Finance

Section D: Carbon Trading Platform
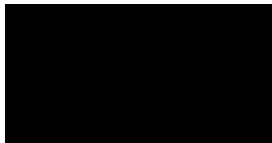
August 2012

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Disclaimer

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G   K   .
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K D   I
D   (DFID)   N   D   -G   I
C   (DGI)   . H   ,
DFID, DGI
C   D   K   N   *,
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.

Contents

1.   Abbreviations

AFD   A   F   D   (F   D   A   )

CBEE   C   B   E   E

CDM   C   D   M

CE   C   E

CI-DE   C   I   D

COP   C   P

C   C

DNA   D   N   A

E   E

E E   E

FONAM   E F   N   D A   -P (N   E   F   )

ICE   I   E

I O   I   O

KAM   K   A   M

K G   K   E   G   C

K I   K   I   A

LDC   L

MC   M   C   E   I

M   M   ,

PDD   P   D   D

PM   P   M

P A   P   A

PPP   P

  EDD

  O₂

  CO₂

  NEP   N   E   P

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C   C

2. Introduction

This section outlines the possible design options for a Kenyan carbon trading platform and presents a set of recommended actions that might be taken forward in the design and implementation of Kenya's National Policy on Carbon Investments and Emissions Trading.

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Figure D1   Kenya has generated as many credits as might be expected given its emissions

Traditionally, carbon markets have been a key way of incentivising private sector investment by international investors in mitigation activities in developing countries. C   (   )

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Compliance purchasers are those who purchase credits to fulfil their legal obligations regarding emission reductions. A
                                        K   P   [1]. O   ,
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The Clean Development Mechanism has, to date, been the main mechanism for managing and regulating the process of generating international credits. A
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(CE   ). CE
                                        (   )   C   D   M
(CDM).   E   B   CDM,   NFCCC,

. .   ,
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              ,   D   N   A   (DNA)

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Voluntary purchasers are those who purchase credits for reasons other than legal obligations i.e. corporate social responsibility (CSR).   ,
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                        CDM E   B   .
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                                                          . C

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Kenya's relative performance in the international carbon markets to date has, contrary to the opinion often expressed, been reasonably good. I   C
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K   CDM E   B   . A   F   D1,
                    K   1

C   (C)   C   (C)
(K   ).

However, future market conditions are likely to be much tougher. A
,   K
2012. F , , CE

$€3\text{-}4/ CO_2$[2]. O ,

. O , K

( ) .

Figure D2 The price of CERs has fallen significantly in recent years

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... ber' < data. frame(Dat
Average.Price == an.ru

lumn "Date"
data <- cer) +
line(data = cer, aes(x = Date, y = Average.Price)) +
x date()
Each group consist of only one observation. Do you need to adj
```

B N

This analysis and set of recommended actions is intended to support Kenya's National Policy on Carbon Investments and Emissions Trading. M
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A C ,
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Box D1   Key conclusions and proposed actions

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1. **Future carbon market conditions will be difficult.**

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E   E   (E   E   ),

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2. **A primary trading platform is more appropriate to Kenya's needs than a secondary platform.** I

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3. **Within the primary platform options, a focus on enhancing the DNA and export promotion activities is desirable.**

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4. **Accelerate negotiations with the European Union regarding a bilateral deal in relation to EU ETS eligibility for credits from Kenyan projects registered after 2012.** D

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A   ).

5. **Advance discussions with Japan regarding its bilateral offset credit scheme (BOCS)**

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6. **Enhance the capacity of the DNA.**

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7. **Seek external resources to support these DNA reform activities wherever possible.** N E

P (NEP) , A C P

A D B B C I

D P M .

8. **Determine the appropriate home to host a body that develops and promotes projects responsible for generating carbon credits, both in the compliance and voluntary markets.**

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                                                   2011 F   2012;
- C   4
                          K
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- C   5
                                  K   . O   ,
      ;
- C   6   .

3.   Key findings from background research

Four pieces of background research have informed our thinking on the appropriate design for a Kenyan carbon trading platform.   :
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                                    (C   , I   , P   C   );

- -A   1
            .

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        ,   4   .
                ( ).

3.1   International developments in the carbon markets[3]

The global carbon market, especially for compliance credits, is threatened by a severe supply and demand imbalance, which could see prices remain low for the foreseeable future.   ,
                A   1   ,
        ,   CDM E   B   ,
                                .
                €2-€10/ CO₂   -
                                                        .

Kenya's access to international carbon markets is further threatened by the future rules of the EU ETS. C   ,   E   E   C
E   (CE   )   2012
                            (LDC).   E   E
                                            ,   ,
                            .

The relevant European legislation however allows for countries to sign bilateral deals with the EU to overcome this constraint. O
G   K   K
                                    E   (
      A   ). A
      , K   A   .
        -LDC A   K   .

In addition, Kenya should identify and exploit particular market niches where it may remain relatively insulated from these impacts.

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- K P ;
, K ,
J B O C ; /
. I , 2015, A K
K K
[4].

Finally, Kenya should begin to investigate opportunities to engage in sectoral crediting and sectoral trading mechanisms, possibly through the World Bank's Carbon Initiative for Development (CI-DEV) or Partnership for Market Readiness (PMR) programmes. P E
2012
-
, (M)
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. . .
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. D P
(C P (COP) 17) *"defines a new market-based mechanism, operating under the guidance and authority of the Conference of the Parties to enhance the cost-effectiveness of, and to promote mitigation actions … and, which, subject to conditions to be elaborated, may assist developed countries to meet part of their mitigation targets or commitments under the Convention."* N M M
. K ,
, M'
.
B . C I
D (CI-DE) 2012
F $20 ,
[5]. F
F ($50) K .
, PM ,
- .
E I PM I C
P . I , $350,000
M P . A M A
PM [6].

3.2 Current carbon market activity in Kenya[7]

In terms of the CDM, following registration of the first CDM project in Kenya in

The voluntary market is also vibrant in Kenya. A

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2   [8],   . M

            ,   .

                                                      EDD+   I,

  EDD+   C   . K

A   (   )

            [9]. F   K

A   A.

A number of barriers relating to the CDM process hold back further carbon market activity in Kenya.   :

1. **A lack of understanding of the CDM process and its requirements**.

                                          CDM

                      . I   CDM

3. **Political and institutional barriers and risks.**

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3.3   Lessons from other countries[10]

We have reviewed the experience of four countries that have been disproportionately successful, relative to their emissions profiles, in attracting carbon market activity: China, India, Peru and Chile.

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Carbon markets have been most successful in countries where there is a coherent policy of using the CDM to support low-carbon technologies and, where necessary, the role of the carbon markets within a suite of other policies is identified. F   ,   C   CDM
            CDM   ,   -
    ;   I   .

Efficient Designated National Authorities can help to streamline the CDM process.   /   DNA
                                    ;
                                                    L   A   (L A)

   L A;   ,   ,
     ;   DNA   . A
                    (I O   ),   P   DNA   ,
                            CDM   .

Countries that have embraced international consultants and project developers have tended to be more successful in carbon markets. A
                C   , C   P

    .

Government (backed) agencies can play an important role in supporting carbon market activity. I   C   P   ,

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                                        .

The broader investment climate and strength of the finance sector is crucial to carbon market activity. M   C   , I   , C   P

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4. Primary versus secondary trading platforms[11]

At a high level, it is possible to distinguish between a 'primary' trading platform and a 'secondary' trading platform. P

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There are two key challenges associated with creating a secondary trading platform in Kenya:

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- K .

The likely lack of liquidity will mean that market participants on both the 'buy' and 'sell' side of any carbon credit transaction are likely to prefer to continue to execute trades on existing platforms based close to where ultimate compliance purchasers, who account for the vast majority of trades, are located. E

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The experience of China and India illustrate the challenges associated with

The second challenge faced by any secondary trading platform in Kenya is that there appears to be a market-wide decline in trading activity.
CDM   2012
E   (   )
.   ,   F   D2,
.
F   D3   B   N   €1
2010   M   2012
A   2008.

Figure D3   The value of CER trading activity on BlueNext has been declining since the start of 2010

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A e age   an ac i n al e
decline ince ea l
e m n h

A g   F eb   A g   F eb   A g   F eb   A g   F eb

:   B   N   E

Other platforms have been insulated from this decline in activity by offering opportunities to trade in related commodities; this may not be possible in Kenya. F   ,   E
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K
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For these reasons, we conclude that a primary trading platform is more aligned with Kenya's needs.
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5.   What should a primary trading platform do?

		K	C
C /	C	C	P
Example: _://_ _. /_	**Example:** CDM B , B N' /CBEE	**Example:** E E E	**Example:** C E , C ; P (CBEE /B N) C -
	P **Example:** A P (AFD) KAM	A ( ) **Example:** N	
	P **Example:** FONAM, P C		
	A ( ) **Example:** N		

: E

5.2 Three archetypes for a primary carbon trading platform in Kenya

The table above highlights that there is a wide range of activities that could be undertaken by a primary carbon trading platform in Kenya. To focus discussion on the different options available we have identified three 'archetype' models:

- a a c d DNA d ;
- a - a c ; a d
- a b d .

It should be stressed that these different design options are neither exclusive nor exhaustive:

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5.2.1 Enhanced Designated National Authority (DNA) model

Under this model, no new institution would be created; rather additional resources would be provided to the existing Kenyan DNA to perform its role even more effectively. M DNA, N
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),
. DNA
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This model would be largely met by resources from the public sector, probably shared between domestic and international resources. A
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K ’ . H , . I , G
K NEP A C
P A D B ,
DNA . , G K
B P M
A , M , C
B . F C I D (CI-DE)
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Ca(i)ei . 2

5.2.2 'Export promotion agency' model

This model would involve an agency explicitly tasked with developing and marketing Kenyan carbon market projects and their associated credits.

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D1 :

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[13], [14];

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K C I C ;

- FONAM P C ,

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An agency performing these roles would be consistent with a number of the interventions proposed in the National Policy on Carbon Investments and Emissions Trading. F , [15]
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The institution would have no adjudicatory/regulatory responsibilities:
K ,

. FONAM   P   C
        P   C   .

The body would have a broad remit to cover CDM-related activity as well as voluntary credits including REDD+ projects.

<div align="right">-2012</div>

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The Ministry of Finance, as the lead implementing agency for the Policy on Carbon Investments and Emissions Trading, will need to determine the appropriate institutional home for the body; regardless of the home, the platform could be implemented/managed in one of two ways.   G
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                    M   F   ,   K   I   . I
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        (   )   .
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In either event, the costs of the organisation would need to be largely met through public resources. I   (   )
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            . H   ,   ,
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Development partners may be reluctant to provide significant resources to support the Government of Kenya with (at least some aspects of) this initiative.
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            -                . A   ,

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                        E   A   .

The institution would have close links to, but be separate from, the proposed climate fund. A   ,

                        . O
                                        C   C   A   P   . A   ,
                            . H   ,
            ,   :

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The advantage of this model is that it would have the flexibility to deal with a number of the barriers to carbon market development in Kenya. I
CDM   ,

K   ' . F   ,
K   ,

. A

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The main disadvantage of this model is likely to be the cost associated with its development, especially as this may need to be borne largely by the Kenyan taxpayer, and in the context of the decline in opportunities for Kenyan carbon market activity.

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5.2.3 Broker model

In the third model, the carbon trading platform would explicitly act as a broker between project developers and credit purchasers. E

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This model would be most effective at a regional or even continental scale.
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E   A   -
A   .

This model could be at least part-funded by private capital. G
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. H   ,

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The main advantage of this model is that it would create strong commercial incentives to overcome some of the barriers to greater carbon market activity in Kenya and beyond. F   ,

CDM (

),   ,   . L   ,

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The key disadvantage of this model is that it risks replicating (crowding-out) the role of (private-sector) organisations that already exist, and hence wasting Kenyan taxpayer resources. A   NEP

K   CDM   [16].

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K   2012.

Overall, given the risks that such a model would replicate existing activities already adequately provided without taxpayer support, our initial view is that such a model is less compelling than the other two alternatives.

Table D2   The three different models vary across a number of dimensions

Variable	Enhanced DNA model	Export promotion agency model	Broker model
What would be the objective of the institution?	To undertake its regulatory functions as efficiently and transparently as possible	To aid in the development and promote the sale of carbon credits from Kenyan projects as an important Kenyan export	To broker deals between project developers and credit purchasers with financial compensation for deals successfully concluded
How might it meet these objectives?	Undertake studies to create new methodologies Calculate and publicise baselines, emissions factors Update website to inform stakeholders about relevant carbon market developments and allow for project documents to be uploaded online Obtain ISO accreditation Develop expertise in sectoral crediting opportunities	Would evolve over time depending on barriers but could include: — creating a platform where information on projects are advertised — providing technical assistance for project developers to develop business plans for projects — pushing for reforms to regulatory environment to encourage carbon market activity — organising conferences and opportunities for project developers to pitch their ideas to credit purchasers or capital providers	Whatever routes it considered most likely to lead to the conclusion of deals but this might include: — organising events that brought together purchasers and project developers — establishing networks with credit purchasers in Annex 1 countries — providing technical advice to specific projects
Who would be its 'customers'?	The DNA would maintain its adjudicatory/regulatory function. It would not have customers	Act to serve the interests of Kenyan project developers although it would not charge for most activities	For any one transaction, either project developers or credit purchasers
What would be the geographic scale?	Kenya	Kenya	Regional or continental
How would the institution be capitalised?	Mainly by Kenyan taxpayers. Some international public support may be available to assist with specific activities, i.e. from UNEP Risoe or African Carbon Support Programme of the African Development Bank. Partnership for Market Readiness could assist with sectoral crediting opportunities	Most resources would come from the public sector with some scope to charge for some activities. Development partners may provide some support but potential reluctance if perceived to be switching activity from other locations in the region. Implementation could be outsourced to the private sector, possibly (partly) on a payment for results basis	Possible public-private partnership arrangements
What barriers would it help	A lack of understanding of the CDM process and its	Flexible to respond to most of the barriers that were important in (a segment of) the market at the time,	Non-regulatory barriers that it was commercially

address?	requirements Lack of information about baselines etc. High transaction costs, uncertainty in processing carbon market transactions	both within Kenya and internationally	rational to address
What barriers would it not address?	Barriers outside the carbon market i.e. access to capital, project development capacity	Would only be able to lobby for regulatory changes at the DNA	The more it made decisions on purely commercial basis, the less likely it would be able to address existing barriers that existing commercial providers already face
Overall assessment	Reasonably low cost way of obtaining benefits Relative focus on compliance market activity may be inappropriate post 2012	Higher cost solution but could provide greater flexibility to deal with post 2012 carbon market context	Risk of crowding out private sector activity makes it unattractive

6. S   a   f Ac i   /Ne   e

**The   ed ac i   ha f   f   hi a a i ca   be di ided i
b ad ca eg ie : h e e a ed i   i g he   e a   a e c di i   f
Ke a   jec a d h e e a ed   he de ig a d i   e e a i   f he
ca b   adi g   a f   .**

I   ,   (b)   -8 (.)]TJ ET Q 0.24 0 0 6689 6.06587 744.0620069 T 45 0

Sec i A e ca b a e jec i Ke a

Tab e D3   CDM   jec i Ke a

CDM ID	Na e	T e	Regi a i da e	O e	A a ER	Ca b b e
1368	35 MW Ba a Ba C a P b M a S a C a L (MSCL)	B a	2 S 2008	IPP	129,591	Ja a Ca b F a (Ja a)
4740	O a a III P a 2 G a E a P K a	G a	4 Ma 2010	IPP	177,600	/a
2448	O a a II G a E a P	G a	4 D 2010	G	149,632	W Ba
6404	La T a a 310 MW W P P	W	28 F b 2011	IPP	736,615	/a
5123	Ab a Ra / M . K a S a S a R a I a - Ka a -K S a S a A/R P	R a -	11 J 2011	NGO	8,542	W Ba B a b F
3140	Ab a Ra / M . K a S a S a R a I a K a -K a S a S a A/R P	R a -	5 O 2011	NGO	8,809	W Ba B a b F
5023	R Ta a H P S a P	H	11 O b 2011	K G	25,680	W Ba C D Ca b F

Source: Carbon Africa and UNEP RISOE CDM Pipeline

Tab e D3   V a   jec i g G d S a da d i Ke a

Na e	T e	A a VER	S a	L ca i
E E C S S a a C , K a	E E D	45,154	R	N a a
Ab a I C S	E E D	70,000	R	C a P
S a ab D L S a Fa a K a	E E D	2,073,328	I	W P
K I C S	E E D	30,149	R	N a a

S ba H I C S	E E D	41,944	R	N/A
L I C S P	E E D	4,924	R	N/A
S I C S	E E D	4,922	R	S
Ka a S a ab E S	O	2,000	L	T a a
Pa a H a C a Wa T a P	E E D	244,019	I	A
M I C S	E E D	75,000	L	N/A
M a b I C S	E E D	75,000	L	N/A
W K I C S	E E D	75,000	Va a	N/A
H a Wa F a K a	E E D	10,000	L	N a a
Ga C S a H , K a	S a , L - I a H	1,968	R	C a P
S L : E E C S P Ka a a, K a	E E D	38,600	R	W P
A a C a a Wa F a P a K a	E E D	30,000	L	A

Source: Climate Care

Notes: While every effort has been made in acquiring this information, it may not be fully comprehensive.

TIST P a K a, VCS 003	14. A , F , La U	14,482
TIST P a K a, VCS 004	14. A , F , La U	13,790

Acedgee

W a b a b a a a a
a .

- Ba A a M L
- B b
- B
- Ca b A a
- C a
- C a B
- C a Ca
- C a C a Ca a
- C a N A a
- E a I Ba
- G ba Ca P a
- G b
- I -A a D Ba
- I a Ca b
- I a a E T a A a
- Ja a I a a C a A
- Na a E Ma a A
- P a B V
- Sa a Ca b E a (SCX)
- S a a Ba
- T a a I a a
- UK F a C a O
- U Na D P a

I a , a b F a T a T a W
G a b a ab a .

[1] T K P b ,
, 5.2 1990 b 2012. A 17 C Pa
(COP17) E a U a a b a a a
K P b a a b
b 2013 a 2017 2020.
[2] CDC C a R a (2012) W b a a CER a ERU a ?
C a B : a a , N b 13, Ma .
[3] T a V E (2011) D a a a b a :
a K a a b a , N b , A E .
[4] C a , a , a a a
a a a a (REDD+) a b b
a a a b a , a ab a a . H ,
a b a a b a , a Ca a, a a
a REDD+ , a a b a
REDD+ b a a ab a a .
[5] Ca b I a D (2012) L a Ca b Ma L -I C :
Ca b I a D . A a ab a : :// b a b a . / /CI-
D C a N F b2012.
[6] W a a a W Ba a a b
b a a a a a
a .
[7] T a Ca b A a (2011) A a a b a a a K a,
N b , A D .
[8] T a a a b S a ab D L S a Fa a
K a a a a 2 a . T a
a a b 2,000 a 40,000 a .
[9] E Ma a (2011) S a F Ca b Ma 2011: F Ca C .
[10] T a a ba V E (2011) Na a CDM G a : a
a K a D b , A G .
[11] T a a ba V E (2011) Ca b a a : I a a
a K a, D b , A H .
[12] P b a a
a .
[13] T a a a DNA b b a a b a .
[14] T :// a a a b . / b a a K a a .
[15] I a b b a a b ; a
b , M F a a a a b .
[16] T a a a a a W Ba a a a a
a a CDM a , a , M a S a
C a .