted for the direction the project was now taking. One very simple step would have been for the Project Design Document to be made public. That this document is not yet available on an Australian Government website, and that the original targets have been dropped in all project documents but continue to be emphasized in the official KFCP fact-sheet stands in stark contrast to AusAID’s aspiration to be “one of the most transparent aid donors in the world,” (Rudd 2011).

The lack of transparency surrounding KFCP is not just a breach of basic principles of good aid. It also risks undermining the project's prospects and impact.

First, as discussed in Section 3, the quiet way in which the downsizing has been done has closed off the opportunity for discussion of whether reducing the ambition of the project has increased risks to sustainability.

Second, it is unfortunate that, four years on from announcement, there is not a single public review or evaluation of KFCP. There is no doubt that much learning has gone on under KFCP. But that will remain private unless results and lessons are shared. By contrast, there is already a public independent evaluation of the Norway-Indonesia forestry agreement, financed by Norway, even though the agreement was signed some two and a half years after KFCP commenced (Caldecott et al, 2011).

And, third, when it does at last become known that KFCP is in fact much smaller than originally announced it will be hard to counter the inevitable impression that Australia is not serious about helping Indonesia stem deforestation.

In summary, the case of KFCP does indeed confirm the damage done to the aid program by an announcement culture. Of course, aid is not the only aspect of
government subject to this culture (Tanner 2011; Daley and Edis 2011). But it is plausible to argue that, given the intrinsic difficulty of monitoring overseas aid projects, the aid program is particularly at risk from a focus on announcements rather than results.

In relation to lessons for REDD, our analysis in Sections 4 and 5 allows three conclusions to be drawn. First, KFCP is badly delayed, and further delays are at least possible if not likely. Whether or not the project will ever achieve its limited goals is unclear.

Second, in the interim, emissions from deforestation in Indonesia, and particularly in Central Kalimantan, continue to be high, and peatland forest continues to be drained and converted, probably irreversibly in the case of oil palm, despite an array of government policies aimed at addressing the problem. In particular, oil palm continues to be developed on the Ex Mega Rice Project Area, where KFCP is also located, and the latest plans for the EMRP area show much reduced ambition in terms of peatland rehabilitation and protection. The longer the delay in KFCP, the less of EMRP will be available for preservation in any eventual scale-up.

Third, the global REDD market which was intended to be the vehicle by which KFCP would be scaled-up is further away than ever, though more public financing has become available, and national carbon trading schemes, such as Australia’s, may provide a source of international demand for forestry credits.

We consider the implications of these findings first in relation to KFCP and the Indonesia context, and then in relation to global REDD efforts in general.

Our research findings imply that the manner in which KFCP has been shaped is mistaken. Australian forest carbon policy has remained unchanged since 2008. But, as Section 5 showed, much has changed since then. It is time for a re-think. It is no longer plausible to proceed with REDD demonstration projects and technical assistance in the hope that a REDD market will come along to allow these to be scaled-up.
The problem is not so much that the prospects for an international REDD market are poorer now than they were in 2007. Public funding and national carbon markets could fill the gap.

The deeper problem is that the prospect of large-scale REDD funds is at the current time too distant and uncertain to provide sufficiently strong incentives to tackle the deep-seated drivers of deforestation in Indonesia. The result is that deforestation continues unabated, and the global policy goal of reducing emissions is defeated.

What should be done? There are no easy answers. The drivers of deforestation in Indonesia are both powerful and deep, ranging from poor governance and corruption, to a powerful industry lobby, and the strong economics of oil palm. How to influence these drivers is unclear, and Australia’s influence is limited. 29 One appealing option is that Australia should put the problem of deforestation in Indonesia in the “too hard” basket, and cease current efforts.

Certainly, there is no point continuing along current lines. The most that can be hoped for from KFCP under current plans is the tenuous, possibly temporary protection of a relatively small patch of peatland, which, against the backdrop of the underlying trends of continued, large-scale peatland conversion and deforestation in Indonesia, would be at best a symbolic victory and at worst harmful by giving the false impression of progress.

At the same time, pulling out would also not be an easy decision. Australia is now invested in Indonesia’s forestry sector, and has made important commitments to the local and poor people of the project area in particular. If the decision is made to continue, we have three suggestions for a radically re-shaped engagement.

First, the experience with KFCP to date is that progress with peatland rehabilitation will be slow, and gains hard to make. If it makes sense for Australia to invest in this area, then we should be prepared to stay engaged in this endeavour over the long-term, by providing ongoing funding to ensure that

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29. Howes and Wywroll (2012) characterise peatland reclamation as one of Asia’s “wicked” environmental problems, implying that there are no easy or definitive solutions.
any successes are not reversed, and to expand the area being reclaimed. It certainly makes sense for Australia to look for additional funding partners, but other partners will only come in if Australia stays engaged, and makes more funding available.

Such a reorientation would return Australia to the original KFCP vision, which was to support a significant reduction in emissions, not just to show that it is possible, but rather, indeed primarily, for the emissions reduction thereby obtained.

Second, if Australia decides to stay engaged, it needs to engage more in policy dialogue, and put a much larger sum of money on the table. The Norwegian intervention in Indonesia presents an alternative model of engagement at the policy level, supported by a substantial financial investment. There is no guarantee that the Norwegian approach will work. Indeed, as we showed in the last section, it has already been severely challenged. And clearly one needs both policy changes and pilots. However, Australia’s restriction of its activities to pilots and technical work, and its lack of emphasis on policies is a weakness. A different sort of engagement is needed, with much closer collaboration with Norway. Australia cannot only welcome Indonesia’s announcements that it plans to tackle deforestation (e.g., AusAID 2011:38-39). It also needs to encourage Indonesia to do more to turn those announcements into reality, and to try to inject a sense of urgency into the reform process. This can be done in part by political pressure and dialogue in relation to the drivers of deforestation, but it would also require that a large amount of money be placed on the table by Australia to encourage action, as Norway has done, to be disbursed on the basis of performance.

Third, Indonesia and Australia apparently agreed in November 2008 on a second pilot (DCCEE 2011), though this has still not been finalised (AusAID 2011). The second pilot would apparently be a more conventional avoided deforestation project (not on peat lands). The findings of this research do not support such a move. Australia already has its hands full with KFCP. The odds are stacked
against success. If it is worth continuing, Australia should engage more in policy dialogue, not disperse its efforts through a second demonstration project.

Finally, what are the implications for the global REDD effort? We noted in the introduction the absence of detailed appraisals of REDD demonstration projects. This study appears to be the first, and it is not encouraging. Reducing emissions from deforestation and degradation would seem to be a complex, difficult and slow task. Demonstration projects such as KFCP are moving forward too slowly when considered against the rapid rate of deforestation.

While other surveys of demonstration projects (surveyed in Section 1) raise a number of issues around project performance similar to the ones we have noted in KFCP, the conclusion we draw is quite different. The REDD surveys aim to show how REDD can work better. Our conclusion of slow progress when juxtaposed against rapid deforestation leads us to be more sceptical of the entire REDD undertaking.

The initial idea embedded in the Bali Action Plan that demonstration projects could “address the drivers of deforestation” (UNFCCC, 2007) appears to be unrealistic. The drivers are simply too powerful and systemic to be amenable to influence from demonstration projects. Demonstration projects are important, but they need to be scaled-up and built on over time, and accompanied by support and pressure for policy reforms.
9. Annex: List of persons consulted

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8. References


Fogarty, D 2011 ‘How Indonesia crippled its own climate project’, Climate Spectator 17 August 2011. 


FPP/SawitWatch 2006 Promised Land: Palm Oil and Land Acquisition in Indonesia - Implications for Local Communities and Indigenous Peoples. Forest Peoples Programme and Sawit (oil palm) Watch. 


<http://www.worldagroforestry.org/downloads/publications/PDFS/WP16601.PDF>


<http://www.un.or.id/sites/default/files/COMPLETEStranas1RevisedEng%20final%20version.pdf>


GON & GOI, 2010 Letter of Intent between the Government of the Kingdom of Norway and the Government of the Republic of Indonesia on “Cooperation on
reducing greenhouse gas emissions from deforestation and forest degradation” 26, May 2010, Oslo, Norway.  


<http://www.cgdev.org/pora>


<http://www.forestcarbonportal.com/resource/peat-co2-assesment-co2-emissions-drained-peatlands-south-east-asia>


Irawan, S, Tacconi, L & Ring, I, 2011 Stakeholders’ incentives for land-use change and REDD: The case of Indonesia, Crawford School of Economics and Government, The Australian National University.


Ministry of Forestry 2010a ‘Peta perubahan peruntukan kawasan hutan menjadi bukan kawasan hutan, penunjukan areal bukan kawasan hutan menjadi kawasan hutan dan perubahan fungsi antar kawasan hutan di wilayah provinsi Kalimantan Tengah’, (Map of alterations to forest areas to become non-forest areas, designation of non-forest areas to become forest areas, and functional changes in forest areas in Central Kalimantan). *Ministry of Forestry*, Jakarta. 20 September 2010.


Tanner, L 2011 ‘Sideshow syndrome eroding democracy’, *The Australian*.


Telapak, 2011 ‘Caught REDD Handed: How Indonesia’s logging moratorium was criminally compromised on Day One and Norway will profit’, *Telapak*.

Tol, S, 2010. *Cancún Climate Summit addresses emissions from peatlands - part II*.

Verchot, L, Petkova, E, Obidzinski, K, Stibniati A, Yulyani E, Dermawan, A, Murdiyarso, D & Salwa, A 2010 *Reducing forestry emissions in Indonesia*, Bogor, Indonesia, CIFOR.


[http://www.focali.se/filer/Focali%20publication%202009_01.pdf]


[http://www.esmap.org/esmap/sites/esmap.org/files/Final%20Low%20Carbon%20Dev%20Options%20Phase1_english_0.pdf]


WRI 2011 ‘Climate Analysis Indicators Tool (CAIT). Release 8.0’, *World Resources Institute.*


Yuhoyono, S 2009 *Intervention by H.E. DR. Susilo Bambang Yudhoyono, President of the Republic of Indonesia, on Climate Change*, Pittsburgh, USA, G-20 Leaders Summit. 