

लघु वनोपज सम्पदा प्रबंधन विधि





ueleg Jevelelepe melleoe HeyelDeve eJedDe

melekeve	é ejekelene jLe, ahefje3ej Helecece ceapej, Deejmeer[emer
lelekelelementelee	é koler mi ese HeleGif[Meve
ehlo Devajao	é Yeleyeve yanjé
meleDokalej majfle	é ejepoDesereare mew j libej [steubecell keleDelej Meve Deej kele[mi ese HeleGif[Meve
©Helej Lele HeleleMeve	é ejepoDesereare mew j libej [steubecell keleDelej Meve (Deejmeer[emes)
Helej HeleleMeve	é Deej, 2013
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Title

: Laghu Vanopaj Sampada Prabandhan Viddhi
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ueleg Jeveetope mechhoe HeyeDeve efleeDe



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ueOeg Jeveetope mechhoe ë Heej Yee<ee Deejj Gmekel IeelHe³e&

niceej er Jeve HyeDeve efleeDe³celllmeccoe³eleë Fceej leer uekela³or Deejj FlDeve uekela³or kelles ner ceK³e Jeve GIltbeo ke³ jAH cellcevee peelee nw³Deejj uekela³or kelles O³evee cell'j Kekelj ner HyeDeve J³eJemLee³ellKekelj peeler nw³ uekela³or kelles DeueeJee Dev³e meYer Jeve GltpeewKekelj meccoe³eleë iej -kele³or Jeve Gltpeew / GIltbeoell (Non-Wood Forest Products or Non-Timber Forest Products) ³ee ueleg iie³de Jeveetope (Minor Forest Products) ke³ cellcevee peelee nw³peyekelj JeemledekeAlee ³en nw³ekelj Fmomes De³or e jepereej eteuele³ nw³Deejj uekela³or kelle GiIltbeoee Oeegj s Oeegj s kelice nesekelj kelej Ce Iebt Helle Deejj yeebie pemes Jeve Gltpe e³cell mes kelebeler Dev³e Yer eteuele³ nw³ mJelbelle³ mes Henues Fceej leer uekela³or Deejj FlDeve uekela³or kelles DeueeJee Dev³e meYer Jeve Gltpe meccoe³cellpemes ekelj H³ale / H³ale / H³ale mes uekela³or KedepeellDeejj Je³epede GiIltbeoellpemes ekelj neLecelle, H³el³cellKekelj H³ale Dees³o kelles ueleg Jeve GIltbeo keker met³or ceMeeceue ekelj³ee Lee Deejj Fme Meyo kele kelej &Keeme kelebeler cen Ije veneRLee~ Fme dueS Jeve HyeDeve ceWFme Meyo ke³ menpe FmIoseuee nesee Lee~ H³j lligpeye mived1996 cellhanee (PESA) DeedDe³ece ueciet nw³Dee Ieye mes Fme Meyo kele efledekelj efledeLee³or IjeC³or nes ie³ee Fme DeedDe³ece ce³ellmt³ ³ke mes yel³ee ie³ee ekelj ueleg Jeve Gltpe e³J³ellWtj mJeeceJe kelle Deedekelj Deedem³ele #de³or kelle ieece meYee Deejj meceg³ele mlej ke³ H³ell³ele mebhLee kelle j nsie~ ekelj leg Fme DeedDe³ece ce³ellmJeeceJe kelle Deedekelj DeLejee ‘ueleg Jeve Gltpe’ kelles mtb³or jAH mes H³ale Yeekele veneKekelj³ee ie³ee, pces Gmekeler Dlledefh³or kellecepeej er Leer Jeve efleYeele kelle dueS ³en ef³elle kele kelej Ce Yer yeve ie³ee kePekelj ueleg Jeve GIltbeoellH³or Gmekeler ef³elleCe j nLee Lee Deejj Gmomes De³or er De³ee Yer nesee Leer, peyekeA ieece meYee ³ee H³ell³ele ke³ mJeeceJe Deedekelj j nves ke³ kelej Ce Deedekelj nesee keles met³or Jevee ke³ meeLe meeLe peleue ceMeeceueMekelj er iedleefDe³ellKekelj DeelMekelj Yer yea³ ieF&Leer FmedueS j ep³ee mej kelej ellwes Delevesmlje H³j ueleg Jeve Gltpe e³cellKekelj H³ale Yee<ee osor mived1998 cellmee³ele, H³ale Deejj Ce IeLee Jeve ce³ell³ee, Yee³le mej kelej ceK³e mee³je, ceO³e H³ome mej kelej keles dueKee ekelj “Jeve mechhoe keles efyeere nesee H³alBe³ele uekela³or kelles DeueeJee melien kelle peeseeJeueer Jeve Gltpe oJ³e ueleg Jeve GltpeewKekelj jAH cellcev³e nesee” ~ ceO³e H³ome mej kelej ves FmecellDeesies pese³ee ekelj ueleg Jeve Gltpe e³cellKekelj KedepeellDeejj peleue preejei ellkelj onseMe Meeceue veneKnellies otnej er Deejj Je³or 2000 cellDees³ee Mee mej kelej ves Skel metelutte-H³ale (resolution) preej kej kelle ueleg Jeveetope e³or kelles H³ale Yeekele kelle Deejj Henues mlej Deejj yeo cellweare Jeveetope e³or kelles ueleg Jeve Gltpe e³or kelles met³or cellpese³ee Deejj Gve H³j H³alleyeDe n³ e³or SjebH³ell³ele kelle ef³elleCe ce³ellKekelj Fmomes Deuee Dees³ee H³alBe³ele preej yetfi ³ee³ee yelle, i mej, ueKe, ielb, i eue Deejj kello GIltbeoellKekelj iaj kele³or Jeve GltpeewGIltbeoellceMeeceuele kelle kelle Fve H³j H³alleyeDe ueice eb³ee~

ueleg Jeve Gitepe meclboe HyeDeve dlede

- Delede celFmekeler ejeDekeA Hej Yee-ee ve neses keA kelej Ce, Delteve F®1 e leLee megldeee keA Devgeej ueleg Jeve Gitepe éJ³cellkes Hej Yeekele kelj yes keler kelesMeMe meYeJe neser Leer- ekeljeg Jeve DeeDekelej DeeDekec³ece- 2006 mes Fmekeler fmLeele yeou ie³eer Dejj ueleg Jeve Gitepe éJ³cellkes J³ekelk leLee Ge®ele Hej Yee-ee Henueer yeej eteue ie³eer- Fme DeeDekec³ece keler Oej e 2-Pe cellyelce³ee ie³ee ekelj é
- “ieejie Jeve Gitepe” keA Delleieke Heokel ceteue keA meYer iej -Fceej leer JeveesHeo nØ eperecallyetne, Pece® PeKeek®, plo, yelle, Iejeej², keltesee, Meno, ceese, ueeKe, lebb³ee keljot Helle DeesOee Heles Deej peqe er yefi ³eb ceteue, kelvo Deej Fme Hekelej Dev³e Gitepe mefceduele nØ
- Helueme®le, Yeej Iejie Jeve DeeDekec³ece-1927 cellGunesKele yeebie keles uekej® er keA meckekej# ceeveves kele HejDeeve keles Jeve DeeDekelej éJ³ece vesHe³ek³eeve ekel³ee nØ Fmekel Delej kelle plo kelesYer ueleg Jeve Gitepe éJ³cellkes mefper celMeeetue ekel³ee ie³ee-3eDeft Fme mefper celMeeetue ceteue keA meYer iej -kelej® Jeve Gitepe éJ³cellkes Jeve DeeDekelej DeeDekec³ece keA Devgeej Meesetue ekel³ee ie³ee, leLee FmekelMeno, Inej Deej ueeKe pameer Gitepekes Yer Meesetue ekel³ee ie³ee, pess Delej³e# jAH mesHeokel Gitepe Deej Hej³e# jAH mesHeCer Gitepe nØ Fmekel medienCe mes Je³e padeekkes mef#e keA Hele Kelej veneRnesies- Fme Hekelej penekel KeeBe SJekelke melejope (FAO) ves iej kelej® JeveesHeo éJ³ekelkes Jeve leLee Dev³e Je#edPeeue mes GiteueyOe Je#edWmes HejHe uekela® er keA Delej kelle Deej meYer Hekelej keA Dev³e penekel meeceirer keA jAH celHej Yeekele kelj keA Gmecelluev³epedeekel orneble keles Yer Meesetue ceeve, Jeve DeeDekelej DeeDekec³ece keA Devgeej ekeljeg#eellmes Gitepe éJ³ekelkes ner ueleg JeveesHeo Gitepe mecePee ie³ee, Delejed Fmekel Jev³epede keA mej#eCe megreM®ele keler ie³eer-
- Heej DeeDekec³ece DeeDekelej®le #eleeWkeA eueS ner ueejet nw Deej GmecellmeYer Hekelej keA ueleg JeveesHeo éJ³ekelWbj mJeedelJe kelle DeeDekelej iece meYee keles Heoe ekel³ee nw peyekeA Jeve DeeDekelej DeeDekec³ece, pess oMe keA meYer #eleeWkeA eueS ueejet nw eHleDekelej³eekkes ‘Hej chfj keA jAH mes melejope’ ‘ueleg JeveesHeo Gitepe Wbj Delejekel Heoe ekel³ee nw Delejed pess JeveesHeo Hej chfj keA jAH mes melejope ekel³ee venePeele nw Gme Wbj Jeve eljeYeeie Yer Delteve DeeDekelej keler oeJee kelj mekeler nØ- oesellHeej Jeve DeeDekelej DeeDekec³ece Jeve meclboe keA mej#eCe Deej HyeDeve Wbj conlJe eb³ee nØ otrejs MeyodMecMFve efe³ecelW cellmeeteOeveWkeA DeltekeSeCe® Deej elveekkes Gitepe éJ³ekelkes keler J³eJemLee venob nØ Fme Hekelej, Fve meclboeDeewkeA mecePeele mej#eCe Deej HyeDeve mejedDele pese meceppe³ekelkels Gitej oeeelJe yeye pesele nØ-
- **Hej chfj keA mej#eCe Deej HyeDeve ejeDee³eeW keAer meerceesb**
 - Hej®are keleue cellpeye Jeve Gitepe éJ³ekelWbj J³eJemeeekel oyeeJe Jeleteeve keler lagevree cellyenje kelce Lee, Iey iej -kelej® JeveesHeo (Sve. i ex SH. Hej) Delejee Je#e Hipeedle³ekelkels mej#eCe leLee Gmekel Ge®ele Wbj eekie keA eueS Hej³e#e/eJemLee ve jnles nØ Yer epeve kelej Ceellmes Fme ebMee cellceoo eueeuer Lee. Jes nØ-
 - **meceekel-mekelkels dle-de** é peselejeo ves Jeve meclboe keA Gitepe³ee celWskel conlJehCek Yabekelc dieYeeF& nØ Gme mece³e Skel eJemeeekel meclboe³e keA ueeje elleMese kelece kej les Les Deej Skel meclboe³e keA ueeje otrej smectboe³e keA kelece venekelj lesLeskePekel Gvecellmeceekel Deej Oeekelk elvee keler Ye³e Lee- Goenj Ce keA eueS, Dees® Mee cellueeKe medien Deej Gmekel Himehkelj Ce kele kelece kelejeu ueekej/mekej er meclboe³e keA ueeje ner kej les Les Heluemej AH, JeveesHeo éJ³ekelkes medienCe meadefle ueejetWujej nele Lee Deej Jeve Wbj kelce oyeeJe Wbj Lee- mJeltele keA yeo, ³en peselele meeceesB Oej s-Oej s mecepe mes Delteve DeefleJe Kees eb³ee Deej Dev³e pesele keA ueeje Yer Fme HelMes cellDeeves ueies- FmedjeS, ueeKe J³eJemee³e Wbj oyeeJe yeaJe, kebekelA ueekej meclboe³e keA ueejeekel melele mlele Dev³e meclboe³e keA ueeje Yer ueeKe J³eJemee³e kelj yes ueies
- 1. ceteue Delteve celbrushwood Meyo J³eJenj kelej®&nifmekeler oesDeltevle 1. Hej elmeskelj® or/ leej® or/ aej® nØ Meekes® [euer (personelle mesuekelj) Flerue uekela® er keA ehmeje mesYer Gitepe³ee kelerpeler); 2. leej Peef® patue ~ ³enekelkelk patue venekeukel patue Gitepe neruef³e celWj FmeueS Hejce Delej celher Fme Meyo kele J³eJenj Ge®ele Helele nele nØ;
- 2. Inej (tussar)

Oeefekel dree-ele è DeesDeer keb jAlt celDeLeJee Dev3e Glt3eeie keb duS peF or-yetl 3ee DeLeJee otnej s Jeve GItheo éJ3cellkeL melienCe Htj MeemLee3e dree-ele Lee, pemesekel moyemeslenuesJe#e kelerHtpe keb j vee, efeMese eldeLe / mece3e Htj melien keb j vee, Deedob- HtluemJej Alt, peye ®ens pemeF®i e nes melien Htj Oeefekel HtleydeelkeL kelerCe Jeve metboe Htj kelece oyeeJe Htj Lee Lee~

Htj dkef keb HtLeSB è keF&J3eJemLee3ellHt3e meYeer metboe3e keb ueestewkeL duS Skel HtLee DeLeJee jaelle-efJeepe yeve ieF&Leer Deej Gmes Dtevees mes Htkefekel metboeDeelkelles melj #C efeuele Lee~ Goenj Ce keb duS Yej lege Htj ctbj e keb Devempej mej mJelcer Htpe keb j vee keb j vee yo yo nre yey Kee3ee pefLee Lee, Hemeo keb jAlt celWefc3ee pefLee Lee~ mej mJelcer Htpe keb mece3e Htkefekel yesf efeuelesnre efeme yey keles Keeves mes Keebees neves keler metboeLee keb j nre nre Gmekel DeueeJee yeepe Htj Htkefekel nres keb kelerCe menpe mes Htj AltHeove nesmekelLee nre í Htmeitef keb keF&DeedobJemeer #efewcellJames nor Deece Kee3ee pefLee Lee, ekahleg peye Deec®ij keb J3eJemee3e yef e, leye Debof Htkefekel Deece melienCe keb duS Ht®efuele jaelle ejJeepe keler Glt3ee keler ic3er Deej Htj AltHeove HtYeelele nDce (lel3e meapev3e : ‘dkef’, peiouetbj~)

Memekele Htleyde è eyefi Me keleue celDeDekeleMe Jeve #ef e meceboer Meemeve keb Deheireke Les Jeve ueelle IeLee Htjdele J3eJemLee ueiet keb j vee keb ceceue celMeemekeleCe yendje keb pej Les DevetekA j epce Deej pececej ellves celu3eJeve Jevestepe éJ3cellHtj keF&Htkefekel keler Htleyde ueiet3er Lee~ Fve dfe3eceilkelle Guuvelere keb j vee keler meemne ueestewkeLwkeL Lee~ mJeldele keb j vee ueestewkeLmJeeOearLee~ efeuele Deej meceboer J3eJemLee meceboe keb j vee ief3er Jeve Deefekel jAlt mes OJelMe nres ueice efemece Htj Meg Ht#er efekel Htj Yer Meeteue nre (keF&#efewcellmej kelej Üeje Devetegesole J3eJemeekeL keb ief &Yer Jeve OJelMe keb duS keb j vee cellepeccesej nre)~

peye iekef keb Deeme-Htme Jeveetmes FDeve uekef er, lej IeLee keler Deepje elkef er efeueles celDeleMese Demefleee nF & leye keF& iefceJeemeer mJes®i dtbkeL Jevedekeler mej #ee keb j vee ueies DeefeuKe mes moyelle efeuele nrekej 1940 keb omekel keb ojjeve DeleJee Fmemes Htme meceboeefekel Jeve mej #ee iefceleDee3eef Deesf Mee celMeg Á nes ®ekeler Leer 3- 1980 omekel keb ojjeve Jeve mej #eCe iefceleDee3eef J3eHtkefekel jAlt mes Htme~ Jelkeeve oMe keb Dev3e Yeejeekeler lej n Deesf Mee celYer Skel megLedekele meceboeefekel Jeve mej #eCe Deej Htjdele (Community Forest Management) Ht®efuele Ht®efuele nre ekahleg Fme Htjdele keb J3eJemLee celUeemle celDeveekeler mej #ee nre celHt3e keb3eLee~ uekelere, mej #ee, Htjdele, mej #eCe Deej efekelme - 3esmeye Skel veneRnre ueje Jeve keler mej #ee Ies keb mekeles nre ekahleg Htjdele J3eJemLee Fme mes Deefekel keb j nre Htjdele J3eJemLee celW3eeve j nre nrekef Jeve celHt3e Deej ekahlevee celle celHt3e Deej nceej er DeejelVekelLee kefLee nre kefLee keb j vee mes nceej er DeejelM3ekelLee3ellHtj er nrekef Deej Jeve kele vogjemeve venek neice Deej Jeve kele efekelme neice~ Jeve celHt3e kefLee Htjdele kefLee Htjdele kefLee melK3ee yef seer, iefye Deej ceftueDeelkelles Demefleee veneRneice, Deedob Snes kefF&elde3eewHtj effej keb j vee nre Htjdele 3epevee Deej dfe3ece yeveles nre~

kefF&meceboeefekel Jeve mej #eCe Deej Htjdele Ht®efuele Ht®efuele uekef er keler kelle keb j vee ief3er Htjdele J3eJemLee DeekMekel jAlt mes kelece keb j lej nre Delelele keleme mee Htj kelej vee ceve nre ekahle uekef er ueles mes Devetegelle efeueleer Deej ekahlevee celle lekeA Devetegelle nre Gmekel duS ekahlevee Devetj efele Yejleve keb j vee neice, Deedob- uekef er keb DeueeJee, Dev3e Jevestepe GItheoekel Htkef eldeMese 03eeve veneR3ee pefLee nre kefLee kefLee yef Htj keb j dfe3eCe nesmekelLee nre~

Fme mece3e uekef er keb DeueeJee Dev3e Jevestepe éJ3eellkeL mej #eCe keb meeLe meeLe Gvekel efekelme keb Htkef Year 03eeve dfe3e pefLee ®eefS kefDeekeler efefMese jAlt mes ceemece Htj Jelkef Deej yefef kef pelue keb ief &kef keb j vee ief &kef keb j vee ief &kef Jevestepe GItheoekel GItheove Deej Deekelj celHt3ekeL Deej j nre nre Deej kefF&Leve GItheoekel iefeflele lej nre kefLee nre Fmekel Deefekel kelle, Jeve Deefekelj Deefekel3e-2006, pefle efeflele Deefekel3e-2002 Deej Htme Deefekel3e Deej Ht3e#e 3ee Htj effe jAlt mes Jeve metboeDeelkelles mej #ee ®enles nre Fve Deefekel3eceilkelles Devetegelle meceboeefekel Jeve mehneDeveHtj mJelJeeDekelej efef meceboe3e keler efeueice, Gve keb duS Fme mehneDeveHtj Ge®ele Deej metele Htjdele 3epevee DeejelM3ekel nre Delel nce Deieus De03ee3e celmece3e Htj Deefef le melele uelef Jevestepe Htjdele 3epevee3ellHtveeves keler efefDe Htj ®efef keb j nre~

ueleg Jevestepe metboe Htjdele efefDe

3. OMe kefkefj Dev3e Htkef celYer Fme lej n 3ee dtbj Dev3e J3eJemLee (pemesekel GItejekel kelej Ht3e) keb Delelele meceboeefekel Jeve mej #eCe IeLee Htjdele Mej Á nre &Lee~

- **mecope³e Hej DeeOeeej le melele Svei eSHeAHeer Heyebere 3eepovee le³eoj ke³j ves ke³ler eJeeDe**
- Jeve meij #ekel mecope³e / Jeve DeDekelaj. Oej ke³A Deltves efe³elleCeeOear Svei eSHeAHeer meelboeOeveelkeler meelokel. Deej J³eeJeneej ke³A metele Heyebere 3eepovee yeevees ke³l duS veef³s Deej Ke cdWecate He³e³ej Ce³e efe³elle³eekeler mJeekelj ke³j meekel³es n³ ke³j DeMe Ikel Gve efe³elle³eekeler Yer Jeve Heyebere 3eepovee ke³l meel³e meel³e Heff ejmLeekeler Heyebere (eco-system management) 3eepovee yeevees ke³l duS Yer mJeekelj ekel³ee pee meekel³ee nwepemekeler Skel dhmme Svei eSHeAHeer Heyebere 3eepovee nes meekel³ee nw
- **Henuu ³ej Ce ē Heff ejmLeekeler³eekeler eJeeMuseCe (Situation analysis)**
- myemes Henuu nccll Svei eSHeAHeer meelboeOeveelkeler Glt³eese kele efe³elleDejed Deej Deet³eef ke³l cdw³eekeler ke³j vee ³eohS, pemes ekel ke³e ke³e Jeveelype meecei er meelboe le nes nQ ke³eell Deej ekelmekel. Uej e meelboe le nesee nw 3esmelienkeA ekelme pescer ke³l nw(pemes ekel iej eye, ceehuee, pepeleef³e kelyueeF&mech, Deeb), Deej Fmeer He³e kele³e lkel Deej ke³eW³eYej Meave nw keleme ke³j lee nw(mecope³e/ meeh/1³eekeler; ej³eegveej), ke³e Fmekel duS Gvekeler Sane kelef&keleveer DeDekelaj / ejmLeekeler Deekelaj / Hej ctef ke³l DeDekelaj / i li nQ ke³e Sane melienCe mes ekelmeer Skel Jeve metboe 3ee Hej er Hepeel³eellHej keleF&Helekeleue HeYeeJe He³e lee nw Jeve metboe keleme jnlee nw(ve³e nesee nw³ee Yedle³e collve³i nesee Jeeuee n³) DeleJee 3ed³e Jeveelype ej³e melien ve nekelj He³e jnlee nw Fmekel kelej Ce ke³e nw Fl³eob)- Fme ejmLeekeler kele Gt³M³e nw Heyebere 3eepovee Hej HeYeeJe ej³eueees Jeeues ke³eF&cenIjetCe&elle³e keles Hn³eerevee-
- **otmeje ³ej Ce ē meelboeOeveelkeler Deekelueve (Resource inventory)**
- Deye nccll Deltves Jeveel³eellecellGlt³eueyOe Jeveelype Glt³eodlkeler Deekelueve ke³j vee nre mLeevee³e Jeveel³eellecellke³e ke³e Jeveelype Glt³eod lkeler / Glt³eese kele 0³eve ekel³e(jeve), Fvekel He³eellHe³e (ej³eegveej) ekelme ejmLeekeler cdllnw(yenje i es e 3ee yej e He³e, ce0³ece Deekelaj kele He³e, Glt³eepT / i ej -Glt³eepT, 3ejle DeleJee Hej eves Deeb), He³eckel Hepeel³eellkeler Jeeekeler Deevgeedrekell Glt³eovce #eclle (mk³ee cell skeljeli eue, ekel, i.ee./ i ve, 3ed³e Hejuevce yel³e ucelmekel Deekelaj cdllnw lces He³eckel yel³e ue celWGM³e ej³e kele mk³ee leLee Deekelaj) ekellever nw ekelmekel meelboe Ce J³eeJemeekel He³eepovee ke³l duS nw ekelmekel lej siel Kette ke³l duS nesee nw Deej ekelmekel oesellkeler duS nesee nw ekelme Hepeel³eell(Je#cellkeler mk³ee) 3ee Glt³eovce ej³e ues yeeme/leeme Je-ew³eellcey³e nw 3ee lej e nw ekeltevee yej e nw³ee ekeltevee le³j e nw keleme mee uejle nes i³ee nw keleme mee Je# ogylee nes i³ee nw keleme metboe letevee DeJemLee cellnw keleme Demej offele (vulnerable) nes i³ee nw Deeb, Fmes nccll Yedle³e cellmLee³eer Heyebere 3eepovee cellmekelme Hepeel³eellHej ejmLeose 0³eve oses kele pejAj le nw Gmekeler Hn³eerevee cellcecoo efeuee-
- 3enekeleMose 0³eve oses kele pejAj le nwakel oesHe³eellkeler veece mecevee nes n³ Yer, Skel otmej smes kelebeler Deueie nes mekelles n³Dej Deueie Deueie veece nes n³ Yer oesHe³eellSkel ner Hepeel³e ke³l nes mekelles n³ FmeueS, mener Hepeel³eellkeler peevees ke³l duS J³eekeler veece kele DeJm³eckel³e nw oKeves cellmecevee ueilees n³ekelleg³eve Hepeel³e ke³l nesee ke³l Ce J³eekeler Deueie Deueie nes mekelles n³ ej³e, ej³eF Deej peuejce³e ejmLeekeler ke³l ke³l Ce Skel Hepeel³e ke³l He³eellDeueie Deueie mLeeveeWcellWcellvee ej³euee i ej³eocel ejmLeose He³eekel³e ke³l mekelles n³ FmeueS, He³eell³e eepeelkeler Hn³eerevee J³eekeler He³e xelle mes nesee ³eohS~ Goenj Cel³e oKeves cell Deueie ueilees n³ Yer metboe (Rauvolfia serpentina) Deej yej e ej³eekeler (Rauvolfia tetraphyla) Skel ner Hej Jeej ke³l nripeyekel Gvekel i ej³eellkeler Hn³eerevee nw
- **leemeje ³ej Ce ē Glt³eovce leLee Heyej AlHeeove kele De0³e3eve (Yield & regeneration studies)**
- Fme ³ej Ce cellncclldelevee uelog Jeveelype meecei er Glt³eovce ke³j ves Jeeues He³e -Heff ejmLeekeler Glt³eovce #eclle / mecel³e ke³l kele Deekelueve ke³j ves ke³l meel³e meel³e Gvekel He³e ejmLeekeler Glt³eovce #eclle Deej mecel³e&ke³e nw Gmekeler De³T er ceelie n³ekelleg Glt³eovce Üeme nes j ne nw lees ekeltevees n³ oe He³e yej e nQ ekeltevees i es s nQ ekeltevees ce0³ece Deekelaj ke³l nQ Deej ekeltevees He³e Hej eves nQ ekeltevees He³eoj nQ Skel He³e kele Deevgeedrekell Jeeekeler Glt³eovce #eclle ekellever nw ve³e He³eles kelles nes n³(yeepe ej³euee veeke³l yeo Gveves Jeeues He³eles 3ee otmej er lej ekel mesekeler), Hej eves He³e ellkeler Igevee cell³e ejmLeekeler mk³ee ekellever nw Deeb ej³e ecePever nesier- 3ed³e Hej Hkelle J³eekeler ke³l mk³ee yenje nwakel³e ej³eDeekelkeler mk³ee yenje kele nw³ee ej³eukeljue vendnwlees Jelatsevee ej³euee n³ oe efeuee nwkej i ej³eovce

kel yeo Jen vendReteue mekeAlee, kebedekeA Yeje³e celMbej Hekelle Je#cellcej preeves kel yeo Gmekelle mLeeve Yej ves kel dueS He³edde Hebejell
 veneknells yeeth ke kel dueS Gmekeler voF&keleU³ell(shoots) kele melK³ee, Gmekel³ celue celMbe³edde celtekeFer Yej er nF&nW³ee venek
 (kebedekeA He³edde eceEer ve nges mes ve³er kelelue³eb drakelueves kele melYejeve kelce nes mekeAlee n), kelye Hekule De³es Les Deej kelye Deees
 kele melYejevee nw (kebedekeA Hekule DeeesHbj yeeth cej peeleS n), Deedo dle-e³eddej O³eve j Keveer neice- Hbj eves Ha³ keles kelci ves mes³efo
 Gmekel³ kele[mes ve³er Meekkee efekelueles n[(coppice 3ee kele[ekelj Ce) lees³en O³eve cellj Kevce neice ekel Ha³ keles peceere kel Heeme
 3ee Lees T Hbj kelci vee @eefS leekel[mes MeekeeSb De³er lej n mes Dakefj le nes p³eeoe T Hbj kelci ves mes De³er Dakefj Ce
 venekReteueleer- Smeer Glbj kele[er i³er levee 3ee GBer p[(high stump) kele melK³ee kele Deekelueve kelj vee neice Deej Gmekelles
 vees mes kele[vee neice- Fmemes Gmekeler De³er Jeef< neice- meljeDeer pemes kelj Hebelelej -ejelej nekelj Glikeles nQDeej Helele Jeie[
 ce[j DeLeJee pemes Glbj yeeth ueies Gmekeler Deemeleve melK³ee kele Deekelueve kelj vee neice- 3efo ceamece kel Devegej effeMese Hekelej
 kel Hebeleleuel es n[lees ceamece Deekelueve ekel³ee pee mekeAlee nw 3efo Jes dleMese SeYleg cellpence nes kelj cej peeleS n[lees Je-eel SeYleg
 cellkelelueveseuel es n[3ee Meale SeYleg cellkelelueves Gmekelle Deekelueve kelj vee neice- Fmemes ekelme SeYleg cellpence Hebeleleuel es n[Gmekelle
 Helele ueieie leekel nce Gme SeYleg cellmeliCe Hbj j ekaA ueieie mekeA

ueleg Jevedepe mechhoe Hebeleve dlede

¶eclle ¶ej Ce : meljeinCe HeYeeJe kele Deekelueve (Assessment of harvest impacts)

Fme ¶ej Ce cellnce uelegjeve Glbeoellkel meljeinCe kele HeYeeJe kelme j n[ee nw (De³er 3ee yej) Gmekelle Yer Deekelueve Deej effeMuseCe
 kelj n[es- Deej ener uele (climber) otrej s Ha³-Hebelelej pecke[j j n[es n[efemenej Ha³ kele n[emle effekeleme venek nes mekeAlee- 3efo
 otrej elmekes nede Hbj yeeth Jeeue Sines Hebeleleuel kele[ab³ee p[es S lees Hbj Gmekelle kele[&HeYeeJe venekHa³ lee nw p[es ueleSBHa³ kele
 effekeleme keles j ekel mekeAlee n) GvnWn i vee yenlej nes mekeAlee nw Hbj leg kelj Hebelelej ejeukejue Glbj³esier nes mekeAlee n[Deej
 men³ekel Je#cellkel effekeleme cellnede venekHebeleel n[Fmemes, Jeve Jeole Deel³eve kelj oj[vee GvnWn i e[ee venek p[eeve @eefS-
 lebb[kele Peaj[kelj e[(&bush cutting) meOej[Celie[Skel mekelej elcekej HeYeeJe nw Fme kelj e[&mes Glbeove Deej iejelej l[ee ye[es
 cellceoo efueleer nw lebb[Helel[meljeinCe kele kele[&nefekelj kele HeYeeJe veneknw Hej Hekelle yeeth (leer/¶ej Je-ekelkele) keles ve kele[ves
 mes Hebeleleuel HeYeeJe Ha³ lee nw Fme lej n kele[yeeth Deltveer Ca[Lee Kees o[er nw Deej p[eeue cellDeie Hebeleves kele[De³er er meeOeve nes
 mekeAlee nw p[es Jeve kelj dueS Deeh[ekelj nw ekel[ekelj³er yeeth Deej Gmekeler kelelue³eb kele[kelj e[&ye[ne kel Helele Deeh[ekelj nw
 Gmemes yeeth kele[Jeef< ejel[ekelj p[eele[nw Deej Glbeove #ecele[kele[nes p[eele[nw i e[ue kelj yeb[ekel[meljeinCe kele[kelej Ce oMe kel
 Devkel A Yeeie[cellceide uckel[er (*Litsea glutinosa*) Deej *Persea marcrantha* p[eeue Je#e Hepeell³edel[kele[emLelle
 mekel[elvne DeJemLee celln[Deej effeugle kele[kelj[Hbj Hbj ieF&nW GmeHekelej Deokel[celue meljeinCe kele[kelej Ce meljeleDee kele[
 emLelle yejer lej n mes HeYeedlele nw ueleg Jevedepe e[3e[ekel meljeinCe mes Deltveer Hepeell³edel[kele[Hekelej HeYeeJe Ha³ lee nw Fmekel
 meeL[meeL[Jeve Deej JeoleJej Ce Hbj ekelme Hekelej kele HeYeeJe Ha³ Lee nw (pemes ekel De³e Ha³-Hebelelej³epedee[nw Deej He³eddej Ce keles
 kelmes HeYeedlele kelj lee nw ke[ee kelej effeMej Je[3e Hebelelej/ Hebele[kele[KeeDe cellkelecer Dee p[eele[nw ke[ee Fmekel kelej Ce ceveJe-
 HeMegkel ye[& meljele[ye[p[eele[nw ke[ee yeb[Deej p[eeueer meDej pemes p[eeueer p[eevelej ellkelej GlbjJe Fmeer kelej Ce ye[p[eele[nw?
 Jeve Hbj effeMese Deveyele j Kees Jeeue meljeinCe kele[p[eeveles n[ekel Jeve cellkeleme mee p[eevelej ke[ee KeeDe nw 3efo ekelme Hebele[ekelme
 Je[3e p[eele[nw kele Hebele[kele[nw lees Gme Ha³ kel Fuekel[celMbelele ueiee[Ha³ lee leekel Hebelele[kele[meljeinCe nes mekeAlee- Fmemes
 Je[3e p[eele[nw dueS Delt[eele Ha³-Hebele[keles veljelmeve ve Hbj p[es Gmekel Helele 0³eve osce DeJem³ekel nw Je[3e p[eele[nw kele[KeeDe meels ve[
 nes mes Je[eeJeef< j AkeA mekeAlee[nw DeLeJee Jes ceveJe Hbj DeekelceCe kelj mekeAlee[nw Fmemes yeb[-neLeer kele[GlbjJe ye[j ne n)
 Deej meydeDele meljeinCe kele[nw Deej otrej s jececeCell[keles kelmes HeYeedlele kelj lee nw (pemes ueeKe meljeinCe nesce nw Hbj leg Jeve effeYee[kel
 Hebelele[kelej Ce ueeKe J3eJemee³ cellkelejoveF&Deeler n) Deej De³e mehLellecell[keles kelmes HeYeedlele kelj lee nw (pemes Hbj leg
 mehLelle Jevedepe meljeinCe kele[ueeFmette Hebele kelj kelj j epene[kele j AkeA ce[ekelj Dee³e kelj le[nw DeLeJee ke[ee kele[&Hebelekelej Ce
 Fkele[&mLellele n[De nw DeLeJee ke[ee kele[&mJe[3e[eb mekeAlee[mecek/menkelej or meljele[mecek/hekelej j AkeA mes effeMesekelej i[gi -kele[p[Jeve
 Glbeoellkele[J3eJemee³ kelj Ies n) Deedo kele Deekelueve kelj vee neice- effeMese j AkeA mes p[eeveJe[3e[egHbj Je[ee kele[emLelle celMfme Hekelej
 Hebeleleuel emLelle[3e[ell[er p[eele[nle j n[es Jeeue[Hepeell³edel[keles ten@cevee, GvnWhej #ee Hebele kelj vee, Deej Gmekeler Jeef< kelj vee
 cen UjtbcC& nw

ueley Jevelepe meclboe Hyeleve dlede

- **HeelPjCej : mece³e mece³e Hej elveijever Deepj melienCe Hej elve³elleCe (Periodic monitoring and harvesting adjustments)**

Glt³gelle ®ej Cetlmes Deiej ³es ltéee ²ewee ekel ejedewe ltéekelj kai Jevestpeelkkel melienCe mes elveleve Hekelej keler Je#e Hepeell³eellWtj Helekelue ltéYeeje Hej lee nwDeleJee cepebo Gltbecove He³eekle vene&nw³ee ejelj Yeele³e kai elueS He³eellle Hej vene&nwIees Gmes Cefi celW j Kekelj ncillmelienCe Hej kaiF<éleyele wiceeve neisee epememes melienCe Hej elve³elleCe j Kee pee mekelece Deepj Helekelue ltéYeele kelesyab ekel³ee pee mekelece~ Fme Heleyele keli Deoeej kele neisee, Gmekeler ®e#e&Deieus Deo³ee³e cellneise- ³ebf Smeer Heleyele Hepeell³eellW kelesye®eves Deepj Hepeellle keli ves celWt³eekle vene&nwIees keli ece Ghe³e mes Gltbecove keli vee neisee DeleJee Je#e ej ebCe keli vee neise- ³esmey Skel HeYeele elveij ever dlede mes rier maYej le nw kaiJeue dle³ece yeeve osesmes keler vene&neisee, Hej llngecabokere neisee kelin&lekel Heleyele ltéYeele / Glt³eiser nQDeij ³ebf ltéYeele / Glt³eiser vene&neisee nwIes DeleJem³ekel mece³e kai kai ejetbluelle kai keler Ce keler hen³eive keli tevegeej j Ceveell³eellcellmeliesve keli vee neisee~ Hepeell³eellkeler ejef/eveleee kai Devgeej elveij ever keler ejef/eveleee mes mekelece nwI pamesekel muce HbI ls keler elveij ever keler ejef/eveleee celMkayj yes mes ueYee³ekel nes mekelece nwka&ekel Fmekeler melionCe Hej s Je#e Yej neisee nwI othej er Deepj lltbt HbI ls keler elveij ever Skel Je#e cellSkel yeej neesmes Yer ®eueise keli ³en Skel elleMese ceemece cellneisee nwI Fmekeler DeueJee, Je#e ej ebCe Deepj Hej -Heles meteOelle pameer Jeve ejekelame ieldeejDe³ebf Jeve mehneOeveellkeler yes Iej mej #ee cellmen³elee keli mekelece nwI

- **kejí ejelMese 0³evee oves Jeeveer yeeleWé**

Fme ³eepvee kai mebYe&cellmelyDole macepc³eellkeler drecveveKele yeeleWtj 0³evee oves keler pej j Åle nwI

- ↳ Hej ltée cellner ncill³en le³e keli vee neisee ekel ³en mej#eCe / ejelMuseCe / ³eepvee GltbeuyOe meYer Hepeell³eellkeler iej - keler j Jevess Gltbecovkeler Deo³e³eve kai elueS keli Ws ³ee ekelmeer ejelMese Hepeell kai elueS keli Ws (pees cen IJebCe&nwDeij peuoer ®eefhS)~ ³ebf nceej's ceveje leLee Delekel melineOeve meecele nwI yee keli Heleekelue Jeeveer Hepeell³eellWtj 0³evee eb³ee pee mekelece nwI
- ↳ nceej' ³eepvee ceveje melineOeve Deepj Delekel mecel³e&kel 0³evee cellj Kekelj yeeveer ®eefhS-
- ↳ ³eepvee keler Yee-ee mLeevep³e Yee-ee cellneisee ®eefhS, leekel uestie menpe mes mecoPe mekele; ejaj Yer keli³e&meejelMe (Executive summary) Delepeer Yee-ee cellyvee³ee pee mekelece nwI
- ↳ ³eDele ³en ³eepvee Jeve Yette kai elueS yeeveer nwI leLeeHej Jeve kai yeenj GltbeuyOe cen IJebCe&Je#e Hepeell³eellkeler elueS Yer Fmekeler ejemlej nes mekelece nwI cenDe, Fceueer leLee keli mege pamej Je#e iej -JeveYette cellYer oKevs keler ejueles nQDeij ejepoor Delekelj keler Yette Hej j ns Je#eHej Yer ejelMese 0³evee ovese ®eefhS- Oevee Keli DeleJee veeuee kai ekelveij WkelF& DeueOeepe HelellWGiles nQ DeleJem³ekel nes Ies Fme ejel³e Hej J³ejemLee keli vee neisee
- ↳ Fmekeler Delekelj keler Dev³e keli ejel³e³ekelos pees keler mej keler j ³ee kelevdror DeleJem³ekelce nwI Ies Gme Hej Yer He³eellle j Åle mes ejel³e peevee ®eefhS-
- ↳ 3en ³eepvee yeevees mece³e Jeve melienCe elleMese%elWkai Hej cheej kai %evee Deepj Devgeje keler Delekel ³ee peevee ®eefhS, DeleJem³ekel Je#eekelkeler Cefi keler Yer Delekel ³ee peevee ®eefhS- ueeselWkai Devgeej keli ejuej (Ficus hispida) Hej kai Heleue vene&neisee nQ ekelleg JeemleJe celWigjej Heleue kai Debj Skel Heleue neisee nwI %evee Hej cheej kai nes ³ee Je#eekelkeler, peye ncillmece- ³ee Gwele yeevees nwI yee Gmes ienCe keli vee ®eefhS- Je#eekelkeler Cefi mes Ogeej ³ee jeue (Sal resin) Je#e keler ceue nw³ee Jep³eJemlej nwI Hej legnceej er Hej ejtj e Gmes yeej er pe×ee kai meeLe oKeler nwI pamekeler kaiF&Deoeej nwI Deepj ³es Cefi ceue kai j Åle celloKevs keler Cefi mes eldeM®ele yes Iej nwI
- ↳ 3eDele Hej ®ej Cetlkelo GuuKe ekel³ee ie³ee nwI ejaj Yer JeemleJe celWes ³ee oes mes Delekel A ®ej CetlSkel meeLe J³ejenej ³eis³e nwI (#elé celW (pame othej e, leemej e Deepj ®eefhS)- ekelleg ejHej & keli cevegeej yeevee ®eefhS leekel Skel Glt³gelle ejekel&Hej Hn³eves cellmen³elee ejuele-

- ↳ Ikelweekeler ceejekel Mette pomesekel Heelkesekel veece kelj elueS Jeve eljeYeeie mes Devej elje ekel³ee pee mekeAlee nw k³eetkeA Smeer tel³e Jeve eljeYeeie kelj Heeme j nlee nw
- ↳ 3en 3eepvee H³ej er lej n mes menYeejel³e kelj DeeOej H³j neser ④eefnS (mLeeve³e ieccJeeefn³ellmes ④eefnkelj kelj)~
- ↳ 3eDelle kelj Deekelueve Deevegeefekel nw eljej Yer Fme H³j Hmlede ej Hees & leLee tel³e Deemeuve Ge³e, eljeMuneeve³e Deej Joomleekel³e nesee ④eefnS~
- ↳ elreij eever cellH³ai eskele Fmleseeue ekel³ee pee mekeAlee nw ekelmeerelove SkeA eljeMe³e #elje kelj metkelle Heelkesekel H³ai es uckelj i e ceneres kelj yeo Hg³ee Gme #elje kelj H³ai es uckelj oKevee nwkel Heelkesekel metk³ee yeej er nw³ee lej er nw

Ikelweekeler met³evee kelj Deeliefi kelle, 3eepvee cellkelF&meece³e penekelej er oer penevee ④eefnS pomesekel iedle leLee Gme iedle keler JeveYeeie, Gmekel cevef³e, iedle leLee mLeeve³e eljeMuneeveC, melele Heyleve H³elle Hjel³e kelj yes kelj GTM³e, Fme 3eepvee ueei³e kelj vee ekelmekeler efoccepej er nw (Speltter/meljebv/J³eekelle), Fmekel elueS GveedMmeecl³el#eelej nw³ee venek 3eob venek lees #eelej eljekelemele kelj yes kelj elueS k³eet kelj vee nesee (HeM³eCe), ekelme Hepeel³eellkel elueS 3eepvee yeej j ner nw Deej keBeelW(otnej)s leemej s Deej ④eles ④eij Ce kelj H³ej Cece kelj J³eJemLee kalmes H³eYeeje nesee, Deeb~

ueleg Jeveelope mechhoe Heyleve eljeDe

HeelfeyeDe ueieeves kelj DeeOej

ebve oes telJeelkel DeeOej H³j uelegJeveelope Glheo kelj melienCe keler elje³ece (protocol) eljekelemele ekel³ee pee mekeAlee nw Jes n³e (1) Glheo/Hipeedl³eellkel³e keler Heelkesekel iefj/meeceCe (2) mLeeve³e eljeMuneeve Deej eljeDekel Develeuve~ Fmekel DeueJee, el³ece lejej kelj les mece³e eljeveelueKele yeeleH³elj Yer elje³e kelj vee nesee

- ↳ 3en eljeM³e ekel³ee penevee ④eefnS elje Fve uelegJeveelope éJ³edWtj 3eLeeke j H³e meselYej Meave Depeeelkete peej er j nseer- mececepekkel 1³e³e eljeelWkole Heuvare nesee ④eefnS (ceehue, iejeye, Deehoeleinle, ojKeer ueeceilkel elueS mjelelle J³eJemLee 3ee jenle j nver ④eefnS)~
- ↳ kellevete /mettleOevee kelj Guueleve venek nesee ④eefnS~
- ↳ meyedDele elje³e kelj meYee H³eueDeelWtj elje³e kelj les n³ Skel Skelkel³e/Jeemleekel C³ek kelj nesee ④eefnS~
- ↳ mece³e mece³e H³j DeejM³ekelle kelj Devegej Fmekel mmeelive, H³ej Jeelle, DeBeleve kelj elueS J³eJemLee j nver ④eefnS~
- ↳ 3en medjeM³e ekel³ee penevee ④eefnS elje HeefelLeelkel³e ue³eueelvve (ecological resilience) kelj meeLe i e - i e³ veneknes j ner nw Deej Jeve keler mJemL³e mes mecePeel³e veneknes j ner nw

H³ej Heelkesekel Jes DeMe efomekel melienCe nesfekelj Ce H³eYeje [euelee nw Gmes Hn³evee kelj eljeveelueKele lej ekelWmes meceg³e J³eJemLee kelj veer nw pemes

- ↳ 3eob H³ej sHeelkesekel melien ekel³ee penevee nw (pemes yeej eer Deej kellevete), lees yeej eljeKej yes kelj yeo ner melien ekel³ee pee mekeAlee nw 3eob Jen meYee nesekel leesHeel kelj elje&ce³e j celSkel 3ee SkeA mes DeoDekel HeelWtj e³e ④eefnS~ 3eob HeelWtj 3ee H³ej ekelmeer penevej kelj Skel cel³e Denej nw lees Gme #elje mes Smeer H³ej kelker kelj elje&venek nesee ④eefnS~ Goenj Ce kelj elueS Kepoj Hipeel³e pees nel³eellDeej ie³eue kelj Denej nw leel Kepoj kelj polive Mej pemes kelj penevej eljeWkole DeeJeeme mLeeve kelj elueS cenlJelCe&nw (J³eekellelele H³eCe, kelj'mi ese HeelG³e Meve)~
- ↳ pe³E DeleJee kelj melien kelj les mece³e celue DeleJee kelj kelle i e e mee Yeeie eljeEer kelj veer³e j Kevee ④eefnS efomes eljeA H³epeelive meYee nes mejedDele Heelkesekel pe³E Wyendje Heleue³ee i e s nesekel Dejmemes H³ej spe³E kelj lees yeej H³ej nw Smeer HeelWtj kelj elueS Heel Jeel&ce³e j celSkel 3ee SkeA mes DeoDekel HeelWtj j Kevee keler J³eJemLee keler penevee ④eefnS (j Le, 2008)~ yeej s HeelWtj HeelKee celue kelj i e³E kelj Deeliefi kelle MeeKee celue kelle melienCe ekel³ee pee mekeAlee nw

ueley Jevelepe meclboe Hyeleve dlede

- ↳ 3ebo Hellelkelkele melien nesee nw leeskeloseue Heli³eellDeej kelele³eB leej³ ve yeb kelj vee nejee epememes Hellelkelkelele nes mekel³- yekelj e Deej yekelj er 3es kelele³eB Deej keloseue Heli³eellKeles nQpees Jeve kel duS neidkelej kel nw FmeueS patieue cemylekelj er @ej eF&Htj Helleylede ueice³ear peeler nw(j Le, 2008)~
- ↳ 3ebo Helle melien ekel³ee peeler nwleeskej³ kelele³eB Deej Helle FOej -GOej (efedYeve doMeeDeelldj i es³ ve @eefhS leekel Hellellmes yeepe GHeove ekel³ee pee mekel (j Le, 2008)~
- ↳ 3ebo Helle Skelaltele ekel³ee peeve nw(3ebo Helle Je# mes veer³es venekdij lee nw Deej leej³ ee peeler n) lees yeepe mes Hye³ GHeove kel duS kej³ Hellellkes efedYeve doMeeDeelldj i es³ eb³ee peeve @eefhS epemes ekel yeepe mes Hyepeleve nes mekelkeer nw~
- ↳ 3ebo i eue melien ekel³ee peeve nwleesleveskel Tltj mesvee³eskel Deej eff uekalevee @eefhS Deej Skel Deej ner eff uekalevee @eefhS~ Deedekelkece Skel @eekce&Yeeie ner melien ekel³ee peeve @eefhS~ kefekelkA Helle Üej e meliehle Deenej i eue kel ceo³ece mescelue lekel Hellele nw JeHe³e Deekelj kel jAtb eff uekalevesmes DeLej³ p³eoce eff uekalevesmescelue lekel Deenej ve Hellefeveskel kelej Ce H³ cej peeler nw~

ien je kel³ eje yeb nesee @eefhS~ i eue dakeleueves kel yeo, dakeleues ie³es Yeeie keleus Heli³ee Yehee mes DeejHele nesee @eefhS leekel 3en kelcepeej Yeeie kele³ s³ee Dei³e mecem³eeDeellmes ye@e mekelkeer nw efepve Hellellmes ieb³ dakeleueles nQ dakeleueles ie³es Yeeie Htj leeppe iegej 3ee keleodW/ HelleA mes DeejHele kel³ vee @eefhS (j Le, 2008 ; kele³m i epe HelleGf[Meve, 2009)~

- ↳ ieb³ dakekelce kel mece³e 3en O³eve j Kevee nejee ekel mJeeYeelekel #ecel³ee mes p³eoce ieb³ dakeleuevesmes H³ kel³ peadeve Dei³ej kelce nes peeler nw Deej ieb³ kelej iefejel³ee cellYee kelce nes mekelkeer nw efepnells ieb³ dakekelce kel duS Deedekelkelej jAtb mes Deej³s leej³ i sekels³es n³ kejuueg³ee kel³ee H³ kelescej Cemewe DeJenLee kelle CM³e oKee nejee jesFme yeele keles De³T er lej n mes mecePe mekelkees nQ- 3ebo mLee³er jAtb mes melien ekel³ee peeve nwleesH³ keles De³T er neuale cell j Kevee nejee- cek³el³ee Medakelkele nes oejive, dakekelce kel³eH³Ye nesee @eefhS~ Jevele³eveer mellese kefcej oeMe kel³ Deveggeej melien kel³ ves Jeeuee J³ekelke keles Deltvee T³eef& kel Deveggeej leare kel HelleYee Htj 1³ee 1.5 F³e ien je Skel A i³ kel³ vee @eefhS, Deej Gmeer lej n Helle³cer Yeeie Htj Hellemesekel³es i³es i³ mes 2.5Htj T³tj 3³ ve@es obje³ i³ kel³ vee @eefhS~ megen kelej mefekelj Cemewe doMee kel³ i³ Deej Demle³eue mefekelj Cemewe doMee kel³ i³ keles meekel³e kel³ mekelkeer nw peye lekel ieb³ kelej iefejel³ee Deej ceele cellkelke&flej ej³ vene&Dee&nwleye lekel ieb³ kele dakekelce ekel³ee pee mekelkeer nw 3ebo Skel yeej iefejel³ee cellkelej ej³ kele mekelkele (pemes ieb³ Helleuve nesee, Deej above Helleleve Helleen cellkelke) eteuele nwleesdakekelce yeb kel³ eb³ee peeS Deej H³ keleskej³ efekelkelele duS efepce eb³ee peeve @eefhS~ peye lekel kel³ ef&kele ml³eve Yeje vene&nwleye lekel H³ mes dakekelce vene&nesee @eefhS (j Le, 2008)~

- ↳ kejuuek kelej ieb³ Skel cenIjetC&Jeve GHeeo nw efeme H³ kelej ieeseeF&leare H³leare nw Gme H³ mes ieb³ melienCe kel³ vee @eefhS~ peceere mes kelce mes kelce leare H³leare mes T³tj i³ kel³ vee @eefhS Deej ieeseeF&kel ermeege mes i³ kel³ vee nejee- leare-@ej H³leare kel³ ieeseeF&kel duS oes i³, H³leare kel³ duS leare i³, i³ H³leare kel³ duS @ej i³ Deej Gmemes Deedekel kelej ieeseeF&Htj Depej i³ F³e kel Deltvee cellSkel Skel i³ ekel³ee pee mekelkeer nw i³ dakekelkele Deekelj De& JetHekelej nesmekelkeer nwDeej @eefhS~ efekelce meskelce i³ eF³e lelee ifej³ef&cesF³e lekel nesmekelkeer nw obje³lele leamej³ Je&el&W i³ Hellemes Jeelellkel³es i³es f³ i³ mesheF³e mes ceer. Deedekel T³eef&Htj nesmekelkeer nw 3ebo H³leare i³ Yej veskelel efhlelle cellnwlees Gme Htj kej³ kelej vee vene&@eefhS~ 3en oKee ie³ee ekel metek³ eff uekel Jeeuee H³ kelej legueeve cellueeve eff uekel Jeeuee H³ mes Deedekel ieb³ GImepete nesee nQ(kel³eles ieme, Deebveekelle)~

Dei³e ieb³ H³leare³ellkel duS Deuele Deuele lej ekel Deltvee³es pee mekelkeer nQ ekellegceaukel eff³ee myee cellueeve nesee (ieeseeF&kel Deveggeej i³ dakekelce mefK³ee)~

iejeue H³ kelej ieeseeF&leare H³leare ve nesee nQ Yeer Gmemes GeF³e leare cellieell melien ekel³ee pee mekelkeer nw Fmekel duS dakekelkelele veF&lekelvecell³ellkel³ee skel³ee iefejel³ee DeejM³ekel nw Deej Gwele GHekej Cemewe H³leare ekel³ee peeve @eefhS~ pemes ekel 'efef³e' ieuape @ekel', peespeekce keleskelce kel³ ves cellceoo kel³ lee nw(meeOej Ce @ekel kelej legueeve cell³ (vee³ej, Deebveekelle)~ SLeetave



(ethephon) Skel Sme j emee³edkel HeoLe&nwpeesH² elkelor Jeef< cellmenie³elie kelj leer nij ielb Gl mepete cellceoo kelj leer nwDeej H² kel mLee²elje kelies yee³es j Keles n² GI heove cellJeef< kel meeLe meeLe i s kelies peuoer H²el&kel dueS Yeer ceoo kelj leer nw³en Skel keliee e¹J³e nwpees levesHej FlpekelMeve kel peej³es Yej e pee mekeliee nw² ekalligncejer meueen nwde³edcel e j Al² mes Fmleseeue ve kelj W ne² 3edbo yeej yeej ale-kekelce kel kelej Ce kel²&H² kelcepeej nes ie³ee nwles Gmekeler leekel te keliesHye² heves kel dueS SLethave kelte H²eeie kelj vee Ge²ele nw²

 Meno mleienCe DeefoJeefie³eliklel Skel cek³e H²Mee nw² Deltres preeve kelies yeepe veeiekelj ue²eeue meaff³cellitj @ek kelj Hnef² er ueeie Meno mleien kelj les n² Gme mleka i H²C&ehfMellie³elWcellncee j H²elleyde 3ee efleDe kelies Deltiveeve Gvekel dueS p³eeoe mleyle vendr nwkaekel kel efleDe Deltivees kel dueS efloave mecc³e DeclM³ekel nw² Glivee mecc³e Gvekel Heme DeYeele j nlee nw² preeueie H² mes Meno mleien kelj lesnQues i H²eskeler Gme Yeeie kelies l²eej vee venek@eefhS efemecel DeC [W²ee ueeJex j nles n² Fmekel Deeljeff kelle j eever cekelKe³elkelle kelF&velgelmeve veneRnesee @eefhS~ cekelKe³elkelle dueS i H²es cellkelj f Meno i e² ab³ee preeve @eefhS, Fmemes i H²es kelj abovellka yeo Hye² Meno mes Yej preeSice~ 3edbo i H²es kate vayyes H²elMele Yeeje DeeljeHe nwles mecePee preeSice ekel Jen Meno mleienCe n²g Gl³edgelie nw (ceafj meve, 2010)~ efeme Delme cellMen o K²es cellMeeue nwDee (bulgy) ueieliee nw² Skel ner peien H²j j nsDevkel i H²elcell mes kelj i H²es H²Cakel i e² ab³es preeve @eefhS~

uelog Jevedope mechhoe Hye²leve efleDe

yelle, i mej , ueeKe Deej Ketyer pemes Jeve Gltepekel dueS Deueie lej ekel kelies J³eJemLee n² Fmekel dueS nceMee Jelkeefekelle lej ekel preevees kel dueS H²el#ee kelj ves kelies DeeljeM³ekel lee veneRnkeBekel kelF&mLeevee efleMese% Deltres Devyjeekel kel Deoej H²j Fme mleyle celNDevekeA preevekelj³ekelceiMelle H²oeve kelj mekelies nOpemekel Deoej H²j ef³ece ueieliee ekel³ee pee mekeliee nw²

IeLeeft, 3en 3eo j Kerev nwkel i ej -kele-je Jeve Gltepe kel melele GI heove kelies megfedM²elie kelj yes kel dueS keljeue ef³ece ueieliee kelj osse H²eele veneRnw² kebekel kelj De³e kelj kel Fme H²j H²Yeeje [ueuelies n² Jeve eflekelme cellJeef³e preeleWkeler Yeer Dence Yetekelie j nlee nw² Gvekel efleueetve (extinction) Jeve Gltepe GI heove kelies H²Yedele kelj mekelies nw² kelF&kelH H²j eiCe J³eJemLee kelies mejoice kelj lesnQles kelF&preeveJej yeepe keliesJej eje kelj lesnQ 3en oKee ie³ee nwkel DeoDekelMe #ekel celPeeveJej dI³ee H²elW²je K²e²e n²Dee H²lue kel yeepe De² er lej n mes Dekeljej le nes n² kelies n² H²elG² Meve Üej i ekel³es ie³es DeI³eeve mes H²lue @euee nw² ekel Jeve #ekelWcellnj oe H² kel DeYeeje nes kelie kelies CekelWcepjeeuer kelj ves Jeuees preeveJej (pemes ekel mej Ce Deej ueeieie³e) kelies kelceer mes nes mekelies nw² oftej er Deej , i ej -ceemecer Je-eel³ee p³eeoe ieceekel kelj Ce ueeKe H²lmeue H²Yedele nes mekelies nw² DeleJee i mej H²lmeue yeeceej³ekelmes H²Yedele nes kelj ve² nes mekelies n² 3edbo H²ekelkelkel Deelbo nceej s ef³elleCe mes yeenj nw² IeLeeft 3eLeeMefje Devygele H²efj dnLeele yeeceej³es j Kerev DeeJem³ekel nw² 3ekelhelte i me 3ee DekelMe³ee H²j (eflepecel²e ekelme) j et²Ce mes Jeelceej Ce H²j H²elkelkel H²Yeeje H² kel mekelies nw² Jevelkel Deeme Heme Kel²elcellj emee³edkel Keej Deej kelies veMekel DeeeOedkel Gl³estie, Mekel elMeeueer ceegFue i ej DeleJee Fueskel ka i ej , efleMese j Al² mes Henej [3eW²je Kerev Deej H²eluees Jeuees

meleoveMeue / Hefj meleove Jeve Glhepe

kelF&H²elWDeej preeleWhefj lelle² (ecosystem) kel Helle Fives meleoveMeue nes n²ekel 3edbo Hefj lelle kel me²ce meleoveve cell kelF&ieafye² nes lew nwles Jes DeoDekel mecc³e lkel preelele venej j n mekelies @eens yeej Hefj elLelle ekeleves Yeer De²CCe j nw² ueeKe kelies pomes meleoveMeue nw² James uelog Jevedope e¹J³ekelWclimes Ketyer, Meleuee SJeb Meleuee-keUekel (lichen) Del³edkel meleoveMeue n² ieceekel ceemecel cell²eo Jeve kel Deboj ekelmeer H²j Meleuee oKee preele nwles 3en cevee preeSice ekel Jenekel kelie leebcece p²je nw² Ketyer mes DeoDekel veceer kelie H²le @euele nw² kelj ueeie Kerev kel dueS Ketyer mleien kelj lesnQles kelj ueeie yee²es kel dueS~ ce²ej H²le Jeuee Ketyer o K²es cellhelpj ueieliee nw² FmedueS lej kelies mepppeejei meceeevilkel j Al² mes Fmleseeue ekel³ee preele nw² Mesleuee-keUekel Skel Sme H²le nwpeesoue oue nkelj H²lej H²j abKef&osnDejj kelj i ueeie Gmes DeeeOer kel j Al² celWfleseeue kelj les n~ 3en H²lej kelies i gelaEskelj ves celWDelel ef²e i der yeevees cell ceoo kelj leer nw² Jes Je²eg ceC [ue celWcepjee pueeje DeleJee H²eskel A leJelkel Deoej H²j preelele j nles n² Je²egjeC [ue celWhebcel ee yeej ves kelj kelj Ce pueeje DeleJee kelce nes Deej Je²egH²okel nes H²j Jes cej preele n² Jeve keliesJemlefel A mJeml³e ekelieer De² er nw² Jen Fve meleoveMeue H²elWDeej preeleWmes H²le @euele nw² Jeve mej effele j nsej lees Jes preelele j nles Deej Gvekel eflekelme nsej-

uelej Jevelepe meleboe Heydeve dlede

- GDeeselmesefekelues otkele Heveer Deejj OelDeekel keler Ce Jeve keler Deeltej kel peKebeve Deejj mollegive eyieej pellee nwDeejj Jeve Ghepe ej3eellkete GItheove Deejj iefjelel lee Kej eye nesmekeltes nØ FmeueS mLee3er GItheove Heydeve 3epevee kel elueS kelJeue Jeve kel meygle cellmLete Ghee3eelltj ejteej kelj ver H3eetle venetnw Jeve kelesyeenj mesHeYeelte kelj ves Jeeues keler kelletHbj Yeer 03evee j Kere 03eefS~ Goenj Ce kel elueS, ceeyeeFue i ejej ellekel keler ejleDeje ejekelkete ejekelj Cellimes ceOeg ceekKe3eB HeYeeltele nesles nØ ceOeg ceekKe3eB Deemeke kel mej mees keler KekelMkele Htuellmes cekelj lo Skelletele kelj les nØDeejj KekelMkj keler veemekelNDelJee De3e elle-awes j mes3eve kel GI3eese Deejj MeekelMeueer ceeyeeFue i ejej mesceOeg ceekKe3eellkeler iefjeleDe teLee Meno keler iefjelel lee HeYeeltele nesmekeltes nØ FmeueS 3en kelne pee mekekee nwkeA ncelJeevkel mLeeue mej #ee kel meeLe meeLe H3eetlej Cee3e mej #ee Hbj Yeer elle#eej kelj vee DeelM3ekel nw Fmekel Deeltej kelle, cen1JekCe&Hipeedle3eellkeler Heefj ehLekelkeler keltes Yeer mecePvee nw pemes ekel ekelme Je#ee kel elueS Deelkeli r e3e 03eefS Deejj ekelme Je#ee kel elueS Deelkeli Ote; pjej e3e Jeve (mangrove forest) keler Hipeedle (true mangrove) keler meer nw Deejj Gmekel men3eeler Haf (mangrove associates) keler meer nw FI3eedo-
kelj GI3eesej Hipeedle3eell nOpes Keges #ee cellyan1lej Huvbels nØDeejj JenByealHaf ueiakelj r e3e kelj ves mes Gmekel GItheove HeYeeltele nesmekeltee nw (3emBok) Kere nejee Keges Jeve mes ncllpees kelj eceulee nwJen mLeevee paaekelte kel elueS Deiej yendje cen1JekCe&nw Deejj meteve Jeve ceWGlevee venetRefeuelee nwIes epelevee DeelM3ekel nwGlevee ner Keges Jeve j Kellie~
pelieuur keltoekelkes lej kel Heaf sKeeuer peienMkj jekCe mes mej #eeCe kel meeLe meeLe iefjelel lee cellYee Jeefx nesmekeltee nw
JeveellcelDdeeie Hbj elie3elleCe j Kere Yeer Fme H3eelle keler SkelA cen1JekCe&Yeeie nw kaF&ueeie De@1 sGItheo kel elueS lobb Pee [er kelles peueeltes nØ Ieskelj ueei cen1Jee melienCe kel elueS Haf kel veer#es Gieseyej esue3edMceMDeie ueieeltes nØ Sineer meYer elie3eB oeejeeuee kakesyefJee olee nOpemes jekelkeler pvee 03eefS Deejj 3eob Deiei ueiees keler me#eevee eceulee nwIes lej ille Deiei yefvees kel elueS pej Aj er J3eJemLee kelj veer nejee~
HMepej Ce Hbj Yeer dle3elleCe j Kere nejee- Jere keler Deckelj (r ei e nes3ee yeje) Deejj enLelle Hbj 3en dle3elleCe elieYej kelj lee nw 3eob Jeve Deckelj cellyenje yeje nwkelelegelketelemeave ehLelle cellnwIes kelceJel lette (rotation) kel DeelDeejj Hbj Skel elieMese Yeeie cellHMepej Ce meadcole j Kee pce mekellee nw 3eob Jeve yendje r ei e nwIes 03eob Ce Hbj H3eC&HtelleyleDe DeelM3ekel nesmekeltee nw
Hleueekelj Ce (thinning) Deejj Jeve-Je-xkel iefjeleDe3eellkeli oejjeve 3en 03evee eb3ee pvee 03eefS ekel DeemeOeepe Htellepfe er yeffi 3eob Deejj Dev3e GI3eesej Htellekeli ve pe3ell Del3eDekeA metHleF&(cleaning) mes Jeve DeltleGe (weed) mesYej mekellee nw
Delle cellFvelee ner kelAnvee Gaf3ele nejee ekel 3eob Jeve GItheovellkale meceg3ele eliefe3eise Hbj 03evee ve eb3ee pesS Ies 3en Heydeve J3eJemLee Deejje j nsier- J3eckelleleite Iageweve cellmecetfkel j Ate mes meliehle Jeve GItheo yendje cen1JekCe&nw penel GItheove Hbj meecetfkel elie3elleCe j nlee nwDeejj mecepe3e keler Deejj mesmeliehle nejee nwJeneBeppecejjer yeje lej nwkeleekelj Flever oKeYeeue Deejj 13eie keler Haf Cece 3eob J3eL&nes pvee nw3ee Gmekel Gaf3ele J3eJenej venetnesmekeltee nw Ies oKeYeeue Deejj 13eie keler ves kelle GImeen Yeer keler nespeSiae- FmeueS, lej kel elueS GI3eesej kelj vee nwIes oKeYeeue nejee ekel mener mece3e Hbj Deejj mener lej ekel mes GItheove/melienCe nØDee nw3ee venet 3eob GItheo yes#eskel elueS nwIes GmomesDe@1 er De3e eceuvesHbj 03evee ossee nejee- penel kelne Yeer DeejjelM3ekel nesIes GItheovellkale Hmehkeli Ce Deejj mej #eeCe keler Hafj 3epevee Yeer keler pce mekelleer nw Jeve GItheovellkales Deelkeli elouell keler maj ellele j Keres Deejj Ya[ej Ce kel elueS ieepece iea keler J3eJemLee keler pce mekelleer nw
- Fme Hkelielj J3eetkeli leLee meceie oek keler mene3elee mes Skel Jeve GItheope metHleve elieDe Hmlejje kelj ves mes YeeJeer Haf3eell keler Skel oetleDe3er leLee yengelker metHf Cece eceu mekellee nw Jeemleje cell 3en Htelleve elieDe pueje3egHbj Jelalle keler cegeleyeuue kelj kel mebneOeeveeHkates yeve3es j Keres cellDeejj Gvekeler Jeefx celWketeleler GI3eeseier elieX nesmekelleer nw



mene³ekel ievLe

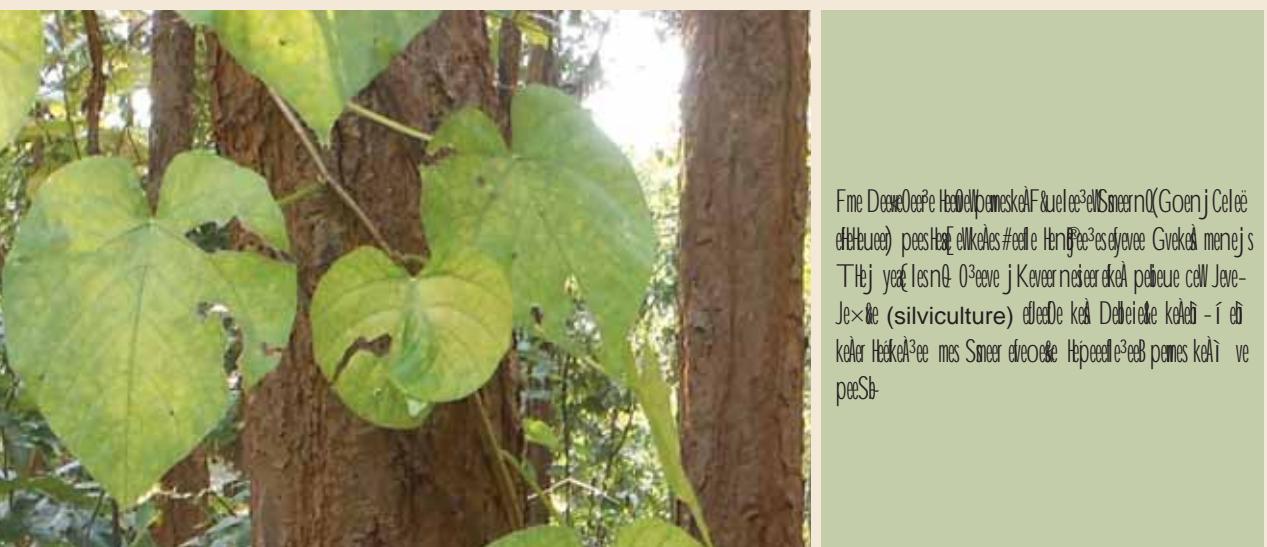
ueleg JevLepe mechoe Heydele dleDe

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ueleg Jeveelhepe mechboe HeyeDeve keker Heñi ellmelle'







Skel meecepeebekel Jeve keler 3en Keguee Yeeie James lees ueielee nwekel Je#ej dt@Ce/Jereekelj Ce kel dueS Glt3eester ny ueskely O3eve oses keler yeele 3en nwekel Fmeer Keguer peien Itj ner Gieler nimmLeeveefie ueesiedlkeli keler celDDe j ner Skel Peefet leeme, yee@fe (*Aristida setacea*) epeeme celmes Skel Peefet yeveler nw yee@fe keler i e3ee celBben leeme De@f er lej n Itvelte venekmekel leem-

Fme meljeOer (*Hemidesmus indicus*) Hepeelle keler lej n kelF&He@ell pees ejekje n@Dee It@es pees nQ Gvekeler mener vecatellmehneOeve kel Deekelueve/meJ@#Ce celW due@es peees @eeshS- pees He@ell ceemecer nies nQ Gvekeler dueS mJelelle O3eve j Keveer @eeshS-



Keler kel dueS peieu keli er, ueskely Fme cenjDee pomes kel i Glt3eesterH@ y@esj ns Hej clesj kel keler-Jerekelj Ce kel 3en Goenj Ce 3en Yer oMeekelie nwekel peieu keler yeenj Yer ueleg Jevestape keler melneOeve nes mickelies nQ epevekeli Deekelueve neser @eeshS-

keleleme celWkelel[keles veer@es mes kelel[e peel@e nw Htj llog
 i eF&(pruning) celWmekel Thtj erYeeie celWelleMesekelj
 peesMeeKeeSBnQ Gvekeleskele[eloS peelsn0(pollard-
 ing) leekel[ve3er kelesue MeeKee drekelue Dees, pees
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 Depege Htj oKe jns n0 Fme Htkelej kelel ceveJekel[
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jbeceare meskelj[Thtj kelel mlej Htj Fme @eyellej scell@ mej
 kelel keleses meceve jahe mes Htuee kelej mekec3ee ic3ee nw
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 Deceue celWuevesmes GIteove kelel menemelj #eCe, ief@Jel lee
 kelel Drevg #eCe, TeLee ueeYeo3ekel A ejebCeve cellmenem3elee
 eteueler nw FmekelermegfetM@el ee mesmeheeOeve kelel meij #eCe
 kele yenlIej ueeYe eteuelee nw

DeewkeOee3e ief@e3ekelle Fme yee;eeb3eer/Jee3epdeeler
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 keleF&kelel nesmekelIeer nwpeesJel eevee mece3e celWdej Lekel
 3ee ief@e ueie mekeAler nw ekelIej Yeele3e celWvekeAer
 GIte3efiel ee HtceceCeler nesmekelIeer nw





Meeue HelleWkeles Deiej Helleue 3ee Leeueer kele jAh celW
ehneueeF&kelej oer pees, Ies FmecelWKeueer Hellee keeler
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kelej eF&ieeuwekelej j nleer nw Deij FmemesDeeceover Yer
yeeleer nw



HeueMe kelej Eve HattueWpernes keleF&Gtbs#ele meneoeve nw
ebevekelel mener Gt3e3e mes ehre3edele jAh mes mellen nes
Jeeueer meneoeve hbj oyeeJe kelej neleer nw Deij Gvekel
melpj #Ce celWmen3ele eceueler nw (Dellip#ele) melkes
HeueMe Helleue kelej me kele meeLe Deeje©i HeGafj
eceuwekelej i e3ee ceb mekeees kele yeo Heinleje Meg
iegreeue-

Geff Mee keler Skel DeesJeemeer icelle celWkeler Gfe³eester
yevef & i³eer pelieuur kelj~ kelj HfameuelfDevekel Hfekelue
ehLeelle celWyer yc² j n mekeluer nft Hfekelue peueJee³eg
kelj merne kelj Heves Jeeuer Fme Hfekelj keler eflekevve
Hf² -Hfekelj keler ten²eve leLee melj #Ce neer @eefS~
pemes ekel KeFj (*Acacia catechu*) keler Hf² mefkes
keler ehLeelle merne kelj mekeluer nw Deej ogue³eyeeSve
(*Avicennia alba*) legeejHele keler ehLeelle merne
kelj mekeluer nw Meeue keler Hf² pelieuur keler Deei mes
venekcej leej-



pelieuur kelj



KeFj



ogue³eyeeSve



yedne keler Skel ieff² e (clump) pees peaf ell celWkefEer
keler Dee² f eove celWkeler kelj kelj Ce mes Skel Ieff²keve celW
peaf mes GKef² ie³ee~ FmedueS, yedne Je²re keler efleDe
kelj Skel cenljetCek Delle neetee nw peaf ell kelj efleEer keler
efi uee (mound) mes { keljve, keljue³ellkelj melienCe Hfj
efie³ellCe, leLee HfC& eflekelemele yedne keler mece² Hfj
kelj efF&

yedne keler yeape Hfepelleve kelj keljce Dees nQ FmedueS
Deiej yedne celWf² i Hfj HfCce nes lees nmle#etle venek
kelj vee @eefhS~ ueakelave Deiej J³elHekel A HfCce
(gregarious flowering) nes lees eflekefle Deej
mekeluer nw kefekel A Yeej or ceel ee celWpepe Peaf vosmes Gmekakes
Keeves Jeeuer @ehelWkeler JeMeJeef< neetee nw pees Devekel
Hfekelj keler mepam³ee GfHfve kelj mekeluer nw Fme efleS
J³ekelA HfCce mes Hfle& mefekalee yej leevr @eefhS~





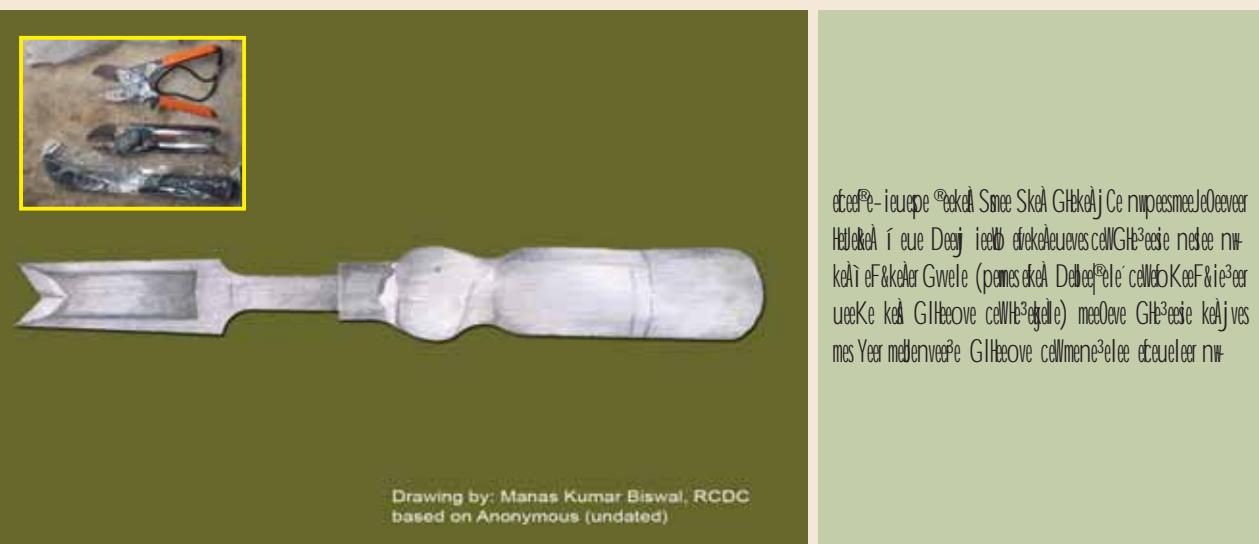
p³eeoe ueeYe keler ueue[®] eloKee kel^j Dethves yeppe 3^{ee}
©ej e ye[®]eves Jeeues J³eeheef^j 3^{ee}Mkeler yeeleelc^{ee}Dee pveesmes
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DeMjeibee Deebo kelF& hepeeff^ceeellkeler J³eeJemeeff^ekel
Keler mes nF& velgelmeeve Gmeer ueue[®]e keler Jepen mes nF&

H^je[®]dkeler í eue driketeueevee, ©ens Jen j Mesej IboLee
kel^j At^j cel³elc^ece cel³we j ns lees- It^j lbg³en Yeer mel³e nw
ekel H^jlue Peaf^j kelles Huuefn^j kel^j mes yeeleves keler yeppe³e
ceuegkeler j Mes mes yee[®]evec (Dellep[®]e) Devkel H^jkel^j mes
Glt³esier nefer nw FmeueS, Fme lej n keler Jeveespe
keler melien It^j Ske^j DabDe H^jlleyd^j ueeuees keler yeppe³e
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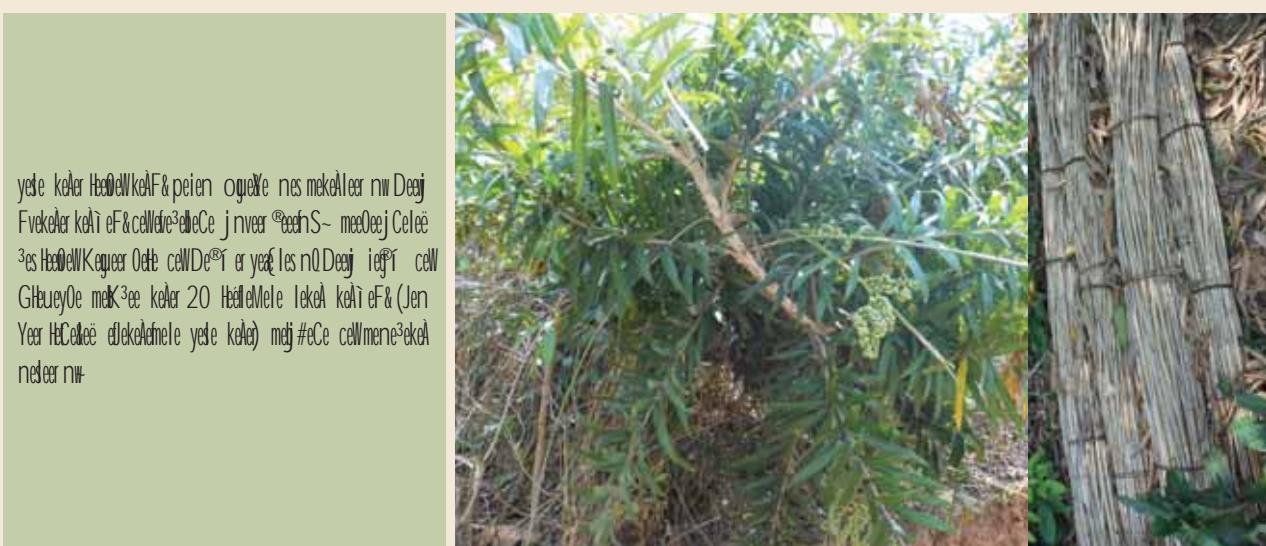


pelue cel^WDeie kel^j el³elc^ece kel^j elueS Dees[®]Mee keler
oslei³e[®] epeues cel^WSkel^j ieelc^{ee} cel^W³es iedleJeeues ver[®]e[®] H^jer
nF&mekes[®]kel Leekelklos Fkel^jue kel^j Deweie kel^j osles nOpes
ekel yeo cel^Wkellben^j yeeuees cel^WGlt³esieer nesmekelteer nw

yekelēj H²E erpeceare H²j meste³eeuele keler Keler mes ueeKe
 keler Keler cehuueDeelWkel d²eS menpe nes mekellēr n²
 0³eve j n²Wkel pelliue mes cehuueDeelWkel melyde H²j A-cel²
 keler legivee cel²p³ecce metlesoveMeuse Deej² peef u neleer
 n² 3²Deat² keler Jevestape keler melienCe keler kelece keler
 nes keler kelece Ce H²j A-cel² les n² uekelle Gmekelles Yeer
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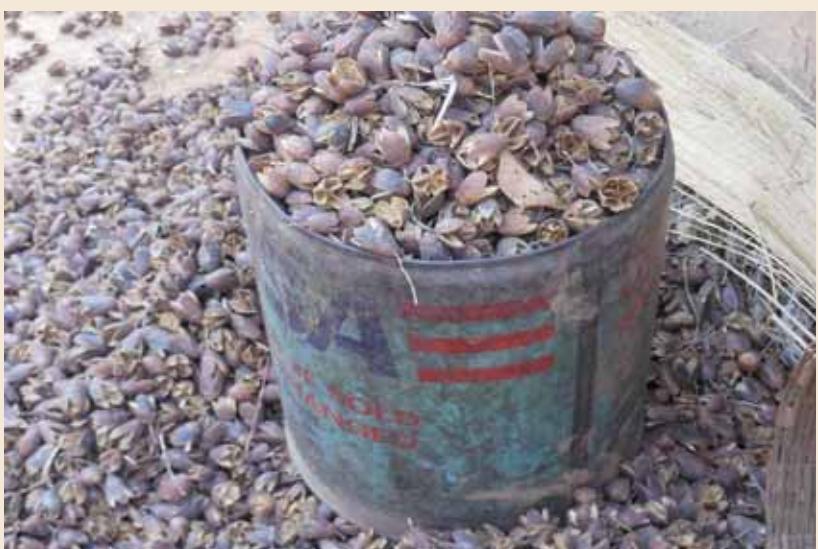
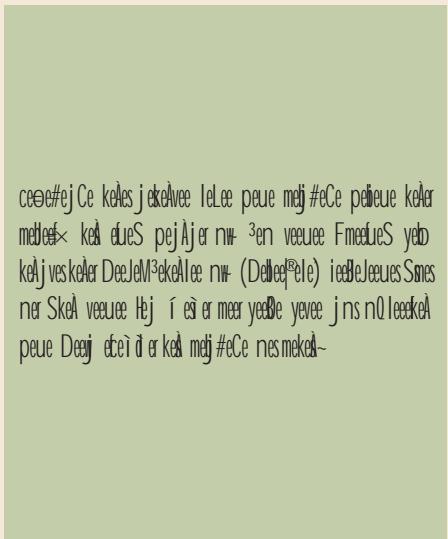


ece²e- ieuope ©ekel² Smee Skel G²kel² j Ce n²pesmeeJoOeeve
 H²kel² í eue Deej² ielt² ekeleueves cel²GHt³este neslee n²
 keler eF&keler Gwele (pomesekel Delleq²e) cel²KeeF&i²eer
 ueKe keler G²heove cel²Ht³ejele) meeOeve G²he³esse keler ves
 mes Yeer mellenvee² G²heove cel²mene³ele ebeuleer n²





ekel'mi ese haleG [Meve Üeje uer nif& SkA hakelej keler
Maaleue-keukele (lichen) keler i ejje- (Dallef®ele) palieue
cellHvelbelle SkA hakelej keler Kyeer- keBekkel Fve permes
Haf mettesoer Hepeelle Ga®ele me#ce peueJee3ejje ehnLeele
ejvee Hvelb vernemekelles FmedueS Fvekel DeehleJe mes
palieue keler JeemleJe mJeemL3e keler hblce @eueler nw



veetb-leeue keAer cevekeA He×elle3ewkeles i esf kaj Fme
hakelej keler [yyee 3ee Dev3e ekeameer Smeer He×elle ejomes
ekel Heedekel metteenkeleWkeler MeeseCe keler Deemekete
j in leen nw GvnHleyDele kaj vee Deej cevekele J3eJemLee
magredM®ele kaj vee Yer HyeDele keler ce3eebo leLee HeYeeJe
yee@eeler nw



Yeejje mejkalej je²i t³e iececeCe Deepereekale elceMeve (NRLM) ke¹ Dellelele oeyewkele² leLee ueleg Jeveetlepe #ed¹e' ceW ceefhuee GBee²eel³kel¹ keles Heelmeerive oy¹ ke¹ elueS ceefhuee ke¹ekel meMeekellekel¹jCe Heef³eepvee (MKSP) ke¹ kele¹ke²eel³je³eve ke¹ jner nw ebemekel metehue jaHee³eve ceW meBjelle je²i thelle kele¹ melLee³gsve [elle¹ kele¹ elDeMese³eesioeve jner nw ueleg Jeveetlepe melleoe HeyelDeve #ed¹e' ceW peve meceipe³e ke¹ elueS elkelelemele³en meb#elle elUeDe-Hagmlekeke Fme men³eesie ke¹ Heef³Ceece ke¹ jaHe ceW kele¹ mi eye HekeGh[Meve kele¹ lekelveekeler merie³ele mes Deepj [emeer Ueje HekeleleMele nw

