**hnjfo' kl/jt{gsf] ;Gbe{df :jR5 ljsf; ;+oGq / g]kfn**

j]bk|sfz n]vs

pk–;lrj, jftfj/0f dGqfno

**!= k[i7e"dL M**

 ljZjdf hnjfo' kl/jt{g w]/} k'/fgf] ljifo xf]Og . ;g\ !(\*) sf] bzsdf hnjfo' kl/jt{gsf] a}1flgs cfwf/nfO{ Wofg lbb}+ ;+o'Qm /fi6« ;+3Lo jftfj/0f sfo{qmd (United Nations Environment Program, UNEP) / ljZj df};d ;+u7g (World Meteorological Organization, WMO) n] rf;f] lnPkl5 o;df cfjZos cg';Gwfg tyf cWoog u/L k|ltj]bg ug{ Ps hnjfo' kl/jt{g ;DaGwL cGt/;/sf/L d~r (Intergovernmental Panel on Climate Change, IPCC) sf] u7g ePsf] lyof] . IPCC n] ljZj el/ cfjZos cWoog cg';Gwfg tyf ;/f]sf/jfnfx?;+u cGt/lqmof ;d]t ul/ ;g\ !(() df cfk\mgf] k|yd k|ltj]bg k|sfzdf Nofof]] . hnjfo' kl/jt{gsf] ;jfnnfO{ ;Daf]wg ug{ ;+o'Qm /fi6«;+3sf] ;fwf/0f ;efsf] lg0f{o adf]lhd cGt;{/sf/L jftf{ ;ldltjf6 ;g\ !((@ sf] d] dlxgfdf hnjfo' kl/jt{g ;DaGwL ;+o'Qm /fi6«;+3Lo ;+/rgf dxf;lGw (United Nations Framework Convention on Climate Change, UNFCCC) sf] d'nkf7 tof/ eof] . h;df g]kfnn] k[YjL lzv/ ;Dd]ngsf] ;dodf !@ h'g !((@ df x:tfIf/ u/]sf] lyof] eg] #! h'nfO{, !(($ b]lv g]kfn o; dxf;lGwsf] kIf /fi6« ePsf] 5 .

UNFCCC n] ljZjdf xl/tu[x Uof; pT;h{g ug]{ d'n'sx?nfO{ cfˆgf] xl/tu[x Uof; pT;h{gsf] ljBdfg :t/nfO{ 36fpg cfXjfg u/]sf] 5 . xl/tu[x Uof; g} hnjfo' kl/jt{gsf] k|d'v sf/s /x]sf] ;Gbe{df o;sf] pT;h{gnfO{ lgoGq0f ug'{ hnjfo' kl/jt{gsf c;/x?sf] Go"gLs/0fsf nflu cfjZos lyof] . o;} l;nl;nfdf ;g\ !((& df hfkfgsf] Sof]6f]df ;DkGg UNFCCC sf kIf/fi6«x?sf] t];|f] jflif{s ;DDf]ng (Third Session of the Conference of the Parties, COP 3) n] dxf;lGwsf kIf/fi6«x?sf] nflu xl/tu[x Uof; lgoGq0fsf nflu Ps JffBfTds Joj:yf u¥of], h'g Sof]6f] k|f]6f]snsf gfdn] lrlgG5 . Sof]6f] k|f]6f]snn] xl/tu[x Uof;sf] pT;h{gdf cu|k+lQmdf /x]sf ljsl;t tyf cf}Bf]lu\s d'n'sx? h;nfO{ UNFCCC n] cg';'lr ! -Annex 1) df /fv]sf] sf/0fn] Annex 1 d'n'sx? klg eGg] ul/G5, sf nflu yk bfloTj ;[hgf u¥of] . cyjf tL d"n'sx?n] cfˆgf] xl/tu[x Uof; pT;h{gsf] dfqfnfO{ ;g\ @))\*–@)!@ sf] cjlwdf ltgsf] !(() sf] :t/ eGbf %=@Ü sd t'Nofpg' kg]{ Joj:yf u¥of] . of] lgs} r'gf}ltk"0f{ o; sf/0f klg lyof] ls xl/tu[x Uof; a9L pT;h{g ug]{ d'n'sx? ljsl;t tyf wgL 5g\ . plgx?sf] ljBdfg xl/tu[x Uof; pT;h{gsf] :t/ 36fpbf ltGsf] ljsf;sf] k|lqmof ;d]tnfO{ k|efj kfg{ ;Sg] cj:yf lyof] / 5 klg . Sof]6f] k|f]6f]snsf] k|fjwfg kfngf ug{' kg]{ cj:yfn] :jR5 ljsf; ;+oGq (Clean Development Mechanism, CDM) sf] k|fjwfg Sof]6f] k|f]6f]sndf /x\of] . cyjf CDM Ps o:tf] Joj:yf lyof] h:fn] Sof]6f] k|f]6f]snsf k|fjwfgx? kfngf ub}{ Psflt/ lglb{i6 xl/tu[x Uof;sf] :t/ 36fpg] k|ltj4tf k'/f ug{ d2t ub{Yof] eg] csf]{lt/ cfk\mgf ljsf;sf sfdx?nfO{ lg/Gt/tf lbb} lbuf] ljsf;sf nflu /fli6«o ljsf/sf sfo{s|dx?nfO{ cufl8 j9fpg ;lsGYof] .

**@= :jR5 ljsf; ;+oGq (CDM) / Sof]6f] k|f]6f]sn M**

UNFCCC sf p2]Zox? k|fKtLsf] qmddf cufl8 a9\g cfjZos gLlt, lgod, jftf{ tyf lg0f{ox? kIf/fi6«x?sf] jflif{s ;Dd]ng (COP) n] ug]{ ub{5 . COP o;sf] k|d'v ;+rfng stf{ -Governing Body) xf] . COP sf] hd{gLsf] jln{gdf ;DkGg klxnf] ;Dd]ngn] Annex 1 df /x]sf kIf/fi6«x?sf nflu ;g\ @))) kl5sf k|lta4tfx? to ug]{ lg0f{o cg';f/ hfkfgsf] Sof]6f]df ;g\ !((& df COP 3 n] Pp6f sfg"gL ?kdf afBsf/L k|f]6f]sn kfl/t u¥of] . o;n] #\* j6f cf}Bf]lus d'n'sx? nufot s]Gb|L|o / k"jL{ o'/f]ksf !! b]zx?n] cfˆgf] xl/tu[x Uof;sf] :t/ ;g\ !(() sf] :t/eGbf %=@ Ü Go"g ug]{ u/L afBfTds k|fjwfgx? lglZrt u¥of] . oL k|ltj4tf k"/f ug]{ cjlw ;g\ @))\* b]lv ;g\ @)!@ sfod ul/Psf] lyof] . Sof]6f] k|f]6f]sn ljZjdf !^ k|m]a'c/L @))% b]lv nfu" ePsf] 5 . g]kfnn] Sof]6f] k|f]6f]sn cg'df]bgsfnflu !^ ;]K6]Da/, @))% df cj]bg u/]sf] lyof] eg] !$ ;]K6]Da/, @))% b]vL g]kfn Sof]6f] k|f]6f]snsf] kIf /fi6« aGof] . o;} ;Gbe{df UNFCCC sf] Sof]6f] k|f]6f]snsf] bkmf !@ adf]lhd Aoj:yf ePsf] :jR5 ljsf; ;+oGqsf] ;+rfngaf6 cGt/f{li6«o k|ltj4tf k'/f ug{ Pjd\ :jR5 ljsf; cfof]hgfx? (CDM Projects) nfO{ /fli6«o :t/df l:js[tL / l;kmfl/;sfnflu g]kfn ;/sf/n] @@ lb;Da/, @))% df jftfj/0f dGqfnonfO{ /fli6«o lgsfo (Designated National Authority, DNA) tf]Sof] . /fli6«o lgsfon] lbuf] ljsf;sf ljleGg $ j6f dfkb08 (Creteria)[[1]](#footnote-2) sf ;d]tsf cfwf/df :jR5 ljsf; cfof]hgfx?nfO{ l:js[tL k|bfg ug]{ sfo{ ub{5 .

Sof]6f] k|f]6f]snn] 5 j6f k|d'v xl/tu[x Uof;x?sf] Go"gLs/0fnfO{ ;+s]t u/]sf] 5 . o; cGtu{t (i) Carbon dioxide (CO2) (ii) Methane (CH4) (iii) Nitrous Oxide (N2O) (iv) Hydroflurocarbons (HFCs) (v) Prefluorocarbons (PFCs) and (vi) Sulfur hexafluoride (SF6) kb{5g\ . jgh+unn] jfo'd08ndf /x]sf xl/tu[x Uof';x? cjzf]if0f ug]{ sfo{ ub{5 .

Sof]6f] k|f]6f]snn] lgwf{/0f u/]sf] r'gf}ltk"0f{ k|ltj4tfnfO{ Jojxf/df ptfg{ sl7g lyof] . kmntM o;sf] cg'df]bg -Ratification) df ;d:ofx? cfP . rf/ jif{ nfdf] ax; kZrft ;g\ @))! df df/fs]z ( Marrakech) df ;DkGg COP 7 n] Sof]6f] k|f]6f]snsf] sfof{Gjogsf] nflu ;xof]uL ;+oGqsf] ?kdf Marrakech Accord nfu' u¥of] . h;nfO{ :jR5 ljsf; ;+oGq (CDM) elgPsf] 5.

#= **:jR5 ljsf; ;+oGq / ;xof]uL k|fjwfg M**

ljsl;t tyf cf}Bf]lus d"n'sx?nfO{ cfˆgf xl/tu[x Uof; 36fpg] k|lta4tf k"/f ug]{ ;Gbe{df Sof]6f] k|f]6f]snn] tLg j6f ;xof]uL k|fjwfgx?sf] Joj:yf u/]sf] 5 . h; cg';f/ klxnf], xl/tu[x Uof; pT;h{gsf] cGt/f{li6«o sf/f]af/ ug{ ;lsG5 . o;nfO{ sfa{g Jofkf/ (International Emission Trading) elgG5 . bf];|f], ljsf;lzn d'n'sx?n] :jR5 ljsf; ;+oGq ;DaGwL kl/of]hgf (CDM Project) ;+rfng u/L sfa{g8fO{cS;fO8 Go'gLs/0fsf] 6g cg'?k 'Certified Emission Reduction (CER)' pTkfbg u/L cf}Bf]lus d'n'sx?nfO{ lalqm ug{ ;lsg] / cf}Bf]lus d'n'sn] To;/L k|fKt u/]sf] CER nfO{ cfˆgf] Sof]6f] k|f]6f]snsf] k|ltj4tf k'/f ug]{ sfo{df pkof]u ug{ ;Sg] k|fjwfg /x]sf] 5 . t];|f] k|fjwfgsf] ?kdf Sof]6f] k|f]6f]snsf] k|ltj4tf k'/f ug]{ bfloTj /x]sf] d'n'sn] ;+;f/sf] s'g} klg d'n'sdf CDM Project df nufgL u/L k|fKt sfa{g o'lg6 (Emission Reduction Unit, ERU) nfO{ cfˆgf] k|ltj4tf k'/f ug{ pkof]u ug{ ;Sg] /x]sf] 5 . o;nfO{ Joint Implementation (JI) elgG5 .

**$= :jR5 ljsf; ;+oGq cfof]hgf M**

:jR5 ljsf; ;+oGqsf] ;+rfngaf6 cGt/f{li6«o k|ltj4tf k'/f ug'{sf] ;fy} b]z ljsf;sf] sfo{nfO{ lbuf] t'NofO sfa{g Jofkf/sf] cGt/f{li6«o ahf/af6 nfe xfl;n ug{ ;Sg] k|r'/ ;Defjgf ePsf] If]q xf] . ljz]if u/L g]kfn h:tf] cltsd ljsl;t d'n'sx?sf] nflu ;s]hlt cGt/f{li6«o ax'kIfLo Pj+ b'OkIfLo ;xof]u tyf nufgL k|fKt ug{ ;lsg] / ;/sf/L afx]s ;fd'bflos Pj+ gLlh If]qn] klg k|ofKt nfe lng ;Sg] ;Defjgf /x]sf]n] oL d'n'sx?df o:tf cfof]hgfx?sf] ;+rfng Pj+ ljsf; dxTjk"0f{ b]lvPsf] 5 . :jR5 ljsf; ;+oGq cfof]hgfjf6 CER k|fKt u/L nfe lng] sfo{sf] nflu lglZrt Measurement / Verification sf dfkb08x? k'/f ug'{ cfjZos x'G5 .

CDM Project ;+rfng u/L kmfObf lng'k"j{ lgDg rf/ j6f tYox? dggof]Uo dflgPsf 5g\ .

s\_ Additionality: CDM kl/of]hgfn] sfa{g Go"gLs/0fsf] qmddf ljBdfg Go"gLs/0fsf] :t/ eGbf yk Go"gLs/0fdf of]ubfg lbO{ sfj{g o'lg6 k|fKt u/]sf] x'g'kb{5 . cyjf :jtM sfj{g Go"gLs/0f:t/sf] cfwf/ (Baseline) eGbf cltl/Qm ?kdf sfa{g o"lg6 k|fKt dfkg of]Uo elgG5 .

v\_ Methodologies: k|To]s CDM kl/of]hgfsf] l;nl;nfdf kl/of]hgfn] :jtM sfa{g Go"gLs/0f:t/sf] dfkgsf ljlwx? (Baseline Methodology) Pj+ kl/of]hgfn] k|fKt ug]{ yk sfa{g o"lg6sf] dfkgsf] ljlw (Monitoring Methodology) sf ;DaGwdf UNFCCC af6 dfGotf k|fKt ljlwx?sf] k|of]u ug'{ kb{5 .

u\_ National Approval: CDM kl/of]hgfsf k|:tfjsx?n] cfof]hgfsf] btf{sf] nflu b]z leqsf nflu tf]lsPsf] DNA / cGo b]zsf] nflu Sof]6f] k|f]6f]sn kIfaf6 tf]lsPsf] lgsfojf6 :jLs[lt lng' kb{5 . g]kfndf CDM Project x?sf]nflu Designated National Authority (DNA) sf] ?kdf g]kfn ;/sf/n] jftfj/0f dGqfnonfO{ tf]s]sf] 5 .

3\_ Third Party Certification M CDM cfof]hgfaf6 k|fKt sfa{g o'lg6 (CER) sf] nflu UNFCCC af6 tf]lsPsf cGt/f{li6«o lgsfo (Certifies) x?n] kl/of]hgfsf] / k|fKt u/]sf] sfa{g o'lg6 af/] l;kmfl/; u/]kl5 dfq CER k|fKt u/]sf] dflgG5 .

**%= l;=l8=Pd= cfof]hgfsf] rqm M**  ;fdfGotofl;=l8=Pd= cfof]hgfaf6 CER k|fKt ug]{ qmddf cfof]hgfsf lgDg & j6f r/0fx? k"/f ug'{kb{5 .

**The CDM Project Cycle**



Source: Introduction to the CDM, UNEP RISOE Centre, 2002:

**^= g]kfndf :jR5 ljsf; ;+oGq M**

 g]kfndf Sof]6f] k|f]6f]sn l8;]Da/ @))% b]lv kIf ePsf] 5 . g]kfnn] ljZjdf pT;h{g ePsf] xl/tu[x Uof;sf] dfqfsf] s]jn )=)@% k|ltzt dfq of]ubfg u/]sf] sf/0fn] k|f]6f]snsf k|ltj4tfx? k'/f ug]{ xfd|f] bfloTj gu0o /x]sf] 5 . Sof]6f] k|f]6f]snsf] k|fjwfg cg'?k cGt/f{li6«o sfa{g Jofkf/sf ultljlwx?df ;+nUg /xg] qmddf l;=l8=Pd= cfof]hgfx?sf] ;+rfng tyf To:tf cfof]hgf ;+rfngdf afXo nufgL JI cGtu{t leq\ofpg] k|r'/ ;Defjgf /x] klg o; If]qdf ;/sf/L, u}/;/sf/L Pj+ gLlh If]qsf k|of;x? l;ldt /x]sf 5g . g]kfnsf l5d]ls d'n's rLg / ef/t xl/tu[x Uof;sf] pT;h{gdf qmdzM @#=## -klxnf]\_ / %=&\* -rf}yf]\_ k|ltzt of]ubfg /x]sf d'n's x'g . xfn ;Dd ljZj sfa{g Jofkf/sf] dxTjk'0f{ c+; oL b]zx?sf] /x]sf] 5 . g]kfnsf] ;fgf] k|of;df klg oL b]zx?af6 JI cGtu{t l;=l8=Pd= cfof]hgfx?df cfjZos nufgL cfslz{t ug{ ;Sg] Jofks ;Defjgf /x]sf] 5 . t/ Totf lt/ vf;} k|utL ePsf] b]lvb}g .

g]kfndf l;=l8=Pd= cfof]hgfx?sf] /fli6«o :jLs[ltsf] nflu jftfj0f dGqfnonfO{ /fli6«o lgsfo (DNA) ;g\ @))% df tf]lsPsf] lyof] . xfn ;Dd jftfj/0f dGqfno l:yt DNA n] !\* j6f l;=l8=Pd= cfof]hgfx?sf] PIN tyf PDD :jLs[t u/]sf] 5, eg] /fli6«o :jLs[lt k|fKt u/]sf cfof]hgfx? dWo] % j6f cfof]hgfx?n] cfof]hgfx?sf] Validation tyf Registration sf] nflu CDM Executive Board df cfjb]g u/]sf] eP klg Registration sf] sfo{ ;DkGg eO{ g;s]sf] cj:yf /x]sf] 5 . Validation tyf Registration sf nflu cfj]bg ug]{ cfof]hgfx? dWo] # cfof]hgfx? jftfj/0f dGqfno cGtu{t /x]sf] j}slNks phf{ k|j4{g s]Gb|af6 ;+rflnt 5g\ eg] @ cfof]hgfx? gLlh tyf u}/ ;/sf/L If]qaf6 ;+rflnt /x]sf 5g .

g]kfn ;/sf/af6 @)^& ;fndf :jLs[t u/]sf] hnjfo' kl/jt{g gLltn] sfa{g Aofkf/ ;DaGwL /fli6«o /0fgLlt lgdf{0f ug]{, Go"g sfa{g cfly{s ljsf; /0fgLlt tof/ ug]{, phf{ bIftf clej[l4sf nflu lgoldt ?kdf phf{ cl86 ug]{, Go"g sfa{g pT;h{g ;DaGwL sfo{nfO{ cfly{s tyf k|fljlws ;x'lnot k|bfg u/L k|f]T;fxg ug]{, sfj{g ;+lrlts/0f (Sequestration) nfO{ k|f]T;fxg ug]{ h:tf gLlt Pj+ /0fgLltx? lgwf{/0f u/]sf] 5 . oL k|fjwfgx? dWo] s]xL sfof{Gjogsf] l:yltdf /x]sf 5g\ . l;=l8=Pd= cfof]hgfx? ;+rfngdf b'O{kIfLo ;xof]ux?sf] lg/Gt/tfsf nflu hgj/L @)!! df g]kfn / ef/tsf ;DalGwt If]qsf lj1x?sf] sfo{zfnf ;+rfng ePsf] lyof] . o;sf cltl/Qm ;]K6]Da/ $ b]vL &, @)!! df g]]kfn ;/sf/, jftfj/0f dGqfno / hnjfo' kl/jt{g ;DaGwL dxf;lGwsf] ;lrjfnosf] ;+o'Qm tTjfjwfgdf :jR5 ljsf; ;+oGq -;L=8L=Pd=\_ cGtu{t Jojl:yt cfwf/ -Standardized Baselines under the Clean Development Mechanism) ;DaGwL sfo{zfnf tyf Plzof tyf k|zfGt If]qsf nflu ;L=8L=Pd= 8L=Pg=P= kmf]/dsf] If]qLo a}7s -Regional CDM Designated National Authorities Forum for Asia and the Pacific\_ ;DkGg ePsf] lyof] . o;df &% /fi6«sf !@) eGbf a9L k|ltlglwx?sf] ;xeflutf /x]sf] lyof] .

oL k|of;x?sf afah"t d'n'sn] :jR5 ljsf; ;+oGqsf] nflu cem} w]/} Wofg lbg ;s]sf] b]lvb}g . sfa{g Jofkf/af6 nfe lng ;lsg] cj:yfsf] hfgsf/Lsf] cefjn] klg o; If]qdf gLlhIf]q Pj+ u}/;/sf/L If]qsf] Wofg cfslif{t ePsf] sd} 5 . ;/sf/n] klg sfj{g Jofkf/nfO{ Jofj;flos ?kdf cufl8 a9fpg] If]qdf ;xof]uL e"ldsf lgjf{x ug{ cem} w]/} k|oTg ug'{ kg]{ b]lvPsf] 5 . ljBdfg Sof]6f] k|f]6f]snsf afWosf/L k|fjwfgx?sf] jt{dfg lg/Gt/tf ;g\ @)!@ ;Dd /x]sf] ePklg o;sf] lg/Gt/tf cuf8L klg sfod /xg ;Sg] s'/fdf ljZjf; ug{ ;lsG5 . cfufdL l8;]Da/ @)!! df blIf0f clk|msfsf] 8/jfgdf x'g uO/x]sf] COP 17 n] o; ljifodf cfjZos lg0f{o ug]{5 . hnjfo' kl/jt{g gLltn] ;+s]t u/]sf] sfa{g Jofkf/ ;DaGwL /fli6«o /0fgLltnfO{ ;dod} tof/ u/L sfa{g Jofkf/ km:6fpg /fHosf] bfloTj :ki6 u/L cl3 a9\g 68\sf/f] b]lvPsf] 5 .

;Gbe{ ;fdu|Lx?M

!\_ Development and Climate Change, World Development Report, 2010; The World Bank, Washington DC.

@\_ hnjfo' kl/jt{g gLlt @)^&Ù g]kfn ;/sf/, jftfj/0f dGqfno, l;+xb/jf/, sf7df08f}+ .

#\_ Joergen Fenhann & Miriam Hinostroza; CDM Infromation and Guide Book, Third edition; UNEP Risoe Center, Denmark, 2010.

$\_ jftfj/0f dGqfnojf6 k|sflzt ljleGg k|sfzgx? .

%\_ UNFCCC; The Kyoto Protocol Mechanisms; Climate Change Secretariat (UNFCCC), Bonn, Germany.

^\_ UNFCCC; Clean Development Mechanisms; Climate Change Secretariat (UNFCCC), Bonn, Germany.

&\_ UNFCCC; Executive Board Annual Report 2010; Clean Development Mechanisms; Climate Change Secretariat (UNFCCC), Bonn, Germany.

1. Environment, Economic, Social, and Technology related criteria. [↑](#footnote-ref-2)