2015

Vulnerabilidade Klimatíka no Analiza Kapasidade: Relatorio Final

Organiza husi:

CARE Internasional iha Timor-Leste

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Povo Timor-Leste hanesan mos parte barak iha mundo seluk experiencia mos manas makas ka veroens, persipitasaun sporaidik ka udang boot, mudansa ba klima, bé maran, no dezaster barak liu hamusu hosi mudansa ba klima no dezaster natural hanesan inundasaun, rai-halai no rai-monu iha tinan hirak neé nia laran. Neé impaktu balun mak bele haré hosi mudansa klimátika ba ita nia moris lor-loron. Mudansas hirak ba padroens klimátika neé iha impaktu direita ba ita nia vida moris, saúde, infraestrutura, atividades ekonómiku no dezenvolvimentu global ba nasaun. Realiza ona estudus balun iha pasadu hanesan Atividades Programa Adaptasaun Nasional (NAPA) no Inisial Komunikasaun Nasional (INC) prova ona katak mudansa hirak neé real no kauza hosi mudansa klimátika.

Nudar rezultado, iha ema moris balun mak oras neé expoz hasoru risku klimátika hirak neé., no nivel vulnerabilidade aumenta tamba seidauk iha estrategia efektivu atu infrenta impaktus negativu hosi alterasaun klimátika. Maibe Timor-Leste la mesak iha dalan sanak neé. Governos no ema iha mundo tomak mos infrenta ho dezafius no devastasoens iha sira nia maneiras rasik. Maioria governo hirak neé servisu hamutuk ho sira nia povu atu dezenvolve politíkas no maneiras rapídu responde ba dezastres no hamusu maneiras foun no diak hodi tulun emar hirak nebe vulneraveis ba mudansa klimátika infrenta ho impaktus negative, Ita, iha Timor-Leste persiza mos fo pasu ida ba kotuk no haré ita nia esforsos aktuais atu minimiza impaktu negativu no haré ita iha nebe nudar nasaun ida hodi prepara ita nia an hasoru dezafius hirak neé, no atividades específikus saida mak ita halo ona atu hadiak kapasidade adaptive ba sira hirak nebe mak maioria iha risku nia laran no maioria vulneraveis tamba mudansa klimátika.

UNDP Timor-Leste tulun da-daun povu no Governo Timor-Leste iha nia esforsu rasik atu halo povu no komunidades rezisti liu ba mudansa klimátika. Ami fiar kata ami nia tulun sei efektivu liu karik ami tulun fortalese governo nia mekanismu no sistema planeamentu no dezenvolvimentu nebe mak iha tiha ona. Tamba né, ami nia esforsu regular tenke alinha servisu ba nesisidades no prioridades komunidade lokal, governo lokal no meta klima global dezenvolvimento rezistensia ba pais neé. Konaba neé, ami iha projetos ida mak servisu hamutuk ho governo lokal, Ministêrio Administração Estatal (MSA) no Ministêrio Comercio,Industria e Ambiente (MCIE) atu harí no reabilita infraestrutura rurais eskala kiík.

Ami fiar katak servisu parseria neé sei traduz ba n dezenvolvimentu longu prazu tamba liu-hosi servisu neé, ami hglo fortalesimentu ba prosesu Planeamento Dezenvolvimento Integrado Municipal (PDIM) nebe mak iha tiha ona, liu-liu ba nia esforsu atu reforsa adaptasaun mudansa klimátika no rezistesia klimátika ba iha dezenvolvimentu, planeamentu no procesu orsamental. Atu reforsa liu tan probabilidade no sustentabilidade ba ita nia servisu, ami servisu hamutuk ho governo no partes interesante local atu hadiak sira nia kapasidades atu identifika, plano no internalize atividades nebe kontribui ba harí reziliensia klimátika.

Ami hatene katak infraestrutura rural eskala kiík hanesan sistema abastesimentu be'e, estradas ki'k, kanais irigasaun, pontes, no Sistema drainagens krusial teb-tebes ba komunidades local. Tambe neé UNDP identifika ona projetos nebe importante liu hosi matrix planeamentu Suco nebe aprovado ona no presta apoiu suporta tékniko no finanseiro laos deit ba realizasaun servisu reabilitasaun maibe mos halo infraestrutura hirak neé reziliente ka rezisit ba klima. No entanto, ami nia servisu ka obra nudar tentativa piloto ida nebe atualmente limita deit iha postos administrative ualu hosi Ermera, Liquica no Baucau

Ami halo ona estudu ida atu tulun planeador local sira, ami nia parseiro implementadores – MSA no MCIE atu kompriende risku konaba dezaster komun hanesan rai-halai, rai-monu no inundasaun nebe afeta komunidade lokal no infraestrutura eskala kiík. Estudu neé mos atu intende oinsa sira bele replica no habelar servisu nebe ami halo iha Suco hirak selesionado hosi Ermera, Liquica no Baucau ba iha areas seluk nebe perigo ba risku klimátika. Objetivus prisipais hosi estudu neé, nebe halaó hosi CARE internacional Timor-Leste mak atu hetan (i) nivel risku nebe dezaster akontese iha area estudu, (ii) fatores nebe kauza risku hirak neé (iii) Areas nebe maioria vulneraveis (mos teme nudar hotspots), no (iv) oinsa komunidades local infrenta ho risku hirak neé.

Embora estudu neé la aprofunda risku especifiku nebe ameasa infraestrutura eslala kiík, Buat hotu iha relatorio neé fornese dadus inisial ida ke forte atu laó ba oin no halo planeamento klimátika responsive bazeadu ba risku klimátika areas vulneraveis. Hau fiar katak planeadores Suco no Aldeia sei bele atu fortalese prosesu PDIM tinan ikus no tinan hirak tuir mai uza informasaun risku klimátika fornese hosi relatorio neé. Hamutuk, ita sei konstrui reziliente rural Timor-Leste ida mak forte ho infraestrutura eskala kiík sustentavel no abundante klimátika.

Knut Ostby

Kordenador Rezidenti ONU nian no Reprezentante Rezidenti PNUD nian ba Timor-Leste

PREFÁCIO

Projeito SSRI UNDP hakarak rekonhese suporta kolaborasaun no kooperasaun mak simu husi parseirus implemetadores _Facilidade Ambiental Global, Ministeriu Estatal, and Ministeriu KOmersiu, Industria no Ambiente no nia funsionariu tomak durante halao prosesu preparasaun ba Vulnerabilidade Klimatika no Analisa Kapasidade iha Suco neébe mak seleksionadu iha Municipiu Baucau, Ermera no Liquica.

SSRI hakarak fo specifiku agradesimentu ba Care International iha Timor –Leste hodi halo analysa GIS no produsaun Mapa risku klima mak indika areas risku no halo produsaun relatoriu final CVCA hamutuk ho analisa CVCA no GIS nian. Hanesan mos, SSRI hakarak fo agradese ba Administradores Municipiu Bauacu, Ermera no Liquica, Administradores Posto Administrativus Baucau Villa, PA Quelicai, PA Vemase, PA Liquica, PA Bazartete, PA Maubara, PA Ermera Vila no PA Hatulia, Chefe de Sucos, Chefe de Aldeias , komunidades , Ekipa EVAS, funsionariu governu local no funsionariu CITL ba sira nia kontribusaun ba iha relatoriu ida nee. La haluha mos SSRI hakarak hatoo nia agradesimentu ba partisipantes durante konsultasaun nia laran mak halao iha dia 16 fulan Julhu 2015 husi ministeriu relevantes hanesan Ministeriu Agrikultura no Peskas, Ministeriu Sosial Solidaridade /Diresaun NAsional ba Jestaun Disaster, Ministeriu Obras Públika, Sentru ba Mudansa Klimatika no Biodiversidade, Estrada ba Dezenvolvimentu (R4D/ILO) , ba imi nia tempu no kontribuisaun liu-liu identifika nakulas/gaps iha relatoriu draft nian no suporta fo ideas atu hadia kualidade relatoriu nian iha konteudu mudansa klimatika Timor-Leste .

SUMARIU EXEKUTIVU

Kondisaun bio-fíziku iha Timor-Leste tau risku barak ba nasaun nia infra-estrutura husi perigos natereza oin-oin. Foho ás, rai-lolon, udan ho volume boot, udan intesas ho tempu naruk, Ladun iha vegetasaun natural, no rai labarak, , rai ho rai-henek, karaterístikas hirak nee deskreve parte barak iha Timor-Leste, no hamutuk buat hirak neé hamusu ameasas ida ba nasaun nia infras-estrutura. Iha maioria senaios mudansa klímatika nia okos agora da-daun foti ho serio , né nudar ameasa liu-liu relasaun ho klima, dalaruma atu hetan graves barak no barak liutan iha futuru ka loron ikus mai. . Entre hirak neé hotu, grave liu mak inundasaun, rai-halai no rai monu ka erosaun . Atu proteze infra-estrutura hasoru risku aktual no prepara kondisaun neebe grave ka severa liu iha futuru, populasaun Timor-Leste presiza intense barak liu konaba saida mak kauza husi eventus no prosesu hanesan inundasaun, rai-halai no erosaun, tamba saida mak risku ás iha fatin balu kompara fatin seluk, no saida mak tenki halo atu redus risku, proteze komunidades no salva gurada investemento iha infra-estrutura. UNDP fo knar ba CARE liu-husi projeito Climatika Vulnerabilidade no Analiza Kapasidade atraves husi projeito Infra-estrutura Rural Eskala Kiik (UNDP SSRI) hodi responde ba perguntas hirak nee no hodi fornese liu-tan informasaun detailhada konaba riskus ba infra-estrutura neebe bele kontribui ba Governo Timor-Leste nia planeamento no prosesu halo desizaun.

Projeito CARE neé komposto hosi abordagem ida ho parte-rua atu hetan compriensaun klean liu konaba ameasas ba infra-estrutura husi riskus relasionado ho klima ba posto administrative walu neebe CARE halao servisu ba. Parte premeiro husi projeito nee mak halo analiz espasial no excersiziu mapamento neebe atu produs mapa lubung ida no estatistiku hatudu distribuisaun ba nivel perigos risku nebe la hanesan relasionado ho klima.. Excersiziu mapamento nee mos sei examina ba nivel iha neébe mak infra-estrutura iha ona hetan ameasas husi perigo neé.

Estudo mapamento hare relasaun entre perigos tolu relasionado ho klima no tipo hat husi infra-estrutura. Perigos sira nee mak inundasaun, rai-halai no erosaun solu ka rai-monu, no tipo infra-estrutura mak hanesan uma, eskola, fasilidade saúde no Estradas. Extensaun geografika ba servisu mapamento nee define liu-husi area administrativo iha neébe SSRI servisu ona ba – Baucau, Quelicai no Vemasse iha Municipio Baucau, Ermera no Hatulia iha Municipio Ermera no Bazartete, Liquica no Maubara iha Municipio Liquica. Quadro servisu ba analiz nee laos determina deit ba limitas adminitrativos – Analista sira dezenvolve ona karakterística risku ba basias hidrografikas, ba sucos no mos ba postos administrativos. Atu hamapa risku espozisaun relativo hosi risku tolu nebe la hanesan s ekipa mapamento konsidera fatores contributorio ida keluan , inkulindo elevasaun nivel aa's hosi tasi, declinasaun foho lolon,, densidade no kondisaun cobertura vegetal neébe kovre, textura husi rai, media annual udan monu rai ka persipitasaun media annual no promoxidade ba mota no korenti mota.

Baucau, Vemasse, Hatulia no Maubara mak nudar posto administrativos neebe mak maoria risku hosi inundasaun. Kuaze 10,000 hektares hetan risku ba area estudo 8,800 hektares iha PA hat nee. Ba bacias hidrografikas mak susceptivel liu ba inundasaun iha parte hirak nee iha pais ida nee mak mota Seiçal iha PA Baucau, mota vemasse iha PA Vemasse, no mot aloes iha posto administrativos Hatolia no Maubara . Fatin inundasaun ka planices diak teb-tebes ba fatin agricultura no fatin nebe diak teb-tebes atu moris ka hela. maibe neé expoen número substansial ba uma no infra-estruturaa seluk at husi inundasaun.

Bazea ba estudo neé rai ho area besik 14,000 hektares mak iha risku ba rai-halai. 7.5% neé nudar area total hosi studu neé . Area riskures 8,464 hektares (61%) mak konsiderando ba mediu ka risko ás ba rai-halai. Area risko ás konsentrado iha PA Quelicai. Area seluk neebe Risku ba rai-halai inkluindo PA tolu iha Municipio Liquica no parte PA Hatulia. Area sira neébe iha risko la iha infra-estrutura barak toó oras nee. Estradas hirak nebe existi ona geralmente evita liu kona areas rai-halai, ho apenas 35km (4%) narauk ka komprimento hosi total 893km mak iha risku nia laran. No hosi hirak neé apenas mak iha risku aás nia laran. Tamba neé rai-halai maske estraga sesaun estrada kurtu bele kauza perturbasaun grave ba trasporte no komunicasaun

Postos adminisatrativos ho maioria potensia problemas ba erosaun mak Ermera, Bazartete no Liquiça nebe mais de 90% hosi areal rai konsidera iha risku mediu ka aás nia laran. Postu administrativo Ermera destaka tamba meteade hosi nia areal rai no infraestrutura iha risku aa's ba eorsaun. Neé importante atu nota katak erosaun geralmenete iha impaktu luan liu compare ho rai-halai no inundasaun no komunidades no infraestrutura iha fatin tetuk ka mota-ain bele sofre estragus, ho karun no konsequensia ho tempu naruk ba erosaun nebe mosu iha areas rai aás ka mota-ulun hosi kilométrus ba kilométus nebe dok.

Estudo nee produs mapa 24 hodi ilustra nivel diferente ba risko hanesan inundasaun, rai-halai no erosaun iha kada SSRI nia posto administratsun walu. Dadus, , mapa no estatístika jenerado husi ida nee, representa rekursu informasaun ida valiozo , atu fasilita halo desizaun neebe diak husi interessadas sira, inklui planeador, einjineiro, liders komunidade no membros públikus.. Mapa no data mak disponivel iha formatus ida variadade, inkluindo mapa impresas, , mapa disgitais, kamada GIS no arkivus Google Mundo/earth, atu buat hirak neé sebele karik ema barak bele asesu Dadus tekniku no mapamento nee rasik bele fornese informasaun abarak maibe, no iha parte Segundo husi abordagen rua projeito neé fila hikas ba ba komunidade sira rasik atu nuneé bele komprende diak ba realidade iha tereno. Nee presiza CARE nai aplikasaun feramento ba Vulnerabilidade Klimatika no Analiza Kapasidade (KVAK), neébe involve fasilitasaun workshop ho komunidade lokal atu komprende sira nia prespeitiva no esperiensia passado konaba saida mak risko princsipal, oinsa risko sira nee afeita ba iha infra-estrutura eskala kiik, no medida saida ba komunidade sira rasik atu hare hodi proteze sira nia Estrada, Sistema fornesemento be, uma no pontes . Alen neé, objeitivu analiza atu hasae komprendesaun ba komunidade ida neebe mak vulneravel liu, iha neébe sira lokalizado, ba saida no tamba sa mak sira vulneravel.

CVCA workshop konkuli ka ramata ho avaliasaun konaba lokalizasaun-purdente ba vulnerabilidade no risko assosiado ho infra-estrutura eskala kiik. Parte vital husi prosesu neé premiti ita atu komprende iha neebe komunidade senti, bazea ba sira nia esperiensia, prioridade no persepsaun, katak sira mak maioria vulneravel liu no maoria liu iha risk onia laran.

Alem de inundasoens, rai-halai no rai-monu, komidade sira mos halista udan-boót, anin-boót no bai-loron naruk hanesan problema signfikativos. Maske aseita katak eventus klima hirak neé nudar klimátika real no bele iha konsequensias grave avalia esposure ba udan boot , anin boot no bailoron naruk neé laos kompetensia husi estudu neé, nebe foka avaliasaun esposure ba riskus nebe klima graves komtribui, em ves de avalia exposure ba klima neé rasik. Liu-husi kombinasaun konhesemento lokal ho dadus sientífika, projeito nee fornese komprendesaun klean ida konaba ameasa ba infra-estrutura hosi riskus relasiona ho klima nebe fornese baze fundamental ka krítiku konaba planu asaun atu fasilita halo-diak resiliensia ida diak ba komunidade rural iha posto administrativos alvu iha Timor-Leste.

Glossario Termos Teknika no Abreviatouras

ALGIS	Agriculture and Land Use Geographical Information System *(SIstema Informasaun Geografika ba Agrikultura no Uza-rai)*
ALOS	Advanced Land Observing Satellite *(Satelite Avansado Observasaun Rai)*
AP	Administrative Post *(Posto Administrativo)*
ASTER	Advanced Space-borne Thermal Emission and Reflection Radiometer *(Espasiais Avasando ba ThermatikaEmisaun no Refleksaun Radiometer)*
CITL	CARE Internasional iha Timor-Leste
CVCA	Climate Vulnerability and Capacity Analysis *(Klimatika Vulnerabilidade no Analiza Kapasidade)*
DEM	Digital Elevation Model *(Digitais Moelo Elevasaun)*
GIS	Geographical Information System *(Sistema Informasaun Geografika)*
GPS	Global Positioning System *(Sistema Posizaun Global)*
JICS	Japanese International Cooperation System *(Sistema Internasional Cooperasaun Japoneza)*
MAF	Ministry of Agriculture and Fisheries *(Ministerio Agrikultura no Peskas)*
NASA	National Aeronautics and Space Administration *(Aeronautiko Nasional noEspaço Administrasaun)*
NASA JPL	National Aeronautics and Space Administration Jet Propulsion Laboratory *(Aeronautiko Nasional noEspaço Administrasaun Laboratoriu Propulsaun Jato)*
NDF	National Directorate for Forestry *(Dirasaun Nasional ba Floresta)*
SSRI	Small Scale Rural Infrastructure Project *(Projeito Infra-estrutura Eskala Kiik)*
Suco	An administrative area most usually translated as 'village'. Timor-Leste has 442 *sucos (Area Administrativa ida neebe bai-bain tradus hanesan "Village". Timor-Leste iha 442 Sucos)*
TMAP	Timor GIS and Mapping Solutions Lda *(GIS Timor no Solusaun Mapamento Lda)*
UNDP	United Nations Development Programme *(Programa Nasaun Unidas Dezemvolvimento)*
UNFPA	United Nations Population Fund (Fundus Populasaun Nasaun Unidas)
UTM	Universal Transverse Mercator (Kordena sistema no projeksaun mapa)

Tabela ba Konteudo sira

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1.0 Informasaun Jeral no Objetivu

PNUD, liu-husi projeito Infra-estrutura Rural Eskala Kiik, fo knar ba CARE Internasional iha Timor-Leste (CITL) atu halao Vulnerabilidade Klimatika no Analiza Kapasidade ida atu nunee iha komprendesaun diak ba vulnerabilidade husi komunidade balu konaba risko klimatika. Foka husi analiza nee mak vulnerabilidade husi komunidade, bazea ba oinsa sira hetan ka populasaun iha risko ba disaster (eksposizaun) no sira hetan impakto ida nee (susceptabilidade). Atu halao inisiativa nee involve tipos xaves analiza rua, premeiro mak CARE servisu ona ho komunidade konaba klimatika vulnerabilidade no analiza kapasidade (KVAK) hodi komprende exposizaun no susceptabilidade passado no prioridade neebe mak prekupa ba. Segundo analiza mak uza mapa, imajem no estatistika espasial neebe mak jenerado husi GIS, atu assessu ba eksposizaun ne'ebe mak existe no proposta infra-estrutura neebe assosiado risko ho klima no mudansa klimatika. Liu-husi halibur buat rua nee husi analiza kritikal ami bele ona dezemvolve dezenha klaru ida ba vulnerabilidade ba iha komunidade balu no implikasaun ba sira nia kapasidade ba resiliente.

Mapamento GIS nee hahu ona iha Fevreiro 2015, bainhira CARE kontratado kompania lokal Timor GIS no Mapamento solusaun (TMAP) atu dezemvolve mapa seriu ba risko no jenerado estatistika atu oferese komprendesaun diak ba distribuisaun no magnitude ba varias risko, no hanaruk ba iha risko hirak pertense iha mapa sira no estatistika, no apresenta resultado detailha mai-husi estudo ida nee hanesan seriu ba nivel Posto Administrtaivu sira nia perfil risko. Formasaun KVAK neebe halao ona simultaneousamente atu dokumentado konhesemento lokal no esperiensia husi aspektos diferente husi risko no vulnerabilidade ba mudansa klimatika, eksposizaun, sensitividade no resiliensia, husi prespektiva komunidade. Dokumentos relatorio nee metodolojia no prosesu husi formasaun KVAK no komparasaun husi resultados no faktos mai-husi KVAK ho estudo mapamento GIA atu nunee harí dezenha klaru ida oinsa risko nee iha kada Suco.

Infra-estrutura iha Timor-Leste sofre ona husi varias perigos klima-relasionado; rai-halai, inundasaun no erosaun solu entre hirak nee ho destrutivu potensia boot. Estragos ba infra-estrutura husi perigos mak hanesan kustu neebe boot tebes liu-liu lakon kapasidade produsaun; neebe disloka ema husi sira nia uma, rai no bisnis; ida nee isola komunidade husi eskolas, merkados, fasilidade saude no servisu apoio social; no ida nee uza rekurso limitado bainhira presiza estrutura atu hadiak no harí hikas ho frequentamente.

Razaun tamba saida Timor-Leste partikularmente vulneravel ba perigos hanesan rai-halai, inundasaun no erosaun parte rua bio-fisiko no umano. Ba iha parte bio-fisiko, Timor-Leste nia klima, topografia, geolojia, rai no vegetativo natural kovre kombina ho kria kondisaun susceptivel ba rai-halai, inundasaun no erosaun. Iha tempo balu tinan nia laran, udan monu rai volume boot ho penetrasaun udan neebe hakotu iha minute balu iha loron balu nia laran. Iha tempo seluk tinan ida nia laran, udan monu rai limitado, rai-maran liu no vegetativu neebe kovre hetan estragus. Nasaun nee foho mak barak-liu, karateristiku husi elevasaun ás no rai-lolon. Iha rai-lolon nee, rai-sira nee la kualidade, friavel, iha taho naton no konteudo organiko, no menus teb-tebes kahor hamutuk ho vegetasaun. Timor-Leste nia ambiente natural neebe mak adverso ona no risko inklinado no temperatura global neebe mak sae, prediksaun balu sujere eventus klima iha nasaun nee sei sai extremo liu tan, potensialmente aumenta eksposizaun ba perigos husi rai-halai, inundasaun no erosaun.

Husi prespektiva umano, fator social no ekonomiko konspira hodi halo ida nee defisil tebes ba komunidade barak iha Timor-Leste hodi jere ka adapta ba perigos klima relasionado. Hirak nee mak sempre subsistansia komunidade halo toós no sira depende liu ba nasaun nia baze rekurso natural ba sira nia sustenta moris. Sira hela iha area rural nebe remotas tamba tradisional nain-ba rai no ligasaun parentesko, no hakbiit sira ho rai no be sira presiza hodi halo toós. Sempre iha area hirak nee ho kondisaun fisiko neebe mak punitivu no ameasa husi rai-halai, inundasaun no erosaun solu neebe grave liu. Ho Timor-Leste nia populasaun nebe aumenta lalais-liu, infra-estrtura barak mak presiza uma-povo, transporte-sira haleu nasaun no tula

sasan no fornesemento ba sira. Iha konteudo populasaun aumenta, pratikas halo toós tradisional hodi resulta deflorestasaun boot, halo-at liu tan neebe eksposizaun perigos ba natural. Iha tempo neebe hanesan, ema barak mak obriga hela iha area marjinal iha neebe potensia ba rai-halai, inundasaun ka erosaun neebe relativamente ás.

Agrikultura iha Timor-Leste jenerado osan ituan-liu, rekursu atu harí uma, Estrada, Sistema fornesemento bé, Sistema irigasaun no infra-estrutura eskala kiik seluk neebe mak limitado. Nee bai-bain meios estrutura mak la forti atu tahan forsa natureza nian. Maske nunee komunidades iha meios atu hari padraun enjineria ás, dalaruma sira ladun informa ho diak konaba natureza, magnitude ka extensaun husi ameasa klima espesifiku ba lokasi diferente. Mapamento GIS neebe mak intende atu ajuda hodi-taka problema liu-husi fornese informasaun konaba tipo ida neebe mak risko ameasado partes diferente iha nasaun nee, grau ida neebe iha risko diferente area hasoru, no tipo infra-estrutura saida mak hetan risko husi rai-halai, inundasaun no erosaun solu.

Iha tempo neebe hanesan ho TMAP halao ona analiza GIS no mapa preparado atu hatudu risko relativa neebe assosiado ho rai-halai, inundasaun no erosaun, CARE kontratado ho membro komunidade rural atu hetan ideas husi nia prespektiva konaba eksposizaun ba iha perigos diferente. Metas mak atu apresenta responsabilidade ba planeamento no infra-estrutura rural eskala kiik ho teknika neebe diak no dadus sientifiko disponivel, hamutuk husi ideas neebe hetan husi matenek lokal no komprendesaun lokal, atu ajuda sira informa diak ba decizaun, saida mak hari no oinsa hari. Hadiak kualidade no liu husi dalan ba dezemvolvemento infra-estrutura futuru, objeitivu nee atu apoio hodi haforsa resiliensia komunidade hodi hamrik hasoru ameasa klima relasionado, ba parte kondisaun agora no klima ida neebe mak atu estraga iha futuru.

Relatorio nee fahe ba iha sesaun xave hitu: objeitivu jeral husi projeito; metodolojia GIS no resultado; proseso KVAK, metodolojia no resultado; triangulasaun parte rua husi limitasaun dadus no aprendesajem; rekomendasaun no konkluzaun.

Objeitivu primiaria ba analiza espasial no mapamento hodi produs atu estabelesido mapa hatudo variasaun iha nivel risko diferente saida-deit husi perigos klima relasionado. Ba supplementa mapa sira nee, hanesan bi-produto ida ba analiza espasial neebe mak sira jenerado, estatistika sei jenerado quantifika ba lokasaun sira iha nivel diferente ba risko iha area administrativu, no hatudu varias infra-estrutra hira mak existe hodi konsidera iha risko rai-halai, inundasaun no erosaun. Mapa hirak nee mak atu uza no ajuda identifika “pontu prinsipal’ fatin sira neebe partikularmente inklinado ba perigos klima-relasionado – iha neebe intervensaun futuru bele sai objeito. Resultado mai husi mapamento mak intende variadade audiensia diferente no ekipa uza-nain sira no ikus nee inkluindo eskala mapa luan neebe printado, versaun elektronika ba mapa sira neebe hanesan, dadus GIS komposto husi uza dadus espasial no jenerado liu-husi estudo, Google-Earth kamada kompativel ba risko dadus no lokalizasaun infra-estrutura. Kursu formasaun badak atu ajuda membro familiariza ba ekipa PNUD-SSRI ho mapa no resultado seluk neebe inkluindo mos iha espaco ida nee.

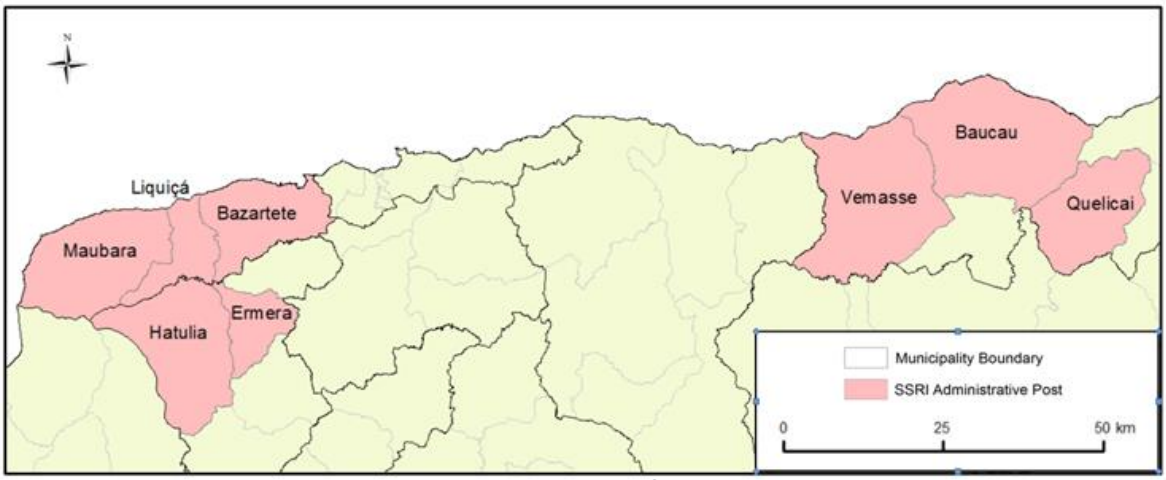
Objeitivu primaria husi KVAK nee mak atu assessu resiliensia komunidade ba mudansa klimatika, no risko saida mak hasoru sira nia infra-estrutura rural eskala kiik. Ida nee importante laos deit atu influensia komunidade halo sira nia decizaun hodi nunee hetan dezenha klaru ba saida mak sai sira nia prioritiza. Enkuanto mapamento GIS foka unikamente ba iha: rai-halai, inundasaun no erosaun, KVAK primitido ba komunidade atu hato’o sira nia prekupasaun konaba akontesemnto natural seluk mak hanesan inundasaun no bai-loro. KVAK nee hatudu mos ideas ida ba iha saida mak sai prioridade ba komunidade hetan konaba infra-estrutura differente. Ami espera uma sira, eskola, no klinika bele sai prioridade ás no presiza liu halo protesaun; KVAK nee hatudo ba ita komunidade balu la konsidera eskola ida hodi fo prioridade. Nee hamosu perguntas interesante; karik bele komunidade hare sira nia risko prinsipal no oinsa ida nee liga ba sira nia rain.

Finalmente, relatorio nee tahu hamutuk buat importante rua husi analiza ba iha idea jeral neebe premite ita atu komprende diak konaba nivel, impaktos no realidade husi risko iha kada komunidade no hahu hodi esplora area posivel neebe requere atensaun partikular ka intervensaun iha futuru. Resultado informasaun konaba risko no vulnerabilidade hodi habilita barak liu aproximasaun informa ba planeamento kontinua no intervensaun iha nivel komunidade.

2.0 Analiza Espasial no Mapamento

2.1 Ambito ba estudo ne'e

Extensaun geografika ba area estudo mak eventualmente defini tuir area husi posto administrativo walu iha neebe PNUD – SSRI oras nee dadaun servisu ba, hanaran Baucau, Quelicai, Vemasse, Ermera, Hatulia, Bazartete, Liquica no Maubara. Mapa 1 hatudu iha extensaun ba iha area estudo, ho PA 3 iha Municipio Baucau, PA 2 iha Municipio Ermera no PA 3 iha Municipio Liquica. Ba PA 8 komposto ho total suco 79 no sira okupa rai hektar 186,548, neebe mak 12.5% area total Timor-Leste nia rai hektar 1,492,000 (Direitor Jeral ba Estatistika 2013).



MAPA- 2. Ekstensaun Geografika ba Area Estudo

Razaun konfinando ba peskiza no analiza to PA 8 nee hodi ativado ba dezemvolvimento detailada dezenha husi ameasa lokal ba infra-estrutura, no iha tempo neebe hanesan hatudu katak kontekstu nee luan liu, padroens regionais. Nee premite ita atu analiza buat ruma diak liu inves husi fotografia jeral husi klima relasionado risko iha nivel Municipio. PA hirak nee selesionado tamba sira kapaás ba proposta ida nee, oferese oportunidade detailhado, nivel fatin estudos no eskala boot, informasaun jeral husi Municipio no Nasional.

Iha numero perigos no ameasa barak husi infra-estrutura assosiado ho klima no klimatika no ida nee nesesaria atu halo estudo ho selektivu. Bazea ba CARE nia komentarius husi komunidade ba tinan hirak nee rai-halai, inundasaun no erosaun solu mak jeralmente konsidera pertense ba ameasa seriu ba infra-estrutura entaun perigos tolu nee sai hanesan baze ba estudo ida nee. Iha diferente tipo inundasaun, rai-halai no erosaun, entaun entres katogorias perigos tolu nee presiza halo seletivu, ba deskrisaun kompleta ba tipos husi perigos nee bele hare anexo 1.

Atu assessu eksposizaun relative husi lokalizasaun diferente ba risko neebe identifkado analiza tekniko detailhada ba dadus especifiko, kriteria no indice neebe mak uzado. Nee inkluindo analiza ba dadus neebe existe, analiza espasial, analiza estatistika no servisu iha tereno nudar metodolojia kompleta iha neebe mos inkulindo iha anekso 1.

2.2 Resultados

Resultado primaria mai husi area estudo mapamento neebe tahu iha risko mapas 24, baze dadus elektroniko husi risko estatistiko no dadus GIS, no relatorio nee dokumentasaun uza abordajem tekniku no resultado hirak nee alkansado.

Mapa sira – risko mapa 24 hatudu area iha varias grau ba risko inundasaun, rai-halai no erosaun iha kada posto administrativu neebe mak SSRI servisu ba. Mapa 24 neebe mak publikado iha formatos oi-oin, foti iha konsiderasaun katak presiza alvu husi audiensia oi-oin. Mapa dezenha atu print iha medida A1 (594mm x 841mm), konjunta kompleta rua neebe mak printado ho kualidade ás ho medida ida nee. Iha formatu ida nee mapa sira pretendido atu uza iha planeamento no enkontro jestaun, espesialmente wainhira iha numero ekipa boot husi ema neebe mak involvido. Sira presiza tebes ba uza iha eskritoriu kampo no area remotas iha neebe mak komputador ho assessu internet eskaze tebes. Mapa sira neebe hanesan mos print iha medida A3 iha seksaun 4 husi relatoriu nee. Sira konveniente liu iha eskala ida nee, maibe konveniente nee mai ho preso, maske mapa hirak nee ho deit legivel mak difikulta atu hare detailha lubuk ida iha eskala kiik ida nee.

Versaun elektronika husi mapa nee entrega iha formatu rua PDF no JPG. Mapa PDF nee hanesan resolusaun-ás partikularmente util tebes tamba sira ho kamada no bainhira loke ho Adobe Acrobat Software, sira bele utiliza ho forte-liu, feramento planeamento flexivel. Acrobat premite uza-nain sira hodi bele hare kamada diferente husi dadus taka no loke no hare mos elementus mapa sira diferente ho loke no taka (lendas, seta norte, hatama mapa sira, eskala bara, titulo bloku, nst). Funsaun panoramika no zoom mos disponivel, hodi halo posivel ba uza-nain sira atu foka ba iha area partikular ida husi mapa nee no seleksi ho deit kamada husi dadus neebe mak sira interesado atu mostrar. Desde mapa publisado iha PDF ho resolusaun-ás, rekurso sira nee tomak, label no elementos grafika diak nafatin, maske wainhira zoom (haboot) iha eskala neebe boot liu. Nee halo posivel tebes hodi extrato detailhado tomak disponivel iha mapa.

TMAP halao ona formasaun kursu badak hodi introdus ba membros ekipa SSRI ba iha mapa sira PDF. Durante kursu nee, partisipante sira experimentado ho funsaun navigasional aplikasaun Acrobat no explora uza diferente iha neebe mapa iha formata ida nee bele kolokadu. Ezemplu husi exersiziu instrutor lidera ekipa atraves husi numero eskola sira iha kada suco iha posto administrativu partikular ida, identifika fasilidades saude sira tomak iha area risko mediu no ás ba inundasaun no selesaun sessaun husi Estrada neebe liu-ba-mai husi area sira ho risko ás ba rai-halai.

Iha format JPG mapa hirak nee ho flexivel naton, no uza-nain sira lakon abilidade atu hare kamada sira no elementos mapa loke no taka. Zoom (haboot) sei iha posivel, no resolusaun diak nafatin. Valor prinsipal ba JPG mapa sei print fali kopia balu iha medida A1, hodi distribui liu-husi internet, no apresenta iha dokumentos no apresentasaun.

Baze dadus GIS – dadus espasial mak jenerado mapa entrega ba iha formatus elektronika – ida kompativel ho ESRI GIS software (shapefiles) no kompativel seluk ho Google Earth (KMZ files). Assesu ba konjunta dadus sei premite uza-nain sira inkoraporado tahu kamada sira, dadus infra-estrutra no dadus referensia ba iha sira nia applikasaun rasik no analiza. Ida sei bele premite sira atu explora no hetan komprendesaun diak ba dadus risko – kamada sira hatudu kategoria sira diferente husi eksposizaun ba inundasaun, rai-halai no risko erosaun.

Dadus GIS, hanesan deit husi jenerados mapa sira, tiru-rapido parte diskreto husi rai nia superficie momento iha tempo ida maibe ita mos rekonhese katak buat sira nee muda-an lalais liu, iha parte tempo no espaco. Nee la signifika katak sira la util hanesan dokumento historiku no mudansa detesaun no monitorizasaun neebe mak komum rua uza ba tempo seriu dadus GIS. Posibilidade seluk bele hare

sientifiku no analiza GIS konaba ida nee, no ida nee rasoavel ituan hodi assume katak analiza sira seluk mos bele hare ba iha dadus neebe hanesan mai husi prespektiva diferente. Hirak nee dala ruma interesado iha klasfikasaun ba ideas kamada sira, introdus ba ideas foun ba dadus konjunta, ka atribuindo diferente valor risko no pezu husi dadus nee atu kalibra fila fali modelu nee. Iha momento nee, resultado husi PNUD SSRI risko estudo mapamento bele sai ideas ba futuru estudos iha neebe ho esperansa boot mai tuir komprendesaun ba vulnerabilidade ba klima no perigos klimatika relasionado.

Uza-nain toman arkivos KMZ neebe mak sempre luan no audience jeral liu tan entre komunidade Google Earth. Maske dadus arkivos KMZ la barak funsionalidade ba dadus uzado iha ambiente GIS, ida nee nafatin forsa rekursu informasaun. Ida nee vantajem boot neebe presiza abilidade espesial balu no konhesemento tekniku naton atu util ho diak. Membro ekipa SSRI involvido iha aktividade kampo mak dalaruma atu hetan dadus KMZ partikularmente util. sobre posizaun poligons hatudu area sira ba risko inundasaun, rai-halai no erosaun iha imajem satellite iha Google Earth sei permite uza-nain sira atu imediatamente transmite buat ruma neebe abostraku kamada risko sira ho kondisaun kampo neebe mak sira hatene diak. Poligon mean nee indika risko ás ba rai-halai katak lojika tebes uainhira ita halo klean, vegetasaun rai-lolo neebe eskazu liu iha imajem neebe hatudu. Hanesan-liu, polygon hatudu area sira inundasaun inklinado hare katak real liu uainhira imajem sira kraik klaru liu hatudu rai frequentamente inundado ho be husi mota neebe besik.

Estatistiko Risko – Estatistiko risko neebe mak apresenta iha tabela sumariu relatoriu ida nee. Tabela walu husi kada Posto Administrativu prefill risko oferese detailhado registro numerikado husi numerous neebe iha mapa kotuk. Tabela oferese estatistiko tuir mai ba suco hotu-hotu nia kaptasaun iha kada Posto Administrativu Walu:

- Naran no area total, iha hektares
- Numero total uma sira, eskolas no fasilidade saude
- Total naruk Estrada, iha kilometros
- Numero ba hektares no persentajem husi area total hetan risko inundasaun
- Numero no persentajem ba uma sira, eskola no fasilidade saude iha area inundasaun sira inklinado
- Naruk no porsento ba Estrada iha area inundasaun sira inklinado
- Numero no persentajem ba uma, eskola no fasilidade saude sira neebe laiha risko naton, mediu, no ás ba rai-halai
- Naruk no persentajem ba Estrada neebe laiha risko naton, mediu no ás ba rai-halai
- Numero no persentajem ba uma, eskola no fasilidade saude sira hetan risko naton, mediu no ás ba erosaun
- Naruk no persentajem ba Estrada nebe hetan risko naton, mediu no ás ba erosaun

Tuir estatistika neebe apresenta ona nee hanesan dalan ida 'akondosionamento' resultado ba estudo ida nee. Uzo kaptasaun suco hanesan unidade relatoriu neebe mak deside ona tamba importansia ba ligasaun rai-ás-rai-tetuk ba risko avaliasaun perigos natural husi natureza ida nee. Estatistiku nee kalkulado no apresenta ona ba suco deit ka ba kaptasaun deit, maibe ida nee sei subar entre administrativo no rai fiziko balu. Alternativamente, posto administrativu no bareira kaptasaun iha ona intersesaun, produz konjunto foun ida ba rekurso neebe hanaran 'PA-Kaptasaun' no jenerado estatistiku risko ba hirak nee. Maibe, halo nee sei kauza ba ita atu lakon detailha barak no variasaun lokal iha kaptasaun suco – nivel estatistiko. Agregando hotu husi detailha ba iha jeral mak fasil liu atu halo duke disagregasaun kraik husi jeral ba iha detailha. Liu husi kontravensaun dadus nee no apresenta detailhado estatistiku risko iha nivel kaptasaun suco, nee oportunidade neebe disponivel ba uza-nain sira atu agregando hamutuk no sumariza ba suco, posto administrativu no kaptasaun. Ba hirak neebe hakarak atu halo, dadus iha estatistiku nia kotuk mos disponivel iha planilhas excel, neebe mak iha vantajem hodi autoriza uza-nain sira atu kategoria, seleksi, sumariza no pakote ba numerous atu hetan sira nia presiza.

2.3 Vizaun Jeral Risko iha Nivel Posto Administrativu

Inundasaun

Ba rai hektar 186,548 iha estudo area, kuaze hektar 10,000 neebe mak konsidera susceptivel ba inundasaun. Baucau, Vemasse, Hatulia no Maubara mak PA sira iha risko. Entre iha 4 PA sira nee, area sira neebe iha risko boot mak iha kaptasaun ba mota lubuk ida iha Timor-Leste nian: Mota Seiçal iha PA Baucau, Mota Vemasse iha PA Vemasse, no Mota Lois iha PA Hatulia no Maubara nian. Mota hirak nee pertense ameasa boot husi inundasaun tamba sira nia kaptasaun boot, sira lori volume be durante eventos udan no extensaun ba periodu humidos, no sira iha luan liu, inundasaun be suli habelar planice too iha sira nia fatin ho nivel badak. Inundasaun planice hirak nee halo agrikula diak liu ba buat rua kuda ai-han no du'ut ba animal, no sira atraktivu fatin atu hela ba. Nee deskovre numero substansial ba uma sira no estrutura sira seluk atu estraga husi inundasaun. Bazea ba kriteria neebe uza husi estudo nee ba uma 1,402, eskola 10, fasilidade saude 4 no Estrada km 45 mak iha risko.

Iha Quelicai, Ermera, Bazartete no Liquiça, relativamente area sira neebe kiik mak iha signifikante risko ba inundasaun.

Municipality	Administrative Post	Land Area		
		Total	In Flood Risk Zone	
			Hectares	%
Baucau	Baucau	36,962	2,178	5.9%
	Quelicai	20,594	94	0.5%
	Vemasse	37,395	2,231	6.0%
Ermera	Ermera	9,338	244	2.6%
	Hatulia	27,350	2,251	8.2%
Liquiçá	Bazartete	18,693	198	1.1%
	Liquiçá	9,822	347	3.5%
	Maubara	26,394	2,153	8.2%
	SSRI APs	186,548	9,696	5.2%

Municipality	Administrative Post	Houses			Schools		
		Total	In Flood Risk Zone		Total	In Flood Risk Zone	
			Number	%		Number	%
Baucau	Baucau	7,390	296	4.0%	47	2	4%
	Quelicai	4,772	1	0.0%	36	0	0%
	Vemasse	2,159	456	21.1%	16	5	31%
Ermera	Ermera	5,618	362	6.4%	26	4	15%
	Hatulia	5,958	105	1.8%	28	0	0%
Liquiçá	Bazartete	3,869	238	6.2%	25	1	4%
	Liquiçá	3,627	65	1.8%	18	1	6%
	Maubara	4,003	412	10.3%	20	3	15%
	SSRI APs	37,396	1,935	5.2%	216	16	7%

Municipality	Administrative Post	Health Facilities			Roads		
		Total	In Flood Risk Zone		Total	In Flood Risk Zone	
			Number	%		Km	%
Baucau	Baucau	8	0	0%	169	8.2	4.9%
	Quelicai	5	0	0%	92	0.7	0.7%
	Vemasse	6	2	33%	47	11.4	24.4%
Ermera	Ermera	4	1	25%	93	4.8	5.1%
	Hatulia	9	0	0%	164	9	5.5%
Liquiçá	Bazartete	7	0	0%	119	7.1	6.0%
	Liquiçá	7	0	0%	93	2	1.8%
	Maubara	7	2	29%	116	16	13.9%
	SSRI APs	53	5	9%	893	59	6.6%

Tabela 1. Summariu Estatisko ba Risko Inundasaun iha Posto Administrativa sira

Rai-halai

Bazea ba kriteria neebe uza iha estudo ida nee, iha neeba potensial ba rai-halai atu mosu iha rai hektares 14,000 balu, representa 7.5% husi area total 8 Pas SSRI. Husi total hektares 5,471 (2.9%) mak konsidera iha risko naton, hektar 5,538 (3.0%) iha risko mediu no hektar 2,926 (1.6%) iha risko ás.

Area risko neebe mak konsentrado iha PA Quelicai, no espesialmente extremu as liu, klean, laiha-liu vegetasaun iha rai-lolon Matebian massif iha parte leste. Rai-halai mak extensive iha PA 3 Municipio Liquiça, Bazartete, Liquica no Maubara – maibe jeralmente nivel kiik liu kompara iha parte leste Quelicai. PA Maubara iha area neebe boot husi risko balu mai-husi rai-halai (3,681 hektar), PA Liquiça iha porsaun neebe mak as iha area rai ho risko (16.4%), no Quelicai iha area rai boot ba risko as (829 hektar). Diferensia iha natureza no extensaun ba ameasa neebe mak esplika husi natureza kontrastante husi terreno, iha neebe extremu nee naton iha Municipio Liquica kompara ba iha Quelicai. Elevasaun nee fator importante ida – Massif Matebian nee as liu duke foho sira iha Municipio Liquiça. Certamente iha neeba risko ba rai-halai, iha parte barak husi Liquiça, maibe foho sira nee naton deit, rai-lolon mos klean naton no vegetasaun kovre atu diak liu, ho ida nee ameasa mosu husi rai-halai ho menus grave kompara iha Quelicai.

Rai-halai mos ameasa parte iha Municipio Ermera nia balu, espesialmente iha PA Hatulia. Jeralmente, inklinado ho rai-halai iha area sira nee kiik liu no ladun luan iha nee kompara sira iha PA Quelicai no Liquiça, maibe nafatin Hatulia iha fileiras 4 iha area susceptivel ba rai-halai (tabela 5). Baucau no Vemasse mak relativamente tetuk, PA altitude badak no area ruma neebe mak inklinado ba rai-halai jeralmente kiik, laiha populasaun no laiha konstrusaun.

Maske nunee iha PA 8 SSRI nian iha neebe potensialmente mosu rai-halai kovre area luan lubuk, kuaze area hirak nee laiha infra-estrutura neebe konstrui iha oras nee dau-daun. Tipo infras-estrutura 4 konsiderando iha estudo nee, uma privada sira kuaze atu lokaliza iha area inklinado rai-halai, maibe nafatin deit 1,104 (3%) husi uma 37,396 iha area estudo nee mak konsiderando iha risko ba rai-halai. Eskola rua deit mak potensialmente risko-sitiu, ba iha area 53 nian mak laiha hospitais, klinika no posto saude mak iha risko. Estrada existe sira mos jeralmente Evita liu husi area neebe kondisaun bele kauza rai-halai, ho deit km 35 (4%) husi total naruk 893km neebe mak konsiderando hetan risko, no hirak nee, 6km deit mak iha area risko as. Klaru, estragus rai-halai somente sesaun badak 1 husi Estrada bele afeita kilometros barak husi Estrada tantu parte dook husi Estrada, kauza grave distrupsaun ba iha transporte no komunikasaun. Nee signifika katak, maske sesaun husi Estrada nee rede servisu hetan ameasa direita mak badak liu, faktos katak parte sira husi Estrada balu bele passa liu iha area inklinado rai-halai signifika katak sesaun luan husi rede servisu neebe mak hasoru risko indireita.

Maske rai-halai mak problema seriu ida iha parte PA husi SSRI, ida nee importante laos atu lakon vista ba faktos nee, ba estudo area sira hotu, nee laiha potensia ba rai-halai. Liu 90% husi area rai iha rai-lolon neebe menus 25° no infra-estrutura balu iha area neebe seguru ba rai-halai.

Land Area		Area of Land in Each Landslide Risk Category							
		No Risk		Low Risk		Medium Risk		High Risk	
Administrative Post	Total Hectares	Hectares	%	Hectares	%	Hectares	%	Hectares	%
Baucau	36,962	36,626	99.1%	96	0.3%	183	0.5%	56	0.2%
Quelicai	20,594	18,295	88.8%	582	2.8%	888	4.3%	829	4.0%
Vemasse	37,395	36,339	97.2%	339	0.9%	510	1.4%	207	0.6%
Ermera	9,338	8,729	93.5%	176	1.9%	274	2.9%	159	1.7%
Hatulia	27,350	25,498	93.2%	673	2.5%	663	2.4%	516	1.9%
Bazartete	18,693	16,203	86.7%	1,156	6.2%	935	5.0%	399	2.1%
Liquiçá	9,822	8,209	83.6%	851	8.7%	471	4.8%	291	3.0%
Maubara	26,394	22,713	86.1%	1,598	6.1%	1,614	6.1%	469	1.8%
SSRI APs	**186,548**	**172,613**	**92.5%**	**5,471**	**2.9%**	**5,538**	**3.0%**	**2,926**	**1.6%**

Houses		Houses in Each Landslide Risk Category							
		No Risk		Low Risk		Medium Risk		High Risk	
Administrative Post	Total No. of Houses	Number	%	Number	%	Number	%	Number	%
Baucau	7,390	7,354	99.5%	11	0.1%	18	0.2%	7	0.1%
Quelicai	4,772	4,628	97.0%	39	0.8%	61	1.3%	44	0.9%
Vemasse	2,159	2,157	99.9%	0	0.0%	1	0.0%	1	0.0%
Ermera	5,618	5,537	98.6%	32	0.6%	25	0.4%	24	0.4%
Hatulia	5,958	5,782	97.0%	71	1.2%	63	1.1%	42	0.7%
Bazartete	3,869	3,664	94.7%	71	1.8%	56	1.4%	78	2.0%
Liquiçá	3,627	3,340	92.1%	158	4.4%	60	1.7%	69	1.9%
Maubara	4,003	3,830	95.7%	51	1.3%	73	1.8%	49	1.2%
SSRI APs	**37,396**	**36,292**	**97.0%**	**433**	**1.2%**	**357**	**1.0%**	**314**	**0.8%**

Schools		Schools in Each Landslide Risk Category							
		No Risk		Low Risk		Medium Risk		High Risk	
Administrative Post	Total No. of Schools	Number	%	Number	%	Number	%	Number	%
Baucau	47	47	100%	0	0%	0	0%	0	0%
Quelicai	36	35	97%	1	3%	0	0%	0	0%
Vemasse	16	16	100%	0	0%	0	0%	0	0%
Ermera	26	26	100%	0	0%	0	0%	0	0%
Hatulia	28	27	96%	0	0%	1	4%	0	0%
Bazartete	25	25	100%	0	0%	0	0%	0	0%
Liquiçá	18	18	100%	0	0%	0	0%	0	0%
Maubara	20	20	100%	0	0%	0	0%	0	0%
SSRI APs	**216**	**214**	**99.1%**	**1**	**0.5%**	**1**	**0.5%**	**0**	**0.0%**

Health Facilities		Health Facilities in Each Landslide Risk Category							
		No Risk		Low Risk		Medium Risk		High Risk	
Administrative Post	Total No. of Health Facilities	Number	%	Number	%	Number	%	Number	%
Baucau	8	8	100%	0	0%	0	0%	0	0%
Quelicai	5	5	100%	0	0%	0	0%	0	0%
Vemasse	6	6	100%	0	0%	0	0%	0	0%
Ermera	4	4	100%	0	0%	0	0%	0	0%
Hatulia	9	9	100%	0	0%	0	0%	0	0%
Bazartete	7	7	100%	0	0%	0	0%	0	0%
Liquiçá	7	7	100%	0	0%	0	0%	0	0%
Maubara	7	7	100%	0	0%	0	0%	0	0%
SSRI APs	**53**	**53**	**100%**	**0**	**0%**	**0**	**0%**	**0**	**0%**

Roads	Total Length of Roads (Km)	Length of Road in Each Landslide Risk Category							
		No Risk		Low Risk		Medium Risk		High Risk	
Administrative Post		Km	%	Km	%	Km	%	Km	%
Baucau	169.0	167.7	99.3%	0.4	0.2%	0.6	0.3%	0.3	0.2%
Quelicai	92.2	88.9	96.4%	1.3	1.4%	1.2	1.3%	0.9	1.0%
Vemasse	46.8	46.7	99.8%	0.0	0.0%	0.1	0.2%	0.0	0.0%
Ermera	93.0	90.3	97.0%	1.3	1.3%	1.1	1.2%	0.4	0.4%
Hatulia	164.4	159.4	97.0%	2.7	1.6%	1.7	1.1%	0.6	0.4%
Bazartete	119.1	111.9	94.0%	3.5	2.9%	2.1	1.8%	1.5	1.3%
Liquiçá	93.1	86.7	93.1%	3.4	3.6%	2.1	2.2%	1.0	1.1%
Maubara	115.6	106.2	91.9%	2.9	2.5%	4.8	4.2%	1.6	1.4%
SSRI APs	**893.3**	**857.9**	**96.0%**	**15.4**	**1.7%**	**13.7**	**1.5%**	**6.3**	**0.7%**

Tabela 2. Summariu Estatistiko ba Rai-halai iha Posto Administrativo sira

Erosaun

Bazea ba persentajem ba area rai, Ermera (49%), Bazartete (42%) no Liquiçá (39%) PA hirak nee iha potensia problema boot asosiado ho erosaun. Em termus area, Maubara teritoriu ida neebe kategoria iha risko as ho hektar 8,068, tuir Bazartete (7,929 ha) no Hatulia (7,647 ha). Quelicai iha substansial risko erosaun iha regiaun matebian – parte neebe hanesan ba iha risko ba rai-halai maibe kuaze iha teritoriu ida-idak nee naton, klean ituan no vegetasaun diak, nee monu iha risko kategoria mediu. Baucau (25,191ha; 68%) no Vemasse (21,518 ha; 58%) PA sira nee predominamente risko kiik ba erosaun em termus ba parte rua hotu ba persentajem husi area rai.

Interesante tebes, risko erosaun solu neebe mak hetan jeralmente as iha PA 5 parte osidental kompara iha PA parte leste iha municipio Baucau. Ida nee esperado tamba, Baucau, Vemasse konsiderando luan liu ba partes husi Quelicai neebe mak relativamente tetuk no altitude badak, no udan monu rai annual neebe mak kiik, husi PA sira parte osidental iha municipio Liquica no Ermera mak karaterizado husi foho as ho rai-lolon naruk no eskazo, friavel solu no sira simu udan monu rai barak liu.

Relasionamento entre distribuisaun ba infra-estrutura no risko erosaun mak kompleksu. Jeralmente ema koko atu Evita konstrui uma, eskola sira no fasilidade saude iha area inklinado ba rai-halai no inundasaun, risko asosiado ho erosaun solu mak viavel naton no katastrofiku. Ema la konsidera erosaun solu sai hanesan direta ka perigoso no ameasa ida hanesan rai-halai no inundasaun iha neebe klaru nee laos. Sira sempre hela no konstrui iha area sira ho potensia erosaun as, aumenta problema liu husi hamos vegetasaun husi rai, konstrui iha rai-lolon naruk no du'ut ba animal. Atividade sira hanesan nee frequentamente fila ba risko potensia ba iha solu neebe lakon atual. Resultado husi estudo nee mosu atu apoio idea ida nee.

Atraves ba totalidade area estudo, ho deit um quarto husi infra-estrutura mak konstrui iha rai konsiderando risko kiik ba erosaun. Ida nee los ba kategoria 4 nee hotu – uma sira (26%), eskola sira (28%), fasilidade saude (30%) no Estrada (27%). Aproximadamente 50% husi estruturas neebe konstrui iha rai risko mediu. Media hirak nee atraves PA 8 sira SSRI ho simulasaun substansial variasaun entre iha parte PA rua no kategoria infra-estrutura, ho PA Ermera sai tiha notavel. Ermera mosu hanesan dook husi problema boot tebes, ho serka metade ba area rai no metade husi nee estrutura iha rai-leten neebe iha potensia boot ba erosaun solu. Iha Baucau no Vemasse, no iha sorin seluk, infra-estrutura neebe mak konstrui iha rai leten iha neebe rai nee konsiderando erosaun neebe mak ho ameasa seriu.

Nee importante hodi nota katak erosaun solu jeralmente luan liu, impaktus habelar barak liu fali rai-halai no inundasaun. Estragus kauza ba infra-estrutura mai husi rai-halai no inundasaun, ba extensaun boot, limitadu iha sitiu ba eventu atual no vicinidade imediata. Klaru, Estrada ka centru saude estragus husi rai-halai ka inundasaun bele kauza problema ba komunidade atraves ba iha area luan, maibe estragus direta ba iha infra-estrutura rasik nee barak liu lokalizado. Ho erosaun solu, maibe impakto iha diferente neebe bele esperiensia parte lokalmente no remotamente. Iha sitiu ba erosaun atual, bele ituan ka laiha impakto kurtu prazu ba iha infra-estrutura, maibe komunidade kuda-ai horis bele sofre iha tempu naruk husi fertilidade no ai-han neebe kolheta sei naton. Komunidade no infra-estrutura iha laletek okos (tetuk) sempre hetan sofre husi estragus, expensivu no konsekuensia tempo naruk ba erosaun mosu iha risko as ba iha foho. Foho no rai tetuk relasaun mak diskote iha detailhada iha sesaun tuir mai, iha neebe identifika husi kaptasaun suco neebe hetan risko husi ameasa diferente iha kada PA 8 SSRI.

Land Area

Municipality	Administrative Post	Total Hectares	Area of Land in Each Erosion Risk Category					
			Low Risk		Medium Risk		High Risk	
			Hectares	%	Hectares	%	Hectares	%
Baucau	Baucau	36,962	25,191	68%	10,589	29%	1,182	3%
	Quelicai	20,594	2,753	13%	12,162	59%	5,680	28%
	Vemasse	37,395	21,518	58%	13,096	35%	2,780	7%
Ermera	Ermera	9,338	434	5%	4,371	47%	4,533	49%
	Hatulia	27,350	5,403	20%	14,301	52%	7,647	28%
Liquiçá	Bazartete	18,693	1,375	7%	9,389	50%	7,929	42%
	Liquiçá	9,822	901	9%	5,090	52%	3,831	39%
	Maubara	26,394	3,686	14%	14,640	55%	8,068	31%
		186,548	**61,261**	**33%**	**83,638**	**45%**	**41,649**	**22%**

Houses

Municipality	Administrative Post	Total No. of Houses	Houses in Each Erosion Risk Category					
			Low Risk		Medium Risk		High Risk	
			Number	%	Number	%	Number	%
Baucau	Baucau	7,390	5,560	75%	1,607	22%	223	3%
	Quelicai	4,772	870	18%	2,851	60%	1,051	22%
	Vemasse	2,159	1,144	53%	967	45%	48	2%
Ermera	Ermera	5,618	351	6%	2,542	45%	2,725	49%
	Hatulia	5,958	913	15%	2,772	47%	2,273	38%
Liquiçá	Bazartete	3,869	305	8%	2,290	59%	1,274	33%
	Liquiçá	3,627	315	9%	2,118	58%	1,194	33%
	Maubara	4,003	354	9%	2,595	65%	1,054	26%
		37,396	**9,812**	**26%**	**17,742**	**47%**	**9,842**	**26%**

Schools

Municipality	Administrative Post	Total No. of Schools	Schools in Each Erosion Risk Category					
			Low Risk		Medium Risk		High Risk	
			Number	%	Number	%	Number	%
Baucau	Baucau	47	36	77%	11	23%	0	0%
	Quelicai	36	6	17%	23	64%	7	19%
	Vemasse	16	8	50%	8	50%	0	0%
Ermera	Ermera	26	0	0%	11	42%	15	58%
	Hatulia	28	2	7%	14	50%	12	43%
Liquiçá	Bazartete	25	4	16%	12	48%	9	36%
	Liquiçá	18	2	11%	11	61%	5	28%
	Maubara	20	3	15%	12	60%	5	25%
		216	**61**	**28%**	**102**	**47%**	**53**	**25%**

Health Facilities

Municipality	Administrative Post	Total No. of Health Facilities	Health Facilities in Each Erosion Risk Category					
			Low Risk		Medium Risk		High Risk	
			Number	%	Number	%	Number	%
Baucau	Baucau	8	6	75%	2	25%	0	0%
	Quelicai	5	1	20%	3	60%	1	20%
	Vemasse	6	3	50%	3	50%	0	0%
Ermera	Ermera	4	0	0%	2	50%	2	50%
	Hatulia	9	3	33%	3	33%	3	33%
Liquiçá	Bazartete	7	1	14%	4	57%	2	29%
	Liquiçá	7	1	14%	1	14%	5	71%
	Maubara	7	1	14%	5	71%	1	14%
		53	**16**	**30.2%**	**23**	**43.4%**	**14**	**26.4%**

Roads

Municipality	Administrative Post	Total Length of Road (km)	Length of Road in Each Erosion Risk Category					
			Low Risk		Medium Risk		High Risk	
			Km	%	Km	%	Km	%
Baucau	Baucau	169.0	128.0	76%	37.2	22%	3.7	2%
	Quelicai	92.2	12.6	14%	53.9	58%	25.6	28%
	Vemasse	46.8	20.6	44%	24.5	52%	1.6	3%
Ermera	Ermera	93.0	5.8	6%	44.3	48%	42.9	46%
	Hatulia	164.4	34.9	21%	85.6	52%	43.9	27%
Liquiçá	Bazartete	119.1	16.1	14%	70.7	59%	32.2	27%
	Liquiçá	93.1	10.1	11%	59.0	63%	24.0	26%
	Maubara	115.6	14.2	12%	72.3	63%	29.0	25%
		893.3	**242.6**	**27.2%**	**447.6**	**50.1%**	**203.1**	**22.7%**

Tabela 3. Summariu Estatistiko ba Erosaun iha Posto Administrativo Sira

2. 4 Perfil Risko

Sesaun nee aprezenta observasaun detilhada liu konaba ameasa ba infra-estrutura husi perigos relasionado-klima iha kada PA 8 SSRI. Materia neebe mak aprezentado husi area administrativo tamba nee mak estrutura dezemvolvimento komunidade Timor-Leste nian neebe familiar ho, no ida nee mak iha enkuadramento programa dezemvolvimento mak pleaneado, finansiado, implementado no monitorizado. Relasaun ho perigos natural hanesan rai-halai, inundasaun no erosaun solu, maske, baliza administrativo iha limitado relevansia, desde fenomena natural jeralmente la konforma ba iha divizaun social-politiko. Kauza sira rai-halai no inundasaun bai-bain la mai husi entre suco ka posto administrativo iha neebe sira mosu. Dala ruma sira mosu la mai husi municipio neebe hanesan, maibe dalaruma sira la mai husi nasaun neebe hanesan.

Iha estudo nee, konsepto ba kaptasaun suco nee mak uza hodi ajuda hatudu relasionamento entre kondisaun sira no eventus ba iha pakote rai administrativo (nasaun, municipio, posto administrativo, suco) no kondisaun no eventos ba iha pakote ba rai neebe naturalmente define ona, unidade bio-fiziko ba auto kontido (kaptasaun mota). Natural nee, define taka Sistema kaptasaun mota neebe mak boot liu influensial ba iha aspeito sira hotu iha mundo ba fiziku no umano. Buat hotu neebe mak akontese iha laletek husi kaptasaun ida iha impaktos ba iha rekurso natural, ema no infra-etrutura iha parte rai tetuk husi kaptasaun nee. Tamba nee mak importante hodi promove oinsa uza kaptasaun mota hanesan unidade planeamento no implementasaun ba programa dezemvolvimento sosio-ekonomiku sira hotu, inkluindo dezemvolvimento infra-estrutra. PA 8 SSRI mak komposto husi suco 79. Area inter-koneksaun ba administrativo sira nee ho kaptasaun mota 34 hodi forma total kaptasaun[1] suco 152.

Perfil risko nee ba kada posto administrativo inkluindo sumariu narativu, lista tabela ba kaptasaun suco no fo sira nia area, no mapa ida hatudu lokalizasaun sira husi kaptasaun suco. Tuir mai nee, ba kada tipo husi risko, iha neeba sumariu narativu, tabela ba estatistiku risko, risko mapa sira no ilustrativo fotografia. Perfil hirak nee deskreve iha neebe infra-estrutura iha risko iha kada PA, no sublinha kaptasaun suco individual neebe mak infra-estrutura sempre konsidera vulneravel liu.

2.4.1 Perfil Risko – Posto Administrativo Baucau

Asaun PA Baucau iha suco 11 neebe mak parte kaptasaun 3. Hirak nee inter-koneksaun hodi produs total kaptasaun suco 20, listado ho sira nia area iha tabela 4. Kaptasaun 3 nee hotu naruk halai liu baliza area posto administrativo sira seluk. Ida neebe boot liu mak Kaptasaun Mota Seiçal, nee kona too iha Venilale no Ossu iha parte osidente tama iha PA Vemasse. Kaptasaun kiik-liu mak Kaptasaun Mota Boro Uai, neebe mak fahe liu husi PA 3 - Baucau, Laga no Quelicai. Uza Kaptasaun Mota Seiçal hanesan ezemplo ida, ba iha referensia tabela no mapa sita nee hatudu oinsa kondisaun no eventos iha suco diferente 11 iha PA Baucau, parte vizinho sira PA Venilale, no maske area rai-as iha diferente municipio ida, Viqueque, kondisaun hotu influensiado no parte rai-tetuk nia kaptasaun mentira iha PA Baucau.

[1] Util kaptasaun 34 ba estudo nee mak agregasaun luan ba sub-kaptasaun, foti konjunta husi kaptasaun 115 komunidade GIS Timor-Leste, jralmente uza tuir hanesan padraun ba analiza bazea kaptasaun no mapamento iha eskala boot.

Suco -Catchment Code	*Suco* -Catchment		Total Area
10803	Bahu	Baucau Aggregate Catchment	688
10832	Bahu	Seiçal River Catchment	786
11003	Bucoli	Baucau Aggregate Catchment	2,727
11032	Bucoli	Seiçal River Catchment	35
11132	Buibau	Seiçal River Catchment	2,559
11203	Buruma	Baucau Aggregate Catchment	1,243
11232	Buruma	Seiçal River Catchment	195
11303	Caibada	Baucau Aggregate Catchment	3,045
11332	Caibada	Seiçal River Catchment	50
12303	Gariuai	Baucau Aggregate Catchment	151
12332	Gariuai	Seiçal River Catchment	4,227
16332	Samalari	Seiçal River Catchment	1,597
16503	Seiçal	Baucau Aggregate Catchment	210
16507	Seiçal	Boro Uai River Catchment	490
16532	Seiçal	Seiçal River Catchment	4,458
16803	Triloca	Baucau Aggregate Catchment	2,022
16832	Triloca	Seiçal River Catchment	1,625
16903	Tirilolo	Baucau Aggregate Catchment	2,855
16932	Tirilolo	Seiçal River Catchment	1,792
17832	Uailili	Seiçal River Catchment	6,206
		Totals Baucau AP	**36,962**

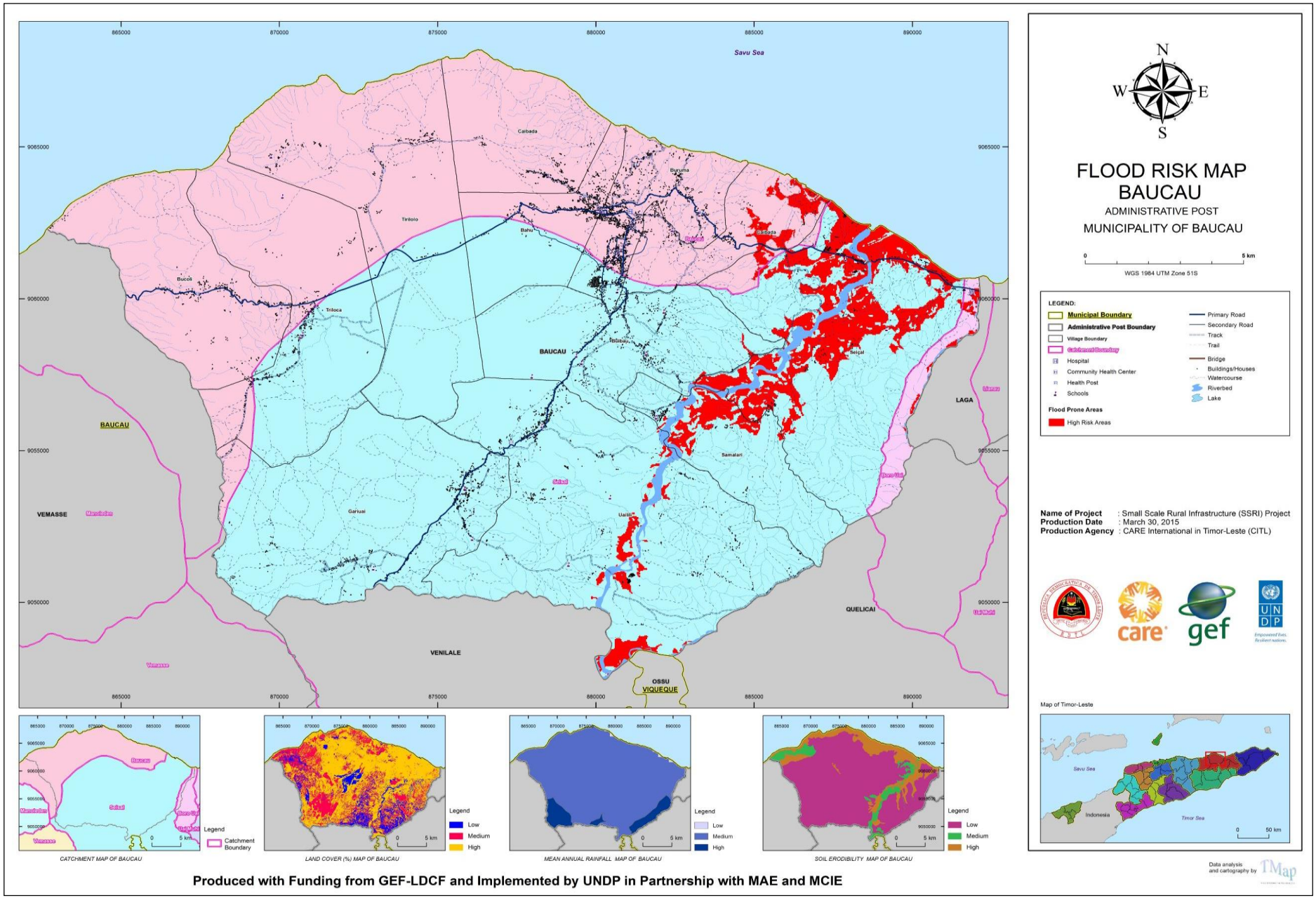
Tabela 4. Suco-Kaptasaun iha Posto Administrativo Baucau

Risko Inundasaun iha Posto Administrasaun Baucau

Inundasaun mak seriu liu husi risko tolu iha PA Baucau, no hanesan mapa 2 hatudu klaru liu, husi problema sira neebe assosiado ho inundasaun neebe mak hetan naton iha Kaptasaun Mota Seiçal. Suco tolu iha kaptasaun hasoru ameasa boot liu, ho Suco Seiçal neebe hetan risko liu. Suco rua seluk mak Uailili no Samalari.

Seiçal-Seiçal dook no risko liu ba kaptasaun suco, ho hektar 1,487 husi rai susceptivel ba inundasaun. Nee representa 33% ba kaptasaun suco total area rai. Infra-estrutura hasoru ameasa seriu iha Seiçal, ho 259 husi total uma 353 (72%), eskola 2 husi 3 (67%) no 7.4km husi 16km husi Estrada (46%) hirak nee hotu inundasaun husi mota Seiçal. Parte balu husi suco Seiçal lokalizado iha kaptasaun seluk, iha neebe inundasaun atu menus husi problem. Ho deit 47 husi hektar 490 iha kaptasaun suco Seiçal Boro Uai no 26 husi hektar 201 iha kaptasaun suco Seiçal Baucau mak konsiderado susceptivel ba inundasaun. Distinsaun nee ilustra no implementa programa dezemvolvimento neebe bele influensia bazea ba kaptasaun prosesu bio-fiziko.

Apartir husi suco seiçal maibe nafatin Kaptasaun Mota Seiçal, konsideravel area sira ba mos iha risko inundasaun iha Uailili – Seiçal (hektar 232), Samalari-Seiçal (219 hektar) no Caibada-Baucau (156 hektar) Kaptasaun suco. Familia balu hela iha area hirak nee, so uma balu deit mak iha risko, maibe dala ruma iha infra-estrutura ituan liu iha neeba.



MAPA- 3. Mapa Risko Inundasaun: Posto Administrativo Baucau

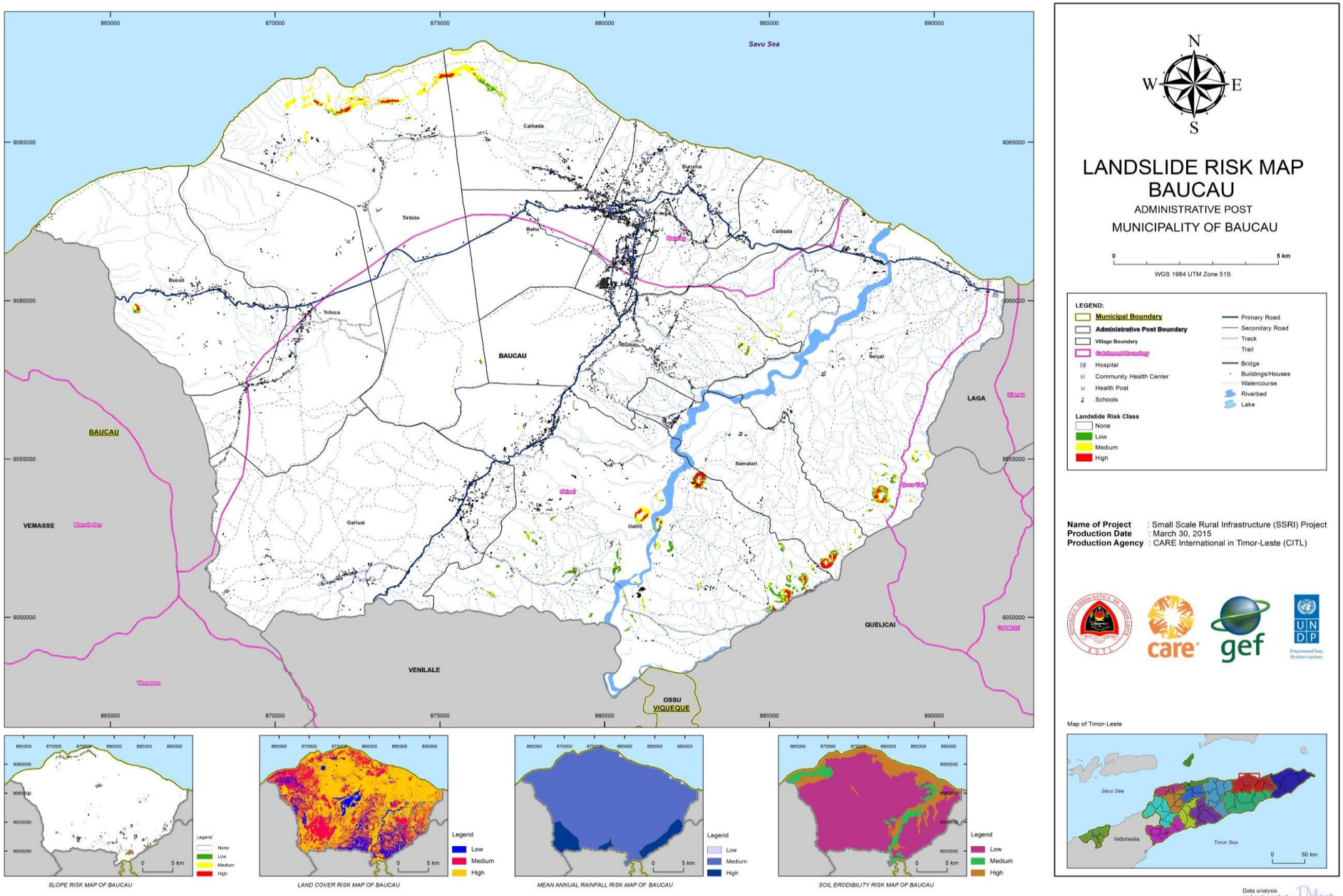
Risko Rai-halai iha Posto Administrativo Baucau

Ameasa husi rai halai nee ladun seriu perkupa iha PA Baucau. Mapa 3 hatudu banda estreita ba rai neebe iha risko hodi fo oin ba norte iha planaltu Baucau. Total area sira ba rai neebe iha risko kiik, mediu no ás so iha deit hektar 85 iha Tirilolo-Baucau no hektar 40 iha Caibada-Baucau Kaptasaun Suco (Tabela 5). Area kiik sira partikamente disabitado no laiha infra-estrutura neebe iha risko.

Area balu iha sudeste husi PA nee mosu risko area rai-halai iha mapa, maibe nee kiik oan no isolado, iha lubuk husi sira mak la klasifikado tamba intereferensia husi kalohan ba dadus satellite. Formasaun husi kalohan tipikalmente mosu hanesan feradurra ka donat neebe mosu iha mapa sira. Nee signifika katak maske hektar numero kiik hatudu sei iha risko ba rai-halai iha Tabela 5 mak dala ruma estimativo liu.

			Land Area			Houses			Schools			Health Facilities			Roads		
Suco -Catchment Code	*Suco* -Catchment		Total Area	In Flood Risk Zone		Total Number	In Flood Risk Zone		Total Number	In Flood Risk Zone		Total Number	In Flood Risk Zone		Total Km	In Flood Risk Zone	
				Hectares	%		Number	%		Number	%		Number	%		Km	%
10803	Bahu	Baucau Aggregate Catchment	688	0	0.0%	627	0	0.0%	3	0	0.0%	1	0	0.0%	5.5	0.0	0.0%
10832	Bahu	Seiçal River Catchment	786	0	0.0%	33	0	0.0%	0			0			3.5	0.0	0.0%
11003	Bucoli	Baucau Aggregate Catchment	2,727	0	0.0%	370	0	0.0%	2	0	0.0%	1	0	0.0%	6.3	0.0	0.0%
11032	Bucoli	Seiçal River Catchment	35	0	0.0%	10	0	0.0%	0			0			0.0		
11132	Buibau	Seiçal River Catchment	2,559	11	0.4%	620	1	0.2%	5	0	0.0%	0			17.4	0.0	0.2%
11203	Buruma	Baucau Aggregate Catchment	1,243	0	0.0%	1,785	0	0.0%	11	0	0.0%	3	0	0.0%	25.3	0.0	0.0%
11232	Buruma	Seiçal River Catchment	195	0	0.0%	551	0	0.0%	2	0	0.0%	0			3.4	0.0	0.0%
11303	Caibada	Baucau Aggregate Catchment	3,045	156	5.1%	541	13	2.4%	2	0	0.0%	0			9.2	0.2	2.1%
11332	Caibada	Seiçal River Catchment	50	0	0.0%	22	0	0.0%	0			0			0.4	0.0	0.0%
12303	Gariuai	Baucau Aggregate Catchment	151	0	0.0%	12	0	0.0%	0			0			0.9	0.0	0.0%
12332	Gariuai	Seiçal River Catchment	4,227	0	0.0%	685	0	0.0%	6	0	0.0%	0			17.7	0.0	0.0%
16332	Samalari	Seiçal River Catchment	1,597	219	13.7%	191	12	6.3%	1	0	0.0%	1	0	0.0%	2.3	0.0	1.3%
16503	Seiçal	Baucau Aggregate Catchment	210	26	12.3%	4	0	0.0%	0			0			0.8	0.1	13.5%
16507	Seiçal	Boro Uai River Catchment	490	47	9.6%	8	0	0.0%	0			0			1.3	0.3	25.2%
16532	Seiçal	Seiçal River Catchment	4,458	1,487	33.4%	353	259	73.4%	3	2	66.7%	0			16.0	7.4	46.1%
16803	Triloca	Baucau Aggregate Catchment	2,022	0	0.0%	159	0	0.0%	2	0	0.0%	0			3.6	0.0	0.0%
16832	Triloca	Seiçal River Catchment	1,625	0	0.0%	233	0	0.0%	2	0	0.0%	0			12.1	0.0	0.0%
16903	Tirilolo	Baucau Aggregate Catchment	2,855	0	0.0%	266	0	0.0%	2	0	0.0%	1	0	0.0%	6.5	0.0	0.0%
16932	Tirilolo	Seiçal River Catchment	1,792	0	0.0%	22	0	0.0%	0			0			12.0	0.0	0.0%
17832	Uailili	Seiçal River Catchment	6,206	232	3.7%	898	11	1.2%	6	0	0.0%	1	0	0.0%	24.7	0.1	0.6%
		Totals Baucau AP	**36,962**	**2,178**	**5.9%**	**7,390**	**296**	**4.0%**	**47**	**2**	**4.3%**	**8**	**0**	**0.0%**	**169**	**8.2**	**4.9%**

Tabela 5. Risko Estatistiko ba Inundasaun iha PA Baucau



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MAPA- 4. Mapa Risko Rai-halai: Posto Administrativo Baucau

Suco -Catchment Code	*Suco* -Catchment		Total No. of Houses	Houses in Each Landslide Risk Category							
				No Risk		Low Risk		Medium Risk		High Risk	
				Number	%	Number	%	Number	%	Number	%
10803	Bahu	Baucau Aggregate Catchment	627	627	100.0%	0	0.0%	0	0.0%	0	0.0%
10832	Bahu	Seiçal River Catchment	33	33	100.0%	0	0.0%	0	0.0%	0	0.0%
11003	Bucoli	Baucau Aggregate Catchment	370	370	100.0%	0	0.0%	0	0.0%	0	0.0%
11032	Bucoli	Seiçal River Catchment	10	10	100.0%	0	0.0%	0	0.0%	0	0.0%
11132	Buibau	Seiçal River Catchment	620	620	100.0%	0	0.0%	0	0.0%	0	0.0%
11203	Buruma	Baucau Aggregate Catchment	1,785	1,782	99.8%	2	0.1%	1	0.1%	0	0.0%
11232	Buruma	Seiçal River Catchment	551	551	100.0%	0	0.0%	0	0.0%	0	0.0%
11303	Caibada	Baucau Aggregate Catchment	541	541	100.0%	0	0.0%	0	0.0%	0	0.0%
11332	Caibada	Seiçal River Catchment	22	22	100.0%	0	0.0%	0	0.0%	0	0.0%
12303	Gariuai	Baucau Aggregate Catchment	12	12	100.0%	0	0.0%	0	0.0%	0	0.0%
12332	Gariuai	Seiçal River Catchment	685	685	100.0%	0	0.0%	0	0.0%	0	0.0%
16332	Samalari	Seiçal River Catchment	191	191	100.0%	0	0.0%	0	0.0%	0	0.0%
16503	Seiçal	Baucau Aggregate Catchment	4	4	100.0%	0	0.0%	0	0.0%	0	0.0%
16507	Seiçal	Boro Uai River Catchment	8	8	100.0%	0	0.0%	0	0.0%	0	0.0%
16532	Seiçal	Seiçal River Catchment	353	353	100.0%	0	0.0%	0	0.0%	0	0.0%
16803	Triloca	Baucau Aggregate Catchment	159	159	100.0%	0	0.0%	0	0.0%	0	0.0%
16832	Triloca	Seiçal River Catchment	233	233	100.0%	0	0.0%	0	0.0%	0	0.0%
16903	Tirilolo	Baucau Aggregate Catchment	266	266	100.0%	0	0.0%	0	0.0%	0	0.0%
16932	Tirilolo	Seiçal River Catchment	22	22	100.0%	0	0.0%	0	0.0%	0	0.0%
17832	Uailili	Seiçal River Catchment	898	865	96.3%	9	1.0%	17	1.9%	7	0.8%
		Totals Baucau AP	**7,390**	**7,354**	**99.5%**	**11**	**0.1%**	**18**	**0.2%**	**7**	**0.1%**

Tabela 6. Uma sira iha Risko ba Rai-halai iha PA Baucau

Suco -Catchment Code	*Suco* -Catchment		Total Hectares	Area of Land in Each Landslide Risk Category							
				No Risk		Low Risk		Medium Risk		High Risk	
				Hectares	%	Hectares	%	Hectares	%	Hectares	%
10803	Bahu	Baucau Aggregate Catchment	688	688	100.0%	0	0.0%	0	0.0%	0	0.0%
10832	Bahu	Seiçal River Catchment	786	786	100.0%	0	0.0%	0	0.0%	0	0.0%
11003	Bucoli	Baucau Aggregate Catchment	2,727	2,722	99.8%	1	0.0%	3	0.1%	1	0.1%
11032	Bucoli	Seiçal River Catchment	35	35	100.0%	0	0.0%	0	0.0%	0	0.0%
11132	Buibau	Seiçal River Catchment	2,559	2,551	99.7%	3	0.1%	4	0.1%	1	0.0%
11203	Buruma	Baucau Aggregate Catchment	1,243	1,242	99.9%	0	0.0%	1	0.1%	0	0.0%
11232	Buruma	Seiçal River Catchment	195	195	100.0%	0	0.0%	0	0.0%	0	0.0%
11303	Caibada	Baucau Aggregate Catchment	3,045	3,005	98.7%	7	0.2%	30	1.0%	3	0.1%
11332	Caibada	Seiçal River Catchment	50	50	100.0%	0	0.0%	0	0.0%	0	0.0%
12303	Gariuai	Baucau Aggregate Catchment	151	151	100.0%	0	0.0%	0	0.0%	0	0.0%
12332	Gariuai	Seiçal River Catchment	4,227	4,227	100.0%	0	0.0%	0	0.0%	0	0.0%
16332	Samalari	Seiçal River Catchment	1,597	1,576	98.7%	5	0.3%	7	0.4%	9	0.6%
16503	Seiçal	Baucau Aggregate Catchment	210	210	100.0%	0	0.0%	0	0.0%	0	0.0%
16507	Seiçal	Boro Uai River Catchment	490	484	98.8%	2	0.3%	4	0.8%	0	0.1%
16532	Seiçal	Seiçal River Catchment	4,458	4,423	99.2%	11	0.3%	18	0.4%	6	0.1%
16803	Triloca	Baucau Aggregate Catchment	2,022	2,022	100.0%	0	0.0%	0	0.0%	0	0.0%
16832	Triloca	Seiçal River Catchment	1,625	1,625	100.0%	0	0.0%	0	0.0%	0	0.0%
16903	Tirilolo	Baucau Aggregate Catchment	2,855	2,771	97.0%	5	0.2%	68	2.4%	12	0.4%
16932	Tirilolo	Seiçal River Catchment	1,792	1,790	99.9%	1	0.1%	0	0.0%	0	0.0%
17832	Uailili	Seiçal River Catchment	6,206	6,072	97.8%	61	1.0%	50	0.8%	23	0.4%
		Totals Baucau AP	**36,962**	**36,626**	**99.1%**	**96**	**0.3%**	**183**	**0.5%**	**56**	**0.2%**

Tabela 7. Area Rai iha Risko ba Rai-halai iha PA Baucau

Figura 1 – Rai-halai Pare-estrada. Suco Buruma, Kaptasaun Agregando Baucau

Figura 2 – Fatuk-lolo eskarpa ho mediu ba ás eksposizaun ba risko rai-halai no erosaun.Suco Caibada Kaptasaun Agregando Baucau

Suco -Catchment Code	*Suco* -Catchment		Total Length of Roads (Km)	Length of Road in Each Landslide Risk Category							
				No Risk		Low Risk		Medium Risk		High Risk	
				Km	%	Km	%	Km	%	Km	%
10803	Bahu	Baucau Aggregate Catchment	5.5	5.5	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
10832	Bahu	Seiçal River Catchment	3.5	3.5	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
11003	Bucoli	Baucau Aggregate Catchment	6.3	6.3	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
11032	Bucoli	Seiçal River Catchment	0.0								
11132	Buibau	Seiçal River Catchment	17.4	17.4	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
11203	Buruma	Baucau Aggregate Catchment	25.3	25.0	98.7%	0.0	0.1%	0.3	1.2%	0.0	0.0%
11232	Buruma	Seiçal River Catchment	3.4	3.4	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
11303	Caibada	Baucau Aggregate Catchment	9.2	9.2	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
11332	Caibada	Seiçal River Catchment	0.4	0.4	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
12303	Gariuai	Baucau Aggregate Catchment	0.9	0.9	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
12332	Gariuai	Seiçal River Catchment	17.7	17.7	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
16332	Samalari	Seiçal River Catchment	2.3	2.3	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
16503	Seiçal	Baucau Aggregate Catchment	0.8	0.8	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
16507	Seiçal	Boro Uai River Catchment	1.3	1.3	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
16532	Seiçal	Seiçal River Catchment	16.0	16.0	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
16803	Triloca	Baucau Aggregate Catchment	3.6	3.6	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
16832	Triloca	Seiçal River Catchment	12.1	12.1	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
16903	Tirilolo	Baucau Aggregate Catchment	6.5	6.5	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
16932	Tirilolo	Seiçal River Catchment	12.0	12.0	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
17832	Uailili	Seiçal River Catchment	24.7	23.8	96.3%	0.4	1.5%	0.3	1.1%	0.3	1.1%
		Totals Baucau AP	**169.0**	**167.7**	**99.3%**	**0.4**	**0.2%**	**0.6**	**0.3%**	**0.3**	**0.2%**

Tabela 8. Estrada iha Risko ba Rai-halai iha Baucau

Risko Erosaun iha Posto Administrativo Baucau

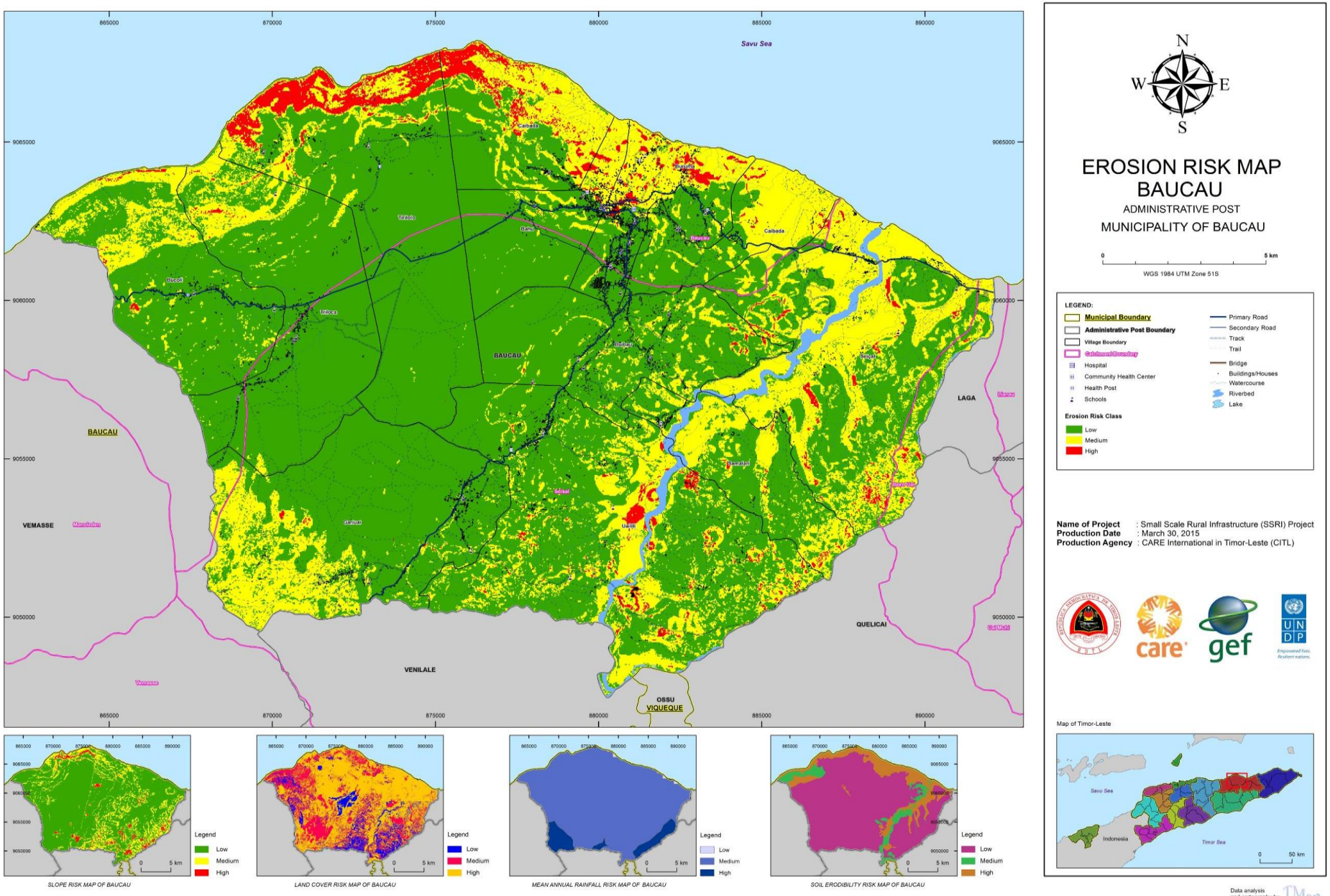
PA Baucau deit mak konsiderando risko kiik tebes ba rai-halai, no erosaun mos. Ida nee laos surpreza desde fator kontibutori ba tipo rua mak relasionado, no rai halai mak atualmente rapido no extremu husi erosaun. liu 68% husi area total PA Baucau mak risko kiik ba erosaun, ho 29% risko mediu no ho deit 3% konsiderando risko as. Maske 3% dalaruma as ituan tamba interferensia iha parte dadus satellite.

Mapa 4 hatudu katak risko erosaun iha PA Baucau mak distribuisaun iha area 3 diferente. Rai-tetuk, relativamente rai estavel husi Planaltu Baucau neebe mak hatudu ho koor matak, representa risko kiik ba erosaun. Nee parte PA Baucau mak parsialmente iha Kaptasaun Mota Seiçal no parsialmente iha Agregado Kaptasaun Baucau. Entre kaptasaun rua nee, suco sira neebe iha erosaun menus dalaruma iha problema inkluindo Bahu no parte ida as Tirilolo-Triloca.

Rai-naruk, menus liu vegetasaun iha parte rai lolo maran, norte hatudu eskarpamento neebe mak klasfikado hanesan risko mediu ba as neebe mak hatudu iha kinur no mean. Area risko as mak prinsipalmente eskarpamento kalkario (batu kapur) iha Suco Tirilolo iha neebe rai lolo klean too iha tasi. Area risko nee kovre hektar 467 iha Tirilolo, representa 16.4% husi area rai total suco nian. Nee extende ba parte leste ba iha Suco Caibada, liu 50% husi area total mak konsiderando risko mediu too as ba erosaun.

Area diferente datoluk husi PA Baucau ba erosaun potensia nee mak inundasaun planicie Mota Seiçal, neebe mak hatudu iha mapa 4 boot liu hanesan risko mediu. Prinsipalmente kontribui ba fator neebe mak menus liu kovre ho vegetasaun no rai-henek natureza friavel ba iha rai sira. Suco sira Kaptasaun Mota Seiçal neebe mak area boot husi rai mak exposto ba risko mediu ba erosaun inkluindo hektar 2,503 iha Suco Seiçal (56% ba total area), hektar 1,738 iha Suco Uailili (28%) no hektar 1,084 iha Suci Gariuai (25.6%).

Numero sustansial ba ema hela iha area risko mediu, no provavel iha impakto direita hasae risko liu husi hamos rai ba agrikultura no animal sira neebe mak han duut. Maibe mapa sira nee no tabela hatudu klaru liu katak ema maioria neebe hela iha PA Baucau iha rai risko kiik ba erosaun no impakto direita dalaruma bele minimiza. Tuir husi nee katak maioria infra-estrutura neebe iha rai partikularmente la susceptivel ba erosaun. Porporsaun ba uma, eskola, fasilidade saude no Estrada sira iha risko kiik ida nee notavelmente konsisten kuaze 75% separado. Hirak nee ho numero substansial ba uma sira iha risko mediu iha iha suco sira hanesan Bahu, Buruma, Seiçal no Uailili no eskola 4 husi eskola Buruma nian 11 iha area neebe mak konsiderando risko as ba erosaun. La iha eskola ida husi 47 ka fasilidade saude iha PA Baucau mak iha area ho potensial as ba erosaun.



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MAPA- 5. Mapa Risko Erosaun: Posto Administrativo Baucau

Figura 3 – Risko kiik-liu ba erosaun besik iha aeroporto iha Platô Baucau. Suco Tirilolo, Kaptasaun Mota Seiçal

Figura 4 – Risko Mediu ba erosaun ba iha vegetasaun menus liu iha foho kiik sira. Suco Seiçal, Kaptasaun Mota

				Area of Land in Each Erosion Risk Category					
Suco -Catchment			Total	Low Risk		Medium Risk		High Risk	
Code	*Suco* -Catchment		Hectares	Hectares	%	Hectares	%	Hectares	%
10803	Bahu	Baucau Aggregate Catchment	688	416	60.5%	247	35.9%	25	3.6%
10832	Bahu	Seiçal River Catchment	786	780	99.2%	6	0.8%	0	0.0%
11003	Bucoli	Baucau Aggregate Catchment	2,727	2,121	77.8%	588	21.6%	17	0.6%
11032	Bucoli	Seiçal River Catchment	35	35	99.1%	0	0.9%	0	0.0%
11132	Buibau	Seiçal River Catchment	2,559	2,245	87.7%	302	11.8%	11	0.4%
11203	Buruma	Baucau Aggregate Catchment	1,243	529	42.6%	605	48.7%	109	8.7%
11232	Buruma	Seiçal River Catchment	195	187	96.2%	7	3.8%	0	0.0%
11303	Caibada	Baucau Aggregate Catchment	3,045	1,353	44.4%	1,448	47.6%	244	8.0%
11332	Caibada	Seiçal River Catchment	50	50	99.0%	0	1.0%	0	0.0%
12303	Gariuai	Baucau Aggregate Catchment	151	61	40.5%	90	59.5%	0	0.0%
12332	Gariuai	Seiçal River Catchment	4,227	3,137	74.2%	1,084	25.6%	7	0.2%
16332	Samalari	Seiçal River Catchment	1,597	960	60.1%	619	38.7%	19	1.2%
16503	Seiçal	Baucau Aggregate Catchment	210	126	59.7%	82	38.8%	3	1.5%
16507	Seiçal	Boro Uai River Catchment	490	220	45.0%	257	52.4%	13	2.6%
16532	Seiçal	Seiçal River Catchment	4,458	1,866	41.9%	2,503	56.1%	90	2.0%
16803	Triloca	Baucau Aggregate Catchment	2,022	1,595	78.9%	415	20.5%	13	0.6%
16832	Triloca	Seiçal River Catchment	1,625	1,609	99.0%	16	1.0%	0	0.0%
16903	Tirilolo	Baucau Aggregate Catchment	2,855	1,864	65.3%	524	18.4%	467	16.4%
16932	Tirilolo	Seiçal River Catchment	1,792	1,734	96.8%	58	3.2%	0	0.0%
17832	Uailili	Seiçal River Catchment	6,206	4,303	69.3%	1,738	28.0%	165	2.7%
		Totals Baucau AP	**36,962**	**25,191**	**68.2%**	**10,589**	**28.6%**	**1,182**	**3.2%**

Tabela 9. Area Rai iha risko ba Erosaun iha PA Baucau

Suco - Catchment Code	*Suco* -Catchment		Total No. of Houses	Houses in Each Erosion Risk Category						Total Length of Roads	Length of Road in Each Erosion Risk Category					
				Low Risk		Medium Risk		High Risk			Low Risk		Medium Risk		High Risk	
				Number	%	Number	%	Number	%		Km	%	Km	%	Km	%
10803	Bahu	Baucau Aggregate Catchment	627	398	63.5%	221	35.2%	8	1.3%	5.5	4.6	83.6%	0.8	14.9%	0.1	1.5%
10832	Bahu	Seiçal River Catchment	33	33	100.0%	0	0.0%	0	0.0%	3.5	3.4	98.3%	0.1	1.7%	0.0	0.0%
11003	Bucoli	Baucau Aggregate Catchment	370	359	97.0%	11	3.0%	0	0.0%	6.3	6.1	96.4%	0.2	3.6%	0.0	0.0%
11032	Bucoli	Seiçal River Catchment	10	10	100.0%	0	0.0%	0	0.0%	0.0						
11132	Buibau	Seiçal River Catchment	620	579	93.4%	41	6.6%	0	0.0%	17.4	15.0	85.8%	2.5	14.2%	0.0	0.0%
11203	Buruma	Baucau Aggregate Catchment	1,785	1084	60.7%	552	30.9%	149	8.3%	25.3	12.6	49.8%	10.0	39.5%	2.7	10.7%
11232	Buruma	Seiçal River Catchment	551	537	97.5%	14	2.5%	0	0.0%	3.4	3.4	100.0%	0.0	0.0%	0.0	0.0%
11303	Caibada	Baucau Aggregate Catchment	541	418	77.3%	119	22.0%	4	0.7%	9.2	7.0	76.4%	2.2	23.6%	0.0	0.0%
11332	Caibada	Seiçal River Catchment	22	22	100.0%	0	0.0%	0	0.0%	0.4	0.4	100.0%	0.0	0.0%	0.0	0.0%
12303	Gariuai	Baucau Aggregate Catchment	12	10	83.3%	2	16.7%	0	0.0%	0.9	0.9	100.0%	0.0	0.0%	0.0	0.0%
12332	Gariuai	Seiçal River Catchment	685	591	86.3%	94	13.7%	0	0.0%	17.7	14.3	80.6%	3.4	19.1%	0.1	0.3%
16332	Samalari	Seiçal River Catchment	191	157	82.2%	34	17.8%	0	0.0%	2.3	2.1	91.1%	0.2	8.9%	0.0	0.0%
16503	Seiçal	Baucau Aggregate Catchment	4	4	100.0%	0	0.0%	0	0.0%	0.8	0.1	16.3%	0.7	83.7%	0.0	0.0%
16507	Seiçal	Boro Uai River Catchment	8	1	12.5%	7	87.5%	0	0.0%	1.3	0.1	10.6%	1.2	89.4%	0.0	0.0%
16532	Seiçal	Seiçal River Catchment	353	67	19.0%	286	81.0%	0	0.0%	16.0	7.9	49.1%	8.1	50.8%	0.0	0.1%
16803	Triloca	Baucau Aggregate Catchment	159	159	100.0%	0	0.0%	0	0.0%	3.6	3.6	100.0%	0.0	0.0%	0.0	0.0%
16832	Triloca	Seiçal River Catchment	233	233	100.0%	0	0.0%	0	0.0%	12.1	12.1	100.0%	0.0	0.0%	0.0	0.0%
16903	Tirilolo	Baucau Aggregate Catchment	266	254	95.5%	12	4.5%	0	0.0%	6.5	6.4	98.6%	0.1	1.4%	0.0	0.0%
16932	Tirilolo	Seiçal River Catchment	22	22	100.0%	0	0.0%	0	0.0%	12.0	12.0	100.0%	0.0	0.0%	0.0	0.0%
17832	Uailili	Seiçal River Catchment	898	622	69.3%	214	23.8%	62	6.9%	24.7	16.0	65.0%	7.8	31.5%	0.9	3.6%
		Totals Baucau AP	**7,390**	**5,560**	**75.2%**	**1,607**	**21.7%**	**223**	**3.0%**	**169.0**	**128.0**	**75.8%**	**37.2**	**22.0%**	**3.7**	**2.2%**

Tabela 10. Uma no Estrada sira iha risko ba erosaun iha PA Baucau

Suco -Catchment Code	*Suco* -Catchment		Total No. of Schools	Schools in Each Erosion Risk Category						Total No. of Health Facilities	Health Facilities in Each Erosion Risk Category					
				Low Risk		Medium Risk		High Risk			Low Risk		Medium Risk		High Risk	
				Number	%	Number	%	Number	%		Number	%	Number	%	Number	%
10803	Bahu	Baucau Aggregate Catchment	3	3	100.0%	0	0.0%	0	0.0%	1	1	100.0%	0	0.0%	0	0.0%
10832	Bahu	Seiçal River Catchment	0							0						
11003	Bucoli	Baucau Aggregate Catchment	2	2	100.0%	0	0.0%	0	0.0%	1	1	100.0%	0	0.0%	0	0.0%
11032	Bucoli	Seiçal River Catchment	0							0						
11132	Buibau	Seiçal River Catchment	5	4	80.0%	1	20.0%	0	0.0%	0						
11203	Buruma	Baucau Aggregate Catchment	11	7	63.6%	4	36.4%	0	0.0%	3	1	33.3%	2	66.7%	0	0.0%
11232	Buruma	Seiçal River Catchment	2	2	100.0%	0	0.0%	0	0.0%	0						
11303	Caibada	Baucau Aggregate Catchment	2	2	100.0%	0	0.0%	0	0.0%	0						
11332	Caibada	Seiçal River Catchment	0							0						
12303	Gariuai	Baucau Aggregate Catchment	0							0						
12332	Gariuai	Seiçal River Catchment	6	4	66.7%	2	33.3%	0	0.0%	0						
16332	Samalari	Seiçal River Catchment	1	1	100.0%	0	0.0%	0	0.0%	1	1	100.0%	0	0.0%	0	0.0%
16503	Seiçal	Baucau Aggregate Catchment	0							0						
16507	Seiçal	Boro Uai River Catchment	0							0						
16532	Seiçal	Seiçal River Catchment	3	1	33.3%	2	66.7%	0	0.0%	0						
16803	Triloca	Baucau Aggregate Catchment	2	1	50.0%	1	50.0%	0	0.0%	0						
16832	Triloca	Seiçal River Catchment	2	2	100.0%	0	0.0%	0	0.0%	0						
16903	Tirilolo	Baucau Aggregate Catchment	2	2	100.0%	0	0.0%	0	0.0%	1	1	100.0%	0	0.0%	0	0.0%
16932	Tirilolo	Seiçal River Catchment	0							0						
17832	Uailili	Seiçal River Catchment	6	5	83.3%	1	16.7%	0	0.0%	1	1	100.0%	0	0.0%	0	0.0%
		Totals Baucau AP	**47**	**36**	**76.6%**	**11**	**23.4%**	**0**	**0.0%**	**8**	**6**	**75.0%**	**2**	**25.0%**	**0**	**0.0%**

Tabela 11. Eskola no Fasilidade Saude sira iha Risko iha PA Baucau

2.4.2 Perfil Risko – Posto Administrativo Quelicai

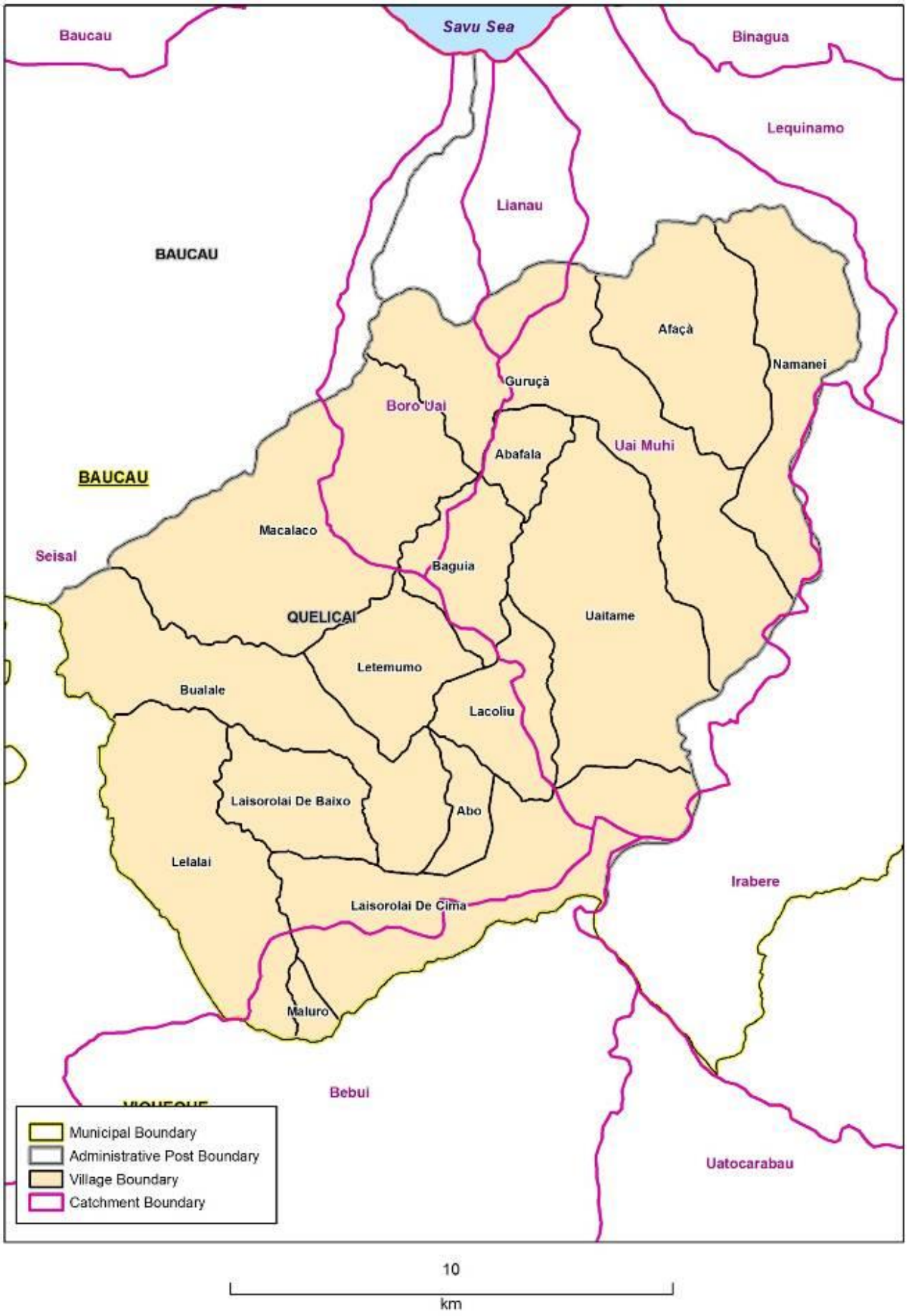
Suco 15 neebe mak hari PA Quelicai lokalizado iha kaptasaun mota 5. Inter-koneksaun hamutuk hirak nee hodi forma kaptasaun suco 24 neebe hatudu iha Tabela 12. Uai Muhi no Kaptasaun Mota Seiçal okupa maioria teritoriu Quelicai, kada suco ho aproximasaun 40% husi area total. Kaptasaun Mota Boro Uai mak signifikante em termus ninia medida, maibe esparse liu ho populado no iha deit ituan infra-estrutura. Restu PA sira iha parte kiik husi Kaptasaun Mota Bebui iha sudeste no Kaptasaun Lianau in parte norte.

Suco -Catchment Code	*Suco* -Catchment		Total Area
20234	Abafala	Uai Muhi River Catchment	329
20332	Abo	Seiçal River Catchment	287
20434	Afaçà	Uai Muhi River Catchment	1,429
20707	Baguia	Boro Uai River Catchment	121
20732	Baguia	Seiçal River Catchment	92
20734	Baguia	Uai Muhi River Catchment	490
20932	Bualale	Seiçal River Catchment	1,918
22607	Guruçà	Boro Uai River Catchment	662
22621	Guruçà	Lianau River Catchment	232
22634	Guruçà	Uai Muhi River Catchment	1,841
23032	Laisorolai De Baixo	Seiçal River Catchment	754
23105	Laisorolai De Cima	Bebui River Catchment	771
23132	Laisorolai De Cima	Seiçal River Catchment	1,079
23134	Laisorolai De Cima	Uai Muhi River Catchment	411
23605	Lelalai	Bebui River Catchment	186
23632	Lelalai	Seiçal River Catchment	1,731
24032	Letemumo	Seiçal River Catchment	847
24332	Lacoliu	Seiçal River Catchment	464
24334	Lacoliu	Uai Muhi River Catchment	277
24707	Macalaco	Boro Uai River Catchment	1,017
24732	Macalaco	Seiçal River Catchment	1,877
24805	Maluro	Bebui River Catchment	121
25634	Namanei	Uai Muhi River Catchment	1,343
27934	Uaitame	Uai Muhi River Catchment	2,316
		Totals Quelicai AP	**20,594**

Tabela 12. Kaptasaun Suco iha Posto Administrativo Quelicai

Apartir husi potensia real tebes, impakto direita entre iha PA Quelicai, nee important hodi komprende katak ligasaun entre parte husi kaptasaun iha Quelicai no parte iha rai tetuk husi kaptasaun neebe hanesan, iha neebe PA Baucau no vizinho PA Laga. Nee exemplo diak tamba sa ida nee sai diak hodi uziliza kaptasaun duke area administrative hanesan baze ba define geografika extensaun kovre husi exersiziu mapamento. Sesaun as liu ba Kaptasaun Mota Bebui iha PA Quelicai, no sira entre area estudo; sesaun naton husi kaptasaun mak iha PA Laga, no apartir husi estudo area. Similarmente parte kiik ida husi Kaptasaun Mota Bebui mak entre iha area estudo PA Quelicai, maioria ida nee Municipio Viqueque husi sudeste. Rai-tetuk no laletek relasionamento klaru liu, iha neebe kondisaun fisiko no pratikas jestaun rai afeita kaptasaun laletek eksposizaun ba perigos natural iha kaptasaun kiik, maibe programa dezemvolvimento sempre hetan fundus, planeiado, implementado no monitorizado ba iha unidade baze administrativo. Maske nunee regularmente programatiku solida no razaun politiku ba jere projeito tuir dalan nee, husi pontus vizaun tekniku neebe frequentamente laos dalan diak ida atu halo.

Hare ba iha tipo tolu husi risko neebe responde iha estudo nee, Quelicai iha problema ho potensia kiik ho inundasaun, maibe ho risko as liu ba area rai-halai no erosaun. Nee tipiko interior, rai-as husi rejiaun Timor-Leste, neebe mak karateristiko liu-husi foho- as, area sira luan no rai balu ho klean barak no volume luan husi udan monu rai katak udan sempre tun ho tempestade neebe forte liu. Ho hirak nee, Quelicai komum ho PA rua sira seluk iha estudo nee Ermera – Hatulia.



MAP- 6. Suco no Kaptasaun husi Posto Administrativo Quelicai

Risko Inundasaun Iha Posto Administrativo Quelicai

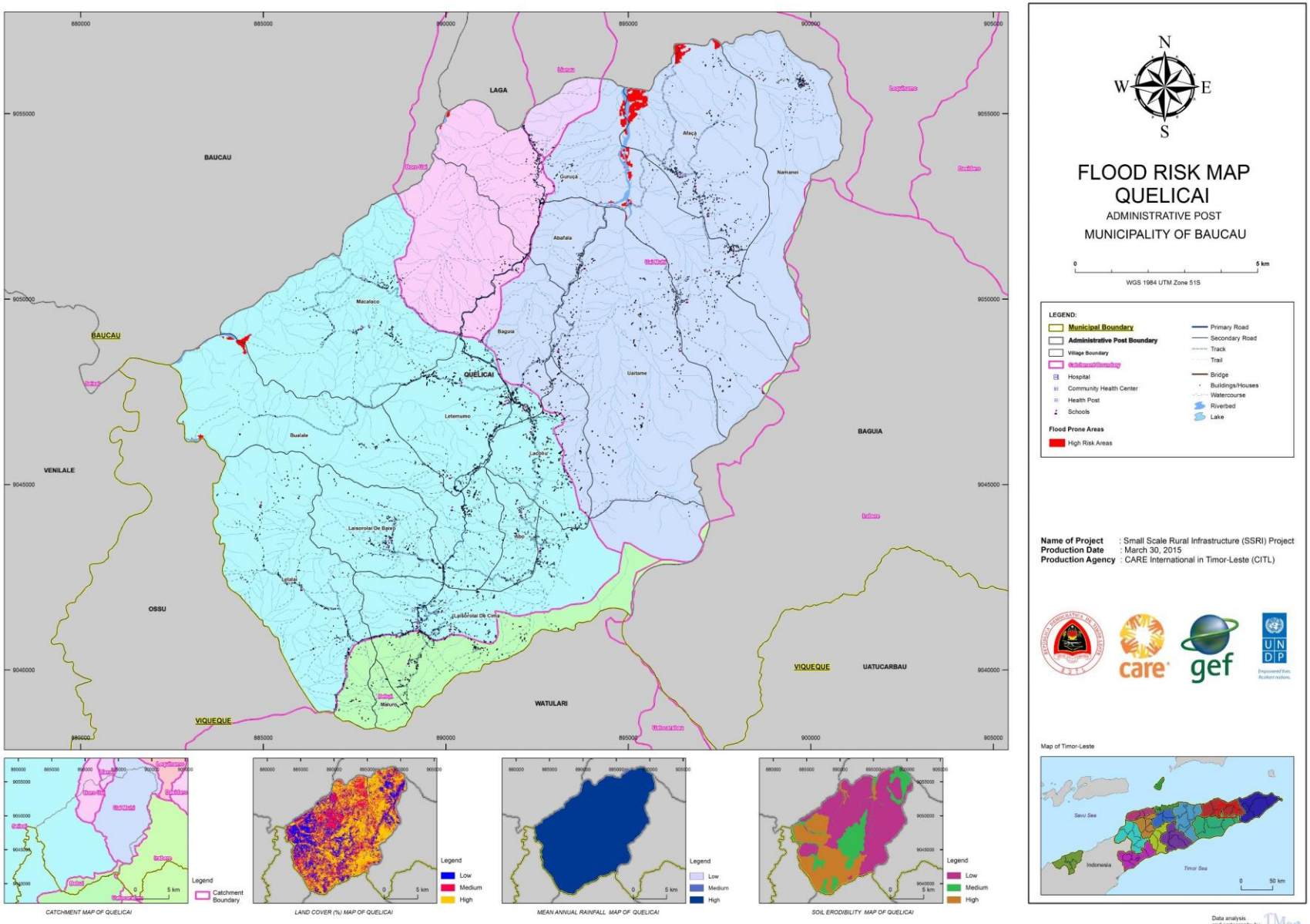
Hanesan temi ona iha leten, parte balu PA Quelicai mak susceptivel ba inundasaun. ho deit sinal ameasa iha porsaun Suco Afaça husi Mota Uai Muhi, husi rai hektar 54 mak konsidera iha risko ba inundasaun, no iha Suco Guruça iha kaptasaun neebe hanesan, iha neebe hektar 26 mak iha risko. Nee koloka virtaulmente laiha ameasa ba infra-estrutura existe, afeita deit uma no ituan liu, 500 metros husi sesaun Estrada. Tun-liu ba rai tetuk, iha porsaun kiik iha kaptasaun Mota Seiçal iha PA Baucau no kaptasaun Mota Uai Muhi iha Laga neebe inundasaun ameasa mak'as. Sedimentasaun neebe lori tun-ba iha area inklinado husi rai-halai no erosaun iha PA Quelicai iha impakto signifikante ba rai, komunidade no infra-estrutura iha rai-tetuk no jurisdisaun seluk, balu negative no balu positive. Entre sira impakto negative, fo intupidu ba mota sira no kanal drainajem, aumenta susbsistansia moris no gravidade ba inundasaun. Impakto positive maioria nee mak be inundasaun regularmente deposito nutrisaun mak'as alluvium ba iha agricultural no duut rai.

Figura 5 – Area kiik inklinado Inundasauniha Suco Afaça, Kaptasaun Uai Muhi

Figura 6 –Tamba saida mak PA Quelicai laiha inundasaun – iha-nee mak tetuk!

Suco -Catchment Code	*Suco* -Catchment		Land Area			Houses			Schools			Health Facilities			Roads		
			Total Area	In Flood Risk Zone		Total	In Flood Risk Zone		Total	In Flood Risk Zone		Total	In Flood Risk Zone		Total Km	In Flood Risk Zone	
				Hectares	%	Number	Number	%	Number	Number	%	Number	Number	%		Km	%
20234	Abafala	Uai Muhi River Catchment	329	0	0.1%	44	0	0.0%	0			0			2.6	0.0	0.0%
20332	Abo	Seiçal River Catchment	287	0	0.0%	149	0	0.0%	1	0	0.0%	0			3.6	0.0	0.0%
20434	Afaçà	Uai Muhi River Catchment	1,429	54	3.8%	374	1	0.3%	4	0	0.0%	1	0	0.0%	8.5	0.5	6.3%
20707	Baguia	Boro Uai River Catchment	121	0	0.0%	39	0	0.0%	0			0			1.8	0.0	0.0%
20732	Baguia	Seiçal River Catchment	92	0	0.0%	142	0	0.0%	0			1	0	0.0%	3.1	0.0	0.0%
20734	Baguia	Uai Muhi River Catchment	490	0	0.0%	94	0	0.0%	0			0			2.2	0.0	0.0%
20932	Bualale	Seiçal River Catchment	1,918	8	0.4%	311	0	0.0%	1	0	0.0%	0			8.0	0.0	0.0%
22607	Guruçà	Boro Uai River Catchment	662	2	0.3%	150	0	0.0%	1	0	0.0%	0			3.9	0.0	0.0%
22621	Guruçà	Lianau River Catchment	232	0	0.0%	40	0	0.0%	0			0			0.3	0.0	0.0%
22634	Guruçà	Uai Muhi River Catchment	1,841	26	1.4%	285	0	0.0%	2	0	0.0%	0			4.5	0.1	3.3%
23032	Laisorolai De Baixo	Seiçal River Catchment	754	0	0.0%	206	0	0.0%	2	0	0.0%	0			3.8	0.0	0.0%
23105	Laisorolai De Cima	Bebui River Catchment	771	0	0.0%	252	0	0.0%	1	0	0.0%	0			3.8	0.0	0.0%
23132	Laisorolai De Cima	Seiçal River Catchment	1,079	0	0.0%	496	0	0.0%	4	0	0.0%	1	0	0.0%	9.8	0.0	0.0%
23134	Laisorolai De Cima	Uai Muhi River Catchment	411	0	0.0%	7	0	0.0%	0			0			0.0		
23605	Lelalai	Bebui River Catchment	186	0	0.0%	49	0	0.0%	0			0			1.0	0.0	0.0%
23632	Lelalai	Seiçal River Catchment	1,731	0	0.0%	309	0	0.0%	3	0	0.0%	1	0	0.0%	6.0	0.0	0.0%
24032	Letemumo	Seiçal River Catchment	847	0	0.0%	512	0	0.0%	8	0	0.0%	0			8.2	0.0	0.0%
24332	Lacoliu	Seiçal River Catchment	464	0	0.0%	382	0	0.0%	2	0	0.0%	0			3.6	0.0	0.0%
24334	Lacoliu	Uai Muhi River Catchment	277	0	0.0%	119	0	0.0%	0			0			0.0		0.0%
24707	Macalaco	Boro Uai River Catchment	1,017	0	0.0%	42	0	0.0%	0			0			4.1	0.0	0.0%
24732	Macalaco	Seiçal River Catchment	1,877	4	0.2%	225	0	0.0%	2	0	0.0%	1	0	0.0%	10.0	0.0	0.0%
24805	Maluro	Bebui River Catchment	121	0	0.0%	18	0	0.0%	0			0			0.0		
25634	Namanei	Uai Muhi River Catchment	1,343	0	0.0%	151	0	0.0%	1	0	0.0%	0			0.6	0.0	0.0%
27934	Uaitame	Uai Muhi River Catchment	2,316	0	0.0%	376	0	0.0%	4	0	0.0%	0			3.0	0.0	0.0%
		Totals Quelicai AP	**20,594**	**94**	**0.5%**	**4,772**	**1**	**0.0%**	**36**	**-**	**0.0%**	**5**	**0**		**92**	**0.7**	**0.7%**

Tabela 13.Estatistiko Risko ba Inundasaun iha PA Quelicai



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MAPA- 7. Mapa Risko Inundasaun: Posto Administrativo Quelicai

Risko Inundasaun iha Posto Administrativo Quelicai

Parte leste no sul husi PA Quelicai mak rai-naruk, sempre menus ba vegetasaun, la proteze ba udan monu rai neebe boot, no susceptivel as ba rai-halai. Maske koalia ida nee, porporsaun ba area rai PA konsiderando kuaze atu laiha risko husi rai halai nee nafatin 90% no tamba nee mak relativamente ameasa nee kiik existe ba infra-estrutura-liliu ba uma sira, eskola sira, fasilidade saude no Estrada neebe konstrui iha area neebe mak seguru.

Area sira inklinado rai halai prinsipalmente assosiado ho Massif Matebian iha PA parte leste. Banda neebe mediu no rai risko as hatudu klaru iha mapa 7. Kaptasaun mota ida neebe afeita liu mak Uai Muhi no Seiçal, no suco sira ho inklinado ba rai halai mak Namanei, Uaitame no Laisorolai de Cima. Iha parte Laisorolai de Cima neebe mak linha ho Kaptasaun Mota Uai Muhi, menus husi 30% husi area neebe mak konsidera atu laiha risko, no hektar 254, representa kuaze liu 60% ba area rai, mak iha risko mediu ka as.

Kuaze 11% husi area rai PA QUelicai iha potensial balu ba rai-halai, maibe menus husi 1% ba infra-estrutura neebe konsidera iha risko. Klaru liu ema kuidado ona no investe iha area risko as, nunee mos iha potensialmente perigos tebes, no mos bai-bain iha remotas, la assessivel no partikularmente rai la-bokur. Maske nunee, uma 144 neebe mak konstrui potensialmente iha sitiu perigos, hirak nee maioria iha suco sira mak hanesan Guruça (21), Laculiu (36) Namanei (19) no Uaitame (21).

Estrada mos jeralmente dook husi rai naruk, maioria iha topografia la estavel, so deit 3.4km mak iha risko liu route potensial

Eskola ida potensialmente iha risko ba estragus rai-halai, ida nee iha risko neebe kiik iha Suco Uaitame. Maske nunee halo visit ida ba sitiu partikular hodi verifika deit katak la posivel, nee hatudu katak bele mos klasfikado in-koreto tamba problema intereferensia mai husi kalohan ho dadus satellite. Ida nee posivel ituan katak eskola iha Uaitame mak lokalizado iha fatin risko neebe laiha.

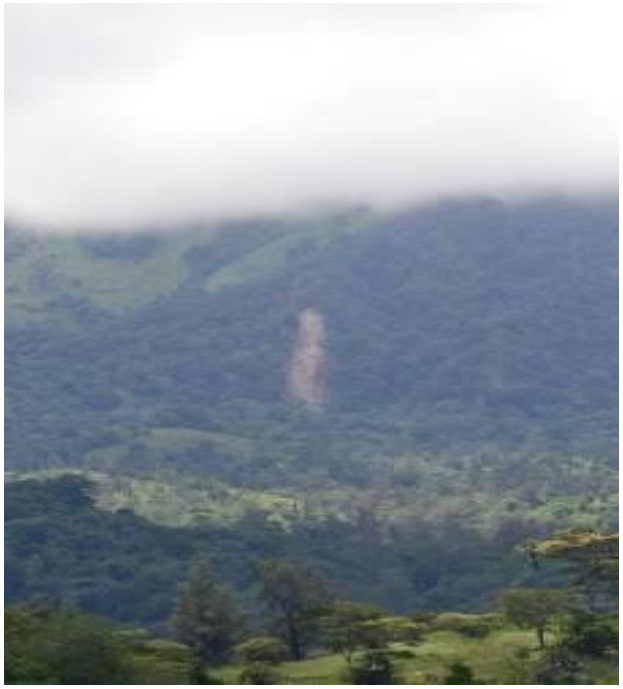
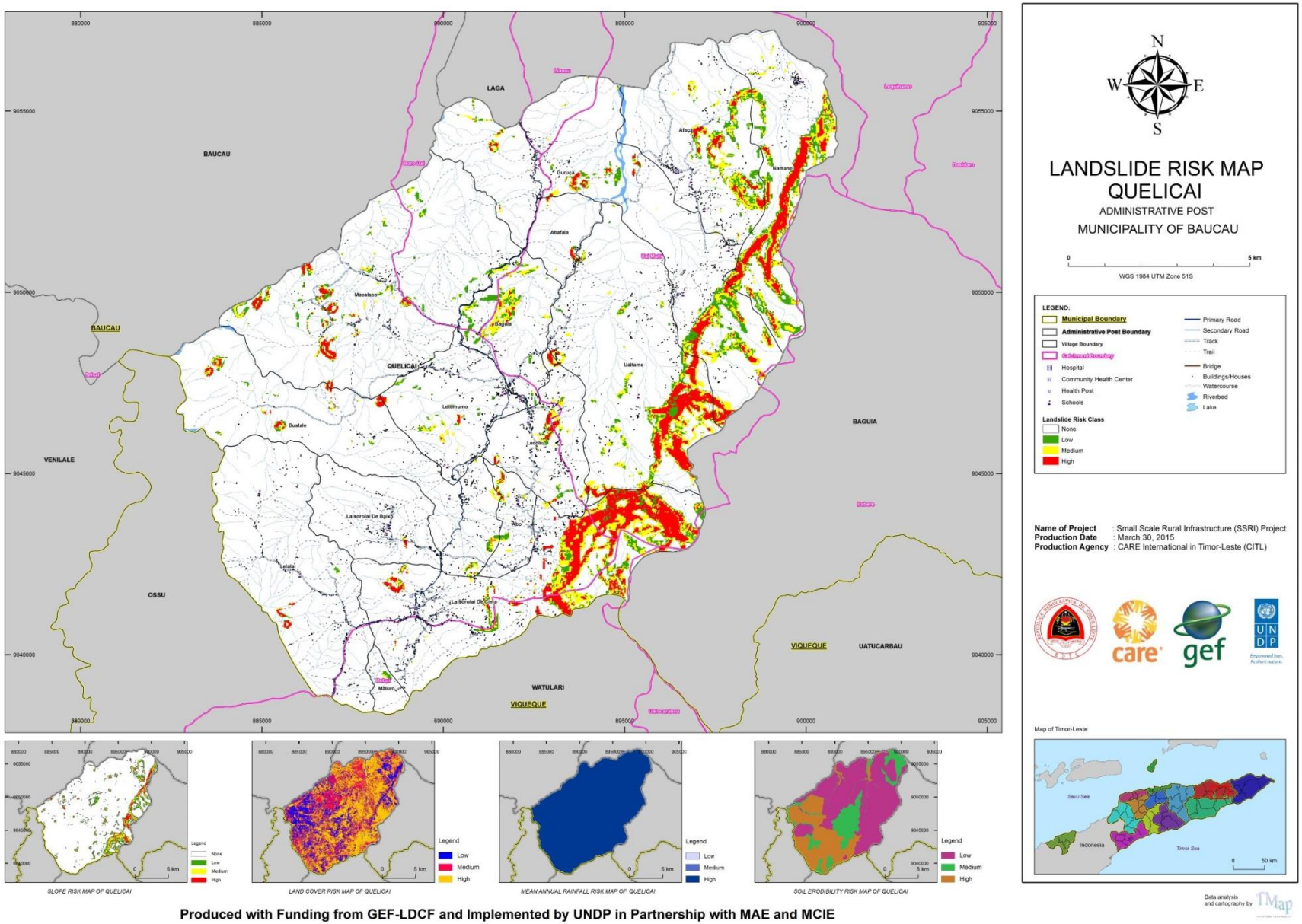


Figura 7 – Rai-halai iha rai-lolo naruk liu. Suco Afaçà, Kaptasaun Uai Muhi

Figura 8 – Rai-halai taka Estrada no fo ameasa ba ponte, kauza husi rai-lolo, la konsolida ho fatuk, fini vegetasaun. Suco Baguia, Kaptasaun Boro Uai



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MAPA- 8. Mapa Risko Rai-halai: Posto Adminnistrativo Quelicai

Suco -Catchment Code	*Suco* -Catchment		Total Hectares	Area of Land in Each Landslide Risk Category							
				No Risk		Low Risk		Medium Risk		High Risk	
				Hectares	%	Hectares	%	Hectares	%	Hectares	%
20234	Abafala	Uai Muhi River Catchment	329	321	97.6%	1	0.3%	3	0.9%	4	1.1%
20332	Abo	Seiçal River Catchment	287	269	93.8%	7	2.4%	8	2.9%	2	0.9%
20434	Afaçà	Uai Muhi River Catchment	1,429	1,244	87.1%	66	4.6%	83	5.8%	36	2.5%
20707	Baguia	Boro Uai River Catchment	121	96	79.2%	17	14.1%	8	6.7%	0	0.0%
20732	Baguia	Seiçal River Catchment	92	85	91.7%	7	7.1%	1	1.2%	0	0.0%
20734	Baguia	Uai Muhi River Catchment	490	422	86.2%	19	4.0%	43	8.8%	5	1.0%
20932	Bualale	Seiçal River Catchment	1,918	1,859	96.9%	18	0.9%	25	1.3%	17	0.9%
22607	Guruçà	Boro Uai River Catchment	662	644	97.3%	5	0.7%	10	1.5%	3	0.4%
22621	Guruçà	Lianau River Catchment	232	230	99.5%	0	0.2%	1	0.3%	0	0.0%
22634	Guruçà	Uai Muhi River Catchment	1,841	1,585	86.1%	85	4.6%	104	5.7%	67	3.6%
23032	Laisorolai De Baixo	Seiçal River Catchment	754	751	99.7%	0	0.0%	1	0.1%	1	0.2%
23105	Laisorolai De Cima	Bebui River Catchment	771	646	83.8%	31	4.0%	55	7.1%	39	5.1%
23132	Laisorolai De Cima	Seiçal River Catchment	1,079	850	78.8%	28	2.6%	89	8.3%	112	10.4%
23134	Laisorolai De Cima	Uai Muhi River Catchment	411	120	29.3%	37	9.0%	87	21.1%	167	40.6%
23605	Lelalai	Bebui River Catchment	186	186	100.0%	0	0.0%	0	0.0%	0	0.0%
23632	Lelalai	Seiçal River Catchment	1,731	1,720	99.4%	3	0.2%	2	0.1%	6	0.4%
24032	Letemumo	Seiçal River Catchment	847	820	96.8%	10	1.2%	13	1.5%	4	0.5%
24332	Lacoliu	Seiçal River Catchment	464	433	93.2%	8	1.7%	14	3.0%	10	2.1%
24334	Lacoliu	Uai Muhi River Catchment	277	253	91.5%	2	0.7%	13	4.7%	9	3.1%
24707	Macalaco	Boro Uai River Catchment	1,017	995	97.9%	15	1.5%	5	0.5%	1	0.1%
24732	Macalaco	Seiçal River Catchment	1,877	1,765	94.1%	35	1.9%	37	2.0%	39	2.1%
24805	Maluro	Bebui River Catchment	121	118	97.1%	3	2.3%	1	0.6%	0	0.0%
25634	Namanei	Uai Muhi River Catchment	1,343	925	68.9%	116	8.7%	149	11.1%	153	11.4%
27934	Uaitame	Uai Muhi River Catchment	2,316	1,955	84.4%	68	3.0%	137	5.9%	155	6.7%
		Totals Quelicai AP	**20,594**	**18,295**	**88.8%**	**582**	**2.8%**	**888**	**4.3%**	**829**	**4.0%**

Tabela 14. Area Rai iha Risko ba Rai-halai iha PA Quelicai

Suco -Catchment Code	*Suco* -Catchment		Total No. of Houses	Houses in Each Landslide Risk Category							
				No Risk		Low Risk		Medium Risk		High Risk	
				Number	%	Number	%	Number	%	Number	%
20234	Abafala	Uai Muhi River Catchment	44	32	72.7%	2	4.5%	6	13.6%	4	9.1%
20332	Abo	Seiçal River Catchment	149	148	99.3%	0	0.0%	0	0.0%	1	0.7%
20434	Afaçà	Uai Muhi River Catchment	374	368	98.4%	0	0.0%	5	1.3%	1	0.3%
20707	Baguia	Boro Uai River Catchment	39	39	100.0%	0	0.0%	0	0.0%	0	0.0%
20732	Baguia	Seiçal River Catchment	142	139	97.9%	3	2.1%	0	0.0%	0	0.0%
20734	Baguia	Uai Muhi River Catchment	94	94	100.0%	0	0.0%	0	0.0%	0	0.0%
20932	Bualale	Seiçal River Catchment	311	303	97.4%	3	1.0%	5	1.6%	0	0.0%
22607	Guruçà	Boro Uai River Catchment	150	149	99.3%	0	0.0%	1	0.7%	0	0.0%
22621	Guruçà	Lianau River Catchment	40	40	100.0%	0	0.0%	0	0.0%	0	0.0%
22634	Guruçà	Uai Muhi River Catchment	285	265	93.0%	8	2.8%	10	3.5%	2	0.7%
23032	Laisorolai De Baixo	Seiçal River Catchment	206	206	100.0%	0	0.0%	0	0.0%	0	0.0%
23105	Laisorolai De Cima	Bebui River Catchment	252	250	99.2%	2	0.8%	0	0.0%	0	0.0%
23132	Laisorolai De Cima	Seiçal River Catchment	496	492	99.2%	2	0.4%	1	0.2%	1	0.2%
23134	Laisorolai De Cima	Uai Muhi River Catchment	7	7	100.0%	0	0.0%	0	0.0%	0	0.0%
23605	Lelalai	Bebui River Catchment	49	49	100.0%	0	0.0%	0	0.0%	0	0.0%
23632	Lelalai	Seiçal River Catchment	309	309	100.0%	0	0.0%	0	0.0%	0	0.0%
24032	Letemumo	Seiçal River Catchment	512	511	99.8%	0	0.0%	1	0.2%	0	0.0%
24332	Lacoliu	Seiçal River Catchment	382	362	94.8%	4	1.0%	10	2.6%	6	1.6%
24334	Lacoliu	Uai Muhi River Catchment	119	103	86.6%	1	0.8%	6	5.0%	9	7.6%
24707	Macalaco	Boro Uai River Catchment	42	42	100.0%	0	0.0%	0	0.0%	0	0.0%
24732	Macalaco	Seiçal River Catchment	225	215	95.6%	4	1.8%	2	0.9%	4	1.8%
24805	Maluro	Bebui River Catchment	18	18	100.0%	0	0.0%	0	0.0%	0	0.0%
25634	Namanei	Uai Muhi River Catchment	151	132	87.4%	4	2.6%	4	2.6%	11	7.3%
27934	Uaitame	Uai Muhi River Catchment	376	355	94.4%	6	1.6%	10	2.7%	5	1.3%
		Totals Quelicai AP	**4,772**	**4,628**	**97.0%**	**39**	**0.8%**	**61**	**1.3%**	**44**	**0.9%**

Tabela 15. Uma sira iha Risko ba Rai-halai iha PA Quelicai

Figura 9 – Evidensia husi Inundasaun be suli habelar, Rai-halai no erosaun, no esforsu enjineria atu proteze strada

Figura 10 – Ezemplo moderado husi rai-lolo no vegetasun esparse kontribuisaun ba iha risko ba Rai-halai. Suco Abafala, Kaptasaun Uai Muhi

Suco -Catchment Code	*Suco* -Catchment		Total Length of Roads (Km)	Length of Road in Each Landslide Risk Category							
				No Risk		Low Risk		Medium Risk		High Risk	
				Km	%	Km	%	Km	%	Km	%
20234	Abafala	Uai Muhi River Catchment	2.6	2.4	94.2%	0.0	0.0%	0.1	4.8%	0.0	1.0%
20332	Abo	Seiçal River Catchment	3.6	3.5	98.1%	0.0	0.3%	0.1	1.6%	0.0	0.0%
20434	Afaçà	Uai Muhi River Catchment	8.5	8.0	94.5%	0.1	1.0%	0.0	0.4%	0.3	4.1%
20707	Baguia	Boro Uai River Catchment	1.8	1.6	92.7%	0.1	5.1%	0.0	2.2%	0.0	0.0%
20732	Baguia	Seiçal River Catchment	3.1	3.0	99.2%	0.0	0.0%	0.0	0.8%	0.0	0.0%
20734	Baguia	Uai Muhi River Catchment	2.2	2.0	87.7%	0.0	0.5%	0.2	10.4%	0.0	1.5%
20932	Bualale	Seiçal River Catchment	8.0	8.0	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
22607	Guruçà	Boro Uai River Catchment	3.9	3.9	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
22621	Guruçà	Lianau River Catchment	0.3	0.3	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
22634	Guruçà	Uai Muhi River Catchment	4.5	4.3	96.2%	0.1	1.6%	0.0	0.7%	0.1	1.6%
23032	Laisorolai De Baixo	Seiçal River Catchment	3.8	3.7	97.6%	0.0	0.0%	0.0	0.0%	0.1	2.4%
23105	Laisorolai De Cima	Bebui River Catchment	3.8	3.8	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
23132	Laisorolai De Cima	Seiçal River Catchment	9.8	9.8	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
23134	Laisorolai De Cima	Uai Muhi River Catchment	0.0								
23605	Lelalai	Bebui River Catchment	1.0	1.0	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
23632	Lelalai	Seiçal River Catchment	6.0	6.0	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
24032	Letemumo	Seiçal River Catchment	8.2	8.2	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
24332	Lacoliu	Seiçal River Catchment	3.6	3.5	95.3%	0.1	1.7%	0.1	3.0%	0.0	0.0%
24334	Lacoliu	Uai Muhi River Catchment	0.0								
24707	Macalaco	Boro Uai River Catchment	4.1	3.4	82.4%	0.4	9.5%	0.3	6.3%	0.1	1.8%
24732	Macalaco	Seiçal River Catchment	10.0	9.1	91.2%	0.4	3.8%	0.2	2.4%	0.3	2.5%
24805	Maluro	Bebui River Catchment	0.0								
25634	Namanei	Uai Muhi River Catchment	0.6	0.6	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
27934	Uaitame	Uai Muhi River Catchment	3.0	2.8	93.3%	0.2	5.6%	0.0	1.0%	0.0	0.0%
		Totals Quelicai AP	**92.2**	**88.9**	**96.4%**	**1.3**	**1.4%**	**1.2**	**1.3%**	**0.9**	**1.0%**

Tabela 16. Estrada sira iha Risko ba Rai-halai iha PA Quelicai

Risko Erosaun iha Posto Administrativo Quelicai

Oito-sete porsento husi area rai PA Quelicai mak susceptivel ba nivel mediu too as ba erosaun. Topografia nee tipikalmente as, rai naruk no menus liu vegetasaun, no solu neebe mak erodivel as liu, materiais la konsolida ho taho ituan no konteudo organiku. Potensia erosaun mak as liu iha Kaptasaun Mota Seiçal, Uai Muhi no Bebui, iha parte norte husi PA nee, Kaptasaun Mota Boro Uai no Liana, jeralmente hatudu potensia kiik ba erosaun tamba sira iha elevasaun badak no rai-lolo ituan.

Hanesan indika sessaun passado, infra-estrutura maioria mak la konsidera sei iha risko as ba rai halai, maibe serivsu kampo konfirma katak estrutura barak sofre estraga mai husi varias tipo movement mundo. Fotografia iha pajina nee no sesaun passado hatudu evidensia klaru katak Quelicai mak fatin ameasado iha neebe atu konstrui eskola, uma no Estrada forte diak atu hamrik iha natureza nia forsa. Liu 80% ba uma sira iha Quelicai mak iha area sira ho risko mediu no as ba erosaun, iha tempo neebe hanesan ba Estrada, persentajem mak as liu kuaze 90%. So deit PA 6 nia eskola 36 no entre 1 husi 5 fasilidade saude mak iha rai leten ho risko kiik ba erosaun. Figura 12 hatudu estragus movemento mundo neebe kauza ba iha eskola primaria iha Suco Abo.

Estrada iha PA Quelicai mos at-liu afeitado husi erosaun. Risko neebe as liu mak besik liu ba Massif Matebian, inklui Laisorolai de Cima, iha neebe 12.9km husi 13.6km Estrada neebe mak iha area sira ho risko mediu ba as, no Afaça, iha 6.1km husi total 8.5km. Nee parte Laisorolai de Cima iha Kaptasaun Mota Uai Muhi nia leten mak rai-lolo, remotas no labele assessu katak iha neeba uma 7 deit, no laiha Estrada. Prominente hodi nota, maibe, erosaun mosu hodi ameasa signifikante ba rai situado kiik no dook husi Matebian. Iha suco Bualale no Macalaco, erosaun mak nafatin maioria ameasa Estrada, ho 8km tomak husi Estrada Bualale no 10.3km husi 14.1km iha Macalaco iha risko mediu no as.

Figura 11 –Erosaun ba moderado rai-lolo ho vegetasaun esparse atu proteze materiais la konsolida. Suco Afaçà, Kaptasaun Uai Muhi

Figura 12 – Estragos ba Eskola Primaria neebe kauza husi erosaun no krise. Suco Abo, Kaptasaun Mota Seiçal

				Area of Land in Each Erosion Risk Category					
Suco -Catchment			Total	Low Risk		Medium Risk		High Risk	
Code	*Suco* -Catchment		Hectares	Hectares	%	Hectares	%	Hectares	%
20234	Abafala	Uai Muhi River Catchment	329	57	17.4%	257	78.1%	15	4.4%
20332	Abo	Seiçal River Catchment	287	11	3.8%	148	51.6%	128	44.6%
20434	Afaçà	Uai Muhi River Catchment	1,429	272	19.0%	964	67.5%	193	13.5%
20707	Baguia	Boro Uai River Catchment	121	28	23.4%	78	64.8%	14	11.8%
20732	Baguia	Seiçal River Catchment	92	11	11.4%	64	69.5%	18	19.0%
20734	Baguia	Uai Muhi River Catchment	490	53	10.8%	320	65.3%	117	24.0%
20932	Bualale	Seiçal River Catchment	1,918	127	6.6%	1,093	57.0%	698	36.4%
22607	Guruçà	Boro Uai River Catchment	662	148	22.3%	439	66.3%	75	11.4%
22621	Guruçà	Lianau River Catchment	232	42	18.3%	184	79.4%	5	2.3%
22634	Guruçà	Uai Muhi River Catchment	1,841	286	15.5%	1,292	70.2%	263	14.3%
23032	Laisorolai De Baixo	Seiçal River Catchment	754	20	2.7%	332	44.1%	401	53.2%
23105	Laisorolai De Cima	Bebui River Catchment	771	28	3.7%	361	46.8%	381	49.5%
23132	Laisorolai De Cima	Seiçal River Catchment	1,079	5	0.5%	320	29.6%	754	69.9%
23134	Laisorolai De Cima	Uai Muhi River Catchment	411	16	3.9%	144	35.0%	251	61.1%
23605	Lelalai	Bebui River Catchment	186	14	7.4%	116	62.0%	57	30.6%
23632	Lelalai	Seiçal River Catchment	1,731	305	17.6%	734	42.4%	693	40.0%
24032	Letemumo	Seiçal River Catchment	847	198	23.4%	522	61.6%	126	14.9%
24332	Lacoliu	Seiçal River Catchment	464	33	7.2%	287	61.9%	144	30.9%
24334	Lacoliu	Uai Muhi River Catchment	277	18	6.6%	154	55.8%	104	37.6%
24707	Macalaco	Boro Uai River Catchment	1,017	322	31.7%	656	64.5%	39	3.8%
24732	Macalaco	Seiçal River Catchment	1,877	371	19.8%	1,095	58.3%	411	21.9%
24805	Maluro	Bebui River Catchment	121	2	1.3%	43	35.1%	77	63.6%
25634	Namanei	Uai Muhi River Catchment	1,343	125	9.3%	926	69.0%	292	21.7%
27934	Uaitame	Uai Muhi River Catchment	2,316	260	11.2%	1,633	70.5%	423	18.3%
		Totals Quelicai AP	**20,594**	**2,753**	**13.4%**	**12,162**	**59.1%**	**5,680**	**27.6%**

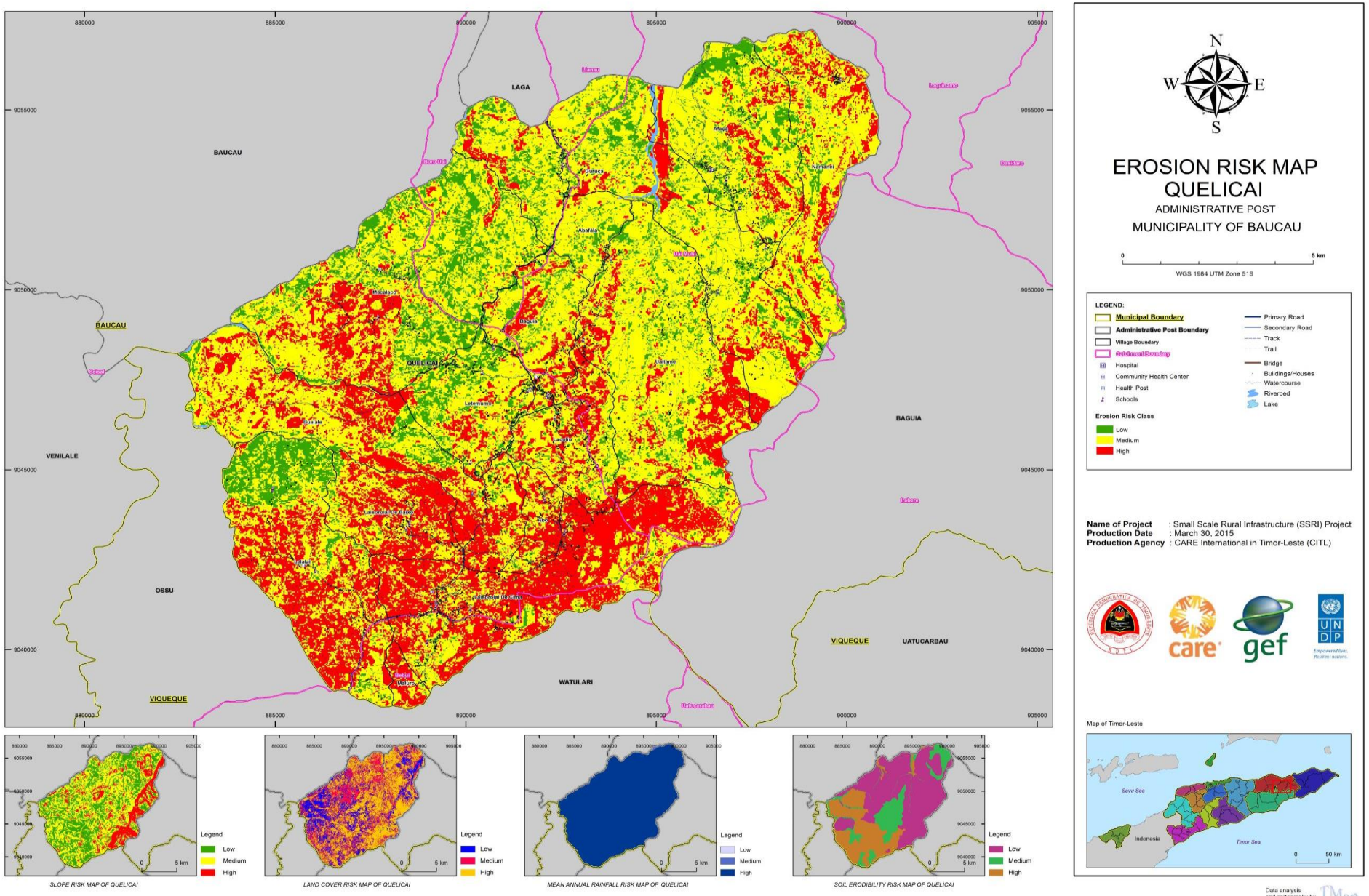
Tabela 17. Area Rai iha Risko ba Erosaun iha PA Quelicai

				Houses in Each Erosion Risk Category						Total	Length of Road in Each Erosion Risk Category					
Suco -			Total No.	Low Risk		Medium Risk		High Risk		Length of	Low Risk		Medium Risk		High Risk	
Catchment Code	*Suco* -Catchment		of Houses	Number	%	Number	%	Number	%	Roads	Km	%	Km	%	Km	%
20234	Abafala	Uai Muhi River Catchment	44	7	15.9%	30	68.2%	7	15.9%	2.6	0.8	30.9%	1.8	68.0%	0.0	1.2%
20332	Abo	Seiçal River Catchment	149	3	2.0%	90	60.4%	56	37.6%	3.6	0.0	1.2%	1.2	33.6%	2.3	65.2%
20434	Afaçà	Uai Muhi River Catchment	374	122	32.6%	227	60.7%	25	6.7%	8.5	2.3	27.5%	5.8	68.5%	0.3	4.1%
20707	Baguia	Boro Uai River Catchment	39	24	61.5%	15	38.5%	0	0.0%	1.8	0.7	38.3%	1.0	55.4%	0.1	6.4%
20732	Baguia	Seiçal River Catchment	142	22	15.5%	95	66.9%	25	17.6%	3.1	0.7	21.5%	2.0	64.8%	0.4	13.7%
20734	Baguia	Uai Muhi River Catchment	94	16	17.0%	59	62.8%	19	20.2%	2.2	0.1	2.3%	1.4	64.1%	0.8	33.7%
20932	Bualale	Seiçal River Catchment	311	42	13.5%	201	64.6%	68	21.9%	8.0	0.0	0.6%	3.9	48.7%	4.1	50.8%
22607	Guruçà	Boro Uai River Catchment	150	58	38.7%	91	60.7%	1	0.7%	3.9	1.3	34.2%	2.6	65.8%	0.0	0.0%
22621	Guruçà	Lianau River Catchment	40	8	20.0%	32	80.0%	0	0.0%	0.3	0.0	0.0%	0.3	100.0%	0.0	0.0%
22634	Guruçà	Uai Muhi River Catchment	285	67	23.5%	203	71.2%	15	5.3%	4.5	0.4	9.4%	3.0	67.7%	1.0	22.9%
23032	Laisorolai De Baixo	Seiçal River Catchment	206	1	0.5%	126	61.2%	79	38.3%	3.8	0.0	0.0%	1.8	48.0%	2.0	52.0%
23105	Laisorolai De Cima	Bebui River Catchment	252	19	7.5%	160	63.5%	73	29.0%	3.8	0.5	14.6%	2.3	61.8%	0.9	23.5%
23132	Laisorolai De Cima	Seiçal River Catchment	496	7	1.4%	233	47.0%	256	51.6%	9.8	0.0	0.2%	5.2	53.7%	4.5	46.2%
23134	Laisorolai De Cima	Uai Muhi River Catchment	7	0	0.0%	7	100.0%	0	0.0%	0.0						
23605	Lelalai	Bebui River Catchment	49	9	18.4%	32	65.3%	8	16.3%	1.0	0.0	0.0%	0.5	49.0%	0.5	51.0%
23632	Lelalai	Seiçal River Catchment	309	48	15.5%	183	59.2%	78	25.2%	6.0	0.0	0.1%	3.4	55.9%	2.7	44.0%
24032	Letemumo	Seiçal River Catchment	512	191	37.3%	268	52.3%	53	10.4%	8.2	1.9	22.6%	5.6	67.8%	0.8	9.7%
24332	Lacoliu	Seiçal River Catchment	382	43	11.3%	225	58.9%	114	29.8%	3.6	0.1	3.5%	2.0	53.7%	1.6	42.8%
24334	Lacoliu	Uai Muhi River Catchment	119	13	10.9%	65	54.6%	41	34.5%	0.0						
24707	Macalaco	Boro Uai River Catchment	42	16	38.1%	26	61.9%	0	0.0%	4.1	1.4	33.7%	2.3	57.6%	0.4	8.7%
24732	Macalaco	Seiçal River Catchment	225	66	29.3%	108	48.0%	51	22.7%	10.0	2.1	20.9%	5.3	52.8%	2.6	26.2%
24805	Maluro	Bebui River Catchment	18	1	5.6%	12	66.7%	5	27.8%	0.0						
25634	Namanei	Uai Muhi River Catchment	151	4	2.6%	120	79.5%	27	17.9%	0.6	0.0	0.0%	0.5	81.2%	0.1	18.8%
27934	Uaitame	Uai Muhi River Catchment	376	83	22.1%	243	64.6%	50	13.3%	3.0	0.3	9.5%	2.1	71.0%	0.6	19.4%
		Totals Quelicai AP	**4,772**	**870**	**18.2%**	**2,851**	**59.7%**	**1,051**	**22.0%**	**92.2**	**12.6**	**13.7%**	**53.9**	**58.5%**	**25.6**	**27.8%**

Tabela 18. Uma no Estrada sira iha Risko ba Erosaun iha PA Quelicai

Suco -Catchment Code	*Suco* -Catchment		Total No. of Schools	Schools in Each Erosion Risk Category						Total No. of Health Facilities	Health Facilities in Each Erosion Risk Category					
				Low Risk		Medium Risk		High Risk			Low Risk		Medium Risk		High Risk	
				Number	%	Number	%	Number	%		Number	%	Number	%	Number	%
20234	Abafala	Uai Muhi River Catchment	0							0						
20332	Abo	Seiçal River Catchment	1	0	0.0%	1	100.0%	0	0.0%	0						
20434	Afaçà	Uai Muhi River Catchment	4	1	25.0%	3	75.0%	0	0.0%	1	0	0.0%	1	100.0%	0	0.0%
20707	Baguia	Boro Uai River Catchment	0							0						
20732	Baguia	Seiçal River Catchment	0							1	0	0.0%	1	100.0%	0	0.0%
20734	Baguia	Uai Muhi River Catchment	0							0						
20932	Bualale	Seiçal River Catchment	1	0	0.0%	0	0.0%	1	100.0%	0						
22607	Guruçà	Boro Uai River Catchment	1	0	0.0%	1	100.0%	0	0.0%	0						
22621	Guruçà	Lianau River Catchment	0							0						
22634	Guruçà	Uai Muhi River Catchment	2	0	0.0%	2	100.0%	0	0.0%	0						
23032	Laisorolai De Baixo	Seiçal River Catchment	2	0	0.0%	2	100.0%	0	0.0%	0						
23105	Laisorolai De Cima	Bebui River Catchment	1	0	0.0%	0	0.0%	1	100.0%	0						
23132	Laisorolai De Cima	Seiçal River Catchment	4	0	0.0%	2	50.0%	2	50.0%	1	0	0.0%	1	100.0%	0	0.0%
23134	Laisorolai De Cima	Uai Muhi River Catchment	0							0						
23605	Lelalai	Bebui River Catchment	0							0						
23632	Lelalai	Seiçal River Catchment	3	2	66.7%	1	33.3%	0	0.0%	1	0	0.0%	0	0.0%	1	100.0%
24032	Letemumo	Seiçal River Catchment	8	3	37.5%	5	62.5%	0	0.0%	0						
24332	Lacoliu	Seiçal River Catchment	2	0	0.0%	1	50.0%	1	50.0%	0						
24334	Lacoliu	Uai Muhi River Catchment	0							0						
24707	Macalaco	Boro Uai River Catchment	0							0						
24732	Macalaco	Seiçal River Catchment	2	0	0.0%	0	0.0%	2	100.0%	1	1	100.0%	0	0.0%	0	0.0%
24805	Maluro	Bebui River Catchment	0							0						
25634	Namanei	Uai Muhi River Catchment	1	0	0.0%	1	100.0%	0	0.0%	0						
27934	Uaitame	Uai Muhi River Catchment	4	0	0.0%	4	100.0%	0	0.0%	0						
		Totals Quelicai AP	**36**	**6**	**16.7%**	**23**	**63.9%**	**7**	**19.4%**	**5**	**1**	**20.0%**	**3**	**60.0%**	**1**	**20.0%**

Tabela 19. Eskola no Fasilidade Saude iha Risko ba Erosaun iha PA Quelicai



MAPA- 9. Mapa Risko Erosaun: Posto Administrativo Quelicai

2.4.3 Perfil Risko – Posto Administrativo Vemasse

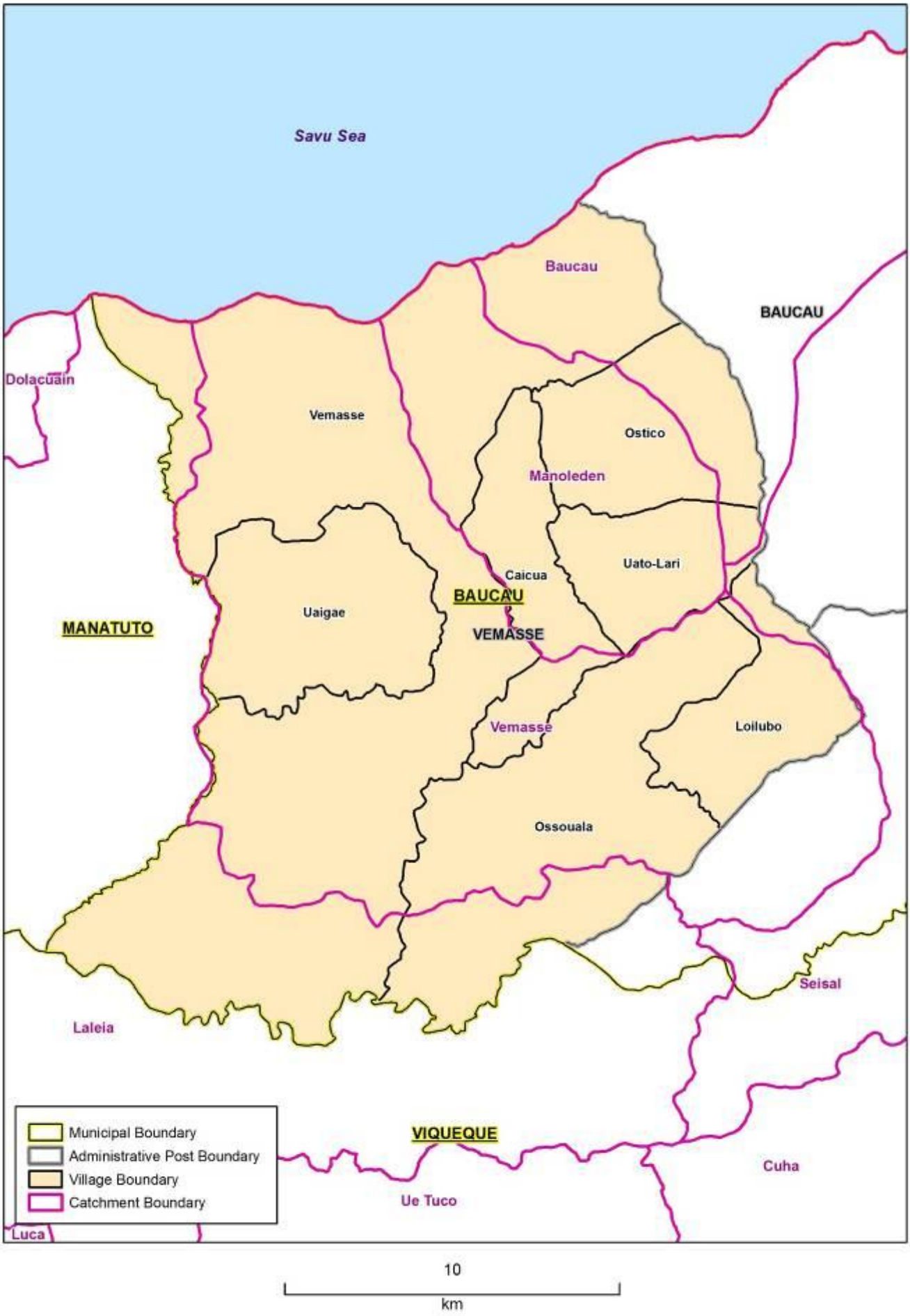
Vemasse mak parte husi kaptasaun 15 no suco 7, iha neebe forma hamutuk ho total kaptasaun suco 15. Kaptasaun suco neebe mak boot liu mak inter-koneksaun Suco Vemasse ho Kaptasaun Mota Vemasse. Kaptasaun nee iha medida hektar 9,534 no iha neebe maioria ema neebe hela iha PA no maioria husi infra-estrutura. Ida nee mos potensia as ba tipo risko tolu neebe mak hetan.

Suco -Catchment Code	*Suco* -Catchment		Total Area
31423	Caicua	Manoleden River Catchment	2,295
34532	Loilubo	Seiçal River Catchment	253
34535	Loilubo	Vemasse River Catchment	1,967
35720	Ossouala	Laleia River Catchment	1,947
35723	Ossouala	Manoleden River Catchment	4,561
35803	Ostico	Baucau Aggregate Catchment	1,147
35823	Ostico	Manoleden River Catchment	1,683
37035	Uaigae	Vemasse River Catchment	3,424
37103	Uato-Lari	Baucau Aggregate Catchment	184
37123	Uato-Lari	Manoleden River Catchment	1,672
37132	Uato-Lari	Seiçal River Catchment	54
37703	Vemasse	Baucau Aggregate Catchment	1,915
37720	Vemasse	Laleia River Catchment	4,590
37723	Vemasse	Manoleden River Catchment	2,169
37735	Vemasse	Vemasse River Catchment	9,534
		Totals Vemasse AP	**37,395**

Tabela 20. Kaptasaun-Suco iha Posto Administrativo Vemasse

Vemasse iha karateristiku bio-fiziko hanesan ba iha ninia vizinho PA ba iha leste, no hanesan iha PA Baucau, inundasaun mak ameasa boot iha nee. Revessa, inundasaun planicie no kanal iha Mota Vemasse mak fisikal karateristika dominante iha area nee, no inundasaun mosu fo problema boot. Area boot iha risko ba inundasaun mak kaptasaun kiik, tun ba iha besik tasi. Parte balu kaptasaun as mak inklinado ho rai halai no erosaun. Iha parte seluk PA Vemasse, kondisaun mak relativamente favoravel no ameasa husi perigos klima-relasionado relativamente kiik.

Figura 13 – Inundasaun Regularameasa Estrada no infra-estrutura eletrisidad. Suco Vemasse, Kaptasaun Mota Vemasse naton-liu



MAPA- 10. Suco no Kaptasaun husi Posto Administrativo Vemasse

Risko Inundasaun iha Posto Administrativo Vemasse

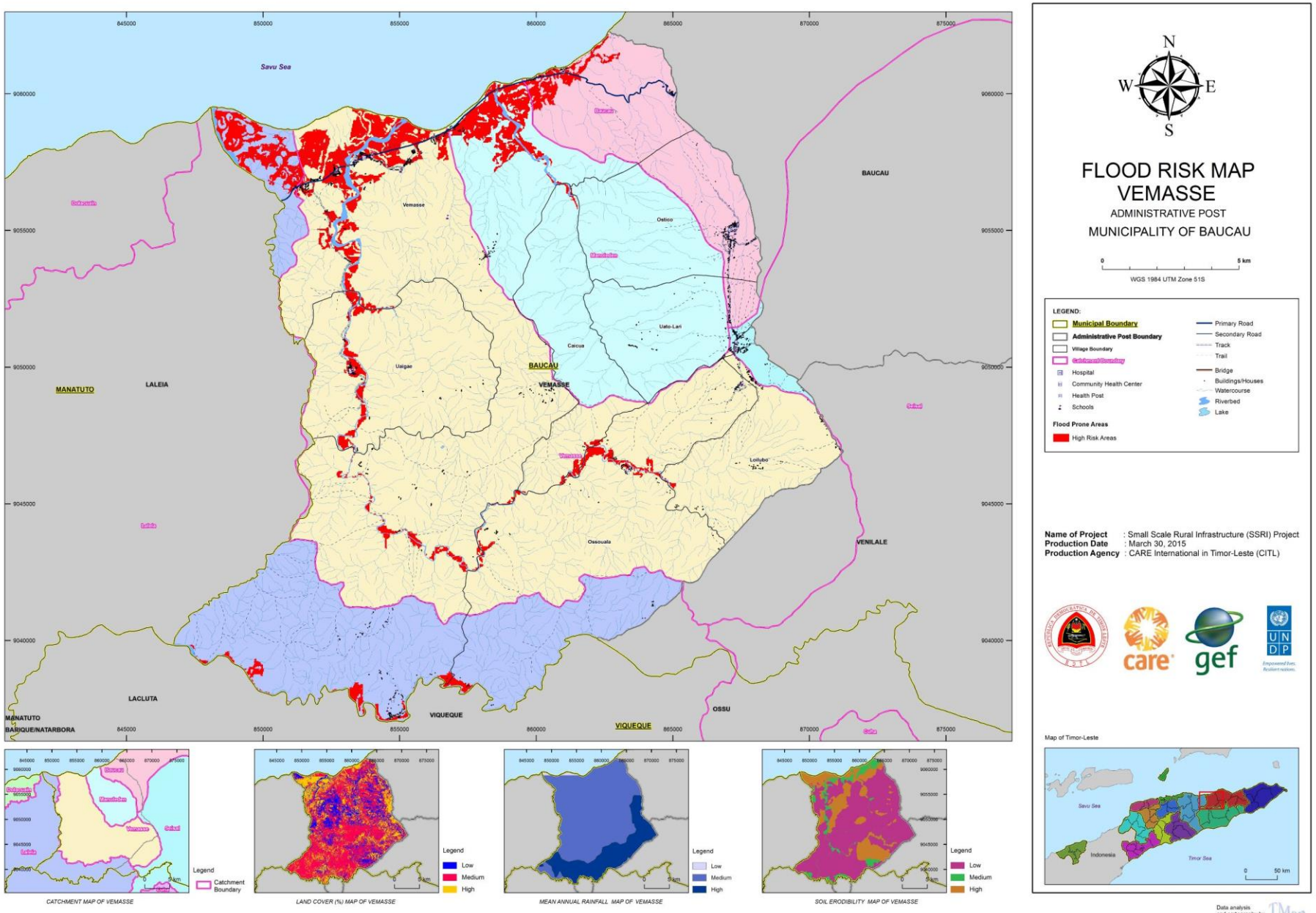
Iha neeba potensia ba inundasaun ba hektar 2,231 PA Vemasse, representa deit 6% husi area total ho hektar 37,395. Area sira inklinado inundasaun ba iha kosteira parte norte no besik ba kanal prinsipal ba iha mota boot rua, nee mak Mota Vemasse no Laleia. Kaptasaun Mota Vemasse maioria rai iha inklinado inundasaun, ho hektar 1,045, Kaptasaun Mota Manoleden nee ho hektar 556, no Kaptasaun Mota Laleia nee mak datoluk ho hektar 464. Maske nunee barak hanesan iha inklinado ba inundasaun parte husi Kaptasaun Mota Seiçal iha PA Baucau, iha nee konsentrado liu iha kosteira. Iha neeba potensia ba inundasaun iha laletek iha Vemasse no Kaptasaun Laleia, maibe mota rua nee relativamente inundasaun estreita neebe tende atu limita inundasaun ba area sira neebe besik ba iha mota. Be menus neebe halai kanal mota husi rai-as klaru signifika be barak tan lori ba rai-tetuk, neebe bele aumenta subsistensia moris ba inundasaun tun too iha kosteira. Seiçal, iha parte seluk, iha inundasaun neebe habelar no boot liu to iha kaptasaun. Ida nee signifika katak inundasaun be mak inklinado ho espalha as liu iha kaptasaun, kovre no extensivu liu tratos husi rai no mai husi kanal mota no ba liu tan kosteira.

Maske area sira inklinado inundasaun kovre deit 6% husi area rai Vemasse, ida nee mak iha neebe ema barak hela no infra-estrutura barak mak konstrui. Uma sira ho Prosento rua nolu resin ida mak iha zona risko inundasaun, no Estrada 24%. Eskola lima husi eskola sira 16 no rua seluk mak fasilidade saude neebe iha ameasa nia okos husi inundasaun. Em prinispiu komunidade afeitado husi inundasaun iha Vemasse tantu impakto positive no negative. Parte husi positive, rai tetuk besik liu ba mota boot nee diak ba agrikultura, ho be neebe disponivel no deposito frequenta ho nutrisaun diak alluvium bainhira inundasaun tun (laiha). Ida nee atrai ema atu hela iha area sira balu. Maibe ho vantajem mai ho ameasa seriu, inkluindo ho posivel estragus properiadades no ai-horis, lakon pekuaria, transportasaun no linha komunikasaun kotu, no mos fo risko ba ema nia moris.

Figura 14 – Estragos inundasaun no erosaun besik uma iha Suco Ossouala, Kaptasaun Mota Vemasse

Suco -Catchment Code	*Suco* -Catchment		Land Area			Houses			Schools			Health Facilities			Roads		
			Total Area	In Flood Risk Zone		Total	In Flood Risk Zone		Total	In Flood Risk Zone		Total	In Flood Risk Zone		Total Km	In Flood Risk Zone	
				Hectares	%	Number	Number	%	Number	Number	%	Number	Number	%		Km	%
31423	Caicua	Manoleden River Catchment	2,295	37	1.6%	5	0	0.0%	0			0			0.0		
34532	Loilubo	Seiçal River Catchment	253	0	0.0%	120	0	0.0%	2	0	0.0%	1	0	0.0%	1.4	0.0	0.0%
34535	Loilubo	Vemasse River Catchment	1,967	6	0.3%	166	0	0.0%	0			0			0.9	0.0	0.0%
35720	Ossouala	Laleia River Catchment	1,947	25	1.3%	24	6	25.0%	0			0			0.0		
35735	Ossouala	Vemasse River Catchment	4,561	96	2.1%	177	17	9.6%	2	0	0.0%	1	0	0.0%	2.0	0.0	0.0%
35803	Ostico	Baucau Aggregate Catchment	1,147	0	0.0%	240	0	0.0%	1	0	0.0%	1	0	0.0%	8.1	0.0	0.0%
35823	Ostico	Manoleden River Catchment	1,683	1	0.1%	1	0	0.0%	0			0			0.0		
37035	Uaigae	Vemasse River Catchment	3,424	140	4.1%	144	84	58.3%	1	1	100.0%	1	1	100.0%	5.4	1.8	34.1%
37103	Uato-Lari	Baucau Aggregate Catchment	184	0	0.0%	55	0	0.0%	0			0			1.9	0.0	0.0%
37123	Uato-Lari	Manoleden River Catchment	1,672	0	0.0%	51	0	0.0%	0			0			0.0		
37132	Uato-Lari	Seiçal River Catchment	54	0	0.0%	70	0	0.0%	0			0			0.5	0.0	0.0%
37703	Vemasse	Baucau Aggregate Catchment	1,915	165	8.6%	84	35	41.7%	2	1	50.0%	0			7.2	2.0	27.5%
37720	Vemasse	Laleia River Catchment	4,590	439	9.6%	149	18	12.1%	1	0	0.0%	1	0	0.0%	0.8	0.2	29.0%
37723	Vemasse	Manoleden River Catchment	2,169	422	19.5%	79	26	32.9%	0			0			3.4	1.3	38.0%
37735	Vemasse	Vemasse River Catchment	9,534	899	9.4%	794	270	34.0%	7	3	42.9%	1	1	100.0%	15.2	6.1	40.0%
		Totals Vemasse AP	**37,395**	**2,231**	**6.0%**	**2,159**	**456**	**21.1%**	**16**	**5**	**31.3%**	**6**	**2**	**33.3%**	**47**	**11.4**	**24.4%**

Tabela 21. Risko Estatistiko ba Inundasaun iha PA Vemasse



MAPA- 11. Mapa Risko Inundasaun: Posto Administrativo Vemasse

Risko Rai Halai iha Posto Administrativo Vemasse

Rai halai mak jeralmente laos ameasa seriu ida iha PA Vemasse, ho 97% area rai neebe konsidera laiha risko. Maske maioria area nee tetuk, iha excepsaun balu. Konsidera area inklinado rai halai iha fatin as parte Kaptasaun Mota Vemasse, suli as liu husi Kaptasaun Mota Vemasse. Rai-as, menus liu vegetasaun area hirak nee mak Suco Ossouala, ho hektar 253 (7.4% area total) neebe mak konsidera risko mediu no hektar 161 (4.4%) mak konsidera risko as ba rai-halai. Ponto assesu seluk ba rai halai mak kiik liu tun iha Kaptasaun hanesan iha Suco Uaigae.

Infra-estrutura iha PA Vemasse mak kuaze kompletamente sai-husi area sira risko ba rai halai. Iha deit 2 husi uma sira 2,159 neebe mak konsidera sei iha sitiu risko, no ho deit sesaun-metro 100 husi Estrada, mai husi total naruk Estrada 46.8km, mak potensialmente iha risko. Laiha eskola ka fasilidade saude PA Vemasse mak konstrui iha sitiu inklinado rai-halai.

				Area of Land in Each Landslide Risk Category							
Suco -Catchment Code	*Suco* -Catchment		Total Hectares	No Risk		Low Risk		Medium Risk		High Risk	
				Hectares	%	Hectares	%	Hectares	%	Hectares	%
31423	Caicua	Manoleden River Catchment	2,295	2,258	98.4%	10	0.4%	24	1.0%	3	0.2%
34532	Loilubo	Seiçal River Catchment	253	253	100.0%	0	0.0%	0	0.0%	0	0.0%
34535	Loilubo	Vemasse River Catchment	1,967	1,964	99.8%	1	0.1%	2	0.1%	0	0.0%
35720	Ossouala	Laleia River Catchment	1,947	1,830	94.0%	23	1.2%	62	3.2%	32	1.6%
35735	Ossouala	Vemasse River Catchment	4,561	4,142	90.8%	99	2.2%	191	4.2%	129	2.8%
35803	Ostico	Baucau Aggregate Catchment	1,147	1,146	99.9%	1	0.1%	0	0.0%	0	0.0%
35823	Ostico	Manoleden River Catchment	1,683	1,681	99.9%	2	0.1%	0	0.0%	0	0.0%
37035	Uaigae	Vemasse River Catchment	3,424	3,200	93.5%	87	2.5%	120	3.5%	17	0.5%
37103	Uato-Lari	Baucau Aggregate Catchment	184	184	100.0%	0	0.0%	0	0.0%	0	0.0%
37123	Uato-Lari	Manoleden River Catchment	1,672	1,671	99.9%	1	0.0%	0	0.0%	0	0.0%
37132	Uato-Lari	Seiçal River Catchment	54	54	100.0%	0	0.0%	0	0.0%	0	0.0%
37703	Vemasse	Baucau Aggregate Catchment	1,915	1,915	100.0%	0	0.0%	0	0.0%	0	0.0%
37720	Vemasse	Laleia River Catchment	4,590	4,521	98.5%	35	0.8%	25	0.5%	9	0.2%
37723	Vemasse	Manoleden River Catchment	2,169	2,115	97.5%	14	0.6%	32	1.5%	9	0.4%
37735	Vemasse	Vemasse River Catchment	9,534	9,404	98.6%	68	0.7%	53	0.6%	9	0.1%
		Totals Vemasse AP	**37,395**	**36,339**	**97.2%**	**339**	**0.9%**	**510**	**1.4%**	**207**	**0.6%**

Tabela 22. Area Rai iha Risko ba Rai-Halai iha PA Vemasse

Risko Erosaun iha Posto Administrativo Vemasse

Maske rai-halai mosu ho ameasa naton iha area maioria parte PA Vemasse, potensia ba erosaun mak substansialmente as no habelar liu tan. (Hare tabela risko erosaun iha p.40.) Tamba erosaun solu fenomeno jeral liu, presiza kontribui kondisaun menus extremo ba rai halai. Fator boot ida mak rai-lolo – maske nunee rai-halai mosu deit iha rai-lolo liu, solu sei erode mai husi rai-lolo mamar no vertualmente husi rai tetuk, iha sirkumstansia certeza. Maske nunee prosesu ba erosaun solu dala ruma difikulta hodi observa, konsekoensia bele nafatin sai dramatiku no estraga, no sira afeita ema no infra-estrutura barak liu iha area rai sira.

Impakto jeral erosaun ba infra-estrutura inkluindo halo at Estrada, konstruisaun no estrutura seluk, estrutura ba kontrola be neebe entupido mak hanesan kanal irigasaun no drainajem, no polusaun husi fornesemento be domestika. Identifika problema espesifiku iha sitiu sira no assessu ba extensaun to iha erosaun mak estraga estrutura individual, ida nee sai husi kovre estudo nee, maibe husi mapa no estatistiku iha posivel atu hare fatin ida neebe mak sempre maioria susceptivel ba erosaun, no fatin ida neebe badak liu ba kaptasaun, mak sempre esperiensia ba impakto sira negative no positive.

Dala ida tan, risko as mak iha fatin as liu ba Kaptasaun Mota Vemasse iha Suco Ossouala, no tun ba iha kaptasaun hanesan iha Suco Uaigae, extensaun liu tan ba iha parte norte Suco

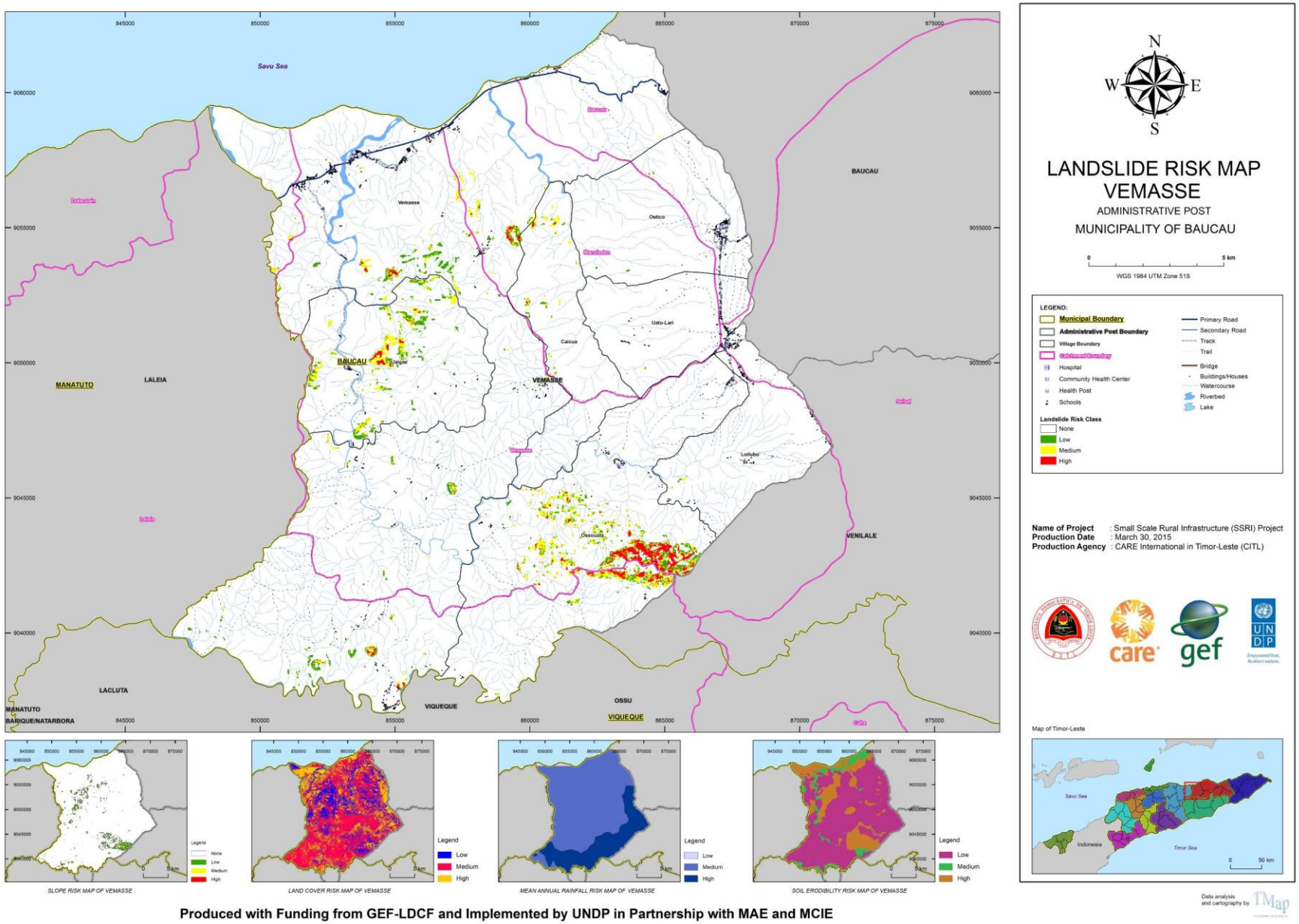
Vemasse. Hanesan iha Kaptasaun Mota Seiçal iha PA Baucau, erosaun makás laletek iha influensia important kondisaun iha rai tetuk, no laiha duvida hasae subsitensia moris ba inundasaun iha komunidade nia hela fatin ba iha inundasaun planice neebe boot no kosteira planice iha parte norte.

				Houses in Each Landslide Risk Category							
Suco -Catchment Code	*Suco* -Catchment		Total No. of Houses	No Risk		Low Risk		Medium Risk		High Risk	
				Number	%	Number	%	Number	%	Number	%
31423	Caicua	Manoleden River Catchment	5	5	100.0%	0	0.0%	0	0.0%	0	0.0%
34532	Loilubo	Seiçal River Catchment	120	120	100.0%	0	0.0%	0	0.0%	0	0.0%
34535	Loilubo	Vemasse River Catchment	166	166	100.0%	0	0.0%	0	0.0%	0	0.0%
35720	Ossouala	Laleia River Catchment	24	24	100.0%	0	0.0%	0	0.0%	0	0.0%
35735	Ossouala	Vemasse River Catchment	177	177	100.0%	0	0.0%	0	0.0%	0	0.0%
35803	Ostico	Baucau Aggregate Catchment	240	240	100.0%	0	0.0%	0	0.0%	0	0.0%
35823	Ostico	Manoleden River Catchment	1	1	100.0%	0	0.0%	0	0.0%	0	0.0%
37035	Uaigae	Vemasse River Catchment	144	144	100.0%	0	0.0%	0	0.0%	0	0.0%
37103	Uato-Lari	Baucau Aggregate Catchment	55	55	100.0%	0	0.0%	0	0.0%	0	0.0%
37123	Uato-Lari	Manoleden River Catchment	51	51	100.0%	0	0.0%	0	0.0%	0	0.0%
37132	Uato-Lari	Seiçal River Catchment	70	70	100.0%	0	0.0%	0	0.0%	0	0.0%
37703	Vemasse	Baucau Aggregate Catchment	84	84	100.0%	0	0.0%	0	0.0%	0	0.0%
37720	Vemasse	Laleia River Catchment	149	147	98.7%	0	0.0%	1	0.7%	1	0.7%
37723	Vemasse	Manoleden River Catchment	79	79	100.0%	0	0.0%	0	0.0%	0	0.0%
37735	Vemasse	Vemasse River Catchment	794	794	100.0%	0	0.0%	0	0.0%	0	0.0%
		Totals Vemasse AP	**2,159**	**2,157**	**99.9%**	**0**	**0.0%**	**1**	**0.0%**	**1**	**0.0%**

Tabela 23. Uma sira iha Risko ba Rai Halai iha PA Vemasse

				Length of Road in Each Landslide Risk Category							
Suco -Catchment Code	*Suco* -Catchment		Total Length of Roads (Km)	No Risk		Low Risk		Medium Risk		High Risk	
				Km	%	Km	%	Km	%	Km	%
31423	Caicua	Manoleden River Catchment	0.0								
34532	Loilubo	Seiçal River Catchment	1.4	1.4	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
34535	Loilubo	Vemasse River Catchment	0.9	0.9	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
35720	Ossouala	Laleia River Catchment	0.0								
35735	Ossouala	Vemasse River Catchment	2.0	2.0	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
35803	Ostico	Baucau Aggregate Catchment	8.1	8.1	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
35823	Ostico	Manoleden River Catchment	0.0								
37035	Uaigae	Vemasse River Catchment	5.4	5.4	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
37103	Uato-Lari	Baucau Aggregate Catchment	1.9	1.9	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
37123	Uato-Lari	Manoleden River Catchment	0.0								
37132	Uato-Lari	Seiçal River Catchment	0.5	0.5	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
37703	Vemasse	Baucau Aggregate Catchment	7.2	7.2	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
37720	Vemasse	Laleia River Catchment	0.8	0.8	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
37723	Vemasse	Manoleden River Catchment	3.4	3.3	97.2%	0.0	0.0%	0.1	2.8%	0.0	0.0%
37735	Vemasse	Vemasse River Catchment	15.2	15.2	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
		Totals Vemasse AP	**46.8**	**46.7**	**99.8%**	**0.0**	**0.0%**	**0.1**	**0.2%**	**0.0**	**0.0%**

Tabela 24. Estrada iha Risko ba Rai Halai iha PA Vemasse



MAPA- 12. Mapa Risko ba Rai-halai: Posto Administrativo Vemasse

Suco -Catchment Code	*Suco* -Catchment		Total Hectares	Area of Land in Each Erosion Risk Category					
				Low Risk		Medium Risk		High Risk	
				Hectares	%	Hectares	%	Hectares	%
31423	Caicua	Manoleden River Catchment	2,295	1,627	70.9%	541	23.6%	128	5.6%
34532	Loilubo	Seiçal River Catchment	253	78	31.0%	175	69.0%	0	0.0%
34535	Loilubo	Vemasse River Catchment	1,967	841	42.8%	1,055	53.7%	71	3.6%
35720	Ossouala	Laleia River Catchment	1,947	620	31.8%	1,111	57.0%	216	11.1%
35735	Ossouala	Vemasse River Catchment	4,561	1,852	40.6%	1,416	31.0%	1,293	28.4%
35803	Ostico	Baucau Aggregate Catchment	1,147	875	76.3%	270	23.6%	2	0.2%
35823	Ostico	Manoleden River Catchment	1,683	1,503	89.3%	173	10.3%	7	0.4%
37035	Uaigae	Vemasse River Catchment	3,424	2,068	60.4%	877	25.6%	479	14.0%
37103	Uato-Lari	Baucau Aggregate Catchment	184	32	17.4%	152	82.6%	0	0.0%
37123	Uato-Lari	Manoleden River Catchment	1,672	1,357	81.2%	303	18.1%	12	0.7%
37132	Uato-Lari	Seiçal River Catchment	54	22	40.3%	32	59.7%	0	0.0%
37703	Vemasse	Baucau Aggregate Catchment	1,915	1,069	55.8%	837	43.7%	8	0.4%
37720	Vemasse	Laleia River Catchment	4,590	2,048	44.6%	2,445	53.3%	97	2.1%
37723	Vemasse	Manoleden River Catchment	2,169	1,163	53.6%	902	41.6%	104	4.8%
37735	Vemasse	Vemasse River Catchment	9,534	6,363	66.7%	2,807	29.4%	364	3.8%
		Totals Vemasse AP	**37,395**	**21,518**	**57.5%**	**13,097**	**35.0%**	**2,780**	**7.4%**

Tabela 25. Area Rai iha Risko ba Erosaun iha PA Vemasse

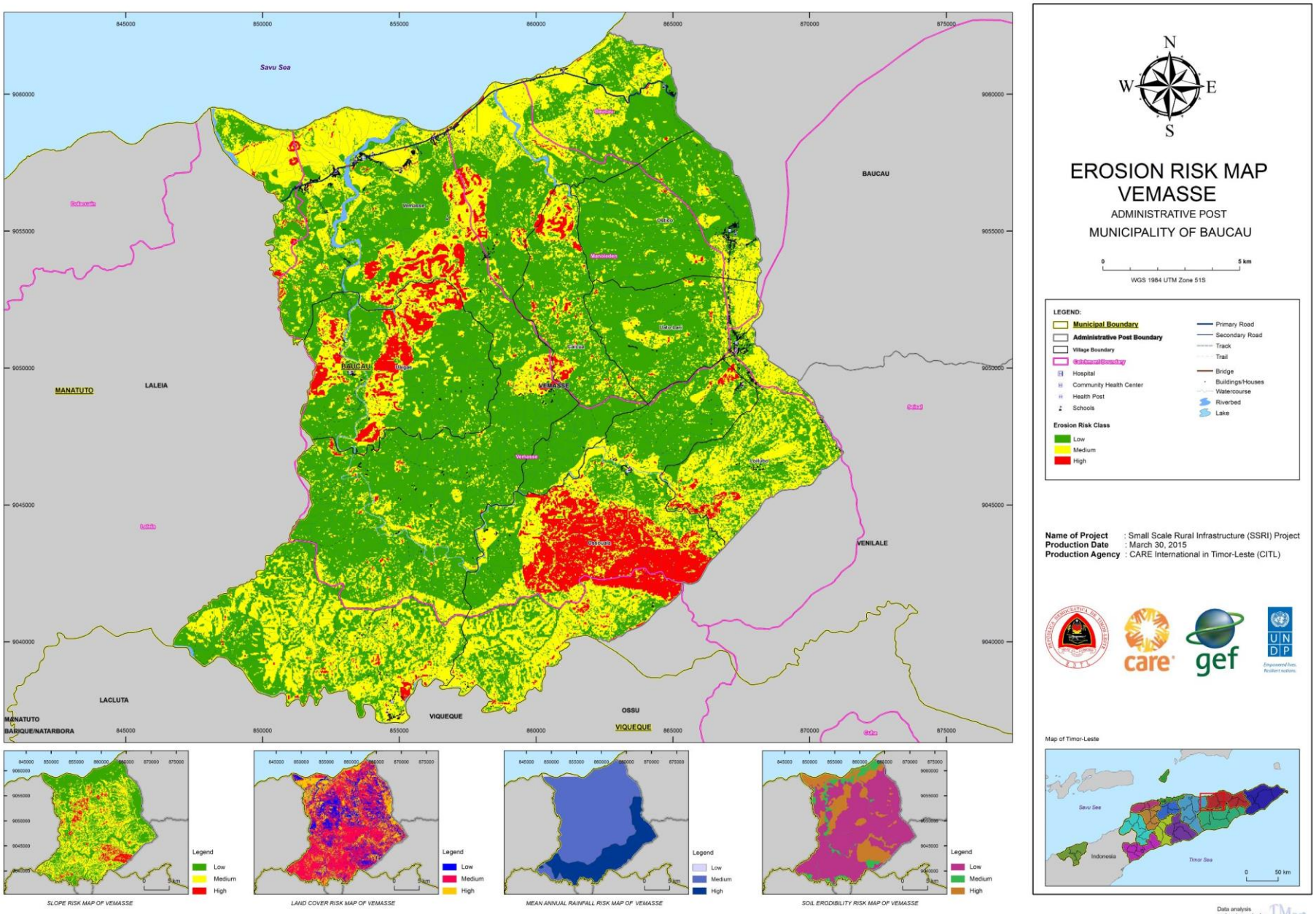
Figura 15 – Kondisaun Estrada át iha risko as ba erosaun. Suco Ossuala, Kaptasaun Mota Vemasse leten liu

Suco - Catchment Code	*Suco* -Catchment		Total No. of Houses	Houses in Each Erosion Risk Category						Total Length of Roads	Length of Road in Each Erosion Risk Category					
				Low Risk		Medium Risk		High Risk			Low Risk		Medium Risk		High Risk	
				Number	%	Number	%	Number	%		Km	%	Km	%	Km	%
31423	Caicua	Manoleden River Catchment	5	5	100.0%	0	0.0%	0	0.0%	0.0						
34532	Loilubo	Seiçal River Catchment	120	70	58.3%	50	41.7%	0	0.0%	1.4	0.9	62.7%	0.5	37.3%	0.0	0.0%
34535	Loilubo	Vemasse River Catchment	166	78	47.0%	80	48.2%	8	4.8%	0.9	0.5	55.8%	0.4	44.2%	0.0	0.0%
35720	Ossouala	Laleia River Catchment	24	12	50.0%	12	50.0%	0	0.0%	0.0						
35735	Ossouala	Vemasse River Catchment	177	106	59.9%	67	37.9%	4	2.3%	2.0	1.3	68.2%	0.6	31.8%	0.0	0.0%
35803	Ostico	Baucau Aggregate Catchment	240	175	72.9%	65	27.1%	0	0.0%	8.1	5.1	63.3%	3.0	36.7%	0.0	0.0%
35823	Ostico	Manoleden River Catchment	1	1	100.0%	0	0.0%	0	0.0%	0.0						
37035	Uaigae	Vemasse River Catchment	144	79	54.9%	65	45.1%	0	0.0%	5.4	3.0	55.4%	1.9	35.1%	0.5	9.5%
37103	Uato-Lari	Baucau Aggregate Catchment	55	31	56.4%	24	43.6%	0	0.0%	1.9	0.5	27.8%	1.3	72.2%	0.0	0.0%
37123	Uato-Lari	Manoleden River Catchment	51	34	66.7%	16	31.4%	1	2.0%	0.0						
37132	Uato-Lari	Seiçal River Catchment	70	36	51.4%	34	48.6%	0	0.0%	0.5	0.2	50.4%	0.2	49.6%	0.0	0.0%
37703	Vemasse	Baucau Aggregate Catchment	84	38	45.2%	46	54.8%	0	0.0%	7.2	2.4	32.6%	4.7	65.9%	0.1	1.5%
37720	Vemasse	Laleia River Catchment	149	32	21.5%	110	73.8%	7	4.7%	0.8	0.7	85.7%	0.1	14.3%	0.0	0.0%
37723	Vemasse	Manoleden River Catchment	79	37	46.8%	39	49.4%	3	3.8%	3.4	0.2	5.7%	2.4	72.0%	0.8	22.3%
37735	Vemasse	Vemasse River Catchment	794	410	51.6%	359	45.2%	25	3.1%	15.2	5.8	37.7%	9.2	60.6%	0.2	1.6%
		Totals Vemasse AP	**2,159**	**1,144**	**53.0%**	**967**	**44.8%**	**48**	**2.2%**	**46.8**	**20.6**	**44.1%**	**24.5**	**52.4%**	**1.6**	**3.5%**

Tabela 26. Uma no Estrada sira iha RIsko Erosaun iha PA Vemasse

Suco -Catchment Code	*Suco* -Catchment		Total No. of Schools	Schools in Each Erosion Risk Category						Total No. of Health Facilities	Health Facilities in Each Erosion Risk Category					
				Low Risk		Medium Risk		High Risk			Low Risk		Medium Risk		High Risk	
				Number	%	Number	%	Number	%		Number	%	Number	%	Number	%
31423	Caicua	Manoleden River Catchment	0							0						
34532	Loilubo	Seiçal River Catchment	2	0	0.0%	2	100.0%	0	0.0%	1	1	100.0%	0	0.0%	0	0.0%
34535	Loilubo	Vemasse River Catchment	0							0						
35720	Ossouala	Laleia River Catchment	0							0						
35735	Ossouala	Vemasse River Catchment	2	0	0.0%	2	100.0%	0	0.0%	1	1	100.0%	0	0.0%	0	0.0%
35803	Ostico	Baucau Aggregate Catchment	1	1	100.0%	0	0.0%	0	0.0%	1	1	100.0%	0	0.0%	0	0.0%
35823	Ostico	Manoleden River Catchment	0							0						
37035	Uaigae	Vemasse River Catchment	1	1	100.0%	0	0.0%	0	0.0%	1	0	0.0%	1	100.0%	0	0.0%
37103	Uato-Lari	Baucau Aggregate Catchment	0							0						
37123	Uato-Lari	Manoleden River Catchment	0							0						
37132	Uato-Lari	Seiçal River Catchment	0							0						
37703	Vemasse	Baucau Aggregate Catchment	2	1	50.0%	1	50.0%	0	0.0%	0						
37720	Vemasse	Laleia River Catchment	1	0	0.0%	1	100.0%	0	0.0%	1	0	0.0%	1	100.0%	0	0.0%
37723	Vemasse	Manoleden River Catchment	0							0						
37735	Vemasse	Vemasse River Catchment	7	5	71.4%	2	28.6%	0	0.0%	1	0	0.0%	1	100.0%	0	0.0%
		Totals Vemasse AP	**16**	**8**	**50.0%**	**8**	**50.0%**	**0**	**0.0%**	**6**	**3**	**50.0%**	**3**	**50.0%**	**0**	**0.0%**

Tabela 27. Eskola no Fasiliisko ba Erosaun iha PA Vemasse



MAPA- 13. Mapa Risko Erosaun: Posto Administrativo Vemasse

2.4.4 Perfil Risko – Posto Administrativo Ermera

PA Ermera mak kompletamente entre iha Kaptasaun Mota Lois. Ida nee jeneralizasaun boot tamba entre iha Kaptasaun Lois iha neeba iha numero kiik-oan sub-kaptasaun sira. Kaptasaun Lois prinsipal neebe mak hili sai unidades prinsipais ba analiza iha estudo nee ba razaun tolu. Premeiro bai-bain halo saida mak kompleksu, analiza abostraku assessivel liu tan ba parte sira interesado. Segundo, tereno iha parte Kaptasaun Lois mak kompleksu extremo liu. Tereno neebe halo diferente todan-liu no rede servisu barak iha korente no produs mota atus ba atus ba iha sub-kaptasaun sira kiik sei halo analiza espasial susar atu uza no todan-liu, ida nee difikulta tebes atu interpreta resultado nee iha kualker signifika ruma, ida nee imposivel tebes atu apresenta sira ho klaru no ho konsize. Finalmente, ba dadus-konjunta GIS ba kaptasaun uza ida nee diak liu agora dadaun nee disponivel ba Timor-Leste. Nee prinsipalmente akurado, iha kaptasaun sira hotu fo naran ona no ema barak hatene hotu ona, no ida nee dezenha ho kaber, linha praktikal ho detailhada liu no la too. Ba eskala boot analiza hanesan nee, iha neebe foka liu mak distribuisaun jeneral ba iha area sira boot, ida nee versaun neebe mak diak uza ba iha kaptasaun baliza.

Iha suco 10 iha PA Ermera, no iha parte nee Kaptasaun Mota Lois. Tabela 28 lista sira alfabetikalmente, no ho sira nia area iha hektar no kode uniko ba sira kaptasaun suco. Mapa 13 hatudu distribuisaun husi suco entre iha PA

***Suco* -Catchment Code**	***Suco* -Catchment**		**Total Area**
41822	Estado	Lois River Catchment	1,264
42922	Humboe	Lois River Catchment	565
43222	Lauala	Lois River Catchment	1,454
43422	Leguimea	Lois River Catchment	850
45422	Mertutu	Lois River Catchment	714
45922	Poetete	Lois River Catchment	1,730
46022	Ponilala	Lois River Catchment	847
46122	Raimerhei	Lois River Catchment	808
46222	Riheu	Lois River Catchment	657
46622	Talimoro	Lois River Catchment	450
		Totals Ermera AP	**9,338**

Tabela 28. Kaptasaun Suco iha Posto Administrativo Ermera

Husi risko tolu neebe mak esplora iha estudo nee, erosaun hatudu ameasa boot iha PA Ermera. Iha “ponto Sussesu” ba inundasaun no rai-halai, maibe tende hirak nee relativamente kiik no isolado. Potensia ba erosaun iha neebe deit ba PA tomak.

MAPA - 14. Kaptasaun no Suco sira iha PA Ermera

Risko Inundasaun iha Posto Administrativo Ermera

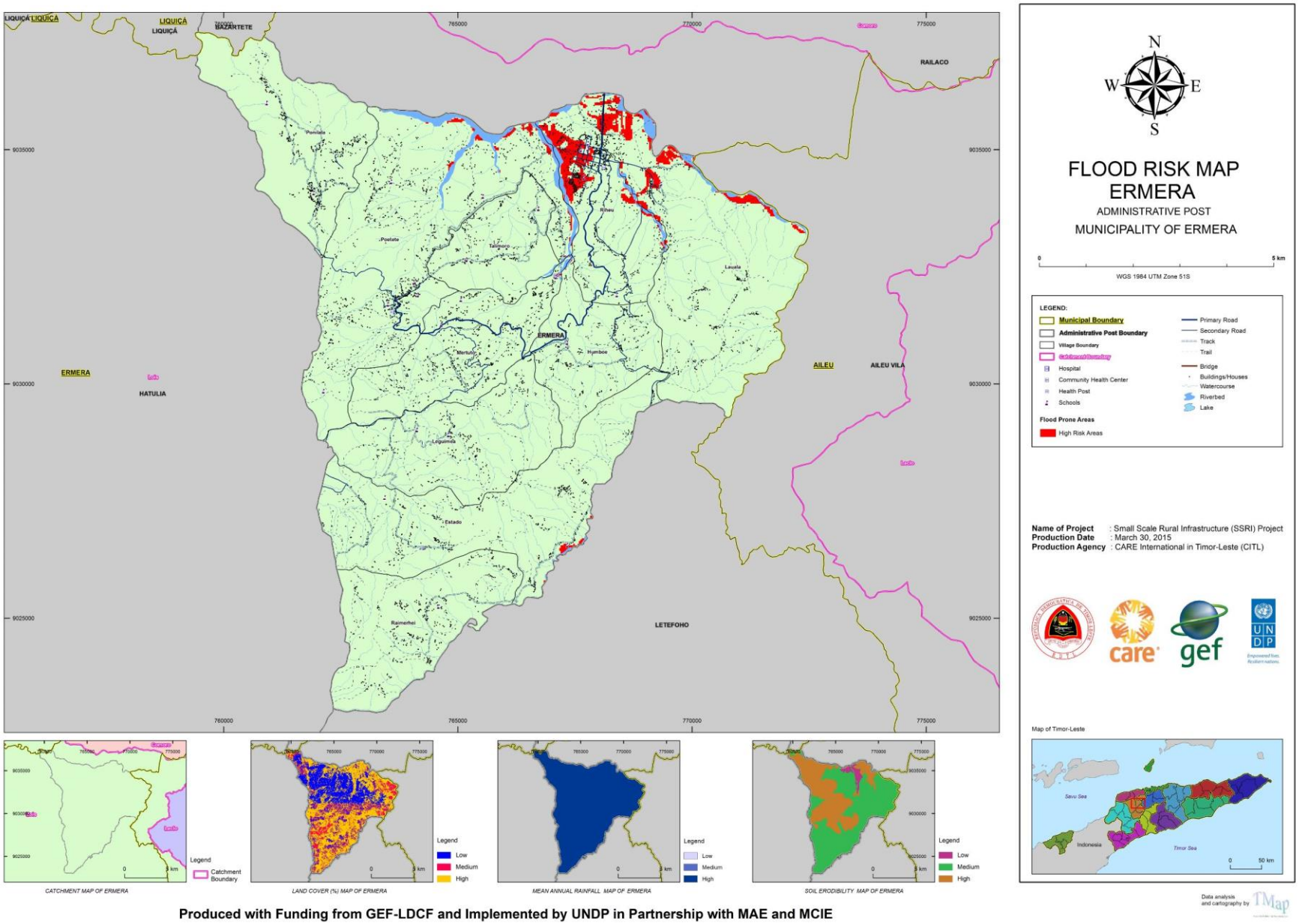
Ameasa maioria mai husi inundasaun iha PA Ermera mak maioria povoado, Gleno (Mapa 14) ida nee iha Suco Riheu no Lauala iha parte norte husi PA nee. Area nee mak iha Kaptasaun Mota Lois, maibe inundasaun iha Riheu no Lauala neebe mak assosiado ho mota Lois nia maioria tributaria, Mota Gleno.

Area inklinado inundasaun iha nee la extensivu, maibe nee diak ida ba infra-estrutura iha risko tamba lokasaun, iha centro kapital distrito Gleno. Riheu iha area boot potensia ba inundasaun, ho hektar 101, total area nee representa deit kuaze 15%. Lauala, ho hektar 97, area neebe hanesan ba inklinado inundasaun rai, maibe Suco nee boot liu Riheu, so ida nee representa menus liu 7% ba nia area. Fatin seluk iha Ermera, inundasaun mosu ameasa balu deit.

Entre kiik sira, hektar 200 zona inundasaun iha Suco Riheu no Lauala mak relativamente numero boot husi uma sira, eskola, fasilidade saude no estrutra sira seluk. Iha Riheu mesak uma deit kuaze 318 mak inklinado ba inundasaun, representa 31% husi uma sira hotu iha suco nee. Rua husi eskola lima mak iha risko ba inundasaun, kuaze 4km husi suco nia Estrada 20km. Suco Lauala mak menus dezemvolvido, no maioria rai hetan risko inundasaun nee dook husi ema no infra-estrutura. Maske nunee, uma 40 no kuaze 1km husi suco nee nia Estrada 4km mak ameasado boot.

Suco Mertutu fornese ezemplo ida ba area administrativo ida ho rai inklinado inundasaun neebe kiik-liu – maibe substansia ameasa ba iha xave infra-estrutura. Bazea ba analiza, suco ida nia eskola no nia fasilidade sira saudavel – Posto Saude Lodudu-mak konstrui iha sitiu hektar 1. Sitiu nee visita no verifikado katak konstrusaun rua nee klaru iha risko duni, mota sobu sai mota ninin no mai besik estrutura nee. Membro komunidade halo esforsu diak atu desvia mota nee husi destruktivo iha tinan-tinan, maibe ba longu prazu nee dook husi sira nia kapasidade – eventualmente mota ninin sei erode bei-beik no konstruisaun sei inundado.

Figura 16 –Eskola no posto saude ameasado husi erosaun, mota no inundasun. Suco Mertutu, Kaptasaun Mota Lois



MAPA- 15. Mapa Risko Inundasaun: Posto Administrativo Ermera

Figura 17 –area inklinado inundasaun iha Gleno, hatudu infra-estrutura iha Risko. Suco Riheu, Kaptasaun Mota Lois

Figura 18 –planice inundasaun husi mota Gleno. Suco Lauala, Kaptasaun Mota Lois

Suco -Catchment Code	*Suco* -Catchment		Land Area			Houses			Schools			Health Facilities			Roads		
			Total Area	In Flood Risk Zone		Total	In Flood Risk Zone		Total	In Flood Risk Zone		Total	In Flood Risk Zone		Total Km	In Flood Risk Zone	
				Hectares	%	Number	Number	%	Number	Number	%	Number	Number	%		Km	%
41822	Estado	Lois River Catchment	1,264	7	0.5%	500	0	0.0%	2	1	50.0%	1	0	0.0%	10.7	0.0	0.0%
42922	Humboe	Lois River Catchment	565	1	0.2%	322	0	0.0%	1	0	0.0%	0			8.2	0.0	0.0%
43222	Lauala	Lois River Catchment	1,454	97	6.7%	522	40	7.7%	1	0	0.0%	0			4.0	0.7	18.7%
43422	Leguimea	Lois River Catchment	850	0	0.0%	295	0	0.0%	2	0	0.0%	0			8.7	0.0	0.0%
45422	Mertutu	Lois River Catchment	714	1	0.2%	644	0	0.0%	3	1	33.3%	1	1	100.0%	10.3	0.0	0.0%
45922	Poetete	Lois River Catchment	1,730	36	2.1%	1,139	4	0.4%	7	0	0.0%	1	0	0.0%	12.7	0.2	1.5%
46022	Ponilala	Lois River Catchment	847	0	0.0%	479	0	0.0%	2	0	0.0%	0			8.8	0.0	0.0%
46122	Raimerhei	Lois River Catchment	808	0	0.0%	396	0	0.0%	1	0	0.0%	0			3.3	0.0	0.0%
46222	Riheu	Lois River Catchment	657	101	15.4%	1,029	318	30.9%	5	2	40.0%	1	0	0.0%	19.8	3.8	19.3%
46622	Talimoro	Lois River Catchment	450	0	0.0%	292	0	0.0%	2	0	0.0%	0			6.5	0.0	0.0%
		Totals Ermera AP	**9,338**	**244**	**2.6%**	**5,618**	**362**	**6.4%**	**26**	**4**	**15.4%**	**4**	**1**	**25.0%**	**93**	**4.8**	**5.1%**

Tabela 29. Risko Estatistiko ba inundasaun iha PA Ermera

Risko Rai halai iha Posto Administrativo Ermera

Risko rai-halai neebe mak espalha PA Ermera tomak. Ida nee la kovre partikularmente area boot, maibe espera iha rai-as, paisajemn profundamente entalhada ba area nee, iha neeba potensia ba rai-halai iha parte maioria iha PA Ermera iha suco 10 (Mapa 15).

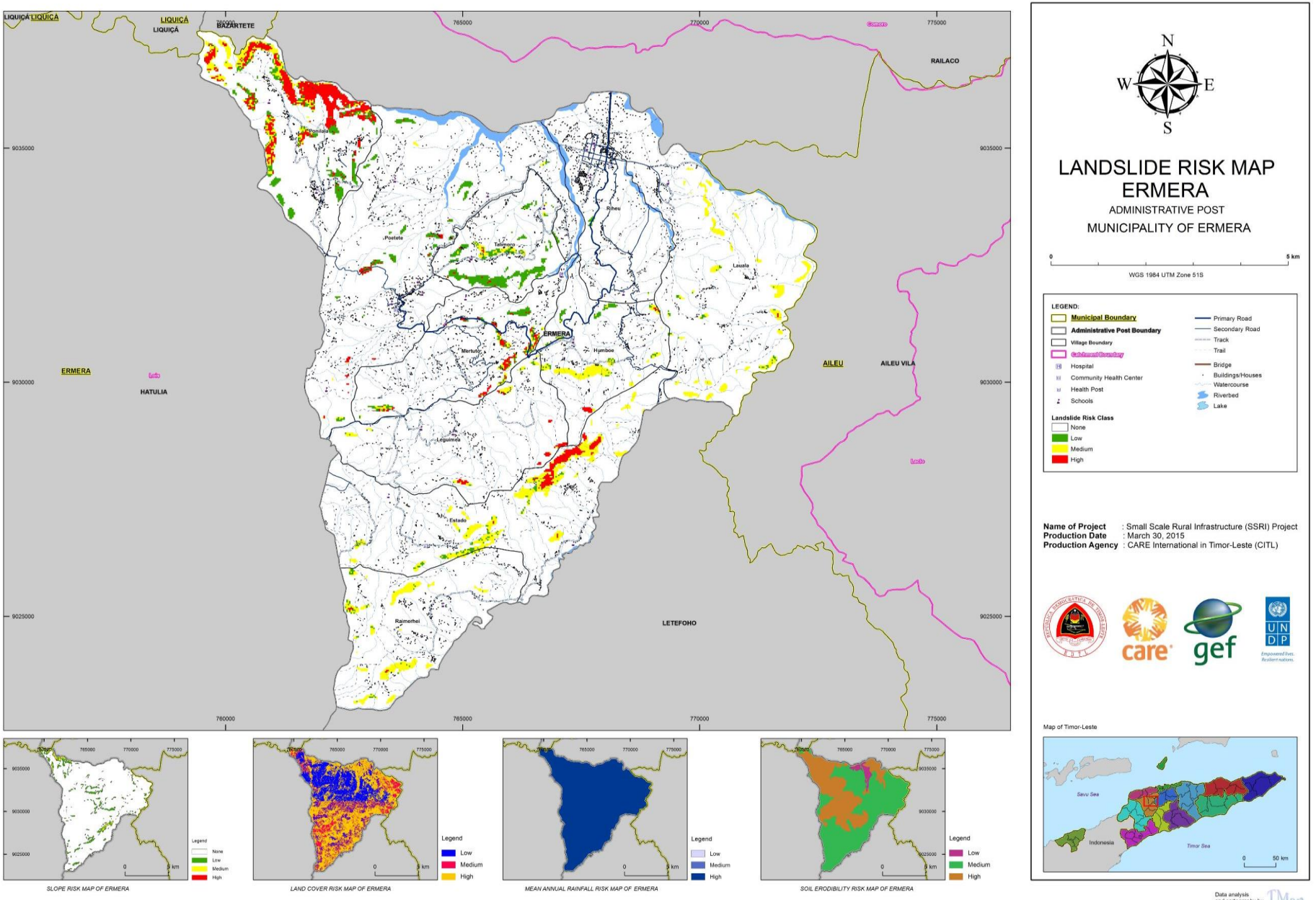
Suco Ponilala iha noroeste iha kantus husi PA Ermera mak area maioria iha risko ba rai halai. Liu hektar 200 neebe hasoru tantu kiik, mediu ka ameasa as, representa 25% husi area total suco nee. Porposaun extremu-liu ba area administrativo ida atu hasoru posibilidade potensia estragus no perigos eventus katastropiku. Ponilala nee laos populado mak'as iha suco nee, no uma kain 479 neebe mak jeralmente hela iha nee no sai-husi zona risko rai halai – husi 10 deit neebe mak hela iha nee. Similarmente, ho deit metros 100 husi total kuaze 9km iha Ponilala mak konsidera sei iha zona risko rai halai. Klaru liu kuaze rai-lolo vertical neebe lori-tun ba iha Mota Gleno ladun diak ba habitasaun ka konstrusaun kualker infra-estrutura.

Suco Estado mak risko mediu no area risko as ba rai-halai. Iha area nee iha risko menus liu mak iha Ponilala, ho deit hektar 112, ka 9% husi area total, entre iha zona risko rai-halai. Dala ida tan, komunidade jeralmente evita atu hela iha nee ka Evita mos konstrusaun Estrada iha rai lolo, tereno inassesivel, no uma tolu deit ho metro 300 husi Estrada neebe iha Estado.

Mertutu dala ida tan provas interesante ida anomalia. Maske ho deit hektar 40 ba area husi total area hektar 714 mak konsidera iha risko ba rai halai, 1.1km, ka liu 11% husi suco nee nian inkluindo iha estudo nee; evidensia ba Ermera nia dizafiu tereno neebe mak konhesido ba Estrada konstruidor sira no ba viajem-nain sira.

Figura 19 – Parte husi Estrada prinsipai shusi Letefoho ba Gleno, sobu husi rai halai. Suco Humboe, Kaptasaun Mota Lois

Figura 20 – Natureza husi Ermera rai halai – kiik, isolado, los iha uma nia oin.Suco Poetete, Kaptasaun Mota Lois



Produced with Funding from GEF-LDCF and Implemented by UNDP in Partnership with MAE and MCIE

MAPA - 16. Mapa Risko Rai-halai: Posto Administrativo Ermera

Suco -Catchment Code	*Suco* -Catchment		Total Hectares	Area of Land in Each Landslide Risk Category							
				No Risk		Low Risk		Medium Risk		High Risk	
				Hectares	%	Hectares	%	Hectares	%	Hectares	%
41822	Estado	Lois River Catchment	1,264	1,151	91.1%	10	0.8%	79	6.3%	23	1.9%
42922	Humboe	Lois River Catchment	565	525	92.9%	10	1.8%	28	4.9%	3	0.4%
43222	Lauala	Lois River Catchment	1,454	1,405	96.7%	4	0.3%	44	3.1%	0	0.0%
43422	Leguimea	Lois River Catchment	850	834	98.1%	1	0.1%	9	1.0%	6	0.7%
45422	Mertutu	Lois River Catchment	714	674	94.5%	17	2.3%	10	1.3%	13	1.9%
45922	Poetete	Lois River Catchment	1,730	1,697	98.1%	24	1.4%	2	0.1%	7	0.4%
46022	Ponilala	Lois River Catchment	847	636	75.0%	54	6.4%	52	6.2%	105	12.4%
46122	Raimerhei	Lois River Catchment	808	761	94.2%	5	0.6%	41	5.1%	1	0.1%
46222	Riheu	Lois River Catchment	657	655	99.8%	2	0.2%	0	0.0%	0	0.0%
46622	Talimoro	Lois River Catchment	450	390	86.8%	49	11.0%	9	1.9%	1	0.3%
		Totals Ermera AP	**9,338**	**8,729**	**93.5%**	**176**	**1.9%**	**274**	**2.9%**	**159**	**1.7%**

Tabela 30. Area Rai iha Risko ba Rai-halai iha PA Ermera

Suco -Catchment Code	*Suco* -Catchment		Total No. of Houses	Houses in Each Landslide Risk Category							
				No Risk		Low Risk		Medium Risk		High Risk	
				Number	%	Number	%	Number	%	Number	%
41822	Estado	Lois River Catchment	500	497	99.4%	0	0.0%	3	0.6%	0	0.0%
42922	Humboe	Lois River Catchment	322	314	97.5%	0	0.0%	8	2.5%	0	0.0%
43222	Lauala	Lois River Catchment	522	521	99.8%	0	0.0%	1	0.2%	0	0.0%
43422	Leguimea	Lois River Catchment	295	288	97.6%	0	0.0%	5	1.7%	2	0.7%
45422	Mertutu	Lois River Catchment	644	624	96.9%	5	0.8%	2	0.3%	13	2.0%
45922	Poetete	Lois River Catchment	1,139	1,126	98.9%	8	0.7%	0	0.0%	5	0.4%
46022	Ponilala	Lois River Catchment	479	469	97.9%	7	1.5%	1	0.2%	2	0.4%
46122	Raimerhei	Lois River Catchment	396	395	99.7%	0	0.0%	1	0.3%	0	0.0%
46222	Riheu	Lois River Catchment	1,029	1,029	100.0%	0	0.0%	0	0.0%	0	0.0%
46622	Talimoro	Lois River Catchment	292	274	93.8%	12	4.1%	4	1.4%	2	0.7%
		Totals Ermera AP	**5,618**	**5,537**	**98.6%**	**32**	**0.6%**	**25**	**0.4%**	**24**	**0.4%**

Tabela 31. Estrada iha Risko ba rai halai iha PA Ermera

Suco -Catchment Code	*Suco* -Catchment		Total Length of Roads (Km)	Length of Road in Each Landslide Risk Category							
				No Risk		Low Risk		Medium Risk		High Risk	
				Km	%	Km	%	Km	%	Km	%
41822	Estado	Lois River Catchment	10.7	10.4	97.4%	0.0	0.1%	0.3	2.5%	0.0	0.0%
42922	Humboe	Lois River Catchment	8.2	7.8	95.1%	0.1	0.7%	0.3	4.2%	0.0	0.0%
43222	Lauala	Lois River Catchment	4.0	4.0	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
43422	Leguimea	Lois River Catchment	8.7	8.7	99.9%	0.0	0.0%	0.0	0.1%	0.0	0.0%
45422	Mertutu	Lois River Catchment	10.3	9.2	88.9%	0.5	4.9%	0.3	3.1%	0.3	3.1%
45922	Poetete	Lois River Catchment	12.7	12.4	97.8%	0.2	1.8%	0.0	0.0%	0.1	0.4%
46022	Ponilala	Lois River Catchment	8.8	8.7	98.2%	0.1	1.2%	0.0	0.4%	0.0	0.2%
46122	Raimerhei	Lois River Catchment	3.3	3.3	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
46222	Riheu	Lois River Catchment	19.8	19.6	99.2%	0.2	0.8%	0.0	0.0%	0.0	0.0%
46622	Talimoro	Lois River Catchment	6.5	6.2	95.4%	0.2	2.7%	0.1	1.9%	0.0	0.0%
		Totals Ermera AP	**93.0**	**90.3**	**97.0%**	**1.3**	**1.3%**	**1.1**	**1.2%**	**0.4**	**0.4%**

Tabela 32. Uma Sira iha Risko ba rai halai iha PA Ermera

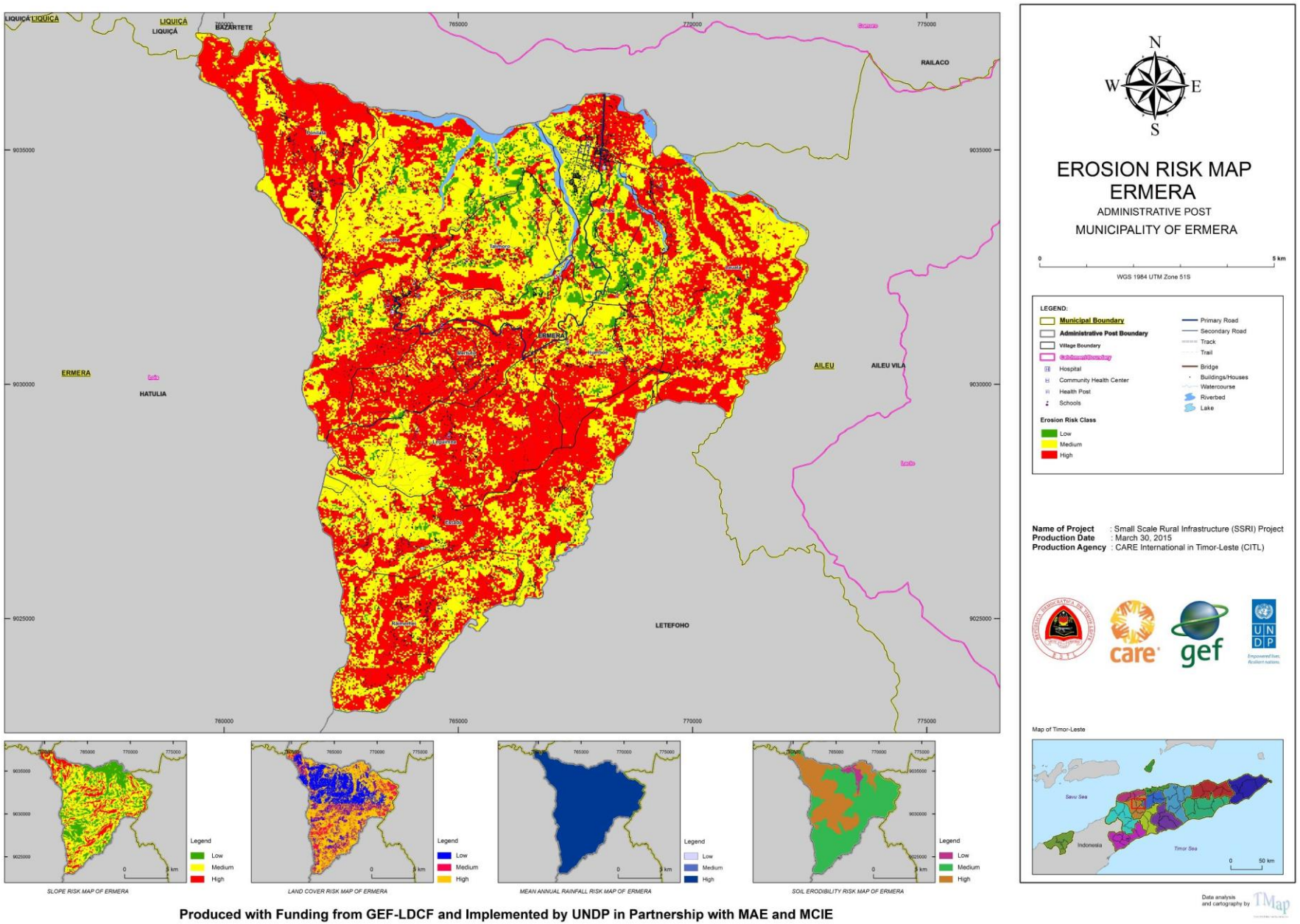
Risko Erosaun iha Posto Administrativo Ermera

Buat ida neebe mak admiravel konaba mapa erosaun ba PA Ermera (Mapa 16) oinsa mak lee ida nee! Kuaze metade ba area rai nee mak konsidera risko as ba erosaun, kuaze iha koor-kinur, kategoria risko mediu. Simplesmente hektar 434, ka ho deit 4.6% husi area total, mak konsidera atu iha potensia kiik ba erosaun. La surpreza tebes, maioria PA Ermera nia infra-estrutura mak iha susceptivel ba erosaun ho mediu no as, inkluindo 94% husi uma sira no Estrada no eskola sira hotu no fasilidade saude. Fo extremu natureza husi Ermera nia topografia no rejime udan monu rai, no relativamente ho populasaun neebe mak barak, area extensivu ba risko nivel as neebe sei esperado mos.

Fator signifikante ida mak halo Ermera hamrik sai husi parte seluk husi pais nee mak influensia husi aktividade umano. Ermera mak ida neebe pupolado barak tebes parte iha pais nee, no numero boot husi ema fo presaun ba iha rai. Manifestasaun husi ida nee iha PA Ermera, no ninia vizinho PA Hatulia, mak degradasaun grave ba iha vegetasaun natural neebe kovre. Hanesan ai, arbustos (semak), du'ut no vegetasaun sira seluk neebe mak hamos ba agrikultura, solu mak hetan forsa husi udan no anin. Hanesan figura 21 hatudu, bainhira nee mosu iha rai-lolo, solu nee fasil atu solur lakon. Nee skenariu komum liu iha PA Ermera.

Maske PA Ermera tomak nia suco 10 mak susceptivel as liu ba erosaun solu, suco 4 hamrik sai hanesan extremu partikular. Suco hirak nee mak Leguimea, Mertutu, Ponilala no Raimerhei. Husi hirak nee Ponilala iha porposaun as ho ninia area rai kategoria risko mediu no as, ho 99.6%. Tuir Leguimea mak (99.1%) turi tan husi Raimerhei (98.4%) no Mertutu (98.1%). Iha termus absoluta Poetete mak suco ho area boot ba rai susceptivel ba mediu no nivel as ba erosaun, ho hektar 1,606.

Figura 21 – Kultivasaun Batar no Ai-farina iha rai-lolo liu, rai-lolo friavel. Suco Mertutu, Kaptasaun Mota Lois



MAPA- 17. Mapa Risko Erosaun: Posto Administrativo Ermera

Suco -Catchment Code	*Suco* -Catchment		Total Hectares	Area of Land in Each Erosion Risk Category					
				Low Risk		Medium Risk		High Risk	
				Hectares	%	Hectares	%	Hectares	%
41822	Estado	Lois River Catchment	1,264	29	2.3%	623	49.3%	612	48.4%
42922	Humboe	Lois River Catchment	565	31	5.4%	275	48.6%	260	46.0%
43222	Lauala	Lois River Catchment	1,454	58	4.0%	641	44.1%	754	51.9%
43422	Leguimea	Lois River Catchment	850	8	0.9%	311	36.6%	531	62.5%
45422	Mertutu	Lois River Catchment	714	13	1.9%	247	34.6%	454	63.6%
45922	Poetete	Lois River Catchment	1,730	124	7.2%	983	56.8%	623	36.0%
46022	Ponilala	Lois River Catchment	847	3	0.4%	281	33.1%	564	66.5%
46122	Raimerhei	Lois River Catchment	808	13	1.6%	341	42.3%	453	56.1%
46222	Riheu	Lois River Catchment	657	107	16.3%	380	57.8%	170	25.9%
46622	Talimoro	Lois River Catchment	450	48	10.7%	290	64.4%	112	24.9%
		Totals Ermera AP	**9,338**	**434**	**4.6%**	**4,371**	**46.8%**	**4,533**	**48.5%**

Tabela 33. Area Rai iha Risko ba Erosaun iha PA Ermera

Suco - Catchment Code	*Suco* -Catchment		Total No. of Houses	Houses in Each Erosion Risk Category						Total Length of Roads	Length of Road in Each Erosion Risk Category					
				Low Risk		Medium Risk		High Risk			Low Risk		Medium Risk		High Risk	
				Number	%	Number	%	Number	%		Km	%	Km	%	Km	%
41822	Estado	Lois River Catchment	500	4	0.8%	291	58.2%	205	41.0%	10.7	0.2	1.6%	7.1	66.2%	3.4	32.2%
42922	Humboe	Lois River Catchment	322	24	7.5%	128	39.8%	170	52.8%	8.2	0.4	5.1%	4.3	52.3%	3.5	42.6%
43222	Lauala	Lois River Catchment	522	14	2.7%	168	32.2%	340	65.1%	4.0	0.1	2.6%	1.6	41.2%	2.2	56.3%
43422	Leguimea	Lois River Catchment	295	3	1.0%	114	38.6%	178	60.3%	8.7	0.1	1.7%	4.1	46.7%	4.5	51.7%
45422	Mertutu	Lois River Catchment	644	33	5.1%	235	36.5%	376	58.4%	10.3	0.1	0.6%	2.5	24.3%	7.8	75.1%
45922	Poetete	Lois River Catchment	1,139	99	8.7%	576	50.6%	464	40.7%	12.7	1.3	10.4%	6.1	47.6%	5.3	42.0%
46022	Ponilala	Lois River Catchment	479	3	0.6%	151	31.5%	325	67.8%	8.8	0.0	0.0%	2.5	28.8%	6.3	71.2%
46122	Raimerhei	Lois River Catchment	396	1	0.3%	119	30.1%	276	69.7%	3.3	0.0	0.0%	1.1	34.4%	2.1	65.6%
46222	Riheu	Lois River Catchment	1,029	133	12.9%	579	56.3%	317	30.8%	19.8	3.0	15.0%	11.2	56.8%	5.6	28.3%
46622	Talimoro	Lois River Catchment	292	37	12.7%	181	62.0%	74	25.3%	6.5	0.7	10.1%	3.8	57.8%	2.1	32.1%
		Totals Ermera AP	**5,618**	**351**	**6.2%**	**2,542**	**45.2%**	**2,725**	**48.5%**	**93.0**	**5.8**	**6.3%**	**44.3**	**47.6%**	**42.9**	**46.1%**

Tabela 34. Uma no Estrada sira iha Risko ba Erosaun PA Ermera

Figura 22 – Deposito Sedimente husi Mota Gleno; evidensia husi erosaun boot fatin as.Suco Riheu, Kaptasaun Mota Lois

Figura 23 –Erosaun Solu mai husi toos ai-farina rai-lolo liu.Suco Mertutu, Kaptasaun Mota Lois

Figura 24 – Erosaun Ravina (selokan) iha duut vegetasaun esparse-liu.Suco Mertutu, Kaptasaun Mota Lois

				Schools in Each Erosion Risk Category						Total No.	Health Facilities in Each Erosion Risk Category					
Suco -Catchment Code	*Suco* -Catchment		Total No. of Schools	Low Risk		Medium Risk		High Risk		of Health Facilities	Low Risk		Medium Risk		High Risk	
				Number	%	Number	%	Number	%		Number	%	Number	%	Number	%
41822	Estado	Lois River Catchment	2	0	0.0%	1	50.0%	1	50.0%	1	0	0.0%	1	100.0%	0	0.0%
42922	Humboe	Lois River Catchment	1	0	0.0%	0	0.0%	1	100.0%	0						
43222	Lauala	Lois River Catchment	1	0	0.0%	0	0.0%	1	100.0%	0						
43422	Leguimea	Lois River Catchment	2	0	0.0%	0	0.0%	2	100.0%	0						
45422	Mertutu	Lois River Catchment	3	0	0.0%	1	33.3%	2	66.7%	1	0	0.0%	0	0.0%	1	100.0%
45922	Poetete	Lois River Catchment	7	0	0.0%	1	14.3%	6	85.7%	1	0	0.0%	1	100.0%	0	0.0%
46022	Ponilala	Lois River Catchment	2	0	0.0%	1	50.0%	1	50.0%	0						
46122	Raimerhei	Lois River Catchment	1	0	0.0%	1	100.0%	0	0.0%	0						
46222	Riheu	Lois River Catchment	5	0	0.0%	4	80.0%	1	20.0%	1	0	0.0%	0	0.0%	1	100.0%
46622	Talimoro	Lois River Catchment	2	0	0.0%	2	100.0%	0	0.0%	0						
		Totals Ermera AP	**26**	**0**	**0.0%**	**11**	**42.3%**	**15**	**57.7%**	**4**	**0**	**0.0%**	**2**	**50.0%**	**2**	**50.0%**

Tabela 35. Eskola no fasilidade Saude sira iha Risko Erosaun iha PA Ermera

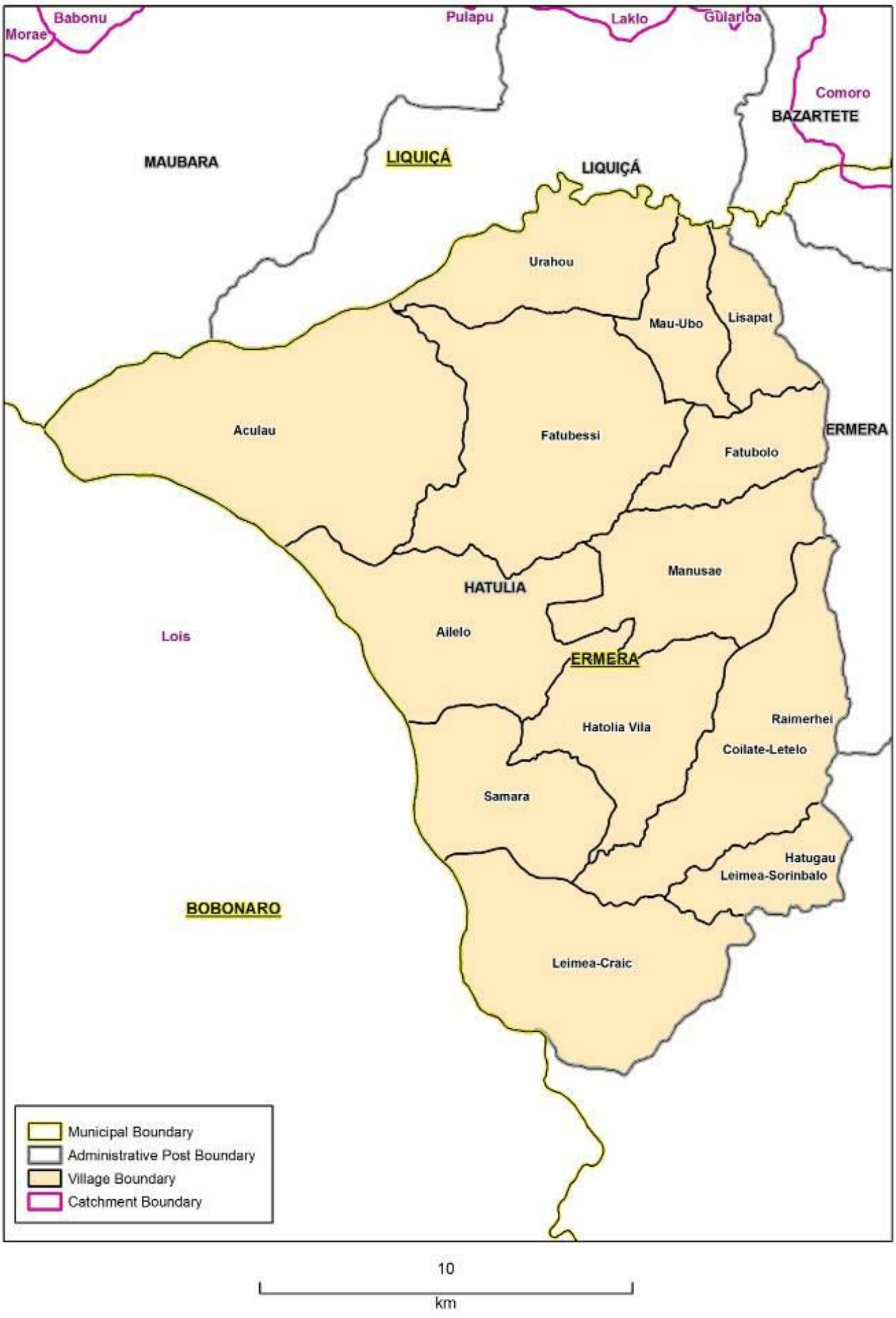
2.4.5 Perfil Risko – Posto Administrativo Hatulia

PA Hatulia kovre husi area total hektar 27,350 no komposto husi suco 13. Hanesan PA Ermera, PA Hatulia lokaliza entre Kaptasaun Mota Lois, nee kombinado ho ninia suco 13, produs kaptasaun suco 13 mos. Em termus risko neebe mak mosu, PA Hatulia iha buat barak komum ho ninia vizinho PA Liquiça ba iha norte, no espesialmente ho PA Maubara. Diversidade husi topografia, hidrolojia no geomorfolojia nee meios katak Hatulia iha area sira ho risko as ba perigos tolu nee hotu iha parte diferente husi teritoriu ida nee. Iha fatin-badak ba iha parte oeste, tuir mota ninin husi mota Marobo, Lauveli, Gamerama no Malerehio, inundasaun mak ameasa ba area rai boot. Rai halai mak ameasa neebe disminado iha sitiu ba rai-lolo no iha elevasaun as ba iha leste. Distribuisaun husi risko erosaun hatudu klaru liu neebe mak fahe iha linha entre kuaze ekskulizivamente risko kiik no mediu iha parte metade oeste husi PA no predominante liu risko as ba iha metade leste nian.

Distribuisaun populasaun mak interesante iha Hatulia, no ho komprendesaun katak ekonomia husi area nee iha lojika. Maioria ema hela iha rai-ás, iha rai sira neebe mak rai-lolo, la assessivel no susceptivel ba rai-halai no inundasaun. Iha nee transportasaun neebe dificulta tebes, ho Estrada neebe frequentamente solur sai tamba inundasaun mosu ka blokeado no dalaruma estragus husi rai-halai. Maibe ida nee oportunidade ida neebe atrai ema ba iha foho Hatulia. Rai besik mota parte leste neebe mak fertil, maibe nee inklinado ba inundasaun. Rai lolo nia klaran nee maran no solu menus fertil, agrikultura mak difikulta tebes. Iha foho as, metro 500 ka liu nivel tasi, abundante udan monu rai halo agrikultura fiavel liu, no kondisaun mak prefeito hodi hamoris kafé. Ema bele hamoris ai-han hodi susteina sira no kafe atu jenerado rendimento naton. Hanesan kazu nee iha PA Ermera, presaun populasaun ba iha rai as husi PA Hatulia mak parsialmente responsivel ba extensivu area rai iha risko as ba erosaun.

***Suco* -Catchment Code**	***Suco* -Catchment**		**Total Area**
50522	Ailelo	Lois River Catchment	2,629
50622	Aculau	Lois River Catchment	4,755
51522	Coilate-Letelo	Lois River Catchment	2,688
52022	Fatubolo	Lois River Catchment	1,038
52122	Fatubessi	Lois River Catchment	3,541
52722	Hatolia Vila	Lois River Catchment	1,758
53522	Leimea-Craic	Lois River Catchment	2,875
53722	Leimea-Sorinbalo	Lois River Catchment	859
54222	Lisapat	Lois River Catchment	730
54922	Manusae	Lois River Catchment	2,123
55222	Mau-Ubo	Lois River Catchment	889
56422	Samara	Lois River Catchment	1,729
57322	Urahou	Lois River Catchment	1,736
		Totals Hatulia AP	**27,350**

Tabela 36. Kaptasaun Suco Posto Administrativo Hatulia



MAPA- 18. Suco no Kaptasaun husi Posto Administrativo Hatulia

Risko Inundasaun iha Posto Administrativo Hatulia

Suco -Catchment Code	*Suco* -Catchment		Land Area			Houses			Schools			Health Facilities			Roads		
			Total Area	In Flood Risk Zone		Total	In Flood Risk Zone		Total	In Flood Risk Zone		Total	In Flood Risk Zone		Total Km	In Flood Risk Zone	
				Hectares	%	Number	Number	%	Number	Number	%	Number	Number	%		Km	%
50522	Ailelo	Lois River Catchment	2,629	271	10.3%	368	5	1.4%	5	0	0.0%	0			11.2	0.6	5.4%
50622	Aculau	Lois River Catchment	4,755	1,353	28.4%	362	73	20.2%	1	0	0.0%	1	0	0.0%	21.0	7.3	34.7%
51522	Coilate-Letelo	Lois River Catchment	2,688	1	0.0%	606	0	0.0%	0			2	0	0.0%	16.2	0.0	0.0%
52022	Fatubolo	Lois River Catchment	1,038	0	0.0%	599	0	0.0%	1	0	0.0%	1	0	0.0%	9.3	0.0	0.0%
52122	Fatubessi	Lois River Catchment	3,541	20	0.6%	679	0	0.0%	4	0	0.0%	1	0	0.0%	28.5	0.1	0.3%
52722	Hatolia Vila	Lois River Catchment	1,758	0	0.0%	570	0	0.0%	2	0	0.0%	1	0	0.0%	12.5	0.0	0.0%
53522	Leimea-Craic	Lois River Catchment	2,875	192	6.7%	273	18	6.6%	2	0	0.0%	1	0	0.0%	1.3	0.3	19.2%
53722	Leimea-Sorinbalo	Lois River Catchment	859	0	0.0%	120	0	0.0%	0			0			3.8	0.0	0.0%
54222	Lisapat	Lois River Catchment	730	0	0.0%	442	0	0.0%	3	0	0.0%	0			7.7	0.0	0.0%
54922	Manusae	Lois River Catchment	2,123	0	0.0%	762	0	0.0%	4	0	0.0%	1	0	0.0%	26.5	0.0	0.0%
55222	Mau-Ubo	Lois River Catchment	889	0	0.0%	516	0	0.0%	1	0	0.0%	1	0	0.0%	9.1	0.0	0.0%
56422	Samara	Lois River Catchment	1,729	397	22.9%	125	9	7.2%	2	0	0.0%	0			6.2	0.6	9.6%
57322	Urahou	Lois River Catchment	1,736	18	1.0%	536	0	0.0%	3	0	0.0%	0			11.1	0.2	1.6%
		Totals Hatulia AP	**27,350**	**2,251**	**8.2%**	**5,958**	**105**	**1.8%**	**28**	**-**	**0.0%**	**9**	**0**	**0.0%**	**164**	**9.0**	**5.5%**

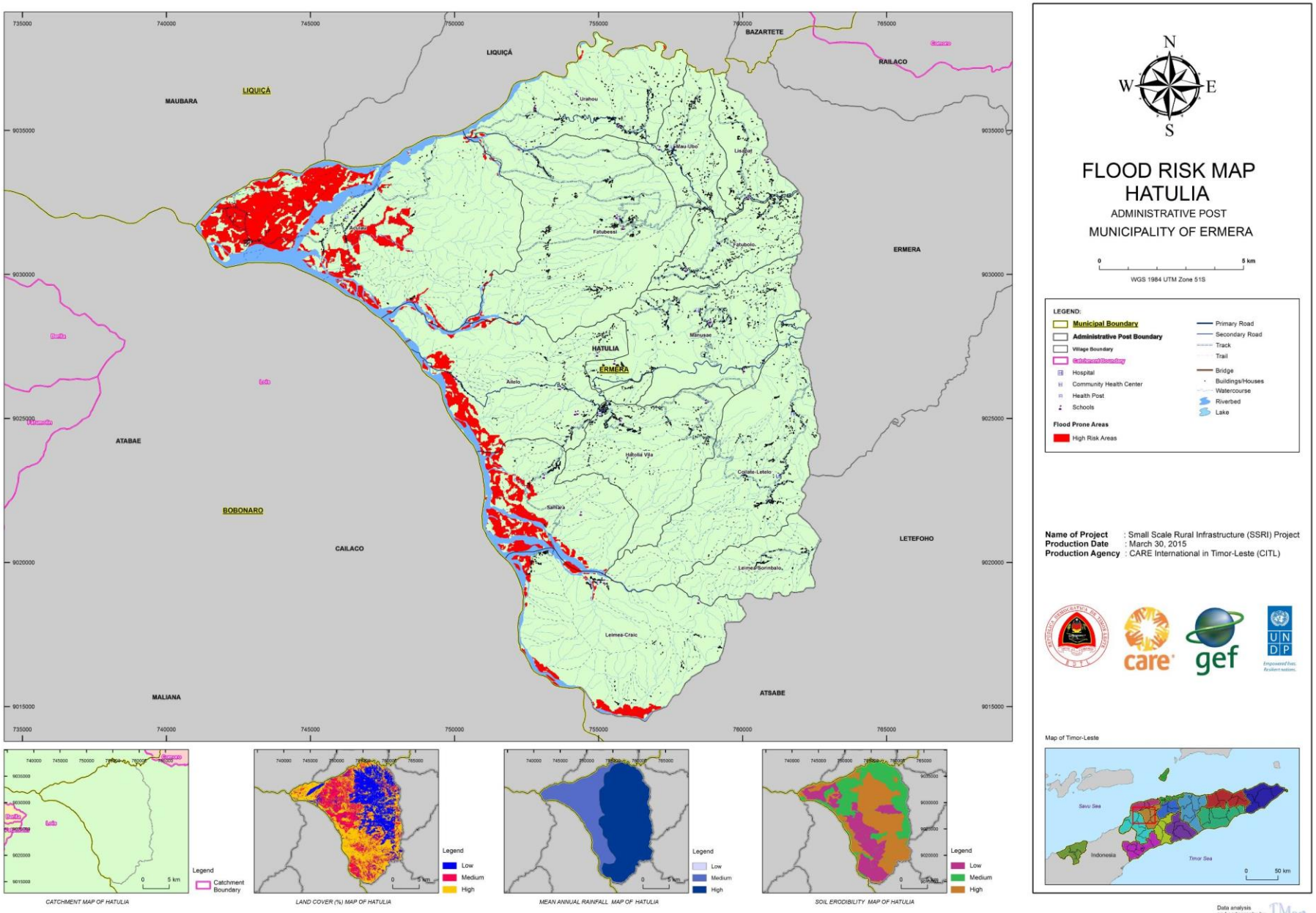
Tabela 37. Risko Estatistiko ba Inundasaun iha PA Hatulia

Area sira iha risko as ba inundasaun distribui tuir mota ninin husi Mota no tributaria iha oeste PA Hatulia (Mapa 18). Suco Aculau mak dook no rai area boot ba iha zona inundasaun, ho hektar 1,353, ka 28.4% husi area total. Area tomak inklinado ba inundasaun iha Aculau iha ilha ida hasoru malu ho mota Luaveli no Marobo. Uma barak hamutuk 73 iha zona inundasaun iha ilha nee. Sira seluk atraves Mota Luaveli iha Aculau Vila. Liu 20% husi uma sira hotu iha suco neebe hetan ameasa husi inundasaun, no ba Estrada, persentajem neebe mak ás. Husi total naruk 21.0km (34.7%) tuir rute neebe mak susceptivel ba inundasaun.+

Fatin seluk iha PA Hatulia, jeralmente ameasa husi inundasaun menus liu. Konsideravel parte husi Suco Samara iha risko, ho hektar 397 mai husi 1,729 922.9%) iha risko. Dala ida tan, rai barak nee forma husi ilha hasoru malu husi mota rua, iha kazu nee Marobo no Garai. Ema lubuk mak hela iha parte PA nee, maibe nafatin uma 9 mak lokilizado iha planicie inundasaun, representa 7.2% husi numero total uma sira iha Suco Samara. Leimeia Craic mos lokaliza iha mota ninin Marobo, no iha nee uma 18 mak iha risko ba inundasaun husi total 273 (6.65)

Laiha PA Hatulia nia eskola 28 ka fasilidade saude 9 neebe mak lokaliza iha area sira inklinado ba inundasaun. Nee provavel-liu refleta ba faktos katak maioria husi ema neebe hela diak iha planicie inundasaun iha parte rai-as husi leste nian.

Figura 25 – Elevado as ba planicie inundasaun -fatin ida neebe mak besik ba mota iha Suco Aculau la inklinado ba inundasaun. Suco Aculau, Kaptasaun Mota Lois



MAPA- 19. Mapa Risko Inundasaun: Posto Administrativa Hatulia

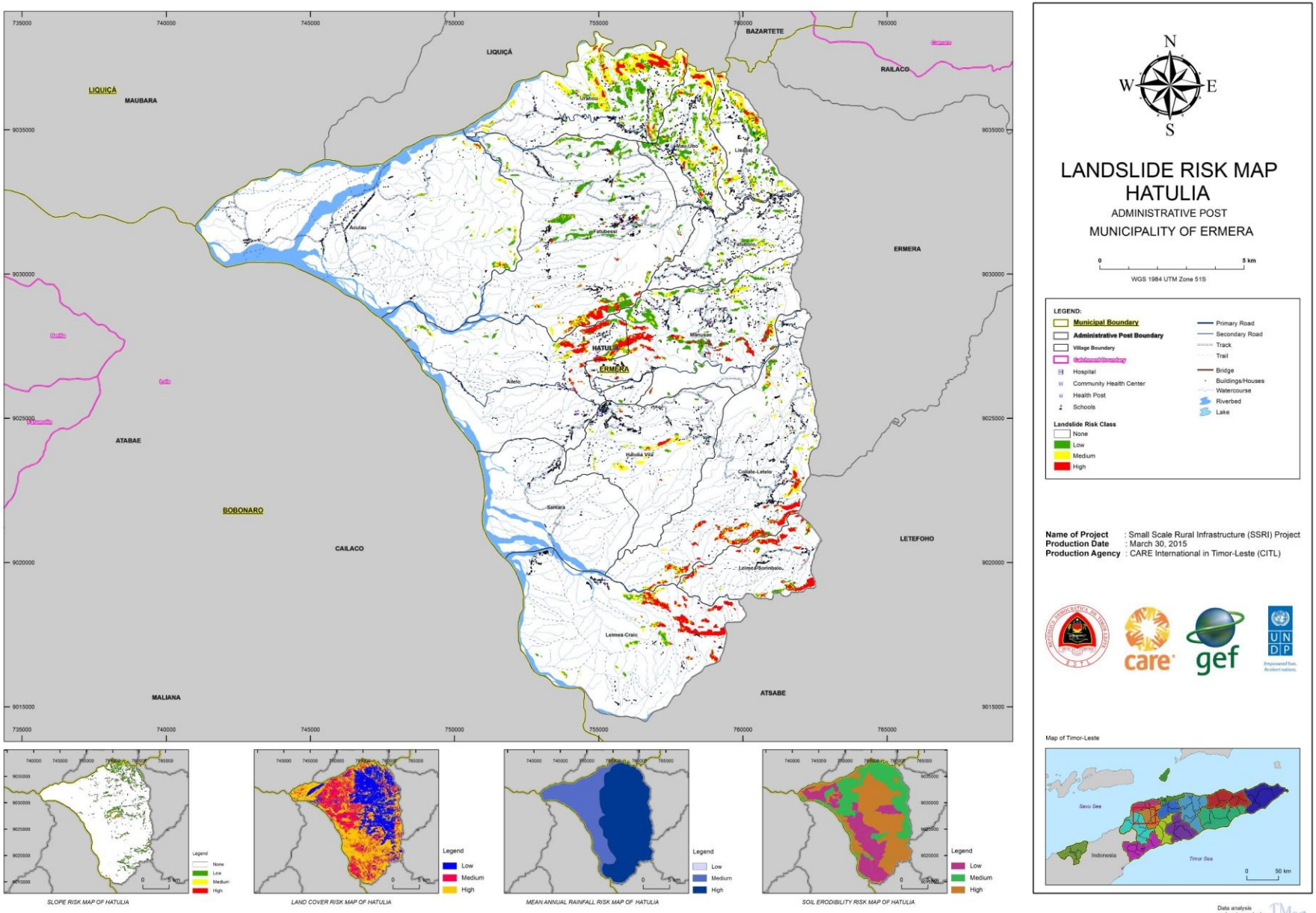
Risko Rai halai iha Posto Administrativo Hatulia

Husi hektar 1,852 iha risko ba rai-halai ba Hatulia tomak, hektar 516 (27.9%) mak area sira ho risko as. Hanesan mapa 19 hatudu, area sira iha risko maioria iha PA Hatulia leste no rai-halai mak potensia problema suco sira iha nee. Suco Urahou maioria iha rai ho risko mediu no ás, ho hektar 247. Nee representa 14.2% husi area rai total sira ho hektar 1,736. Ba hektar 125 iha risko naton ba rai-halai iha Urahou, suco nee iha total hektar 372 iha nivel ameasa balu nia okos inkluindo Suco Mau-ubo, ho hektar 204 (22.9%) no Suco Lisapat ho hektar 152 (20.9%).

Suco Fatubessi mos iha risko boot ba rai-halai, ho hektar 246, kuaze uma sira hotu hetan ameasa. Uma rua nolu resin hitu mak iha zona risko ás, iha neebe 4% husi numero total uma sira iha suco nee. Suco Lisapat no Samara iha numero barak ba uma sira iha risko ba rai-halai, ho 20 no 16 respeitivamente kategori ba risko mediu. Hare ba iha kategoria rai-halai tolu nee hamutuk, uma sira iha Urahou mak maioria iha risko ho 42 (7.9%) tuir husi Fatubessi ho 37 (5.4%) no Mau-ubo ho 30 (5.8%).

Desde Estrada sira iha Hatulia sai prekupasaun, PA nee mak notavel ba persentajem boot katak laos iha risko ba rai-halai. Husi rai total ho naruk 164.4km, ho deit 5km (3.0%) mak konsidera iha risko ba rai-halai. Nee surpreza tebes ba persentajem kiik iha PA ida ho reputasaun iha Estrada kondisaun át. Iha suco rua iha neebe Estrada sai potensia problema boot mak fatubessi, ho total 1.8km (6.7%) iha risko ba rai-halai, no Manusae, ho 0.9km (3.3%) iha risko.

Figura 26 – Rai-lolo tebes no vegetasaun esparse iha area risko-ás ba rai-halai. Suco Hatulia Vila, Kaptasaun Mota Lois



Produced with Funding from GEF-LDCF and Implemented by UNDP in Partnership with MAE and MCIE

MAPA- 20. Mapa Risko Rai-halai: Posto Administrativo Hatulia

Risko Rai-halai iha Posto Administrativo Hatulia

Suco -Catchment Code	*Suco* -Catchment		Total Hectares	Area of Land in Each Landslide Risk Category							
				No Risk		Low Risk		Medium Risk		High Risk	
				Hectares	%	Hectares	%	Hectares	%	Hectares	%
50522	Ailelo	Lois River Catchment	2,629	2,503	95.2%	28	1.0%	33	1.3%	66	2.5%
50622	Aculau	Lois River Catchment	4,755	4,710	99.0%	19	0.4%	25	0.5%	3	0.1%
51522	Coilate-Letelo	Lois River Catchment	2,688	2,515	93.6%	23	0.8%	63	2.3%	87	3.2%
52022	Fatubolo	Lois River Catchment	1,038	1,001	96.5%	21	2.0%	16	1.5%	0	0.0%
52122	Fatubessi	Lois River Catchment	3,541	3,296	93.1%	152	4.3%	41	1.2%	53	1.5%
52722	Hatolia Vila	Lois River Catchment	1,758	1,709	97.2%	7	0.4%	35	2.0%	7	0.4%
53522	Leimea-Craic	Lois River Catchment	2,875	2,728	94.9%	23	0.8%	34	1.2%	90	3.1%
53722	Leimea-Sorinbalo	Lois River Catchment	859	778	90.6%	14	1.6%	15	1.7%	52	6.1%
54222	Lisapat	Lois River Catchment	730	578	79.1%	59	8.1%	81	11.1%	12	1.7%
54922	Manusae	Lois River Catchment	2,123	1,902	89.6%	106	5.0%	46	2.2%	69	3.2%
55222	Mau-Ubo	Lois River Catchment	889	685	77.1%	98	11.0%	86	9.6%	20	2.2%
56422	Samara	Lois River Catchment	1,729	1,729	100.0%	0	0.0%	0	0.0%	0	0.0%
57322	Urahou	Lois River Catchment	1,736	1,364	78.6%	125	7.2%	190	10.9%	57	3.3%
		Totals Hatulia AP	**27,350**	**25,498**	**93.2%**	**673**	**2.5%**	**663**	**2.4%**	**516**	**1.9%**

Tabela 38. Area rai iha risko ba rai-halai iha PA Hatulia

Figura 27 –Rai-halai Hamosu husi konstrusaun Estrada ba iha rai-lolo ho vegetasaun esparse moderado. Suco Ailelo, Kaptasaun Mota Lois

Figura 28. Erosaun iha rai-lolo moderado kovre ho vegetasaun esparse. Iha area risko mediu ba erosaun. Suco Samara, Kaptasaun Mota Lois

				Houses in Each Landslide Risk Category							
***Suco* -Catchment Code**	***Suco* -Catchment**		**Total No. of Houses**	**No Risk**		**Low Risk**		**Medium Risk**		**High Risk**	
				Number	**%**	**Number**	**%**	**Number**	**%**	**Number**	**%**
50522	Ailelo	Lois River Catchment	368	367	99.7%	0	0.0%	0	0.0%	1	0.3%
50622	Aculau	Lois River Catchment	362	362	100.0%	0	0.0%	0	0.0%	0	0.0%
51522	Coilate-Letelo	Lois River Catchment	606	605	99.8%	0	0.0%	0	0.0%	1	0.2%
52022	Fatubolo	Lois River Catchment	599	592	98.8%	4	0.7%	3	0.5%	0	0.0%
52122	Fatubessi	Lois River Catchment	679	642	94.6%	7	1.0%	3	0.4%	27	4.0%
52722	Hatolia Vila	Lois River Catchment	570	568	99.6%	0	0.0%	2	0.4%	0	0.0%
53522	Leimea-Craic	Lois River Catchment	273	273	100.0%	0	0.0%	0	0.0%	0	0.0%
53722	Leimea-Sorinbalo	Lois River Catchment	120	119	99.2%	0	0.0%	0	0.0%	1	0.8%
54222	Lisapat	Lois River Catchment	442	410	92.8%	11	2.5%	20	4.5%	1	0.2%
54922	Manusae	Lois River Catchment	762	739	97.0%	6	0.8%	7	0.9%	10	1.3%
55222	Mau-Ubo	Lois River Catchment	516	486	94.2%	17	3.3%	12	2.3%	1	0.2%
56422	Samara	Lois River Catchment	125	125	100.0%	0	0.0%	0	0.0%	0	0.0%
57322	Urahou	Lois River Catchment	536	494	92.2%	26	4.9%	16	3.0%	0	0.0%
		Totals Hatulia AP	**5,958**	**5,782**	**97.0%**	**71**	**1.2%**	**63**	**1.1%**	**42**	**0.7%**

Tabela 39. Uma sira iha Risko ba Rai-halai iha PA Hatulia

Suco -Catchment Code	*Suco* -Catchment		Total Length of Roads (Km)	Length of Road in Each Landslide Risk Category							
				No Risk		Low Risk		Medium Risk		High Risk	
				Km	%	Km	%	Km	%	Km	%
50522	Ailelo	Lois River Catchment	11.2	11.2	99.7%	0.0	0.0%	0.0	0.0%	0.0	0.3%
50622	Aculau	Lois River Catchment	21.0	20.7	98.5%	0.0	0.1%	0.3	1.3%	0.0	0.0%
51522	Coilate-Letelo	Lois River Catchment	16.2	16.2	99.6%	0.0	0.0%	0.1	0.4%	0.0	0.0%
52022	Fatubolo	Lois River Catchment	9.3	9.2	98.9%	0.1	1.1%	0.0	0.0%	0.0	0.0%
52122	Fatubessi	Lois River Catchment	28.5	26.6	93.3%	1.5	5.4%	0.1	0.5%	0.2	0.8%
52722	Hatolia Vila	Lois River Catchment	12.5	12.5	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
53522	Leimea-Craic	Lois River Catchment	1.3	1.3	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
53722	Leimea-Sorinbalo	Lois River Catchment	3.8	3.8	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
54222	Lisapat	Lois River Catchment	7.7	7.3	94.3%	0.1	1.2%	0.3	4.5%	0.0	0.0%
54922	Manusae	Lois River Catchment	26.5	25.6	96.7%	0.5	1.8%	0.1	0.5%	0.3	1.0%
55222	Mau-Ubo	Lois River Catchment	9.1	8.1	89.0%	0.4	4.3%	0.5	5.5%	0.1	1.2%
56422	Samara	Lois River Catchment	6.2	6.2	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
57322	Urahou	Lois River Catchment	11.1	10.9	97.4%	0.0	0.3%	0.3	2.4%	0.0	0.0%
		Totals Hatulia AP	**164.4**	**159.4**	**97.0%**	**2.7**	**1.6%**	**1.7**	**1.1%**	**0.6**	**0.4%**

Tabela 40. Estrada iha Risko ba Rai-halai iha PA Hatulia

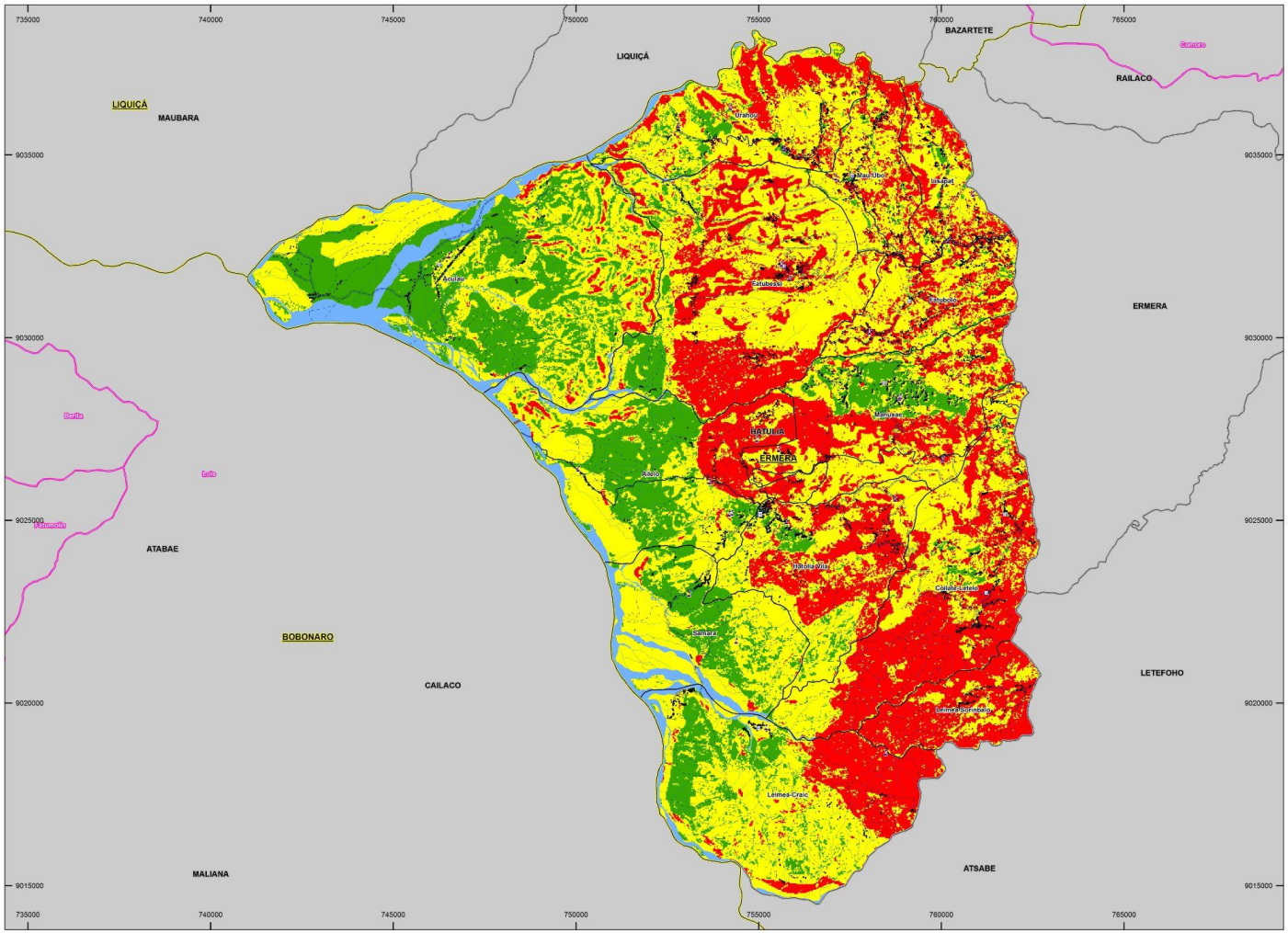
Risko Erosaun iha Posto Administrativo Hatulia

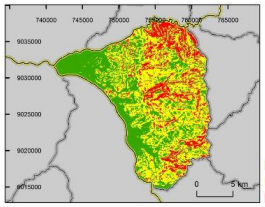
Erosaun solu mak problema potensia boot ida ba rai-ás parte leste husi PA Hatulia (Mapa 20), parsialmente tamba fatores bio-fiziko (rai-lolo, udan monu rai annual boot-liu) no parsialmente tamba mos presaun husi populasaun, iha neebe degradante protetivu liu vegetasaun natural. Ba PA sira hotu, kuaze hektar 22,000 hetan risko mediu no risko ás ba erosaun, representa ituan-liu kuaze 80% husi area total sira. Suco Coilate-Letelo ho hektar 1,486 (55.3%) no Suco Fatubessi ho hektar 1,300 (36.7%) iha area neebe boot kategoria iha risko neebe ás, maibe iha Leimea-Sorinbalu iha porporsaun boot-liu husi ninia area mak iha risko ba erosaun, ho hektar 663 representa 77.3% husi total area.

Iha porporsaun boot husi Hatulia nia infra-estrutura mak konstrui iha area sira inklinado erosaun. Nee provavel-liu pontus ba iha ligasaun entre populasaun barak no degradasaun rai. Kuaze 85% husi uma sira no 78% husi Estrada mak lokalizado iha area risko mediu no ás. Eskola sira bai-bain forte assosiasaun ho risko erosaun, ho 26 husi eskola sira 28 iha PA Hatulia lokalizado iha area sira neebe mak iha risko mediu no ás.

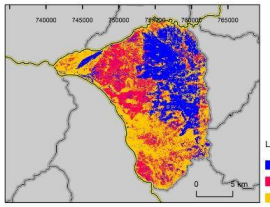
				Area of Land in Each Erosion Risk Category					
***Suco* -Catchment Code**	***Suco* -Catchment**		**Total Hectares**	**Low Risk**		**Medium Risk**		**High Risk**	
				Hectares	**%**	**Hectares**	**%**	**Hectares**	**%**
50522	Ailelo	Lois River Catchment	2,629	926	35.2%	1,239	47.1%	465	17.7%
50622	Aculau	Lois River Catchment	4,755	2,327	48.9%	2,241	47.1%	187	3.9%
51522	Coilate-Letelo	Lois River Catchment	2,688	63	2.3%	1,139	42.4%	1,486	55.3%
52022	Fatubolo	Lois River Catchment	1,038	39	3.8%	644	62.0%	355	34.2%
52122	Fatubessi	Lois River Catchment	3,541	245	6.9%	1,996	56.4%	1,300	36.7%
52722	Hatolia Vila	Lois River Catchment	1,758	142	8.1%	928	52.8%	687	39.1%
53522	Leimea-Craic	Lois River Catchment	2,875	563	19.6%	1,616	56.2%	695	24.2%
53722	Leimea-Sorinbalo	Lois River Catchment	859	0	0.0%	195	22.7%	663	77.3%
54222	Lisapat	Lois River Catchment	730	30	4.1%	420	57.5%	280	38.4%
54922	Manusae	Lois River Catchment	2,123	334	15.7%	1,065	50.2%	725	34.1%
55222	Mau-Ubo	Lois River Catchment	889	41	4.6%	570	64.1%	279	31.4%
56422	Samara	Lois River Catchment	1,729	499	28.8%	1,211	70.0%	20	1.1%
57322	Urahou	Lois River Catchment	1,736	193	11.1%	1,038	59.8%	505	29.1%
		Totals Hatulia AP	**27,350**	**5,403**	**19.8%**	**14,301**	**52.3%**	**7,647**	**28.0%**

Tabela 41. Area Rai iha Risko ba Erosaun iha PA Hatulia

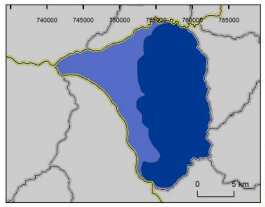




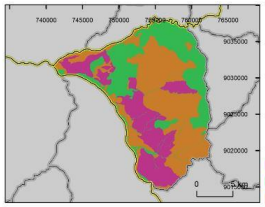
SLOPE RISK MAP OF HATULIA



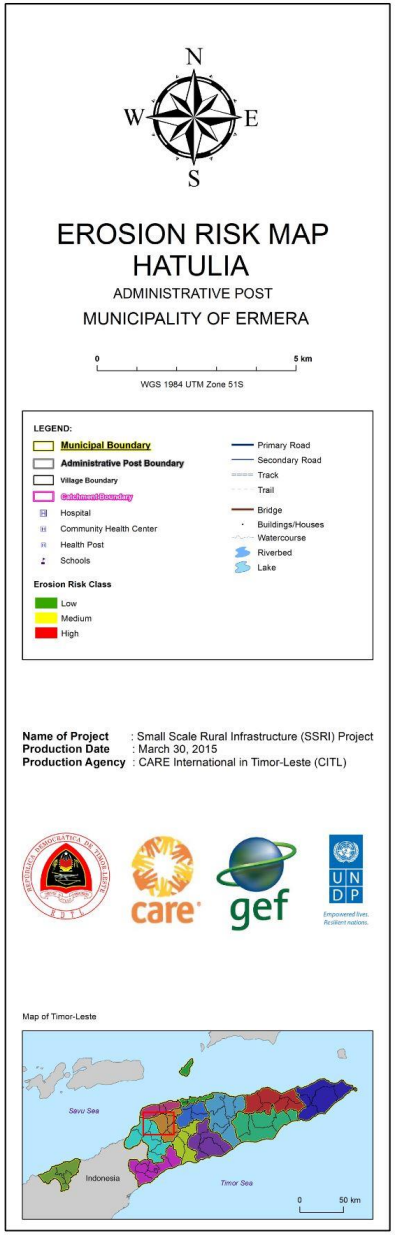
LAND COVER RISK MAP OF HATULIA



MEAN ANNUAL RAINFALL RISK MAP OF HATULIA



SOIL ERODIBILITY RISK MAP OF HATULIA



Produced with Funding from GEF-LDCF and Implemented by UNDP in Partnership with MAE and MCIE

MAPA- 21. Mapa Risko Erosaun iha Posto Administrativo Hatulia

Suco - Catchment Code	*Suco* -Catchment		Total No. of Houses	Houses in Each Erosion Risk Category						Total Length of Roads	Length of Road in Each Erosion Risk Category					
				Low Risk		Medium Risk		High Risk			Low Risk		Medium Risk		High Risk	
				Number	%	Number	%	Number	%		Km	%	Km	%	Km	%
50522	Ailelo	Lois River Catchment	368	55	14.9%	200	54.3%	113	30.7%	11.2	3.5	31.0%	5.5	48.7%	2.3	20.3%
50622	Aculau	Lois River Catchment	362	215	59.4%	145	40.1%	2	0.6%	21.0	15.4	73.1%	5.1	24.3%	0.5	2.6%
51522	Coilate-Letelo	Lois River Catchment	606	21	3.5%	212	35.0%	373	61.6%	16.2	0.3	1.9%	9.5	58.5%	6.4	39.7%
52022	Fatubolo	Lois River Catchment	599	18	3.0%	293	48.9%	288	48.1%	9.3	0.4	4.1%	4.5	48.8%	4.4	47.0%
52122	Fatubessi	Lois River Catchment	679	29	4.3%	229	33.7%	421	62.0%	28.5	1.4	5.0%	17.1	60.2%	9.9	34.8%
52722	Hatolia Vila	Lois River Catchment	570	84	14.7%	263	46.1%	223	39.1%	12.5	1.2	9.8%	6.8	54.0%	4.5	36.2%
53522	Leimea-Craic	Lois River Catchment	273	39	14.3%	204	74.7%	30	11.0%	1.3	0.2	12.1%	1.2	87.9%	0.0	0.0%
53722	Leimea-Sorinbalo	Lois River Catchment	120	0	0.0%	11	9.2%	109	90.8%	3.8	0.0	0.0%	1.0	25.7%	2.8	74.3%
54222	Lisapat	Lois River Catchment	442	48	10.9%	252	57.0%	142	32.1%	7.7	1.1	14.6%	3.9	50.7%	2.7	34.8%
54922	Manusae	Lois River Catchment	762	204	26.8%	320	42.0%	238	31.2%	26.5	6.0	22.6%	15.4	58.3%	5.1	19.2%
55222	Mau-Ubo	Lois River Catchment	516	53	10.3%	292	56.6%	171	33.1%	9.1	0.6	6.6%	5.6	61.5%	2.9	31.9%
56422	Samara	Lois River Catchment	125	70	56.0%	55	44.0%	0	0.0%	6.2	3.0	48.6%	3.2	51.0%	0.0	0.4%
57322	Urahou	Lois River Catchment	536	77	14.4%	296	55.2%	163	30.4%	11.1	1.9	17.0%	6.9	61.7%	2.4	21.3%
		Totals Hatulia AP	**5,958**	**913**	**15.3%**	**2,772**	**46.5%**	**2,273**	**38.2%**	**164.4**	**34.9**	**21.3%**	**85.6**	**52.0%**	**43.9**	**26.7%**

Tabela 42. Uma no Estrada sira iha Risko ba Erosaun iha PA Hatulia

Suco -Catchment Code	*Suco* -Catchment		Total No. of Schools	Schools in Each Erosion Risk Category						Total No. of Health Facilities	Health Facilities in Each Erosion Risk Category					
				Low Risk		Medium Risk		High Risk			Low Risk		Medium Risk		High Risk	
				Number	%	Number	%	Number	%		Number	%	Number	%	Number	%
50522	Ailelo	Lois River Catchment	5	2	40.0%	2	40.0%	1	20.0%	0						
50622	Aculau	Lois River Catchment	1	0	0.0%	1	100.0%	0	0.0%	1	1	100.0%	0	0.0%	0	0.0%
51522	Coilate-Letelo	Lois River Catchment	0							2	0	0.0%	1	50.0%	1	50.0%
52022	Fatubolo	Lois River Catchment	1	0	0.0%	0	0.0%	1	100.0%	1	1	100.0%	0	0.0%	0	0.0%
52122	Fatubessi	Lois River Catchment	4	0	0.0%	2	50.0%	2	50.0%	1	0	0.0%	0	0.0%	1	100.0%
52722	Hatolia Vila	Lois River Catchment	2	0	0.0%	1	50.0%	1	50.0%	1	0	0.0%	1	100.0%	0	0.0%
53522	Leimea-Craic	Lois River Catchment	2	0	0.0%	1	50.0%	1	50.0%	1	0	0.0%	1	100.0%	0	0.0%
53722	Leimea-Sorinbalo	Lois River Catchment	0							0						
54222	Lisapat	Lois River Catchment	3	0	0.0%	1	33.3%	2	66.7%	0						
54922	Manusae	Lois River Catchment	4	0	0.0%	2	50.0%	2	50.0%	1	1	100.0%	0	0.0%	0	0.0%
55222	Mau-Ubo	Lois River Catchment	1	0	0.0%	1	100.0%	0	0.0%	1	0	0.0%	0	0.0%	1	100.0%
56422	Samara	Lois River Catchment	2	0	0.0%	2	100.0%	0	0.0%	0						
57322	Urahou	Lois River Catchment	3	0	0.0%	1	33.3%	2	66.7%	0						
		Totals Hatulia AP	**28**	**2**	**7.1%**	**14**	**50.0%**	**12**	**42.9%**	**9**	**3**	**33.3%**	**3**	**33.3%**	**3**	**33.3%**

Tabela 43. Eskola no Fasilidade Saude sira iha Risko ba Erosaun iha PA Hatulia

2.4.6 Risko Prefil – Posto Administrativo Bazartete

Bazartete mak Posto Administrativo neebe diversiu no kompleksu. Iha kaptasaun mota 10 no suco 9 mak inter-koneksaun hodi kria kaptasaun suco 29 iha Tabela 44 no iha Mapa 21. Kompleksidade nee parsialmente sanak husi varia natureza ba tereno no ekosistema sira iha Bazartete, iha neebe medida husi semi-arida, esparse-liu vegetasaun planicie tuir kosteira, hodi intensivamente area agrikula no du'ut iha foho neebe mak badak, floresta neebe luxuriante no plantasaun kafe nasaun iha rai-lolo, profundamento inisiaisaun iha rai-ás. Nee mos funsaun ida ba inkonsistensia iha dadus neebe disponivel ba estudo nee. Iha Bazartete no PA 2 sira seluk iha Municipio Liquiça, kaptasaun mak define detailhada liu sira mak ba parte seluk husi pais nee, inkluindo Baucau no Ermera. Ida nee saida mak premite ita atu hetan komprendesaun lokalizado ba iha ligasaun rai laletek no tetuk, no hodi kompara estatistiku ba kaptasaun sira kiik-oan iha neebe signifikante-liu mosu risko diferente husi sira nia vizinho. Iha neebe jeneralizasaun presiza ba PA Ermera no Hatulia nia kaptasaun, iha Municipio Liquiça, ligasaun lokalizado liu neebe mak hare iha detailhada, ho hirak nee hotu ka parte sira husi kaptasaun 10 iha Bazartete, 5 iha Liquiça no 13 iha Maubara.

Iha Bazartete, kaptasaun ida-idak iha diferente karateristiko, nee iha mos implikasaun neebe mak diferente ba iha perigos tolu husi klima-relasionado iha estudo nee – inundasaun, rai-halai no erosaun solu. Balu, hanesan Kaptasaun Emeta no Caicassa, mak inklinado liu ba inundasaun, iha fatin hanesan sira seluk, hanesan Comluli no Carbutaeloa, sei susceptivel liu ba rai halai. Sesaun tuir mai sei fo dezenha klaru oinsa exposizaun ba risko assosiado ho inundasaun, rai-halai no erosaun varia husi kaptasaun ba kaptasaun ida, no husi suco ba suco seluk.

***Suco* -Catchment Code**	***Suco* -Catchment**		**Total Area**
61911	Fahilebo	Comoro River Catchment	1,851
61927	Fahilebo	Moraeloa River Catchment	559
62208	Fatumasi	Caicassa River Catchment	160
62209	Fatumasi	Carbutaeloa River Catchment	248
62227	Fatumasi	Moraeloa River Catchment	269
63308	Lauhata	Caicassa River Catchment	865
63309	Lauhata	Carbutaeloa River Catchment	682
63312	Lauhata	Emeta AggregateCatchment	58
63315	Lauhata	Inur Pilila Aggregate Catchment	329
63327	Lauhata	Moraeloa River Catchment	67
63809	Leorema	Carbutaeloa River Catchment	34
63811	Leorema	Comoro River Catchment	1,243
63822	Leorema	Lois River Catchment	864
63827	Leorema	Moraeloa River Catchment	94
65109	Maumeta	Carbutaeloa River Catchment	237
65112	Maumeta	Emeta AggregateCatchment	221
65113	Maumeta	Gularloa River Catchment	227
65309	Metagou	Carbutaeloa River Catchment	312
65313	Metagou	Gularloa River Catchment	266
65322	Metagou	Lois River Catchment	48
65508	Motaulun	Caicassa River Catchment	79
65510	Motaulun	Comluli Aggregate Catchment	1,084
65527	Motaulun	Moraeloa River Catchment	787
66710	Tibar	Comluli Aggregate Catchment	93
66711	Tibar	Comoro River Catchment	958
66730	Tibar	Riheu River Catchment	3,104
66733	Tibar	Tacitolu Aggregate Catchment	58
67210	Ulmera	Comluli Aggregate Catchment	2,984
67211	Ulmera	Comoro River Catchment	914
		Totals Bazartete AP	**18,693**

Tabela 44. Kaptasaun Suco iha Posto Administrativo Bazartete

MAPA- 22. Suco sira no Kaptasaun husi Posto Administrativo Bazartete

Risko Inundasaun iha Posto Administrtivo Bazartete

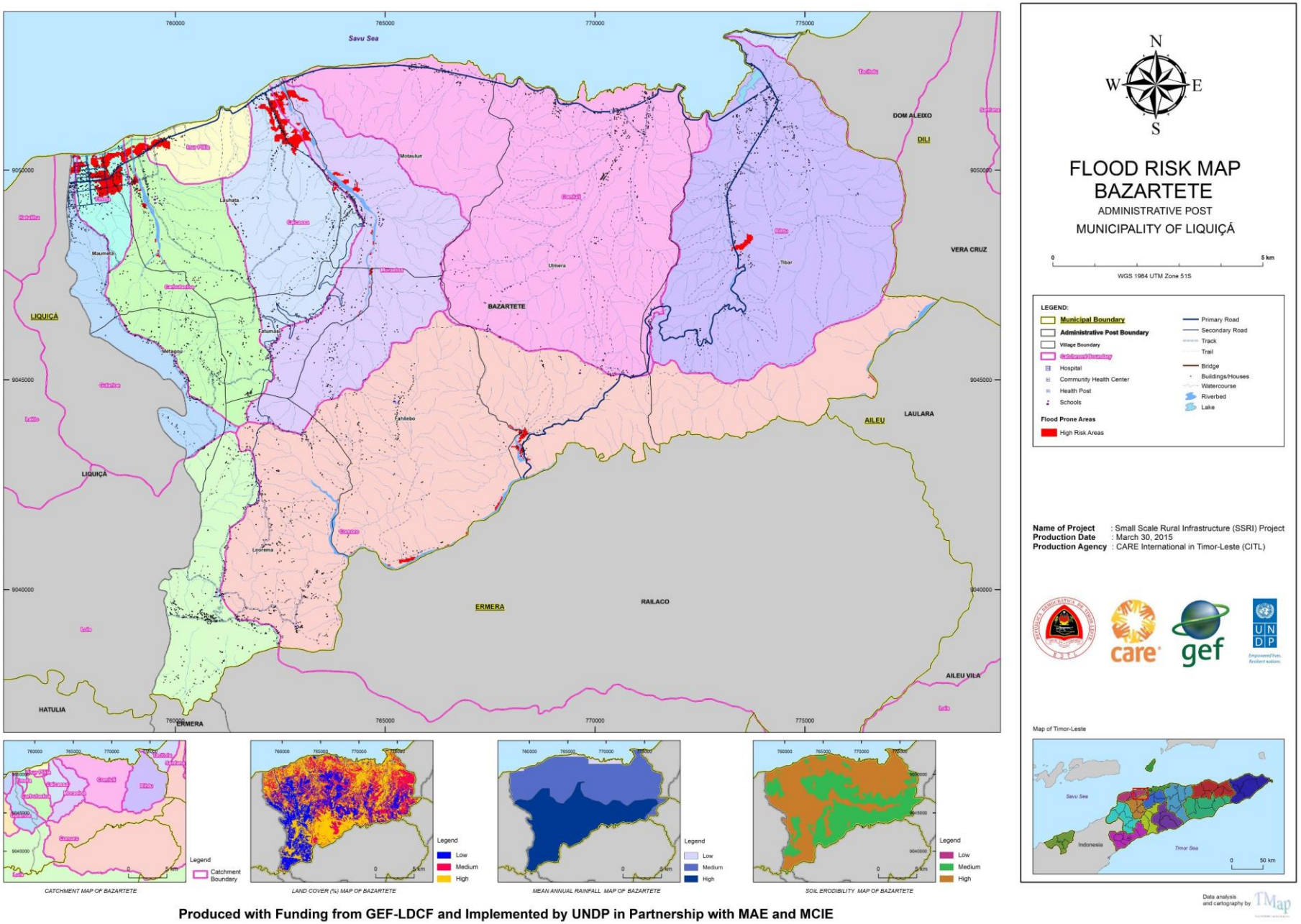
PA Bazartete iha rai-tetuk neebe ituan liu, tamba nee inundasaun la habelar ba area sira seluk. Mapa 22 hatudu katak area sira risko prinsipais neebe mak konsentrado iha Emeta, Kaptasaun suco sira hanesan Caicassa no Moraeloa, no iha Lauhata, Maumeta no Motaulun. Area sira inklinado inundasaun kuaze exekluzivamente iha area kaptasaun sira kiik, neebe besik ba iha mota ibun. Iha excepsaun rua mak hanesan area rai-ás kiik-oan sira iha Kaptasaun Suco Tibar-Riheu no Ulmera-Comoro.

Area boot rua husi PA Bazartete neebe mak inklinado ba inundasaun neebe konstrui haleu iha area rua nee mak hanesan Liquiça Vila no Lauhata. Prosesu nee maioria responsavel ba inundasaun iha nee mak volume be neebe boot tun husi rai-lolo ás depois liu period neebe udan prolongado (iha oras balu ka loron balu nia laran), ka depois ituan, intense udan monu rai. Nee sempre sai kazu, halo problema boot ba aktividade umano – konstrusaun infra-estrutura iha cidade rua nee la fornese drainajem adequada atu be suli tuir. Cidade nee rasik sai barajem, hodi obriga be fila no suli sai husi mota ninin no kanal mota.

Problema nee laos totalmente induzado umano. Mota suli tun husi rai-ás Bazartete lori sedimentasaun no kontribuisaun hodi blokeado kanal sira iha rai-tetuk. Mota iha parte nee badak liu iha pais ida nee, rai-lolo no suli lalais tebes depois udan boot. Inundasaun bai-bain fo distruptive inundasun assosiado boot, no suli neneik iha mota Seiçal no Vemasse iha Baucau.

Maske nunee dezemvolvimento urbano mak parsialmente responsavel ba hasae insidensia ba inundasaun iha area sira naturalmente inklinado inundasaun, laos buat diak ida ba infra-estrutura iha risko. Tamba nee tipo inundasaun la afeita area sira boot iha rai, no ida nee fasil-liu atu Evita inundasaun. Ho deit 238 husi uma sira 18,693 (6.2%) mak konsidera iha risko inundasaun. Husi hirak nee, 142 mak suco Lauhata no 74 mak iha Suco Maumeta. Eskola deit mak iha zona inundasaun iha PA Bazartete nee laos iha kosta norte, maibe iha interior, iha parte laletek husi Kaptasaun Mota Comoro iha Ulmera. Eskola Primiaria iha Vila Lebuloa. Laiha fasilidade saude mak konsidera iha risko inundasaun.

Figura 29 – Servisu Enjinéria tenta atu konteina iha Mota Moraeloa. Suco Lauhata, Kaptasaun Mota Moraeloa



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MAPA- 23. Mapa Risko Inundasaun: Posto Administrativo Bazartete

Suco -Catchment Code	*Suco* -Catchment		Land Area			Houses			Schools			Health Facilities			Roads		
			Total Area	In Flood Risk Zone		Total Number	In Flood Risk Zone		Total Number	In Flood Risk Zone		Total Number	In Flood Risk Zone		Total Km	In Flood Risk Zone	
				Hectares	%		Number	%		Number	%		Number	%		Km	%
61911	Fahilebo	Comoro River Catchment	1,851	11	0.6%	145	1	0.7%	1	0	0.0%	1	0	0.0%	0.0		
61927	Fahilebo	Moraeloa River Catchment	559	0	0.1%	66	0	0.0%	0			0			0.0		
62208	Fatumasi	Caicassa River Catchment	160	0	0.0%	65	0	0.0%	2	0	0.0%	1	0	0.0%	5.7	0.0	0.0%
62209	Fatumasi	Carbutaeloa River Catchment	248	0	0.0%	102	0	0.0%	1	0	0.0%	0			3.2	0.0	0.0%
62227	Fatumasi	Moraeloa River Catchment	269	1	0.5%	95	0	0.0%	0			0			2.3	0.0	0.0%
63308	Lauhata	Caicassa River Catchment	865	38	4.4%	233	54	23.2%	1	0	0.0%	0			7.2	1.3	17.6%
63309	Lauhata	Carbutaeloa River Catchment	682	20	2.9%	221	15	6.8%	2	0	0.0%	0			8.1	0.8	9.7%
63312	Lauhata	Emeta AggregateCatchment	58	20	35.4%	102	43	42.2%	0			0			2.0	0.6	28.7%
63315	Lauhata	Inur Pilila Aggregate Catchment	329	10	3.0%	53	24	45.3%	0			0			4.9	0.6	11.9%
63327	Lauhata	Moraeloa River Catchment	67	17	25.1%	22	6	27.3%	0			0			0.3	0.0	7.7%
63809	Leorema	Carbutaeloa River Catchment	34	0	0.0%	15	0	0.0%	0			0			0.1	0.0	0.0%
63811	Leorema	Comoro River Catchment	1,243	1	0.1%	401	0	0.0%	1	0	0.0%	0			8.7	0.0	0.0%
63822	Leorema	Lois River Catchment	864	0	0.0%	352	0	0.0%	3	0	0.0%	1	0	0.0%	9.7	0.0	0.0%
63827	Leorema	Moraeloa River Catchment	94	0	0.0%	25	0	0.0%	1	0	0.0%	0			1.2	0.0	0.0%
65109	Maumeta	Carbutaeloa River Catchment	237	0	0.1%	56	0	0.0%	0			0			0.5	0.0	0.0%
65112	Maumeta	Emeta AggregateCatchment	221	36	16.3%	262	74	28.2%	1	0	0.0%	0			10.8	2.8	25.7%
65113	Maumeta	Gularloa River Catchment	227	4	1.9%	165	0	0.0%	0			0			5.3	0.7	13.3%
65309	Metagou	Carbutaeloa River Catchment	312	0	0.0%	157	0	0.0%	0			0			2.4	0.0	0.0%
65313	Metagou	Gularloa River Catchment	266	0	0.0%	115	0	0.0%	1	0	0.0%	1	0	0.0%	4.7	0.0	0.0%
65322	Metagou	Lois River Catchment	48	0	0.0%	13	0	0.0%	0			0			0.0		
65508	Motaulun	Caicassa River Catchment	79	1	0.9%	73	0	0.0%	1	0	0.0%	0			1.9	0.0	0.0%
65510	Motaulun	Comluli Aggregate Catchment	1,084	0	0.0%	96	0	0.0%	1	0	0.0%	0			5.1	0.0	0.0%
65527	Motaulun	Moraeloa River Catchment	787	18	2.3%	109	4	3.7%	1	0	0.0%	1	0	0.0%	1.5	0.2	16.4%
66710	Tibar	Comluli Aggregate Catchment	93	0	0.0%	24	0	0.0%	1	0	0.0%	0			2.4	0.0	0.0%
66711	Tibar	Comoro River Catchment	958	3	0.3%	3	0	0.0%	0			0			0.0		
66730	Tibar	Riheu River Catchment	3,104	8	0.2%	418	0	0.0%	2	0	0.0%	1	0	0.0%	16.0	0.1	0.6%
66733	Tibar	Tacitolu Aggregate Catchment	58	0	0.0%	0			0			0			2.0	0.0	0.0%
67210	Ulmera	Comluli Aggregate Catchment	2,984	0	0.0%	400	0	0.0%	2	0	0.0%	1	0	0.0%	8.8	0.0	0.0%
67211	Ulmera	Comoro River Catchment	914	9	1.0%	81	17	21.0%	3	1	33.3%	0			4.4	0.1	1.9%
		Totals Bazartete AP	**18,693**	**198**	**1.1%**	**3,869**	**238**	**6.2%**	**25**	**1**	**4.0%**	**7**	**0**	**0.0%**	**119**	**7.1**	**6.0%**

Tabela 45. Risko Estatistiko ba Inundasaun iha PA Bazartete

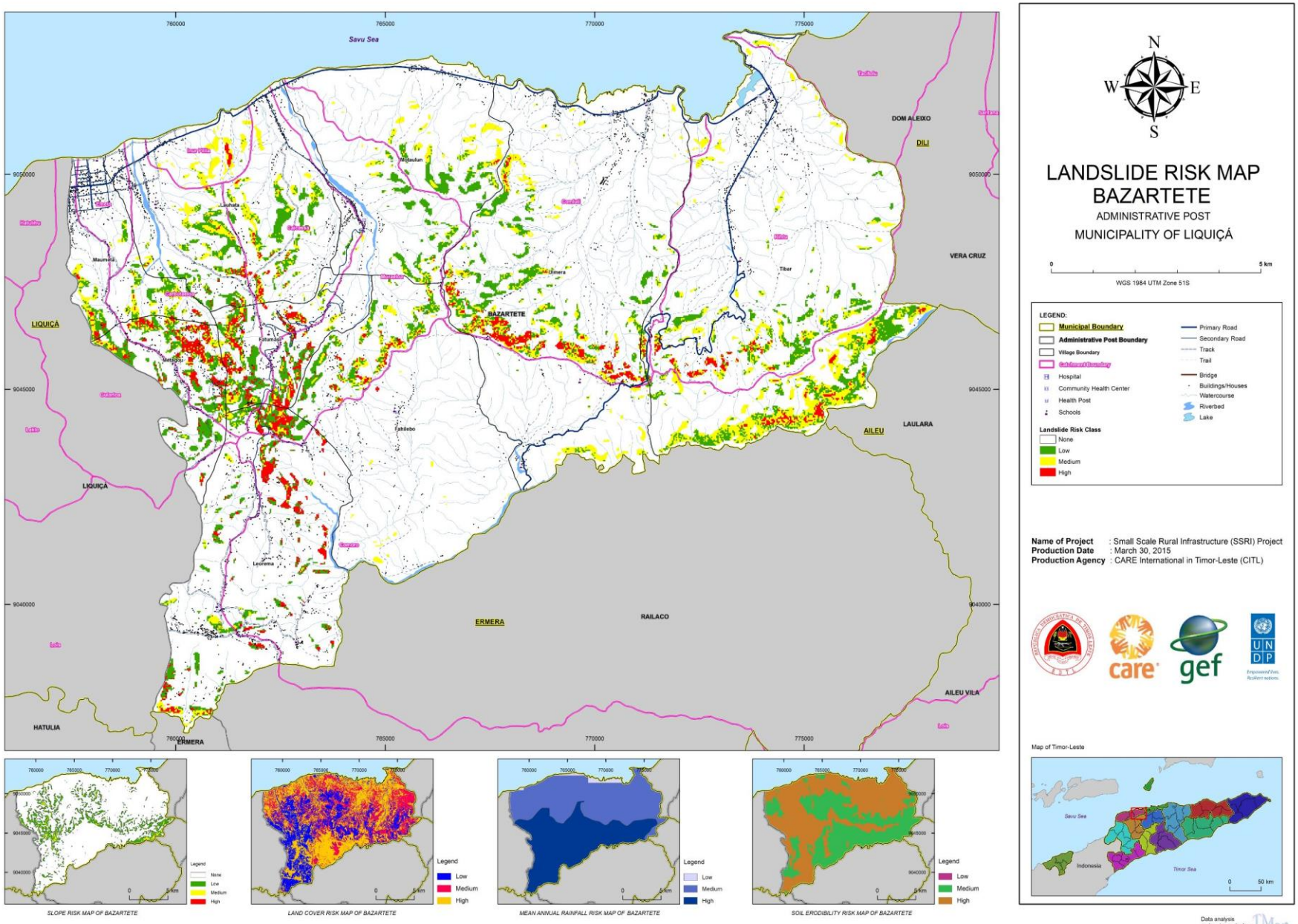
Risko Rai-halai iha Posto Administrativo Bazartete

Total neebe mak konsidera iha risko ba halai iha PA Bazartete mak hektar 2,490, representa 13.3% husi area total iha PA nee. Husi total, hektar 339 (2.1%) mak risko ás, hektar 935 (5.0%) mak risko mediu, no hektar 1,156 (6.2%) mak risko kiik. Ponto prinsipal mak bai-bain iha Kaptasaun Mota Carbutaeloa, Comluli no Comoro, neebe mak hatudu iha Mapa 23. Aspeito interesante ida husi area sira risko iha Kaptasaun Comoro mak area sira balu iha risko neebe mak ás hirak nee mak rai-lolo sira iha Suco Leorema, maibe maioria husi rai ba risko mediu no naton ba rai-halai iha rai-tetuk Suco Tibar. Nee parsialmente refleta husi medida Kaptasaun Comoro, tamba iha parte neebe mota suli tuir liu husi Tibar nee rai-tetuk iha PA Bazartete, maibe nee nafatin konsideravel ba distansia husi tasi wainhira nee suli liu husi Bazartete tama ba iha PA Vera Cruz, no maske iha Tibar nee nafatin tolera maioria ba karateristika husi kaptasaun rai-ás ida.

Em termus ba area, Suco Leorema iha maioria rai iha risko ás ba rai-halai ho hektar 94. Hirak nee iha Kaptasaun Mota Comoro. Suco Ulmera tuir ho hektar 68, prinsipalmente iha Kaptasaun Agregando Comluli. Datoluk mak Suco Fatumasi ho hektar 55, parte boot mak iha neebe Kaptasaun Mota Carbutaeloa. Nee mak interesante atu nota distribuisaun iha risko as ba rai-halai iha relasaun ho parte rai-as husi kaptasaun mota hodi aumenta ba iha area inklinado inundasaun iha Maumeta no Lauhata, hanaran Carbutaeloa, Caicassa no Moraeloa. Nee mak koinsidensia, desde nee klaru iha parte seluk husi pais nee oinsa rai-halai no erosaun iha kaptasaun rai-as bele iha impakto neebe bele hasae subsistensia, gravidade no extensaun ba inundasaun iha rai-tetuk.

Padraun seluk neebe mak hare iha fatin seluk mak jeralmente, ema diak no laiha konstruisaun infra-estrutura iha fatin neebe mak inklinado ba rai-halai. Iha deit 205 husi total uma 3,869 (5.2%) iha PA Bazartete iha risko naton, mediu no as ba rai-halai. Husi hirak nee, uma 48 neebe mak iha Kaptasaun Suco Metagou-Carbutaeloa. Rede servisu Estrada dala ida tan, jeralmente Evita area sira neebe mak posivel ba rai-halai, maibe nafatin 7.1km husi 119.1km (6.0%) neebe liu-husi area risko sira. Fatumasi hasoru ameasa boot ba iha rede servisu Estrada, ho 2.4km husi 11.2km (17.9%) konsidera iha nivel balu ba risko rai-halai. Iha fatin remotas hanesan Fatumasi, iha neebe rekursu transportasaun extremu limitado liu, rai-halai hasai sesaun parte balu husi Estrada neebe Isola komunidade, prevene kultivu husi merkado, halo labarik sira dook husi eskola no provas moris ameasado ba ema sira neebe presiza apoio mediko.

Figura 30 –-Esforsu estabiliza hodi kuda-ai iha rai-lolo inklinado rai-halai. Suco Ulmera, Kaptasaun Agregando Comluli



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MAPA- 24. Mapa Risko Rai-halai: Posto Administrativo Bazartete

Suco -Catchment Code	*Suco* -Catchment		Total Hectares	Area of Land in Each Landslide Risk Category							
				No Risk		Low Risk		Medium Risk		High Risk	
				Hectares	%	Hectares	%	Hectares	%	Hectares	%
61911	Fahilebo	Comoro River Catchment	1,851	1,842	99.5%	0	0.0%	7	0.4%	1	0.1%
61927	Fahilebo	Moraeloa River Catchment	559	420	75.1%	76	13.6%	46	8.2%	17	3.1%
62208	Fatumasi	Caicassa River Catchment	160	136	84.8%	5	3.0%	9	5.4%	11	6.9%
62209	Fatumasi	Carbutaeloa River Catchment	248	127	51.2%	63	25.3%	26	10.4%	32	13.1%
62227	Fatumasi	Moraeloa River Catchment	269	203	75.5%	32	12.0%	11	4.2%	22	8.2%
63308	Lauhata	Caicassa River Catchment	865	720	83.2%	78	9.1%	56	6.5%	11	1.3%
63309	Lauhata	Carbutaeloa River Catchment	682	554	81.2%	75	11.0%	44	6.4%	9	1.4%
63312	Lauhata	Emeta AggregateCatchment	58	58	100.0%	0	0.0%	0	0.0%	0	0.0%
63315	Lauhata	Inur Pilila Aggregate Catchment	329	284	86.3%	1	0.4%	39	12.0%	4	1.3%
63327	Lauhata	Moraeloa River Catchment	67	67	100.0%	0	0.0%	0	0.0%	0	0.0%
63809	Leorema	Carbutaeloa River Catchment	34	17	51.3%	11	33.7%	4	12.9%	1	2.1%
63811	Leorema	Comoro River Catchment	1,243	1,141	91.8%	42	3.4%	7	0.6%	52	4.2%
63822	Leorema	Lois River Catchment	864	771	89.2%	52	6.0%	25	2.9%	17	1.9%
63827	Leorema	Moraeloa River Catchment	94	34	35.7%	29	30.4%	8	8.9%	24	25.0%
65109	Maumeta	Carbutaeloa River Catchment	237	178	75.3%	30	12.8%	25	10.4%	3	1.5%
65112	Maumeta	Emeta AggregateCatchment	221	214	96.7%	4	2.0%	3	1.3%	0	0.0%
65113	Maumeta	Gularloa River Catchment	227	182	80.2%	20	8.7%	20	8.6%	5	2.4%
65309	Metagou	Carbutaeloa River Catchment	312	168	54.0%	60	19.1%	31	9.9%	53	17.1%
65313	Metagou	Gularloa River Catchment	266	192	72.0%	59	22.2%	7	2.5%	9	3.2%
65322	Metagou	Lois River Catchment	48	45	94.6%	1	2.3%	0	0.4%	1	2.8%
65508	Motaulun	Caicassa River Catchment	79	76	96.5%	2	2.7%	1	0.7%	0	0.0%
65510	Motaulun	Comluli Aggregate Catchment	1,084	983	90.6%	52	4.8%	49	4.5%	1	0.1%
65527	Motaulun	Moraeloa River Catchment	787	715	90.8%	53	6.8%	19	2.4%	1	0.1%
66710	Tibar	Comluli Aggregate Catchment	93	78	84.0%	4	3.8%	9	9.4%	3	2.7%
66711	Tibar	Comoro River Catchment	958	579	60.4%	139	14.6%	210	21.9%	30	3.1%
66730	Tibar	Riheu River Catchment	3,104	2,878	92.7%	97	3.1%	107	3.4%	22	0.7%
66733	Tibar	Tacitolu Aggregate Catchment	58	53	91.7%	0	0.8%	4	7.5%	0	0.0%
67210	Ulmera	Comluli Aggregate Catchment	2,984	2,610	87.5%	163	5.5%	142	4.8%	68	2.3%
67211	Ulmera	Comoro River Catchment	914	881	96.4%	5	0.5%	28	3.0%	1	0.1%
		Totals Bazartete AP	**18,693**	**16,203**	**86.7%**	**1,156**	**6.2%**	**935**	**5.0%**	**399**	**2.1%**

Tabela 46. Area Rai iha Risko ba Rai-halai iha PA Bazartete

Suco -Catchment Code	*Suco* -Catchment		Total No. of Houses	Houses in Each Landslide Risk Category							
				No Risk		Low Risk		Medium Risk		High Risk	
				Number	%	Number	%	Number	%	Number	%
61911	Fahilebo	Comoro River Catchment	145	145	100.0%	0	0.0%	0	0.0%	0	0.0%
61927	Fahilebo	Moraeloa River Catchment	66	57	86.4%	5	7.6%	3	4.5%	1	1.5%
62208	Fatumasi	Caicassa River Catchment	65	60	92.3%	0	0.0%	2	3.1%	3	4.6%
62209	Fatumasi	Carbutaeloa River Catchment	102	54	52.9%	18	17.6%	13	12.7%	17	16.7%
62227	Fatumasi	Moraeloa River Catchment	95	86	90.5%	4	4.2%	1	1.1%	4	4.2%
63308	Lauhata	Caicassa River Catchment	233	229	98.3%	1	0.4%	2	0.9%	1	0.4%
63309	Lauhata	Carbutaeloa River Catchment	221	210	95.0%	6	2.7%	4	1.8%	1	0.5%
63312	Lauhata	Emeta AggregateCatchment	102	102	100.0%	0	0.0%	0	0.0%	0	0.0%
63315	Lauhata	Inur Pilila Aggregate Catchment	53	53	100.0%	0	0.0%	0	0.0%	0	0.0%
63327	Lauhata	Moraeloa River Catchment	22	22	100.0%	0	0.0%	0	0.0%	0	0.0%
63809	Leorema	Carbutaeloa River Catchment	15	11	73.3%	1	6.7%	3	20.0%	0	0.0%
63811	Leorema	Comoro River Catchment	401	387	96.5%	5	1.2%	2	0.5%	7	1.7%
63822	Leorema	Lois River Catchment	352	338	96.0%	3	0.9%	4	1.1%	7	2.0%
63827	Leorema	Moraeloa River Catchment	25	16	64.0%	4	16.0%	0	0.0%	5	20.0%
65109	Maumeta	Carbutaeloa River Catchment	56	51	91.1%	1	1.8%	4	7.1%	0	0.0%
65112	Maumeta	Emeta AggregateCatchment	262	262	100.0%	0	0.0%	0	0.0%	0	0.0%
65113	Maumeta	Gularloa River Catchment	165	162	98.2%	0	0.0%	1	0.6%	2	1.2%
65309	Metagou	Carbutaeloa River Catchment	157	109	69.4%	20	12.7%	5	3.2%	23	14.6%
65313	Metagou	Gularloa River Catchment	115	112	97.4%	2	1.7%	1	0.9%	0	0.0%
65322	Metagou	Lois River Catchment	13	13	100.0%	0	0.0%	0	0.0%	0	0.0%
65508	Motaulun	Caicassa River Catchment	73	73	100.0%	0	0.0%	0	0.0%	0	0.0%
65510	Motaulun	Comluli Aggregate Catchment	96	96	100.0%	0	0.0%	0	0.0%	0	0.0%
65527	Motaulun	Moraeloa River Catchment	109	109	100.0%	0	0.0%	0	0.0%	0	0.0%
66710	Tibar	Comluli Aggregate Catchment	24	24	100.0%	0	0.0%	0	0.0%	0	0.0%
66711	Tibar	Comoro River Catchment	3	3	100.0%	0	0.0%	0	0.0%	0	0.0%
66730	Tibar	Riheu River Catchment	418	415	99.3%	0	0.0%	2	0.5%	1	0.2%
66733	Tibar	Tacitolu Aggregate Catchment	0								
67210	Ulmera	Comluli Aggregate Catchment	400	385	96.3%	1	0.3%	8	2.0%	6	1.5%
67211	Ulmera	Comoro River Catchment	81	80	98.8%	0	0.0%	1	1.2%	0	0.0%
		Totals Bazartete AP	**3,869**	**3,664**	**94.7%**	**71**	**1.8%**	**56**	**1.4%**	**78**	**2.0%**

Tabela 47. Uma sira iha Risko ba Rai-halai iha PA Bazartete

Suco -Catchment Code	*Suco* -Catchment		Total Length of Roads (Km)	Length of Road in Each Landslide Risk Category							
				No Risk		Low Risk		Medium Risk		High Risk	
				Km	%	Km	%	Km	%	Km	%
61911	Fahilebo	Comoro River Catchment	0.0								
61927	Fahilebo	Moraeloa River Catchment	0.0								
62208	Fatumasi	Caicassa River Catchment	5.7	4.6	80.5%	0.4	6.5%	0.4	7.3%	0.3	5.8%
62209	Fatumasi	Carbutaeloa River Catchment	3.2	2.3	70.4%	0.6	19.3%	0.2	6.0%	0.1	4.4%
62227	Fatumasi	Moraeloa River Catchment	2.3	2.0	83.9%	0.1	4.6%	0.0	0.0%	0.3	11.5%
63308	Lauhata	Caicassa River Catchment	7.2	7.1	98.7%	0.0	0.0%	0.1	1.0%	0.0	0.3%
63309	Lauhata	Carbutaeloa River Catchment	8.1	8.1	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
63312	Lauhata	Emeta AggregateCatchment	2.0	2.0	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
63315	Lauhata	Inur Pilila Aggregate Catchment	4.9	4.9	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
63327	Lauhata	Moraeloa River Catchment	0.3	0.3	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
63809	Leorema	Carbutaeloa River Catchment	0.1	0.0	39.8%	0.0	60.2%	0.0	0.0%	0.0	0.0%
63811	Leorema	Comoro River Catchment	8.7	8.4	96.8%	0.2	2.5%	0.0	0.4%	0.0	0.3%
63822	Leorema	Lois River Catchment	9.7	9.1	94.6%	0.2	2.0%	0.3	3.3%	0.0	0.0%
63827	Leorema	Moraeloa River Catchment	1.2	0.3	26.5%	0.4	35.9%	0.1	11.3%	0.3	26.3%
65109	Maumeta	Carbutaeloa River Catchment	0.5	0.5	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
65112	Maumeta	Emeta AggregateCatchment	10.8	10.8	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
65113	Maumeta	Gularloa River Catchment	5.3	5.3	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
65309	Metagou	Carbutaeloa River Catchment	2.4	1.9	76.4%	0.4	15.6%	0.0	0.0%	0.2	8.0%
65313	Metagou	Gularloa River Catchment	4.7	4.0	85.8%	0.6	13.8%	0.0	0.0%	0.0	0.4%
65322	Metagou	Lois River Catchment	0.0								
65508	Motaulun	Caicassa River Catchment	1.9	1.5	80.3%	0.3	15.5%	0.1	4.2%	0.0	0.0%
65510	Motaulun	Comluli Aggregate Catchment	5.1	5.1	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
65527	Motaulun	Moraeloa River Catchment	1.5	1.5	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
66710	Tibar	Comluli Aggregate Catchment	2.4	2.1	85.5%	0.1	2.7%	0.2	9.3%	0.1	2.5%
66711	Tibar	Comoro River Catchment	0.0								
66730	Tibar	Riheu River Catchment	16.0	15.3	95.4%	0.1	0.7%	0.5	3.4%	0.1	0.5%
66733	Tibar	Tacitolu Aggregate Catchment	2.0	2.0	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
67210	Ulmera	Comluli Aggregate Catchment	8.8	8.6	98.0%	0.0	0.2%	0.1	0.9%	0.1	0.9%
67211	Ulmera	Comoro River Catchment	4.4	4.4	99.7%	0.0	0.0%	0.0	0.3%	0.0	0.0%
		Totals Bazartete AP	**119.1**	**111.9**	**94.0%**	**3.5**	**2.9%**	**2.1**	**1.8%**	**1.5**	**1.3%**

Tabela 48. Estrada iha Risko ba Rai-halai iha PA Bazartete

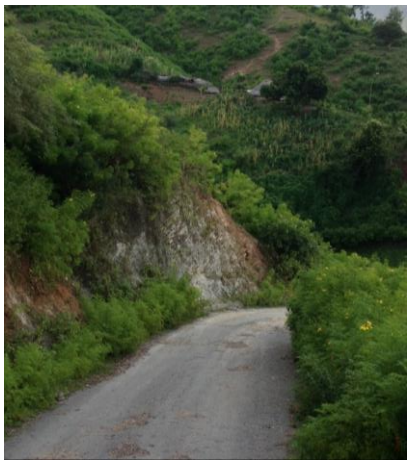


Figura 31. Evidensia risko as ba rai-halai no erosaun hodi tahu Estrada iha risko. Suco Fatumasi, Kaptasaun Mota Carbutaeloa

Figura 32. Risko as ba rai-halai no erosaun. Nee mak vegetasaun diak iha tinan tomak. Suco Ulmera, Kaptasaun Mota Comoro

Figura 33 – foin lalais nee loke fali Estrada depois rai-halai hodi subo tiha. Suco Ulmera, Comluli

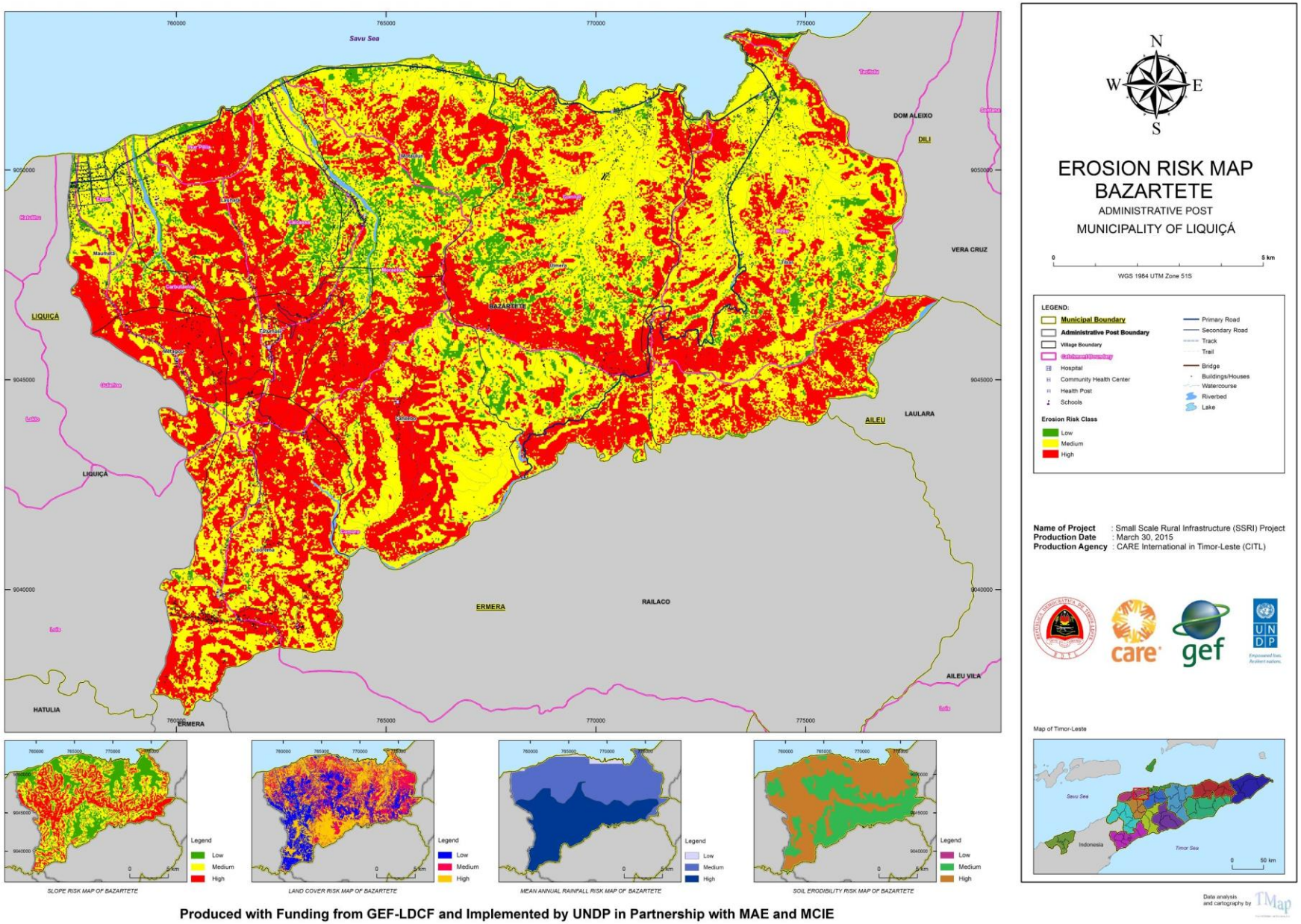
Risko Erosaun iha Posto Administrativu Bazartete

Fatores kombinado balu hodi halo parte sira iha PA Bazartete partikularmente risko-as ba erosaun. Vegetasaun neebe mak partikularmente esparse iha parte sira husi PA nee, liu-liu iha area rai-maran sira udan monu-rai iha foho-as sira, iha norte hasoru rai-lolo, ho rai nutrisaun neebe menus. Aktividade umano ho intense animal han-duut, tesi ai atu sunu no kultivasaun iha rai-lolo hodi aumenta prosesu natural, kondisaun nee produs extremu liu inklinado ba lakon rai neebe diak. Mapa 24 hatudu efeitos sira neebe klaru liu. Banda neebe mean, risko-as rai halai husi oeste ba leste iha parte sudeste husi PA neebe komposto iha fatin ás, husi norte hasoru rai-lolo. Rai-lolo hirak nee menus liu vegetasaun prinsipalmente tamba sira rai neebe maran liu. Ida nee mosu tamba sira hetan loro-matan tiru tinan tomak, no sira hetan anin-maran iha neebe predomina husi norte. Tun ba iha kosta iha parte norte, iha neeba remenda mean kiik neebe barak. Risko as iha kazu nee barak liu tamba proximidade ba iha area sira nee populasaun neebe mak barak – rai nee kuaze mos ba ai-sunu no kultivasaun, hodi hetan erosaun solu husi be no anin.

Kuaze rai sira iha PA Bazartete mak konsidera atu hetan risko mediu ba ás husi erosaun, relativa ba risko iha parte seluk husi pais nee. Iha oportunidade nee hanesan iha Ermera, Liquiça no Maubara iha deit 1,375 husi total hektar 18,693 (7.4%) mak konsidera risko kiik husi erosaun. Suco Motaulun iha centro-norte husi PA nee, iha provavel-liu ba iha nivel erosaun neebe kiik, maibe tendensia jeneral iha suco sira hotu, iha area sira neebe mak kiik husi rai ho risko naton mak protezido, vegetasaun barak-liu moris vontade iha area sira neebe nivel badak, no area boot sira husi risko mediu ba ás iha area rai-ás sira. Area sira neebe boot ba risko as mak rai iha Ulmera-Comluli (hektar 1,058, 35.5%), Tibar-Riheu (hektar 952, 30.7%), Fahilebo-Comoro (hektar 805, 43.5%) no Leorema-Comoro (hektar 712, 57.3%) Kaptasaun-Suco.

				Area of Land in Each Erosion Risk Category					
Suco -Catchment Code	*Suco* -Catchment		Total Hectares	Low Risk		Medium Risk		High Risk	
				Hectares	%	Hectares	%	Hectares	%
61911	Fahilebo	Comoro River Catchment	1,851	61	3.3%	984	53.2%	805	43.5%
61927	Fahilebo	Moraeloa River Catchment	559	22	4.0%	161	28.9%	375	67.2%
62208	Fatumasi	Caicassa River Catchment	160	3	2.1%	37	23.4%	119	74.5%
62209	Fatumasi	Carbutaeloa River Catchment	248	0	0.0%	50	20.0%	198	80.0%
62227	Fatumasi	Moraeloa River Catchment	269	20	7.5%	77	28.7%	172	63.8%
63308	Lauhata	Caicassa River Catchment	865	103	11.9%	395	45.6%	368	42.5%
63309	Lauhata	Carbutaeloa River Catchment	682	59	8.7%	305	44.8%	317	46.5%
63312	Lauhata	Emeta AggregateCatchment	58	7	12.1%	50	86.7%	1	1.1%
63315	Lauhata	Inur Pilila Aggregate Catchment	329	28	8.5%	110	33.4%	191	58.0%
63327	Lauhata	Moraeloa River Catchment	67	14	20.8%	52	77.5%	1	1.5%
63809	Leorema	Carbutaeloa River Catchment	34	0	0.9%	21	62.2%	13	36.9%
63811	Leorema	Comoro River Catchment	1,243	8	0.7%	523	42.0%	712	57.3%
63822	Leorema	Lois River Catchment	864	13	1.6%	438	50.8%	412	47.7%
63827	Leorema	Moraeloa River Catchment	94	1	0.6%	12	12.5%	82	86.9%
65109	Maumeta	Carbutaeloa River Catchment	237	17	7.3%	94	39.6%	126	53.1%
65112	Maumeta	Emeta AggregateCatchment	221	23	10.4%	174	78.5%	24	10.9%
65113	Maumeta	Gularloa River Catchment	227	19	8.4%	110	48.5%	98	43.0%
65309	Metagou	Carbutaeloa River Catchment	312	2	0.5%	53	17.1%	257	82.4%
65313	Metagou	Gularloa River Catchment	266	0	0.1%	104	39.0%	162	60.9%
65322	Metagou	Lois River Catchment	48	0	0.9%	22	45.0%	26	54.0%
65508	Motaulun	Caicassa River Catchment	79	23	29.8%	43	53.9%	13	16.3%
65510	Motaulun	Comluli Aggregate Catchment	1,084	139	12.9%	590	54.4%	355	32.7%
65527	Motaulun	Moraeloa River Catchment	787	175	22.3%	432	54.9%	179	22.8%
66710	Tibar	Comluli Aggregate Catchment	93	5	5.7%	40	42.5%	48	51.6%
66711	Tibar	Comoro River Catchment	958	27	2.9%	435	45.5%	495	51.7%
66730	Tibar	Riheu River Catchment	3,104	237	7.6%	1,916	61.7%	952	30.7%
66733	Tibar	Tacitolu Aggregate Catchment	58	15	25.9%	18	31.1%	25	43.2%
67210	Ulmera	Comluli Aggregate Catchment	2,984	269	9.0%	1,657	55.5%	1,058	35.5%
67211	Ulmera	Comoro River Catchment	914	81	8.9%	486	53.2%	346	37.9%
		Totals Bazartete AP	**18,693**	**1,375**	**7.4%**	**9,389**	**50.2%**	**7,929**	**42.4%**

Tabela 49. Area Rai iha Risko ba Erosaun iha PA Bazartete



MAPA- 25. Mapa Risko Erosaun: Posto Administrativo Bazartete

Suco - Catchment Code	*Suco* -Catchment		Total No. of Houses	Houses in Each Erosion Risk Category						Total Length of Roads	Length of Road in Each Erosion Risk Category					
				Low Risk		Medium Risk		High Risk			Low Risk		Medium Risk		High Risk	
				Number	%	Number	%	Number	%		Km	%	Km	%	Km	%
61911	Fahilebo	Comoro River Catchment	145	2	1.4%	65	44.8%	78	53.8%	0.0						
61927	Fahilebo	Moraeloa River Catchment	66	1	1.5%	19	28.8%	46	69.7%	0.0						
62208	Fatumasi	Caicassa River Catchment	65	0	0.0%	18	27.7%	47	72.3%	5.7	0.0	0.0%	1.2	20.4%	4.5	79.6%
62209	Fatumasi	Carbutaeloa River Catchment	102	0	0.0%	28	27.5%	74	72.5%	3.2	0.0	0.0%	1.0	32.3%	2.2	67.7%
62227	Fatumasi	Moraeloa River Catchment	95	2	2.1%	27	28.4%	66	69.5%	2.3	0.0	0.0%	0.3	11.0%	2.1	89.0%
63308	Lauhata	Caicassa River Catchment	233	32	13.7%	166	71.2%	35	15.0%	7.2	1.5	21.4%	4.4	61.1%	1.3	17.5%
63309	Lauhata	Carbutaeloa River Catchment	221	16	7.2%	160	72.4%	45	20.4%	8.1	1.3	15.7%	5.4	67.2%	1.4	17.0%
63312	Lauhata	Emeta AggregateCatchment	102	11	10.8%	91	89.2%	0	0.0%	2.0	0.3	16.2%	1.7	83.8%	0.0	0.0%
63315	Lauhata	Inur Pilila Aggregate Catchment	53	6	11.3%	47	88.7%	0	0.0%	4.9	1.9	38.6%	2.7	54.3%	0.3	7.1%
63327	Lauhata	Moraeloa River Catchment	22	2	9.1%	20	90.9%	0	0.0%	0.3	0.1	26.8%	0.2	73.2%	0.0	0.0%
63809	Leorema	Carbutaeloa River Catchment	15	0	0.0%	6	40.0%	9	60.0%	0.1	0.0	0.0%	0.0	0.0%	0.1	100.0%
63811	Leorema	Comoro River Catchment	401	1	0.2%	127	31.7%	273	68.1%	8.7	0.1	0.9%	4.2	48.6%	4.4	50.5%
63822	Leorema	Lois River Catchment	352	5	1.4%	128	36.4%	219	62.2%	9.7	0.4	3.7%	6.2	63.7%	3.1	32.6%
63827	Leorema	Moraeloa River Catchment	25	1	4.0%	7	28.0%	17	68.0%	1.2	0.0	0.0%	0.1	8.6%	1.1	91.4%
65109	Maumeta	Carbutaeloa River Catchment	56	4	7.1%	26	46.4%	26	46.4%	0.5	0.0	0.0%	0.3	61.0%	0.2	39.0%
65112	Maumeta	Emeta AggregateCatchment	262	23	8.8%	238	90.8%	1	0.4%	10.8	1.5	13.8%	9.3	86.2%	0.0	0.0%
65113	Maumeta	Gularloa River Catchment	165	22	13.3%	128	77.6%	15	9.1%	5.3	1.3	24.6%	3.6	69.1%	0.3	6.4%
65309	Metagou	Carbutaeloa River Catchment	157	0	0.0%	29	18.5%	128	81.5%	2.4	0.0	0.0%	1.1	43.4%	1.4	56.6%
65313	Metagou	Gularloa River Catchment	115	0	0.0%	70	60.9%	45	39.1%	4.7	0.0	0.0%	2.7	57.2%	2.0	42.8%
65322	Metagou	Lois River Catchment	13	0	0.0%	5	38.5%	8	61.5%	0.0						
65508	Motaulun	Caicassa River Catchment	73	31	42.5%	42	57.5%	0	0.0%	1.9	0.5	25.9%	0.8	42.9%	0.6	31.2%
65510	Motaulun	Comluli Aggregate Catchment	96	13	13.5%	83	86.5%	0	0.0%	5.1	1.0	19.6%	4.1	80.4%	0.0	0.0%
65527	Motaulun	Moraeloa River Catchment	109	43	39.4%	61	56.0%	5	4.6%	1.5	0.3	23.6%	1.1	73.9%	0.0	2.6%
66710	Tibar	Comluli Aggregate Catchment	24	2	8.3%	12	50.0%	10	41.7%	2.4	0.5	22.3%	0.8	31.8%	1.1	45.9%
66711	Tibar	Comoro River Catchment	3	0	0.0%	3	100.0%	0	0.0%	0.0						
66730	Tibar	Riheu River Catchment	418	48	11.5%	348	83.3%	22	5.3%	16.0	2.6	16.2%	10.6	65.8%	2.9	17.9%
66733	Tibar	Tacitolu Aggregate Catchment	0							2.0	1.5	74.1%	0.5	25.9%	0.0	0.0%
67210	Ulmera	Comluli Aggregate Catchment	400	36	9.0%	307	76.8%	57	14.3%	8.8	1.1	12.1%	6.5	74.4%	1.2	13.5%
67211	Ulmera	Comoro River Catchment	81	4	4.9%	29	35.8%	48	59.3%	4.4	0.3	5.9%	2.1	47.9%	2.0	46.3%
		Totals Bazartete AP	**3,869**	**305**	**7.9%**	**2,290**	**59.2%**	**1,274**	**32.9%**	**119.1**	**16.1**	**13.5%**	**70.7**	**59.4%**	**32.2**	**27.1%**

Tabela 50. Uma no Estrada sira Risko ba Erosaun iha PA Bazartete

Figura 34. Estrada rasik hetan erosaun. Suco Ulmera, Kaptasaun Mota Comoro

Figura 35 – Rai-lolo Extremu liu, kovre husi floresta, kampo kultivado iha area risko-ás ba eroasaun. Suco Metagou, Kaptasaun Mota Carbutaeloa

Figura 36 –Vegetasaun Esparse iha solu erodavel mak'as. Besik Lebulua, Suco Ulmera, KC

				Schools in Each Erosion Risk Category						Total No.	Health Facilities in Each Erosion Risk Category					
Suco -Catchment Code	*Suco* -Catchment		Total No. of Schools	Low Risk		Medium Risk		High Risk		of Health Facilities	Low Risk		Medium Risk		High Risk	
				Number	%	Number	%	Number	%		Number	%	Number	%	Number	%
61911	Fahilebo	Comoro River Catchment	1	0	0.0%	0	0.0%	1	100.0%	1	0	0.0%	0	0.0%	1	100.0%
61927	Fahilebo	Moraeloa River Catchment	0							0						
62208	Fatumasi	Caicassa River Catchment	2	0	0.0%	0	0.0%	2	100.0%	1	0	0.0%	0	0.0%	1	100.0%
62209	Fatumasi	Carbutaeloa River Catchment	1	0	0.0%	0	0.0%	1	100.0%	0						
62227	Fatumasi	Moraeloa River Catchment	0							0						
63308	Lauhata	Caicassa River Catchment	1	0	0.0%	1	100.0%	0	0.0%	0						
63309	Lauhata	Carbutaeloa River Catchment	2	0	0.0%	2	100.0%	0	0.0%	0						
63312	Lauhata	Emeta AggregateCatchment	0							0						
63315	Lauhata	Inur Pilila Aggregate Catchment	0							0						
63327	Lauhata	Moraeloa River Catchment	0							0						
63809	Leorema	Carbutaeloa River Catchment	0							0						
63811	Leorema	Comoro River Catchment	1	0	0.0%	0	0.0%	1	100.0%	0						
63822	Leorema	Lois River Catchment	3	0	0.0%	3	100.0%	0	0.0%	1	0	0.0%	1	100.0%	0	0.0%
63827	Leorema	Moraeloa River Catchment	1	0	0.0%	0	0.0%	1	100.0%	0						
65109	Maumeta	Carbutaeloa River Catchment	0							0						
65112	Maumeta	Emeta AggregateCatchment	1	0	0.0%	1	100.0%	0	0.0%	0						
65113	Maumeta	Gularloa River Catchment	0							0						
65309	Metagou	Carbutaeloa River Catchment	0							0						
65313	Metagou	Gularloa River Catchment	1	0	0.0%	0	0.0%	1	100.0%	1	0	0.0%	1	100.0%	0	0.0%
65322	Metagou	Lois River Catchment	0							0						
65508	Motaulun	Caicassa River Catchment	1	1	100.0%	0	0.0%	0	0.0%	0						
65510	Motaulun	Comluli Aggregate Catchment	1	1	100.0%	0	0.0%	0	0.0%	0						
65527	Motaulun	Moraeloa River Catchment	1	0	0.0%	1	100.0%	0	0.0%	1	0	0.0%	1	100.0%	0	0.0%
66710	Tibar	Comluli Aggregate Catchment	1	0	0.0%	0	0.0%	1	100.0%	0						
66711	Tibar	Comoro River Catchment	0							0						
66730	Tibar	Riheu River Catchment	2	2	100.0%	0	0.0%	0	0.0%	1	0	0.0%	1	100.0%	0	0.0%
66733	Tibar	Tacitolu Aggregate Catchment	0							0						
67210	Ulmera	Comluli Aggregate Catchment	2	0	0.0%	2	100.0%	0	0.0%	1	1	100.0%	0	0.0%	0	0.0%
67211	Ulmera	Comoro River Catchment	3	0	0.0%	2	66.7%	1	33.3%	0						
		Totals Bazartete AP	**25**	**4**	**16.0%**	**12**	**48.0%**	**9**	**36.0%**	**7**	**1**	**14.3%**	**4**	**57.1%**	**2**	**28.6%**

Tabela 51. Eskola no Fasilidade Saude sira iha Risko ba Erosaun iha PA Bazartete

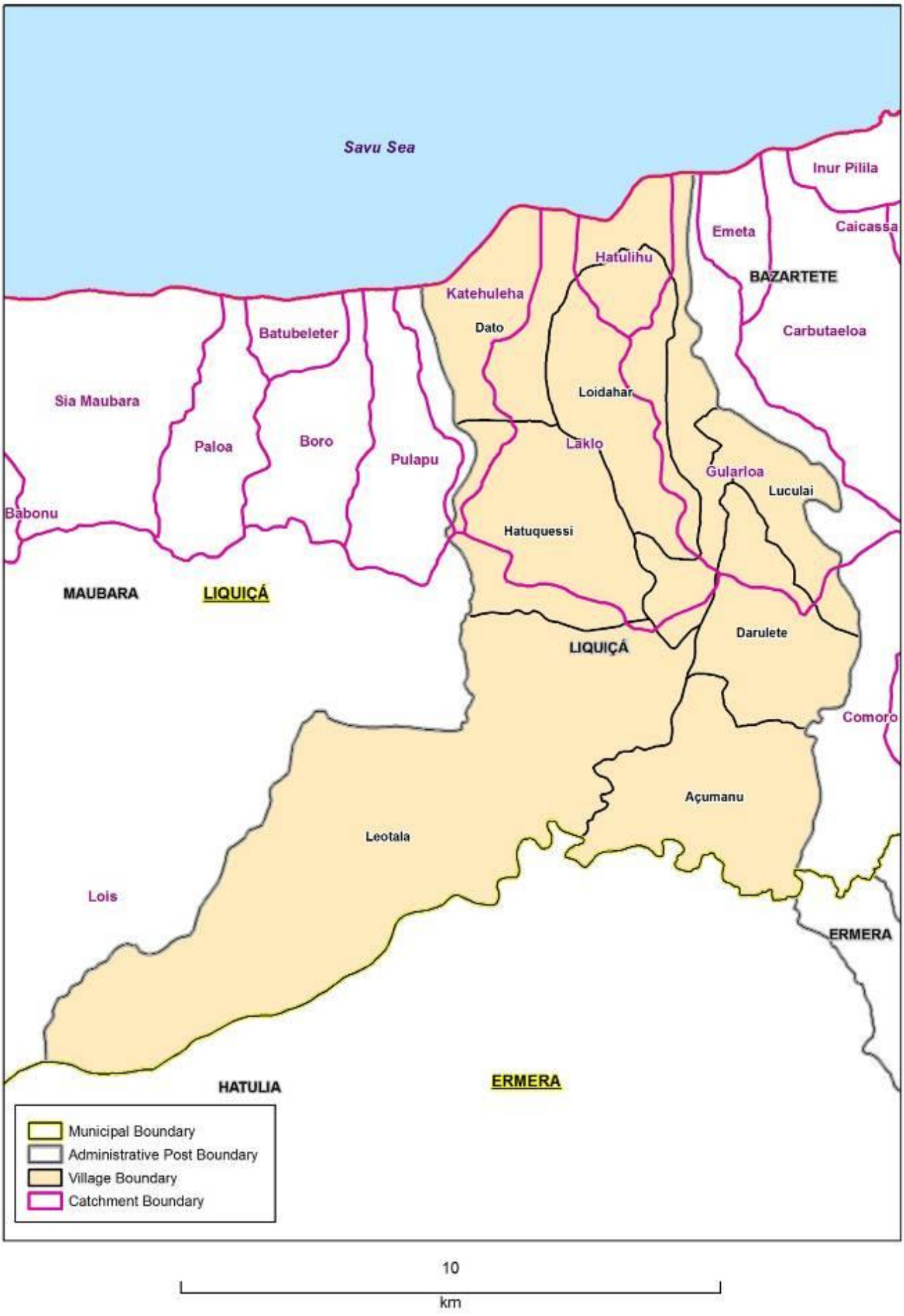
4.7 Perfil Risko – Posto Administrativo Liquiçá

Liquiçá mak posto administrative neebe mak kiik ho total area hektar 9,822, boot ituan deit kompara ho PA Ermera. Iha rejiaun tolu ho diferente karateristiko kontribuisaun bio-fisiko potensial ba inundasaun, rai-halai no erosaun. Parte norte husi PA nee hanesan butir-klot husi rai parte kosta. Ida nee mak altitude badak, area rodada kaber, no hanesan uma ba cidade capital husi municipio, nee barak-liu ema hela no relativamente dezemvolve diak ho infra-estrutura. Husi zona kosta sul, rai sae as'liu ba iha area ida husi foho-as. Nee populasaun barak no moderado no rai kovre mak kahor malu ho floresta, rai-du'ut no rai kultivado. Foho sira nee kontinua iha sul to iha Mota Gleno, iha neebe define baliza entre PA Liquiça no PA Hatulia. To'o ba iha diresaun sudeste nee remota liu, regiaun populado esparse liu, terreno mak menus ho rai-lolo no vegetasaun neebe kovre ladun disturba. Iha area kosta norte no iha kantos sudeste husi PA Liquiça, inundasaun mak maioria ameasa husi klima relasionado; iha centro regiaun rai-as, mak ho problema pinsipais husi rai-halai no erosaun.

PA Liquiça iha Suco 7 no parte ba kaptasaun mota 5. Kombinasaun ba produs rua husi kaptasaun suco 17 hanesan hatudu Tabela 52 no iha Mapa 25. Metade husi PA nee ho drainajem ba iha norte, tun ba Mota Laklo no Gularloa, no drainajem seluk fali tun ba iha oeste Mota Lois.

***Suco* -Catchment Code**	***Suco* -Catchment**		**Total Area**
70122	Açumanu	Lois River Catchment	1,091
71613	Darulete	Gularloa River Catchment	180
71622	Darulete	Lois River Catchment	592
71713	Dato	Gularloa River Catchment	372
71714	Dato	Hatulihu Aggregate Catchment	196
71718	Dato	Katehuleha Aggregate Catchment	482
71719	Dato	Laklo River Catchment	449
71722	Dato	Lois River Catchment	41
72818	Hatuquessi	Katehuleha Aggregate Catchment	88
72819	Hatuquessi	Laklo River Catchment	767
72822	Hatuquessi	Lois River Catchment	217
73922	Leotala	Lois River Catchment	3,916
74413	Loidahar	Gularloa River Catchment	214
74414	Loidahar	Hatulihu Aggregate Catchment	182
74419	Loidahar	Laklo River Catchment	586
74613	Luculai	Gularloa River Catchment	389
74622	Luculai	Lois River Catchment	60
		Totals Liquiçá AP	**9,822**

Tabela 52. Kaptasaun Suco iha Posto Administrativo Liquiçá



MAPA- 26. Suco no Kaptasaun ba Posto Administrativo Liquiçá

Risko Inundasaun iha Posto Administrativo Liquiçá

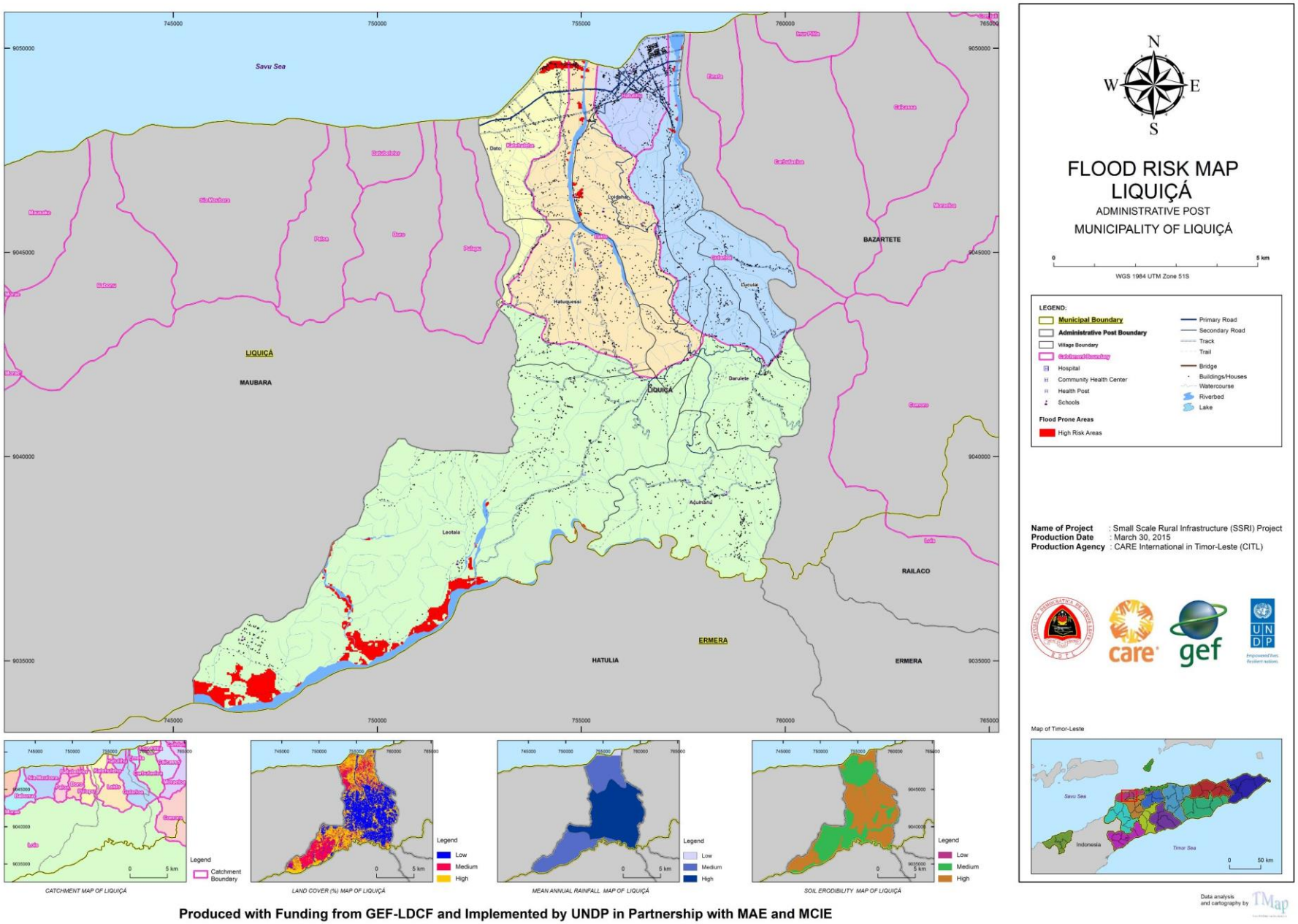
Maioria inundasaun iha PA Liquiça mak sempre akontese iha parte sudeste, tuir mota ninin husi Mota Lauveli (Mapa 26). Ida neebe porsaun naton husi Kaptasaun Suco Mota Leolata-Lois. Liu hektar 300 mak inklinado ba inundasaun, iha neebe mak 87% husi total area inklinado inundasaun iha PA nee tomak. Ameasa husi natureza nee hanesan kompara nivel badak hanesan husi Mota Seiçal no Vemasse iha Municipio Baucau, no Mota Lois iha PA Maubara no Hatulia. Nee mak luan liu, altitude badak, planicie inundasaun be suli habelar mai husi mota boot durante korente mak'as, no naturalmente dalaruma be suli sai husi mota ninin. Entertanto, iha fatin balu agrikultor sira intensionalmente desvia be ba iha rai, tamba sira hamoris hare iha natar no mota prospera iha kondisaun inundasaun.

Suco Leotala mak populado esparse liu no laiha infra-estrutura neebe mak barak. Iha deit uma ida neebe mak konsidera iha area inklinado inundasaun, no ho deit 800 metros husi total kuaze liu 14km husi Estrada neeba mak iha risko

Area seluk neebe mak signifkado ameasa husi inundasaun mak parte norte, besik iha Mota Ibun Laklo. Nee area kiik-oan – ho deit hektar 27-maibe nee mak konstrui-sae, barak-liu area nee populado ka povo hela, tamba nee ameasa ba infra-estrutura no komunidade sira numeo barak liu kompara iha sudeste. Iha nee problema hanesan iha parte leste husi kosta Bazartete. Drainajem ba iha tasi nee impede husi sedimentasaun neebe mak taka, ba iha infra-estrutura no, okasionalmente, liu-husi korente be extremu as-liu. Durante no depois eventos udan, Mota Laklo suli-sai iha mota-ninin no espalha atraves ba to'os sira besik no abatimento.

Impakto husi inundasaun ba iha infra-estrutura iha nee barak liu mak iha area sudeste. Uma lima nolu resin lima iha Suco Dato mak risko husi inundasaun. Nee representa kuaze 12% husi total numero uma sira husi Kaptasaun Suco iha Dato-Katehuleha no Dato-Laklo. Iha kaptasaun suco 2 hanesan, no iha vizinho Kaptasaun Suco Dato-Gularloa, 1.6km husi 22.0km(7.3%) husi Estrada mak ameasado ho inundado ona ka be neebe solur tiha.

Eskola ida iha Liquiça neebe mak konsidera sei iha zona risko inundasaun mak Eskola Primaría Laclolema iha Mota Kaptasaun Suco Loidahar-Laklo. Eskola nee lokalizado iha rai-lolo husi area mota ibun hanesan deskreve iha leten. Ida nee lokaliza iha leste mota ninin husi Mota Laklo, menus husi 70 metros husi kanal nee rasik.



MAPA- 27. Mapa Risko Inundasaun: Posto Administrativo Liquiçá

Suco -Catchment Code	*Suco* -Catchment		Land Area			Houses			Schools			Health Facilities			Roads		
			Total Area	In Flood Risk Zone		Total	In Flood Risk Zone		Total	In Flood Risk Zone		Total	In Flood Risk Zone		Total Km	In Flood Risk Zone	
				Hectares	%	Number	Number	%	Number	Number	%	Number	Number	%		Km	%
70122	Açumanu	Lois River Catchment	1,091	1	0.1%	330	0	0.0%	1	0	0.0%	1	0	0.0%	8.7	0.0	0.0%
71613	Darulete	Gularloa River Catchment	180	0	0.0%	88	0	0.0%	0			0			0.4	0.0	0.0%
71622	Darulete	Lois River Catchment	592	0	0.0%	174	0	0.0%	1	0	0.0%	1	0	0.0%	7.3	0.0	0.0%
71713	Dato	Gularloa River Catchment	372	10	2.7%	141	0	0.0%	1	0	0.0%	0			2.5	0.4	15.3%
71714	Dato	Hatulihu Aggregate Catchment	196	0	0.0%	631	0	0.0%	5	0	0.0%	0			12.4	0.0	0.0%
71718	Dato	Katehuleha Aggregate Catchment	482	12	2.5%	256	34	13.3%	0			0			13.5	0.8	5.9%
71719	Dato	Laklo River Catchment	449	15	3.3%	204	21	10.3%	1	0	0.0%	1	0	0.0%	6.0	0.4	6.0%
71722	Dato	Lois River Catchment	41	0	0.0%	27	0	0.0%	0			0			1.0	0.0	0.0%
72818	Hatuquessi	Katehuleha Aggregate Catchment	88	0	0.0%	25	0	0.0%	0			0			2.2	0.0	0.0%
72819	Hatuquessi	Laklo River Catchment	767	1	0.2%	411	0	0.0%	2	0	0.0%	1	0	0.0%	7.5	0.0	0.0%
72822	Hatuquessi	Lois River Catchment	217	0	0.0%	81	0	0.0%	0			0			2.0	0.0	0.0%
73922	Leotala	Lois River Catchment	3,916	302	7.7%	568	1	0.2%	3	0	0.0%	1	0	0.0%	14.3	0.1	0.8%
74413	Loidahar	Gularloa River Catchment	214	0	0.2%	117	0	0.0%	0			1	0	0.0%	0.7	0.0	0.0%
74414	Loidahar	Hatulihu Aggregate Catchment	182	0	0.0%	105	0	0.0%	1	0	0.0%	1	0	0.0%	2.0	0.0	0.0%
74419	Loidahar	Laklo River Catchment	586	5	0.9%	298	9	3.0%	3	1	33.3%	0			8.2	0.0	0.0%
74613	Luculai	Gularloa River Catchment	389	0	0.0%	148	0	0.0%	0			0			4.3	0.0	0.0%
74622	Luculai	Lois River Catchment	60	0	0.0%	23	0	0.0%	0			0			0.2	0.0	0.0%
		Totals Liquiçá AP	**9,822**	**347**	**3.5%**	**3,627**	**65**	**1.8%**	**18**	**1**	**5.6%**	**7**	**0**	**0.0%**	**93**	**1.6**	**1.8%**

Tabela 53. Risko Estatistiko ba Inundasaun iha PA Liquiçá

Risko Rai-halai iha Posto Administrativo Liquiçá

Ameasa inundasaun iha PA Liquiça mak limitado liu iha zona-mediu – rai-lolo, regiaun remota as liu iha area inklinado inundasaun ba iha kosta norte no Mota Lauveli inundasaun planicie iha sudeste (Mapa 27) maske kondisaun nee laos extremu hanesan sira iha Quelicai ka parte husi PA Ermera, risko rai-halai nafatin espalha iha nee. Tende risko nee atu menus grave, ho area boot sira ba risko naton no area kiik sira ba risko ás. Husi area total hektar 9,822, hektar 851 (8.7%) mak konsidera risko naton, hektar 471 (4.8%) konsidera risko mediu, no hektar 291 (3.0%) mak konsidera risko as ba rai-halai.

				Area of Land in Each Landslide Risk Category							
Suco -Catchment			Total	No Risk		Low Risk		Medium Risk		High Risk	
Code	*Suco* -Catchment		Hectares	Hectares	%	Hectares	%	Hectares	%	Hectares	%
70122	Açumanu	Lois River Catchment	1,091	741	67.9%	203	18.6%	71	6.5%	76	7.0%
71613	Darulete	Gularloa River Catchment	180	125	69.2%	35	19.4%	8	4.3%	13	7.1%
71622	Darulete	Lois River Catchment	592	525	88.7%	54	9.1%	5	0.9%	8	1.3%
71713	Dato	Gularloa River Catchment	372	254	68.2%	32	8.6%	63	17.0%	23	6.2%
71714	Dato	Hatulihu Aggregate Catchment	196	196	100.0%	0	0.0%	0	0.0%	0	0.0%
71718	Dato	Katehuleha Aggregate Catchment	482	470	97.5%	9	1.8%	3	0.7%	0	0.0%
71719	Dato	Laklo River Catchment	449	381	84.9%	28	6.3%	23	5.1%	17	3.7%
71722	Dato	Lois River Catchment	41	35	85.2%	5	13.3%	0	0.2%	1	1.3%
72818	Hatuquessi	Katehuleha Aggregate Catchment	88	62	70.9%	5	5.5%	19	21.7%	2	2.0%
72819	Hatuquessi	Laklo River Catchment	767	575	75.0%	115	15.0%	38	4.9%	39	5.1%
72822	Hatuquessi	Lois River Catchment	217	186	85.8%	25	11.4%	4	1.7%	3	1.2%
73922	Leotala	Lois River Catchment	3,916	3,513	89.7%	171	4.4%	176	4.5%	56	1.4%
74413	Loidahar	Gularloa River Catchment	214	212	99.1%	1	0.4%	1	0.5%	0	0.0%
74414	Loidahar	Hatulihu Aggregate Catchment	182	179	98.3%	1	0.3%	3	1.4%	0	0.0%
74419	Loidahar	Laklo River Catchment	586	469	80.1%	65	11.2%	35	5.9%	17	2.9%
74613	Luculai	Gularloa River Catchment	389	236	60.7%	99	25.5%	23	5.8%	31	8.1%
74622	Luculai	Lois River Catchment	60	50	83.3%	3	5.6%	0	0.5%	6	10.7%
		Totals Liquiçá AP	**9,822**	**8,209**	**83.6%**	**851**	**8.7%**	**471**	**4.8%**	**291**	**3.0%**

Tabela 54. Area Rai iha Risko ba Rai-halai iha PA Liquiçá

Suco Açumanu no Leolata mak suco neebe maioria sempre hetan rai-halai. Suco rua nee mak iha parte sudeste husi PA nee, sira rua enteiramente entre iha Kaptasaun Mota Lois. Suco Leolata total area boot neebe mak iha risko, ho hektar 403, representa kuaze liu 10% husi total area nee. Iha Açumanu, area kiik ida hektar 350 mak konsidera atu iha nivel neebe hanesan ba nivel balu risko ba rai-halai, maibe nee representa 32% husi total area suco, halo Açumanu inklinado rai-halai maioria ida ba suco sira neebe inkluindo iha estudo nee. Em termos husi persentajem husi area total suco sira iha risko ba rai-halai, Açumanu mak komparavel ho Fatumasi iha PA Bazartete (31%), Laisorolai de Cima iha PA Quelicai (28%), Ponilala iha PA Ermera (25%), no Mau-Ubo iha PA Hatulia (23%).

				Houses in Each Landslide Risk Category							
Suco -Catchment			Total No.	No Risk		Low Risk		Medium Risk		High Risk	
Code	*Suco* -Catchment		of Houses	Number	%	Number	%	Number	%	Number	%
70122	Açumanu	Lois River Catchment	330	280	84.8%	30	9.1%	7	2.1%	13	3.9%
71613	Darulete	Gularloa River Catchment	88	78	88.6%	8	9.1%	0	0.0%	2	2.3%
71622	Darulete	Lois River Catchment	174	170	97.7%	3	1.7%	0	0.0%	1	0.6%
71713	Dato	Gularloa River Catchment	141	109	77.3%	6	4.3%	16	11.3%	10	7.1%
71714	Dato	Hatulihu Aggregate Catchment	631	631	100.0%	0	0.0%	0	0.0%	0	0.0%
71718	Dato	Katehuleha Aggregate Catchment	256	256	100.0%	0	0.0%	0	0.0%	0	0.0%
71719	Dato	Laklo River Catchment	204	189	92.6%	7	3.4%	5	2.5%	3	1.5%
71722	Dato	Lois River Catchment	27	26	96.3%	1	3.7%	0	0.0%	0	0.0%
72818	Hatuquessi	Katehuleha Aggregate Catchment	25	23	92.0%	1	4.0%	1	4.0%	0	0.0%
72819	Hatuquessi	Laklo River Catchment	411	333	81.0%	46	11.2%	10	2.4%	22	5.4%
72822	Hatuquessi	Lois River Catchment	81	74	91.4%	6	7.4%	0	0.0%	1	1.2%
73922	Leotala	Lois River Catchment	568	533	93.8%	14	2.5%	13	2.3%	8	1.4%
74413	Loidahar	Gularloa River Catchment	117	117	100.0%	0	0.0%	0	0.0%	0	0.0%
74414	Loidahar	Hatulihu Aggregate Catchment	105	105	100.0%	0	0.0%	0	0.0%	0	0.0%
74419	Loidahar	Laklo River Catchment	298	260	87.2%	28	9.4%	5	1.7%	5	1.7%
74613	Luculai	Gularloa River Catchment	148	133	89.9%	8	5.4%	3	2.0%	4	2.7%
74622	Luculai	Lois River Catchment	23	23	100.0%	0	0.0%	0	0.0%	0	0.0%
		Totals Liquiçá AP	**3,627**	**3,340**	**92.1%**	**158**	**4.4%**	**60**	**1.7%**	**69**	**1.9%**

Tabela 55. Uma sira iha Risko ba Rai-halai iha PA Liquiçá

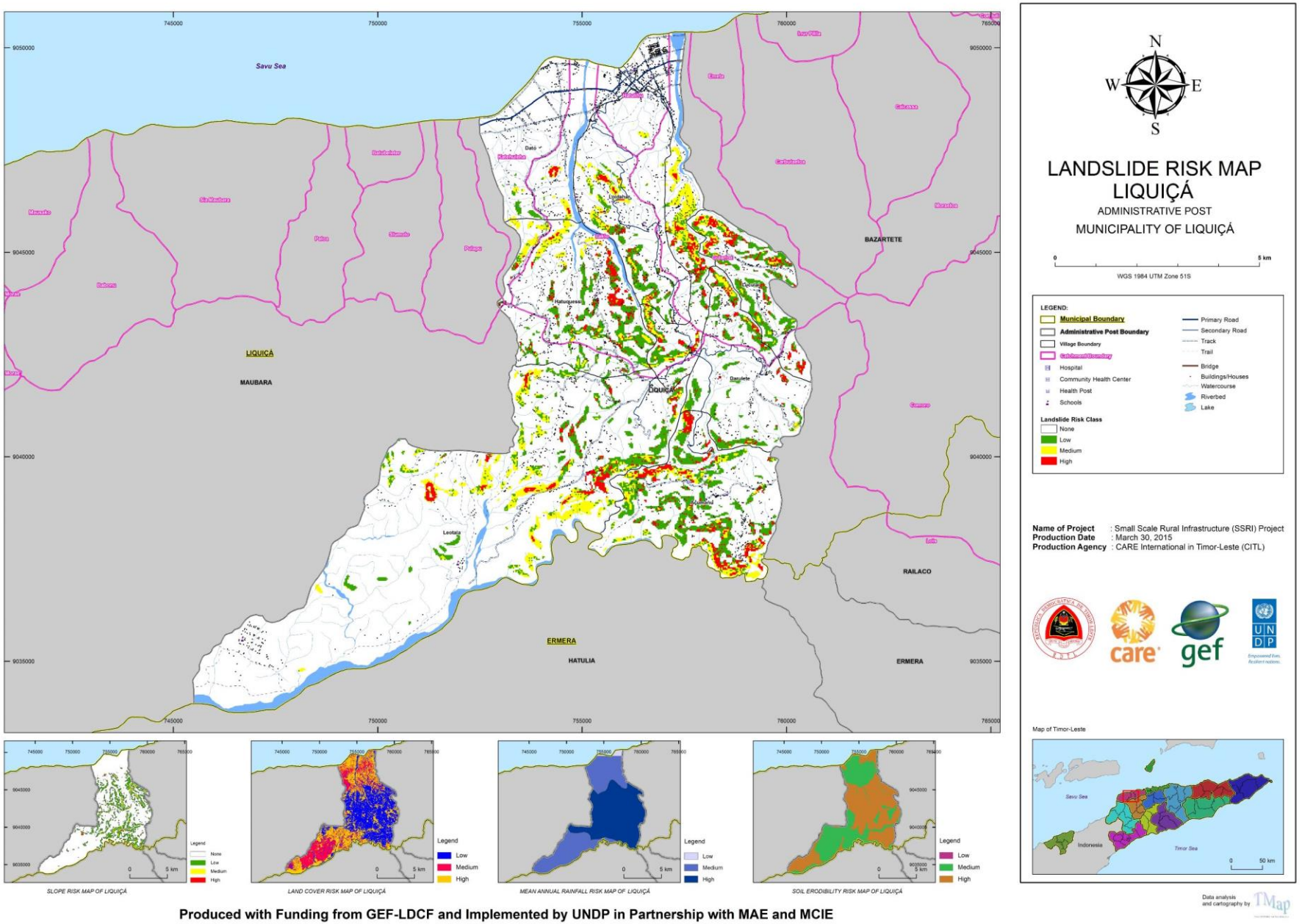
Em termus infra-estrutura, rai-halai hamosu ameasa boot ida iha PA Liquiça kompara ba iha PA 7 sira seluk neebe mak kovre iha estudo ida nee. Husi PA Liquiça nia ho estoke total uma sira 3,627, husi 287 (7.9%) sira hirak nee iha risko naton, mediu no ás ba rai-halai. Nee mak numero ás ba uma sira no persentajem neebe ás mos husi PA sira nee ida. PA Bazartete mak iha numero ás daruak ba uma sira iha risko ba rai-halai ho 205 (5.3%), tuir PA Maubara ho 173 (4.3%) nunee mos PA Hatulia ho 173 (3.0%) no Quelicai ho 144 (3.0%).

Suco sira iha uma maioria iha risko mak Hatuquessi ho 87, Açumau (50), Dato (48) no Loidahar (38). Ho hirak nee, Hatuquessi iha numero ás ba iha kategoria risko mediu no risko ás, ho 32.

Maske nunee 7.9% husi uma sira iha PA Liquiça neebe mak konsidera iha ameasa ba rai-halai, proposaun ba Estrada mak naton ituan, iha 6.9%. Figura nee representa 6.5km ba Estrada iha risko, husi total Estrada nia naruk 93.1km. Maioria sesaun Estrada nee vulneravel la konsidera atu hetan risko as ba rai-halai, ho 3.4km kategoria iha risko naton, 2.1km kategoria iha risko mediu, no 1.0km deit mak kategoria iha risko-as. Açumanu dala ida tan suco iha potensia problem boot. 8.7km Estrada nee, 1.8km (21%) mak konsidera iha risko, maioria ida nee iha risko ho kategoria naton. Suco Hatuquessi mos iha 1.8km (15%) husi estrada iha ameasa husi rai-halai, no Suco Loidahar no Leolata iha 0.9km kada suco iha risko.

Suco -Catchment Code	*Suco* -Catchment		Total Length of Roads (Km)	Length of Road in Each Landslide Risk Category							
				No Risk		Low Risk		Medium Risk		High Risk	
				Km	%	Km	%	Km	%	Km	%
70122	Açumanu	Lois River Catchment	8.7	7.0	80.3%	1.2	13.6%	0.3	3.0%	0.3	3.1%
71613	Darulete	Gularloa River Catchment	0.4	0.4	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
71622	Darulete	Lois River Catchment	7.3	6.7	91.8%	0.3	4.2%	0.3	4.0%	0.0	0.0%
71713	Dato	Gularloa River Catchment	2.5	2.5	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
71714	Dato	Hatulihu Aggregate Catchment	12.4	12.4	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
71718	Dato	Katehuleha Aggregate Catchment	13.5	13.5	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
71719	Dato	Laklo River Catchment	6.0	5.6	93.1%	0.1	2.2%	0.1	2.1%	0.2	2.6%
71722	Dato	Lois River Catchment	1.0	1.0	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
72818	Hatuquessi	Katehuleha Aggregate Catchment	2.2	1.7	74.4%	0.1	4.0%	0.5	20.4%	0.0	1.2%
72819	Hatuquessi	Laklo River Catchment	7.5	6.9	92.3%	0.3	3.6%	0.1	1.3%	0.2	2.9%
72822	Hatuquessi	Lois River Catchment	2.0	1.5	75.2%	0.3	16.0%	0.1	4.9%	0.1	3.9%
73922	Leotala	Lois River Catchment	14.3	13.4	94.0%	0.5	3.5%	0.3	2.1%	0.1	0.4%
74413	Loidahar	Gularloa River Catchment	0.7	0.7	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
74414	Loidahar	Hatulihu Aggregate Catchment	2.0	2.0	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
74419	Loidahar	Laklo River Catchment	8.2	7.4	89.6%	0.3	3.6%	0.4	4.8%	0.2	2.1%
74613	Luculai	Gularloa River Catchment	4.3	3.9	91.2%	0.3	6.4%	0.1	1.4%	0.0	1.0%
74622	Luculai	Lois River Catchment	0.2	0.2	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
		Totals Liquiçá AP	**93.1**	**86.7**	**93.1%**	**3.4**	**3.6%**	**2.1**	**2.2%**	**1.0**	**1.1%**

Tabela 56. Estrada iha Risko ba Rai-halai iha PA Liquiçá



MAPA- 28.Mapa Risko Rai-halai: Posto Administrativo Liquiçá

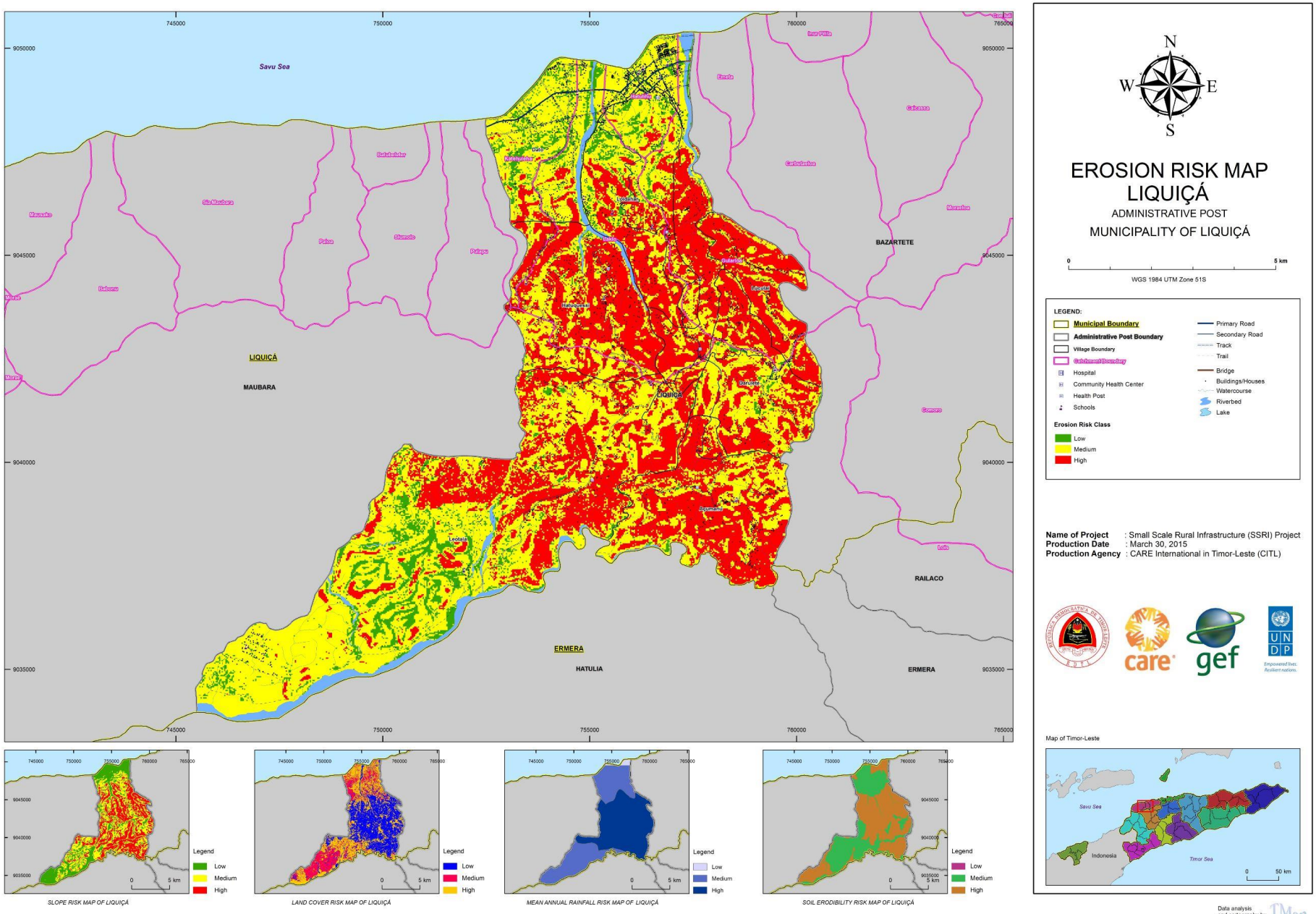
Risko Erosaun iha Posto Administrativo Liquiçá

Distribuisaun husi erosaun risko iha PA Liquiça besik-liu atu hanesan ho risko rai-halai – relativamente ás iha meio, zona rai-ás, no relativamente naton konaba rai-lolo mamar iha parte norte no sudeste. Hanesan iha PA sira seluk iha pais nee, iha Liquiça maioria konsidera inklinado tebes ba erosaun, ho deit 9.2% husi area rai iha kategoria ba risko naton, 51.8% kategoria iha risko mediu, no 39% kategoria iha risko ás (Mapa 28). Familiar husi rai-as no rai-tetuk relasionamento mosu dala ida tan – potensia ás ba erosaun no rai-halai iha kaptasaun ás, ligasaun besik liu ho potensia as ba inundasaun iha rai-tetuk iha kaptasaun neebe hanesan. partikular iha PA nee, maioria problema erosaun grave iha Kaptasaun Mota Lois, Laklo no Gularloa iha PA Liquiça mak exportado ba area administrativo sira seluk iha kaptasaun neebe badak, PA sira hanaran Hatulia, Atabae no Maubara. Nee importante hodi foti implikasaun husi ligasaun transfronteiricio foti ba konta wainhira planeamento no implementa programa dezemvolvimento, inkluindo konstruisaun no manutensaun ba infra-estrutura.

Suco sira neebe maioria vulneravel ba rai-halai mos relativamente iha potensia ás ba erosaun. Husi dook kedas area boot risko ba erosaun mak iha Suco Leotala iha Kaptasaun Mota Lois. Iha nee, 3,437 husi total hektar 3,916 (87.8%) mak konsidera ba erosaun risko mediu no ás. Area kiik-oan sira husi rai mak involvido iha Suco Açumanu no Hatuquessi, maibe proposaun iha risko maske ás liu kompara Leotala nia 87.8%. Iha Hatuquessi, 1,053 husi hektar 1,072 (98.3%) iha risko mediu no risko ás, no iha Açumanu numero nee mak 1,079 husi hektar 1,091(98.8%).

				Area of Land in Each Erosion Risk Category					
Suco -Catchment			Total	Low Risk		Medium Risk		High Risk	
Code	*Suco* -Catchment		Hectares	Hectares	%	Hectares	%	Hectares	%
70122	Açumanu	Lois River Catchment	1,091	13	1.1%	416	38.1%	663	60.7%
71613	Darulete	Gularloa River Catchment	180	2	1.0%	55	30.3%	124	68.7%
71622	Darulete	Lois River Catchment	592	19	3.3%	320	54.1%	253	42.7%
71713	Dato	Gularloa River Catchment	372	43	11.7%	122	32.7%	207	55.6%
71714	Dato	Hatulihu Aggregate Catchment	196	28	14.4%	168	85.7%	0	0.0%
71718	Dato	Katehuleha Aggregate Catchment	482	107	22.1%	342	71.0%	33	6.9%
71719	Dato	Laklo River Catchment	449	80	17.8%	242	53.9%	127	28.3%
71722	Dato	Lois River Catchment	41	0	0.1%	19	46.7%	22	53.2%
72818	Hatuquessi	Katehuleha Aggregate Catchment	88	1	1.3%	31	35.5%	55	63.1%
72819	Hatuquessi	Laklo River Catchment	767	16	2.1%	252	32.9%	499	65.0%
72822	Hatuquessi	Lois River Catchment	217	1	0.6%	132	60.8%	84	38.6%
73922	Leotala	Lois River Catchment	3,916	479	12.2%	2,352	60.1%	1,085	27.7%
74413	Loidahar	Gularloa River Catchment	214	14	6.7%	124	57.9%	76	35.4%
74414	Loidahar	Hatulihu Aggregate Catchment	182	36	20.0%	131	71.9%	15	8.1%
74419	Loidahar	Laklo River Catchment	586	57	9.6%	262	44.7%	268	45.7%
74613	Luculai	Gularloa River Catchment	389	3	0.8%	107	27.5%	279	71.8%
74622	Luculai	Lois River Catchment	60	1	1.9%	17	27.9%	42	70.2%
		Totals Liquiçá AP	**9,822**	**901**	**9.2%**	**5,090**	**51.8%**	**3,831**	**39.0%**

Tabela 57. Area Rai iha Risko ba Erosaun iha PA Liquiçá



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MAPA- 29. Mapa Risko Erosaun: Posto Administrativo Liquiçá

Suco - Catchment Code	*Suco* -Catchment		Total No. of Houses	Houses in Each Erosion Risk Category						Total Length of Roads	Length of Road in Each Erosion Risk Category					
				Low Risk		Medium Risk		High Risk			Low Risk		Medium Risk		High Risk	
				Number	%	Number	%	Number	%		Km	%	Km	%	Km	%
70122	Açumanu	Lois River Catchment	330	1	0.3%	132	40.0%	197	59.7%	8.7	0.1	1.4%	4.3	49.5%	4.3	49.1%
71613	Darulete	Gularloa River Catchment	88	0	0.0%	36	40.9%	52	59.1%	0.4	0.1	34.3%	0.2	51.0%	0.1	14.7%
71622	Darulete	Lois River Catchment	174	10	5.7%	94	54.0%	70	40.2%	7.3	0.4	5.5%	4.7	65.2%	2.1	29.4%
71713	Dato	Gularloa River Catchment	141	12	8.5%	60	42.6%	69	48.9%	2.5	1.0	39.0%	1.5	61.0%	0.0	0.0%
71714	Dato	Hatulihu Aggregate Catchment	631	103	16.3%	528	83.7%	0	0.0%	12.4	2.4	19.6%	9.9	80.4%	0.0	0.0%
71718	Dato	Katehuleha Aggregate Catchment	256	62	24.2%	194	75.8%	0	0.0%	13.5	3.2	23.6%	10.2	75.8%	0.1	0.6%
71719	Dato	Laklo River Catchment	204	17	8.3%	149	73.0%	38	18.6%	6.0	1.2	19.4%	3.7	61.4%	1.2	19.2%
71722	Dato	Lois River Catchment	27	0	0.0%	14	51.9%	13	48.1%	1.0	0.0	0.0%	0.6	59.0%	0.4	41.0%
72818	Hatuquessi	Katehuleha Aggregate Catchment	25	0	0.0%	9	36.0%	16	64.0%	2.2	0.0	0.0%	0.7	30.0%	1.6	70.0%
72819	Hatuquessi	Laklo River Catchment	411	7	1.7%	137	33.3%	267	65.0%	7.5	0.0	0.7%	3.8	51.1%	3.6	48.2%
72822	Hatuquessi	Lois River Catchment	81	0	0.0%	51	63.0%	30	37.0%	2.0	0.0	0.0%	0.8	41.2%	1.2	58.8%
73922	Leotala	Lois River Catchment	568	32	5.6%	343	60.4%	193	34.0%	14.3	0.3	2.1%	10.1	70.5%	3.9	27.4%
74413	Loidahar	Gularloa River Catchment	117	8	6.8%	79	67.5%	30	25.6%	0.7	0.0	2.4%	0.5	65.8%	0.2	31.9%
74414	Loidahar	Hatulihu Aggregate Catchment	105	21	20.0%	84	80.0%	0	0.0%	2.0	0.1	7.3%	1.8	92.7%	0.0	0.0%
74419	Loidahar	Laklo River Catchment	298	35	11.7%	128	43.0%	135	45.3%	8.2	1.0	12.7%	4.0	48.5%	3.2	38.8%
74613	Luculai	Gularloa River Catchment	148	0	0.0%	69	46.6%	79	53.4%	4.3	0.1	1.4%	2.1	48.2%	2.2	50.3%
74622	Luculai	Lois River Catchment	23	7	30.4%	11	47.8%	5	21.7%	0.2	0.1	59.5%	0.0	14.3%	0.1	26.2%
		Totals Liquiçá AP	**3,627**	**315**	**8.7%**	**2,118**	**58.4%**	**1,194**	**32.9%**	**93.1**	**10.1**	**10.9%**	**59.0**	**63.3%**	**24.0**	**25.8%**

Tabela 58. Uma no Estrada sira iha Risko ba Erosaun iha PA Liquiçá

Suco -Catchment Code	*Suco* -Catchment		Total No. of Schools	Schools in Each Erosion Risk Category						Total No. of Health Facilities	Health Facilities in Each Erosion Risk Category					
				Low Risk		Medium Risk		High Risk			Low Risk		Medium Risk		High Risk	
				Number	%	Number	%	Number	%		Number	%	Number	%	Number	%
70122	Açumanu	Lois River Catchment	1	0	0.0%	1	100.0%	0	0.0%	1	0	0.0%	0	0.0%	1	100.0%
71613	Darulete	Gularloa River Catchment	0							0						
71622	Darulete	Lois River Catchment	1	0	0.0%	1	100.0%	0	0.0%	1	1	100.0%	0	0.0%	0	0.0%
71713	Dato	Gularloa River Catchment	1	0	0.0%	0	0.0%	1	100.0%	0						
71714	Dato	Hatulihu Aggregate Catchment	5	2	40.0%	3	60.0%	0	0.0%	0	0		0		0	
71718	Dato	Katehuleha Aggregate Catchment	0							0						
71719	Dato	Laklo River Catchment	1	0	0.0%	1	100.0%	0	0.0%	1	0	0.0%	0	0.0%	1	100.0%
71722	Dato	Lois River Catchment	0							0						
72818	Hatuquessi	Katehuleha Aggregate Catchment	0							0	0					
72819	Hatuquessi	Laklo River Catchment	2	0	0.0%	1	50.0%	1	50.0%	1	0	0.0%	0	0.0%	1	100.0%
72822	Hatuquessi	Lois River Catchment	0							0						
73922	Leotala	Lois River Catchment	3	0	0.0%	2	66.7%	1	33.3%	1	0	0.0%	0	0.0%	1	100.0%
74413	Loidahar	Gularloa River Catchment	0							1	0	0.0%	0	0.0%	1	100.0%
74414	Loidahar	Hatulihu Aggregate Catchment	1	0	0.0%	1	100.0%	0	0.0%	1	0	0.0%	1	100.0%	0	0.0%
74419	Loidahar	Laklo River Catchment	3	0	0.0%	1	33.3%	2	66.7%	0						
74613	Luculai	Gularloa River Catchment	0							0						
74622	Luculai	Lois River Catchment	0							0						
		Totals Liquiçá AP	**18**	**2**	**11.1%**	**11**	**61.1%**	**5**	**27.8%**	**7**	**1**	**14.3%**	**1**	**14.3%**	**5**	**71.4%**

Tabela 59. Eskola no Fasilidade Saude sira iha Risko ba Erosaun iha PA Liquiçá

2.4.8 Perfil Risko – Posto Administrativo Maubara

Maubara nee boot no Posto Administrativo diverso, no tamba hirak nee provavel atributo iha maioria prefill risko variadade husi PA 8 nee ida, inkluindo iha estudo nee. Husi risko tipo tolu nee manifesto sira nia-an iha Maubara, ho area sira extensivu inklinado inundasaun iha sul, signifikante risko ba rai-halai iha rai-lolo central no rai-ás parte oeste, no variantes grau ba risko erosaun atraves iha teritorio tomak. Diversidade nee parte refleta iha estrutura administrativo no padraun drainajem iha PA Maubara. Suco hitu no kaptasaun mota 13 kombina hodi produs total kaptasaun suco 24. Hirak nee listado iha Tabela 60 no hatudu mos iha Mapa 29.

Iha parte norte Maubara mak fahe kaptasaun suco 11 ba medida variantes no karateristiko variantes. Sira balu husi kaptasaun Mota mak hanesan Bautu, Morae, Babono, Boro, Paloa no Pulapu, neebe mak asosiado ho mota individual; sira seluk, neebe laos Kaptasaun Agregando mak hanesan Kaikasa, Batubeleter, Katehuleha, Mausako no Sia Maubara. Hanesan lia fuan “agregando” iha naran implika, hirak nee jeneraliza, amalgamasoens médias husi kaptasaun kiik-oan, bai-bain iha area sira neebe mak laos uniku, kanal mota maioria. Kaptasaun Agregando mak sempre hetan jeralmente iha area tetuk sira besik kosta, iha neebe mota kiik no kanal drainajem sira kuaze kleuk ba-mai no suli ba iha tasi iha fatin lubuk ida. Ida nee laos extraordinariu ba kanal ibun sira hodi muda tun no sae iha kosta.

Iha Maubara, Kaptasaun Mota Lois okupa kuaze metade husi sul tomak husi PA nee. Husi suco 7 Maubara nian okupa parte sira Kaptasaun Lois – ho deit Vaviquinia iha norte enteiramente sai husi nee. Iha sesaun tuir mai nee sei esplika, kuaze rai inklinado inundasaun sira hotu iha PA Maubara mak iha Kaptasaun Mota Lois, maibe maioria ameasa seriu husi rai-halai no erosaun mak iha kaptasaun sira seluk neebe mak kanaliza ba iha parte norte oeste.

***Suco* -Catchment Code**	***Suco* -Catchment**		**Total Area**
82401	Gugleur	Babono River Catchment	11
82404	Gugleur	Bautu River Catchment	545
82417	Gugleur	Kaikasa Aggregate Catchment	295
82422	Gugleur	Lois River Catchment	2,273
82426	Gugleur	Morae River Catchment	1,132
82522	Guiço	Lois River Catchment	3,317
84122	Lissadila	Lois River Catchment	5,495
85001	Maubaralissa	Babono River Catchment	765
85022	Maubaralissa	Lois River Catchment	487
87404	Vatuboro	Bautu River Catchment	336
87422	Vatuboro	Lois River Catchment	2,350
87431	Vatuboro	Sanakiana Aggregate Catchment	2,133
87501	Vatuvou	Babono River Catchment	79
87502	Vatuvou	Batubeleter Aggregate Catchment	238
87506	Vatuvou	Boro River Catchment	651
87518	Vatuvou	Katehuleha Aggregate Catchment	158
87522	Vatuvou	Lois River Catchment	1,491
87524	Vatuvou	Sia Maubara Aggregate Catchment	1,374
87528	Vatuvou	Paloa River Catchment	621
87529	Vatuvou	Pulapu River Catchment	696
87601	Vaviquinia	Babono River Catchment	439
87624	Vaviquinia	Sia Maubara Aggregate Catchment	313
87625	Vaviquinia	Mausako Aggregate Catchment	771
87626	Vaviquinia	Morae River Catchment	423
		Totals Maubara AP	**26,394**

Tabela 60. Kaptasaun-Suco iha Posto Administrativo Maubara

MAPA- 30. Suco no Kaptasaun sira ba Posto Administrativo Maubara

Risko Inundasaun iha Posto Administrativo Maubara

Hektar Rihun Rua no atus ida lima nolu resin tolu iha PA Maubara mak susceptivel ba inundasaun. Nee representa 8.2% husi total area husi PA nee, iha neebe mak hektar 26,394. Aparte husi kiik-oan rua nee kovre ba rai inklinado inundasaun iha kosta norte besik ba cidade Maubara no Liquiça, iha neebe okupa deit rai hektar 84, risko inundasaun nee mak hetan iha mota ninin husi Mota Lois no balu ho tributaria boot. Hanesan hatudu iha Mapa 30, Lois mak mota neebe ho drainajem boot ho area kaptasaun boot, no ida nee ho potensia inundasaun neebe mak extensivu ituan.

Maioria suco sira neebe iha risko inundasaun entre Kaptasaun Mota Lois inkluindo Vatuboro, iha neebe hektar 665 (28.3%) mak iha zona risko inundasaun, Guico ho hektar 572 (17.3%), Lissadila ho hektar 529 (9.6%) no Gugleur ho hektar 279 (12.3%)

Iha neeba estrutura lubuk ida neebe mak konstrui iha rai inklinado inundasaun – uma 412 (8% husi total), eskola 3 (15%), fasilidade saude 2 (29%) no Estrada 16.1km (13.9%), maibe ho medida boot husi area iha risko, ida nee dala ruma surpreza ituan katak proporsaun ba infra-estrutura neebe mak la ás. Nee mak boot liu tamba komunidade iha Maubara jere sira nia inundasaun diak ituan; sira kuda hare ona iha nee ba tinan barak, no maioria ema barak konsidera inundasaun nee hanesan rekursu ida, laos ameasa (Figura 36). Maske nunee relativamente familia ho numero kiik-oan mak preparado hodi adapta ba sira nia ambiente no risko neebe mak iha rai hetan inundasaun husi tempo ba tempo, maioria familia sente ba area neebe mak inundasaun no ida neebe mak laos (Figura 37), no sira konstrui sira nia uma iha rai-maran leten. Hanesan mos ho eskola no fasilidade saude sira – iha balu neebe lokaliza iha zona inundasaun, maibe maioria mak konstrui iha rai-ás leten neebe mak dook ituan husi mota. Tipo infra-esturtura nee realmente sofre husi inundasaun iha Maubara mak Estrada sira.

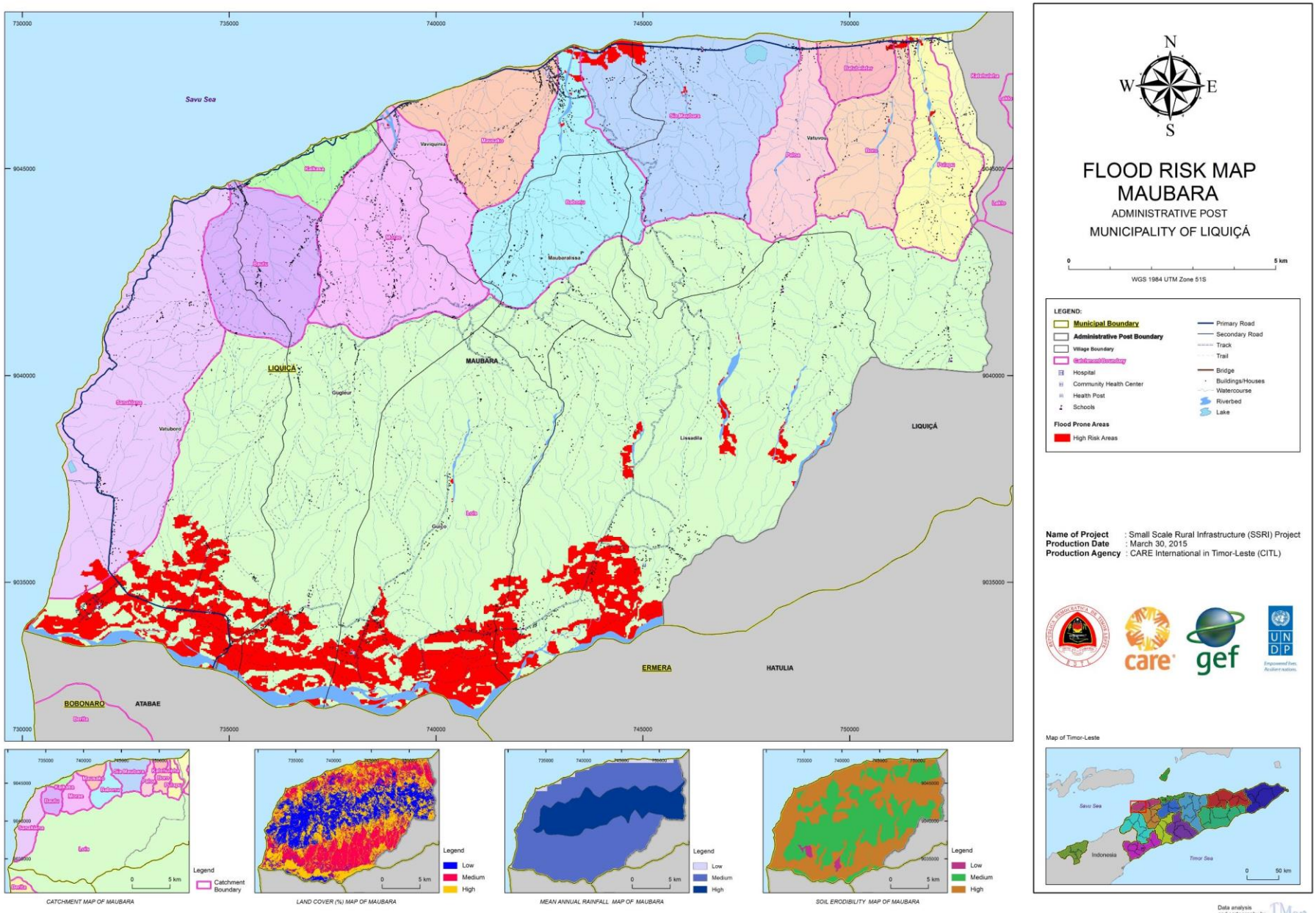
Figura 37 – Estrada iha zona Inundasaun. Suco Guiço

Figura 38 – Kuda Haré iha area risko ás ba inundasaun. Suco Lissadila

Figura 39 – Avisu Governo iha Suco Lissadila

Hanesan mensiona iha leten, 16.1km husi Estrada halai liu-husi iha zona inundasaun PA Maubara, representa 13.9% husi total rede servisu husi 116km. maioria husi Estrada inklinado inundasaun seidauk nahe ho alkatraun, ka sekarik sira alkatraun ona, aspalt sira nee destroi ona no sai fali rai-rahun no fatuk kiik. Figura 35 hatudu exemplo ida. Suco hat nee hotu hanaruk tun ba iha mota Lauveli no Lois iha sesaun ba Estrada inklinado inundasaun. Vatuboro

mak afeita at-liu ho 7.0km (74% husi total Estrada nia naruk iha suco nee). Tuir mak Guiço ho 4.6km (33%), tuir tan Lissadila ho 2.3km (13%) no finalmente ho 0.7km (8%) iha Gugleur.



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MAPA- 31. Mapa Risko Inundasaun: Posto Administrativo Maubara

Suco -Catchment Code	*Suco* -Catchment		Land Area			Houses			Schools			Health Facilities			Roads		
			Total Area	In Flood Risk Zone		Total Number	In Flood Risk Zone		Total Number	In Flood Risk Zone		Total Number	In Flood Risk Zone		Total Km	In Flood Risk Zone	
				Hectares	%		Number	%		Number	%		Number	%		Km	%
82401	Gugleur	Babono River Catchment	11	0	0.0%	0			0			0			0.0		
82404	Gugleur	Bautu River Catchment	545	0	0.0%	146	0	0.0%	3	0	0.0%	0			1.2	0.0	0.0%
82417	Gugleur	Kaikasa Aggregate Catchment	295	0	0.0%	50	0	0.0%	0			0			6.2	0.0	0.0%
82422	Gugleur	Lois River Catchment	2,273	279	12.3%	207	50	24.2%	1	0	0.0%	0			8.2	0.7	8.2%
82426	Gugleur	Morae River Catchment	1,132	0	0.0%	324	0	0.0%	2	0	0.0%	1	0	0.0%	8.1	0.0	0.0%
82522	Guiço	Lois River Catchment	3,317	572	17.3%	298	118	39.6%	1	1	100.0%	1	1	100.0%	14.1	4.6	32.6%
84122	Lissadila	Lois River Catchment	5,495	529	9.6%	759	70	9.2%	2	0	0.0%	1	0	0.0%	16.9	2.3	13.4%
85001	Maubaralissa	Babono River Catchment	765	0	0.0%	154	0	0.0%	0			0			1.5	0.0	0.0%
85022	Maubaralissa	Lois River Catchment	487	0	0.0%	121	0	0.0%	1	0	0.0%	1	0	0.0%	4.9	0.0	0.0%
87404	Vatuboro	Bautu River Catchment	336	0	0.0%	59	0	0.0%	0			0			0.3	0.0	0.0%
87422	Vatuboro	Lois River Catchment	2,350	665	28.3%	250	145	58.0%	2	2	100.0%	1	1	100.0%	9.4	7.0	74.5%
87431	Vatuboro	Sanakiana Aggregate Catchment	2,133	24	1.1%	191	1	0.5%	1	0	0.0%	0			13.7	0.0	0.0%
87501	Vatuvou	Babono River Catchment	79	0	0.0%	8	0	0.0%	0			0			1.5	0.0	0.0%
87502	Vatuvou	Batubeleter Aggregate Catchment	238	2	0.8%	42	7	16.7%	0			0			1.8	0.0	0.0%
87506	Vatuvou	Boro River Catchment	651	6	0.9%	81	6	7.4%	0			0			0.4	0.1	35.0%
87518	Vatuvou	Katehuleha Aggregate Catchment	158	0	0.0%	54	0	0.0%	0			0			1.1	0.0	0.0%
87522	Vatuvou	Lois River Catchment	1,491	0	0.0%	179	0	0.0%	1	0	0.0%	0			4.5	0.0	0.0%
87524	Vatuvou	Sia Maubara Aggregate Catchment	1,374	17	1.2%	254	1	0.4%	2	0	0.0%	0			6.3	0.3	4.5%
87528	Vatuvou	Paloa River Catchment	621	0	0.0%	47	0	0.0%	0			0			0.4	0.0	0.0%
87529	Vatuvou	Pulapu River Catchment	696	7	1.0%	152	4	2.6%	1	0	0.0%	1	0	0.0%	1.6	0.3	17.5%
87601	Vaviquinia	Babono River Catchment	439	11	2.6%	195	1	0.5%	2	0	0.0%	0			2.6	0.2	6.2%
87624	Vaviquinia	Sia Maubara Aggregate Catchment	313	40	12.6%	55	9	16.4%	0			0			3.2	0.6	20.1%
87625	Vaviquinia	Mausako Aggregate Catchment	771	0	0.0%	324	0	0.0%	1	0	0.0%	1	0	0.0%	5.4	0.0	0.0%
87626	Vaviquinia	Morae River Catchment	423	1	0.3%	53	0	0.0%	0			0			2.2	0.0	1.4%
		Totals Maubara AP	**26,394**	**2,153**	**8.2%**	**4,003**	**412**	**10.3%**	**20**	**3**	**15.0%**	**7**	**2**	**28.6%**	**116**	**16.1**	**13.9%**

Tabela 61. Risko estatistiko ba inundasaun iha PA Maubara

Risko Rai-halai iha Posto Administrativo Maubara

Husi PA 8 neebe mak inkluindo iha estudo nee, PA Maubara iha rai neebe maioria konsidera atu iha nivel risko balu husi rai-halai, ho hektar 3,681. Mapa 31 hatudu katak suco sira iha PA Maubara ho rai maioria iha risko inkluindo Gugleur (hektar 980), Vatuvou (hektar 831) no Vatuboro (hektar 702). Razaun ida husi suco hirak nee iha area boot iha risko ba rai-halai tamba sira iha suco boot. Area sira seluk ho potensia ba rai-halai, maske nunee luan la hanesan, neebe mak hetan iha suco seluk iha PA nee.

Maske nunee Kaptasaun Mota Lois iha numero boot sitiu sira iha risko kovre mos area boot, maioria husi risko neebe mak konsidera naton no mediu. Area sira risko ás mak konsentrado iha parte rai-ás husi drainajem kaptasaun kiik-oan ba iha parte norte no oeste, inkluindo Babono, Morae, Paloa, Pulapu, Sanakiana no Sia Maubara. Nee parsialmente tamba parte norte hasoru rai-lolo jeralmente rai-naruk, no parsialmente tamba kovre husi vegetasaun iha leten tende ladun barak tamba sira nia orientasaun. Rai-lolo hasoru ba parte norte mak bai-bain maran liu kompara rai-lolo parte hasoru sul, sira exposizaun direita liu ba loro-matan no predominante husi anin – nee meios tende kovre vegetasaun natural atu menus vigoroso. Presaun populasaun mos ás ba iha rai-lolo neebe hasoru ba norte, espesialmente hirak nee besik liu ba cidade Maubara no Liquiça, iha neebe foti ai atu sunu, hamos vegetasaun ba agrikultura, duut pekuaria hirak nee hotu kontribui ba iha degradasaun natural protektivo kovre vegetasaun.

				Area of Land in Each Landslide Risk Category							
Suco -Catchment Code	*Suco* -Catchment		Total Hectares	No Risk		Low Risk		Medium Risk		High Risk	
				Hectares	%	Hectares	%	Hectares	%	Hectares	%
82401	Gugleur	Babono River Catchment	11	9	80.4%	1	4.5%	1	9.4%	1	5.7%
82404	Gugleur	Bautu River Catchment	545	384	70.6%	70	12.8%	79	14.4%	12	2.3%
82417	Gugleur	Kaikasa Aggregate Catchment	295	245	83.1%	13	4.5%	34	11.5%	3	1.0%
82422	Gugleur	Lois River Catchment	2,273	1,927	84.8%	179	7.9%	130	5.7%	37	1.6%
82426	Gugleur	Morae River Catchment	1,132	710	62.8%	235	20.8%	152	13.4%	34	3.0%
82522	Guiço	Lois River Catchment	3,317	3,047	91.9%	133	4.0%	118	3.6%	19	0.6%
84122	Lissadila	Lois River Catchment	5,495	5,286	96.2%	90	1.6%	92	1.7%	26	0.5%
85001	Maubaralissa	Babono River Catchment	765	510	66.6%	76	9.9%	143	18.7%	36	4.7%
85022	Maubaralissa	Lois River Catchment	487	426	87.5%	34	7.1%	25	5.2%	1	0.2%
87404	Vatuboro	Bautu River Catchment	336	209	62.2%	64	19.1%	53	15.8%	10	2.9%
87422	Vatuboro	Lois River Catchment	2,350	2,209	94.0%	93	4.0%	44	1.9%	3	0.1%
87431	Vatuboro	Sanakiana Aggregate Catchment	2,133	1,698	79.6%	160	7.5%	221	10.3%	54	2.5%
87501	Vatuvou	Babono River Catchment	79	63	79.6%	4	4.9%	11	14.0%	1	1.6%
87502	Vatuvou	Batubeleter Aggregate Catchment	238	236	99.0%	2	0.8%	0	0.2%	0	0.0%
87506	Vatuvou	Boro River Catchment	651	554	85.1%	60	9.3%	26	4.0%	11	1.6%
87518	Vatuvou	Katehuleha Aggregate Catchment	158	145	91.5%	2	1.6%	11	6.8%	0	0.2%
87522	Vatuvou	Lois River Catchment	1,491	1,268	85.1%	95	6.4%	72	4.8%	56	3.7%
87524	Vatuvou	Sia Maubara Aggregate Catchment	1,374	1,196	87.0%	73	5.3%	77	5.6%	28	2.0%
87528	Vatuvou	Paloa River Catchment	621	488	78.6%	48	7.8%	59	9.5%	26	4.1%
87529	Vatuvou	Pulapu River Catchment	696	527	75.7%	54	7.8%	71	10.2%	44	6.3%
87601	Vaviquinia	Babono River Catchment	439	346	78.8%	29	6.7%	51	11.6%	13	2.9%
87624	Vaviquinia	Sia Maubara Aggregate Catchment	313	308	98.5%	3	1.0%	2	0.5%	0	0.0%
87625	Vaviquinia	Mausako Aggregate Catchment	771	670	86.8%	12	1.6%	75	9.7%	15	1.9%
87626	Vaviquinia	Morae River Catchment	423	249	58.9%	66	15.7%	67	16.0%	40	9.5%
		Totals Maubara AP	**26,394**	**22,713**	**86.1%**	**1,598**	**6.1%**	**1,614**	**6.1%**	**469**	**1.8%**

Tabela 62. Area Rai iha Risko ba Rai-halai iha PA Maubara

Em termus exposizaun ba ifra-estrutura risko rai-halai, iha PA Maubara klasfikasaun hanesan ida neebe ás-liu entre iha PA 8 husi estudo nee. Husi total estoke uma 4,003, 173 (4.3%) mak iha sitiu inklinado inundasaun. Liquiça deit (7.9%) no Bazartete iha (5.3%) proporsaun ás-liu husi uma sira iha risko. Maubara nia eskola 20 no fasilidade saude 7 laiha ida mak konsidera atu iha ameasa husi rai-halai, maibe parte subsistansial husi rede servisu Estrada. Realidade, Maubara iha Estrada naruk neebe iha risko (9.4km) representa proporsaun boot husi total rede servisu estrada (8.1%) husi PA sira 8 ba SSRI.

Numero boot husi uma sira neebe mak iha risko husi rai-halai mak iha Suco Guglear, iha neebe ho total uma 39. Iha daruak mak Suco Maubara-Lissa, ho uma 34, tuir ida nee husi Suco Vatuboro ho uma 33

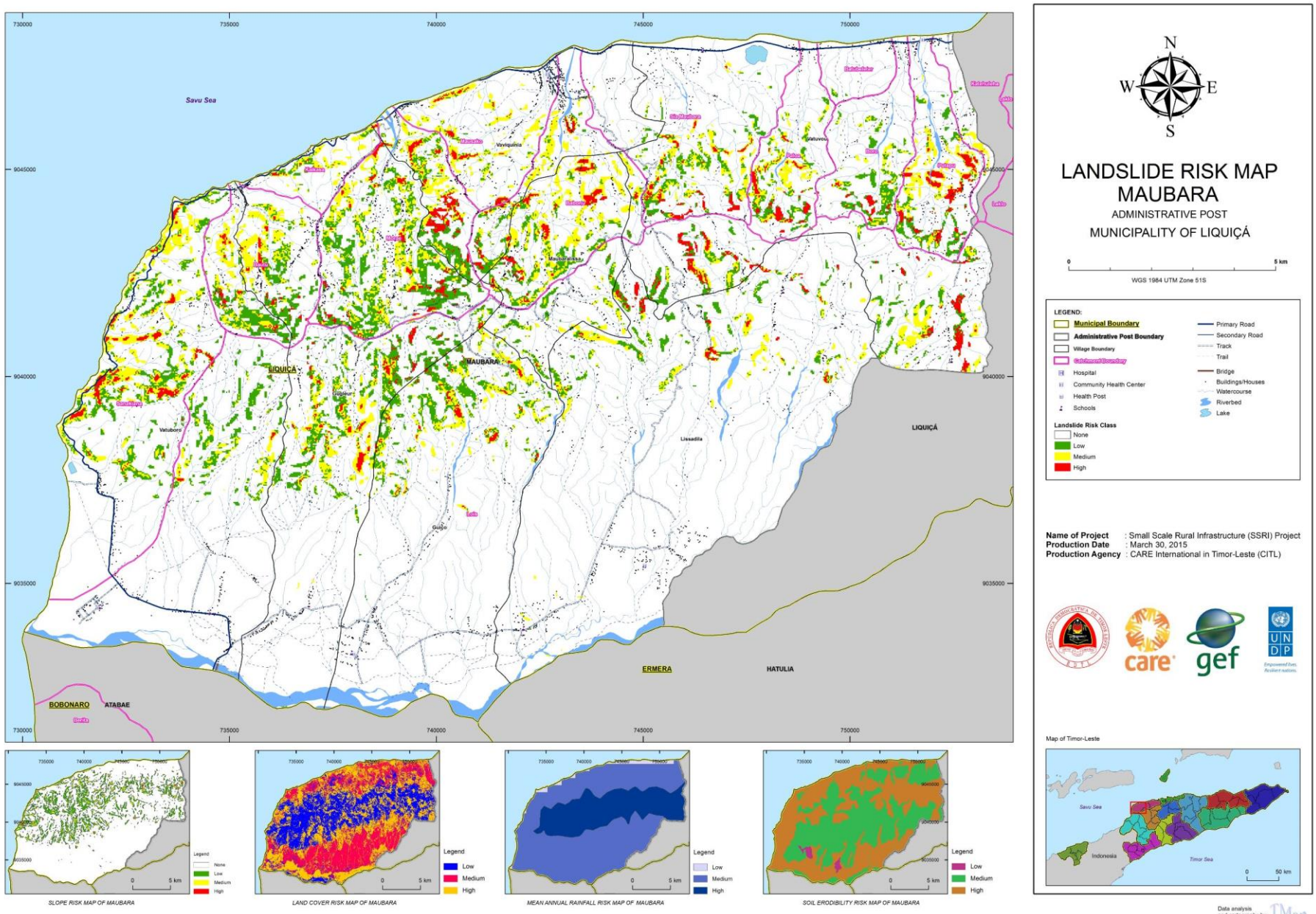
no Suco Vaviquinia ho uma 24. Suco Vatuvou ho uma 14 no Suco Vaviquinia ho uma 13 neebe maioria iha kategoria risko-ás ba rai-halai.

Kaptasaun Agregando Sanakiana lokaliza enteiramente entre Suco Vatuboro no iha nee katak potensia estraga husi rai-halai ka Estrada destroi mak'as liu. PA Maubara nia 9.4km Estrada iha risko, 4.1km (44%) mak iha Kaptasaun Suco Vatuboro-Sanakiana. Maioria husi nee 4.1km mak konsidera sei iha risko mediu no risko ás, no maioria husi parte Estrada prinsipal ligasaun Dili ba Kupang iha Indonesia, no ba iha enklave Municipio Oecusse.

Figura 40 – imajem tolu nee hatudu dizafius neebe hasoru husi konstruidor Estrada iha prinsipais Estrada Dili – Batugade Road. Suco Vatuboro, Kaptasaun Agregando Sanakiana

				Houses in Each Landslide Risk Category							
***Suco* -Catchment**			**Total No.**	**No Risk**		**Low Risk**		**Medium Risk**		**High Risk**	
Code	***Suco* -Catchment**		**of Houses**	**Number**	**%**	**Number**	**%**	**Number**	**%**	**Number**	**%**
82401	Gugleur	Babono River Catchment	0	0		0		0		0	
82404	Gugleur	Bautu River Catchment	146	140	95.9%	3	2.1%	3	2.1%	0	0.0%
82417	Gugleur	Kaikasa Aggregate Catchment	50	50	100.0%	0	0.0%	0	0.0%	0	0.0%
82422	Gugleur	Lois River Catchment	207	203	98.1%	0	0.0%	3	1.4%	1	0.5%
82426	Gugleur	Morae River Catchment	324	295	91.0%	12	3.7%	14	4.3%	3	0.9%
82522	Guiço	Lois River Catchment	298	292	98.0%	0	0.0%	3	1.0%	3	1.0%
84122	Lissadila	Lois River Catchment	759	746	98.3%	0	0.0%	5	0.7%	8	1.1%
85001	Maubaralissa	Babono River Catchment	154	124	80.5%	10	6.5%	13	8.4%	7	4.5%
85022	Maubaralissa	Lois River Catchment	121	117	96.7%	2	1.7%	2	1.7%	0	0.0%
87404	Vatuboro	Bautu River Catchment	59	52	88.1%	3	5.1%	4	6.8%	0	0.0%
87422	Vatuboro	Lois River Catchment	250	249	99.6%	1	0.4%	0	0.0%	0	0.0%
87431	Vatuboro	Sanakiana Aggregate Catchment	191	180	94.2%	2	1.0%	9	4.7%	0	0.0%
87501	Vatuvou	Babono River Catchment	8	8	100.0%	0	0.0%	0	0.0%	0	0.0%
87502	Vatuvou	Batubeleter Aggregate Catchment	42	42	100.0%	0	0.0%	0	0.0%	0	0.0%
87506	Vatuvou	Boro River Catchment	81	78	96.3%	2	2.5%	0	0.0%	1	1.2%
87518	Vatuvou	Katehuleha Aggregate Catchment	54	49	90.7%	1	1.9%	4	7.4%	0	0.0%
87522	Vatuvou	Lois River Catchment	179	173	96.6%	5	2.8%	0	0.0%	1	0.6%
87524	Vatuvou	Sia Maubara Aggregate Catchment	254	251	98.8%	0	0.0%	2	0.8%	1	0.4%
87528	Vatuvou	Paloa River Catchment	47	46	97.9%	0	0.0%	0	0.0%	1	2.1%
87529	Vatuvou	Pulapu River Catchment	152	132	86.8%	4	2.6%	6	3.9%	10	6.6%
87601	Vaviquinia	Babono River Catchment	195	175	89.7%	4	2.1%	3	1.5%	13	6.7%
87624	Vaviquinia	Sia Maubara Aggregate Catchment	55	55	100.0%	0	0.0%	0	0.0%	0	0.0%
87625	Vaviquinia	Mausako Aggregate Catchment	324	324	100.0%	0	0.0%	0	0.0%	0	0.0%
87626	Vaviquinia	Morae River Catchment	53	49	92.5%	2	3.8%	2	3.8%	0	0.0%
		Totals Maubara AP	**4,003**	**3,830**	**95.7%**	**51**	**1.3%**	**73**	**1.8%**	**49**	**1.2%**

Tabela 63. Uma iha Risko ba Rai-halai iha PA Maubara



MAPA- 32. Mapa Risko Rai-halai: Posto Administrativo Maubara

Figura 41 – Rai-halai boot iha area risko ás. Suco Guiço, Kaptasaun Mota Lois

Figura 42 – Terraço atu haforsa no redus rai-naruk iha rai-lolo no atu nunee hamenus ameasa ba Estrada husi rai-halai no erosaun. Suco Gugleur,

Suco -Catchment Code	*Suco* -Catchment		Total Length of Roads (Km)	Length of Road in Each Landslide Risk Category							
				No Risk		Low Risk		Medium Risk		High Risk	
				Km	%	Km	%	Km	%	Km	%
82401	Gugleur	Babono River Catchment	0.0								
82404	Gugleur	Bautu River Catchment	1.2	1.2	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
82417	Gugleur	Kaikasa Aggregate Catchment	6.2	5.8	93.9%	0.0	0.0%	0.2	3.8%	0.1	2.2%
82422	Gugleur	Lois River Catchment	8.2	7.7	94.6%	0.2	2.5%	0.2	2.5%	0.0	0.4%
82426	Gugleur	Morae River Catchment	8.1	6.6	82.1%	1.0	12.0%	0.3	3.5%	0.2	2.5%
82522	Guiço	Lois River Catchment	14.1	13.8	97.2%	0.0	0.1%	0.4	2.7%	0.0	0.0%
84122	Lissadila	Lois River Catchment	16.9	16.5	97.6%	0.2	1.2%	0.1	0.6%	0.1	0.7%
85001	Maubaralissa	Babono River Catchment	1.5	1.4	92.5%	0.1	4.1%	0.1	3.4%	0.0	0.0%
85022	Maubaralissa	Lois River Catchment	4.9	4.3	87.4%	0.3	6.1%	0.3	5.7%	0.0	0.8%
87404	Vatuboro	Bautu River Catchment	0.3	0.3	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
87422	Vatuboro	Lois River Catchment	9.4	9.4	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
87431	Vatuboro	Sanakiana Aggregate Catchment	13.7	9.6	69.9%	0.6	4.3%	2.6	19.4%	0.9	6.4%
87501	Vatuvou	Babono River Catchment	1.5	1.3	87.1%	0.0	0.5%	0.2	12.4%	0.0	0.0%
87502	Vatuvou	Batubeleter Aggregate Catchment	1.8	1.8	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
87506	Vatuvou	Boro River Catchment	0.4	0.4	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
87518	Vatuvou	Katehuleha Aggregate Catchment	1.1	1.1	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
87522	Vatuvou	Lois River Catchment	4.5	4.4	98.9%	0.0	0.7%	0.0	0.0%	0.0	0.5%
87524	Vatuvou	Sia Maubara Aggregate Catchment	6.3	6.1	96.0%	0.0	0.2%	0.2	3.8%	0.0	0.0%
87528	Vatuvou	Paloa River Catchment	0.4	0.4	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
87529	Vatuvou	Pulapu River Catchment	1.6	1.1	67.5%	0.4	22.4%	0.0	0.0%	0.2	10.0%
87601	Vaviquinia	Babono River Catchment	2.6	2.5	96.0%	0.0	1.2%	0.1	2.8%	0.0	0.0%
87624	Vaviquinia	Sia Maubara Aggregate Catchment	3.2	3.1	98.3%	0.0	0.0%	0.1	1.7%	0.0	0.0%
87625	Vaviquinia	Mausako Aggregate Catchment	5.4	5.4	100.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
87626	Vaviquinia	Morae River Catchment	2.2	2.0	90.3%	0.1	5.4%	0.1	4.3%	0.0	0.0%
		Totals Maubara AP	**115.6**	**106.2**	**91.9%**	**2.9**	**2.5%**	**4.8**	**4.2%**	**1.6**	**1.4%**

Tabela 64. Estrada iha risko ba Rai-halai iha PA Maubara

Risko Erosaun iha Posto Administrativo Maubara

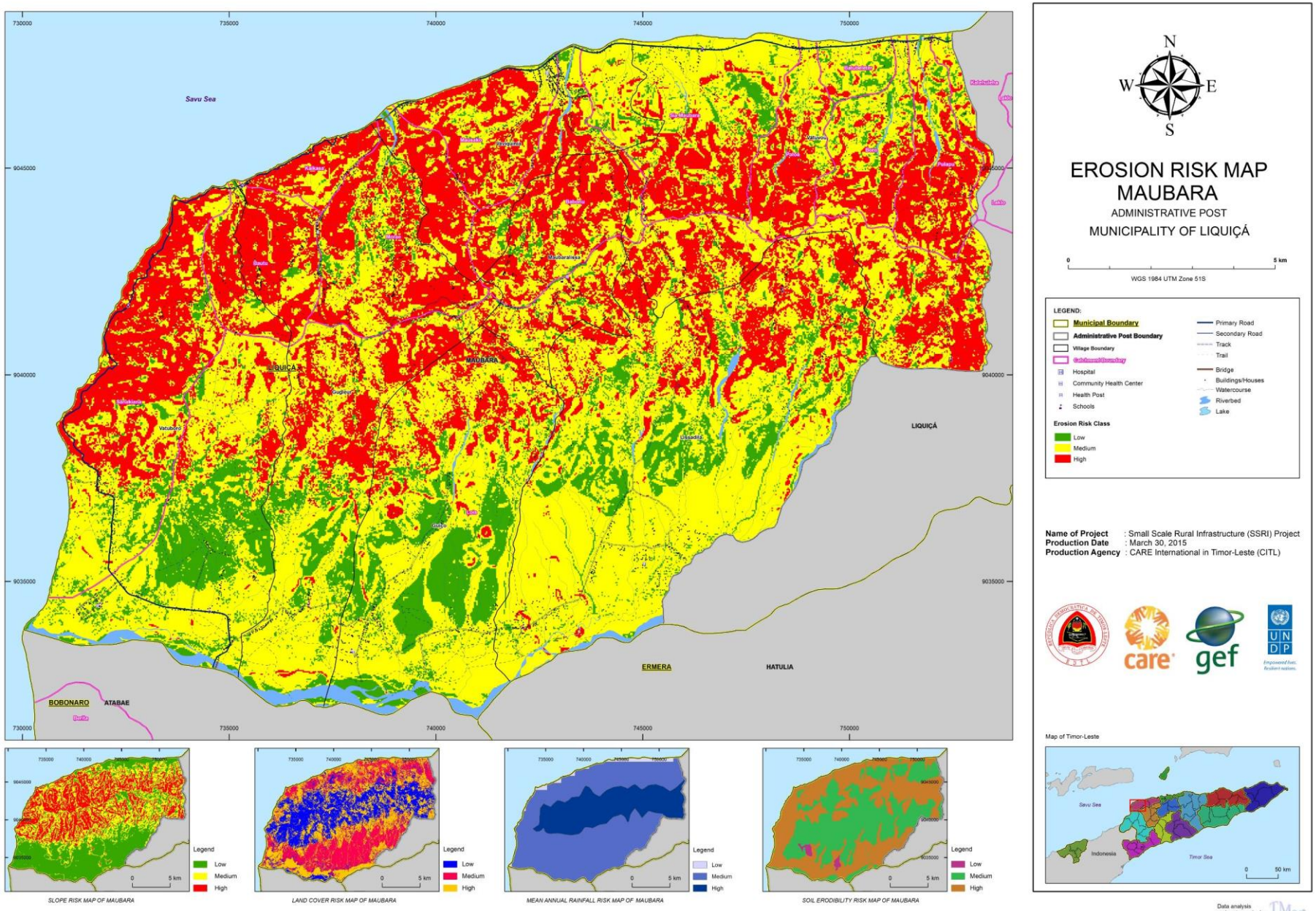
Iha komum ho PA 2 seluk iha Municipio Liquiça, maioria iha PA Maubara neebe mak konsidera atu iha risko mediu no risko-ás ba erosaun solu. Distribuisaun padraun ba risko erosaun besik liu hanesan lalenok ba rai-halai no diskote ona iha sesaun passado. Potensia ás ba erosaun mak iha rai naruk, rai-lolo hasoru norte iha parte PA norte no oeste. Erosaun mos hanesan potensia problema iha sul, maibe jeralmente ameasa nee naton kompara area sira seluk. Husi total area rai hektar 26,394, hektar 3,686 (14.0%) neebe mak konsidera risko naton ba erosaun, hektar 14,640 (55.5%) mak konsidera risko mediu no hektar 8,068 (30.5%) konsidera risko as.

Figura 43 – sedimentasaun mak'as tun iha Mota Lois Evidensia substansia erosaun iha kaptasaun-as. Suco Vatuboro, Kaptasaun Mota Lois

Hanesa hatudu iha Mapa 32, area sira ho risko-as mak konsidera rai-lolo ba iha parte norte relativamente iha kaptasaun kiik iha norte no oeste. Iha kaptasaun Pulapu, Boro, Paloa no Sia Maubara, iha diferente ida klaru neebe mak halo entre iha rai-naruk, vegetasaun esparse liu iha rai-lolo husi kaptasaun neebe as, neebe mak potensia ba erosaun as-liu, rai-lolo kaber naton tun ba iha kaptasaun, iha neebe ameasa mos naton. Ba iha oeste, maske, erosaun seriu liu fo ameasa iha parte kaptasaun sira hotu, 5 husi sira iha 50% sira iha zona risko as. Ida nee inkluindo Bautu ho hektar 566 (64%), Kaikasa ho hektar 183 (62%), Pulapu ho hektar 390 (56%), Morae ho hektar 884 (54%), no Mausako ho hektar 410 (53%). Maske Kaptasaun Mota Lois iha area boot neebe iha risko ba erosaun ho hektar 2,907, nee representa 19% deit husi parte area husi kaptasaun neebe ligasaun entre PA Maubara.

				Area of Land in Each Erosion Risk Category					
Suco -Catchment			Total	Low Risk		Medium Risk		High Risk	
Code	*Suco* -Catchment		Hectares	Hectares	%	Hectares	%	Hectares	%
82401	Gugleur	Babono River Catchment	11	0	1.2%	7	58.0%	5	40.8%
82404	Gugleur	Bautu River Catchment	545	12	2.2%	163	29.8%	370	68.0%
82417	Gugleur	Kaikasa Aggregate Catchment	295	2	0.7%	110	37.4%	183	62.0%
82422	Gugleur	Lois River Catchment	2,273	375	16.5%	1,325	58.3%	574	25.2%
82426	Gugleur	Morae River Catchment	1,132	83	7.4%	503	44.5%	545	48.2%
82522	Guiço	Lois River Catchment	3,317	934	28.2%	1,918	57.8%	465	14.0%
84122	Lissadila	Lois River Catchment	5,495	793	14.4%	3,854	70.1%	848	15.4%
85001	Maubaralissa	Babono River Catchment	765	36	4.6%	296	38.7%	433	56.6%
85022	Maubaralissa	Lois River Catchment	487	30	6.1%	292	59.9%	166	34.1%
87404	Vatuboro	Bautu River Catchment	336	14	4.2%	125	37.4%	196	58.4%
87422	Vatuboro	Lois River Catchment	2,350	731	31.1%	1,440	61.3%	179	7.6%
87431	Vatuboro	Sanakiana Aggregate Catchment	2,133	181	8.5%	918	43.0%	1,034	48.5%
87501	Vatuvou	Babono River Catchment	79	4	4.5%	40	50.7%	36	44.8%
87502	Vatuvou	Batubeleter Aggregate Catchment	238	51	21.5%	169	71.0%	18	7.4%
87506	Vatuvou	Boro River Catchment	651	70	10.8%	343	52.7%	238	36.6%
87518	Vatuvou	Katehuleha Aggregate Catchment	158	13	8.5%	98	61.7%	47	29.7%
87522	Vatuvou	Lois River Catchment	1,491	49	3.3%	766	51.4%	675	45.3%
87524	Vatuvou	Sia Maubara Aggregate Catchment	1,374	132	9.6%	815	59.3%	427	31.0%
87528	Vatuvou	Paloa River Catchment	621	36	5.9%	285	45.9%	300	48.2%
87529	Vatuvou	Pulapu River Catchment	696	34	4.9%	273	39.2%	390	56.0%
87601	Vaviquinia	Babono River Catchment	439	40	9.2%	202	45.9%	197	44.8%
87624	Vaviquinia	Sia Maubara Aggregate Catchment	313	30	9.6%	249	79.7%	34	11.0%
87625	Vaviquinia	Mausako Aggregate Catchment	771	23	2.9%	338	43.8%	410	53.2%
87626	Vaviquinia	Morae River Catchment	423	13	3.0%	111	26.3%	299	70.8%
		Totals Maubara AP	**26,394**	**3,686**	**14.0%**	**14,640**	**55.5%**	**8,068**	**30.6%**

Tabela 65. Area Rai iha Risko ba Erosaun iha PA Maubara



MAPA- 33. Mapa Risko Erosaun: Posto Administrativo Maubara

Karateristiko ida neebe mais notavel ba distribusaun infra-estrutura iha PA Maubara katak infra-estrutura ituan liu neebe mak hetan iha area sira ho risko naton ba erosaun. Kuaze 93% husi uma sira, 86% husi Estrada no 85% husi eskola sira no fasiidade saude mak konstrui iha rai neebe mak konsidera atu hetan potensia risko mediu no as ba erosaun. Laos nee deit mai hamosu ameasa ba estabilidade ba estrutura nee rasik, maibe ida nee mos fo influensia ba fornesemento be-mos domestika, abilidade kanal drainajem atu lori-be husi rai ba tasi, funsaun proprio husi kanal sira, lori-sai, odamatan-be, barajem no estrutura kontrolu-be sira seluk neebe forma iha parte irigasaun no Sistema drainajem. Sistema hirak nee partikularmente importante ba iha area hamoris-haré iha norte husi mota ninin husi Mota Lois no Luaveli.

Figura 44 – Inundasaun habelar-an kauza erosaun no depozita sedimentasaun, estraga Estrada no infra-estrutura seluk. Suco Guiço, Kaptasaun Mota Lois

Figura 45 – Erosaun grave iha rai-lolo ho hamís, solu friavel no kovre vegetasaun. Suco Vatuboro, Kaptasaun Agregando Sanakiana

Figura 42 – Gabion sira hodi proteze natar, Sistema irrigasaun, uma, eskola no klinika saude husi erosaun mota. Suco Vatuboro Suco, Kaptasaun Mota Lois

Suco - Catchment Code	*Suco* -Catchment		Total No. of Houses	Houses in Each Erosion Risk Category						Total Length of Roads	Length of Road in Each Erosion Risk Category					
				Low Risk		Medium Risk		High Risk			Low Risk		Medium Risk		High Risk	
				Number	%	Number	%	Number	%		Km	%	Km	%	Km	%
82401	Gugleur	Babono River Catchment	0							0.0						
82404	Gugleur	Bautu River Catchment	146	2	1.4%	81	55.5%	63	43.2%	1.2	0.1	12.4%	0.9	76.8%	0.1	10.8%
82417	Gugleur	Kaikasa Aggregate Catchment	50	1	2.0%	35	70.0%	14	28.0%	6.2	0.0	0.4%	2.7	43.3%	3.5	56.4%
82422	Gugleur	Lois River Catchment	207	25	12.1%	125	60.4%	57	27.5%	8.2	1.0	12.1%	5.5	67.8%	1.6	20.1%
82426	Gugleur	Morae River Catchment	324	47	14.5%	151	46.6%	126	38.9%	8.1	0.8	10.4%	3.3	41.1%	3.9	48.5%
82522	Guiço	Lois River Catchment	298	52	17.4%	223	74.8%	23	7.7%	14.1	3.3	23.4%	9.6	67.7%	1.3	9.0%
84122	Lissadila	Lois River Catchment	759	54	7.1%	500	65.9%	205	27.0%	16.9	2.7	16.0%	11.6	68.5%	2.6	15.6%
85001	Maubaralissa	Babono River Catchment	154	9	5.8%	77	50.0%	68	44.2%	1.5	0.2	16.0%	0.9	60.1%	0.4	24.0%
85022	Maubaralissa	Lois River Catchment	121	20	16.5%	60	49.6%	41	33.9%	4.9	0.6	13.1%	2.7	54.6%	1.6	32.4%
87404	Vatuboro	Bautu River Catchment	59	2	3.4%	36	61.0%	21	35.6%	0.3	0.0	10.9%	0.3	86.0%	0.0	3.1%
87422	Vatuboro	Lois River Catchment	250	55	22.0%	192	76.8%	3	1.2%	9.4	2.1	22.8%	7.3	77.2%	0.0	0.0%
87431	Vatuboro	Sanakiana Aggregate Catchment	191	17	8.9%	97	50.8%	77	40.3%	13.7	0.5	3.3%	4.6	33.6%	8.6	63.1%
87501	Vatuvou	Babono River Catchment	8	1	12.5%	3	37.5%	4	50.0%	1.5	0.2	10.1%	0.9	60.9%	0.4	29.0%
87502	Vatuvou	Batubeleter Aggregate Catchment	42	6	14.3%	36	85.7%	0	0.0%	1.8	0.1	5.4%	1.7	92.9%	0.0	1.7%
87506	Vatuvou	Boro River Catchment	81	6	7.4%	69	85.2%	6	7.4%	0.4	0.0	0.0%	0.4	100.0%	0.0	0.0%
87518	Vatuvou	Katehuleha Aggregate Catchment	54	2	3.7%	36	66.7%	16	29.6%	1.1	0.3	26.9%	0.8	73.1%	0.0	0.0%
87522	Vatuvou	Lois River Catchment	179	9	5.0%	73	40.8%	97	54.2%	4.5	0.1	2.9%	2.6	59.0%	1.7	38.1%
87524	Vatuvou	Sia Maubara Aggregate Catchment	254	6	2.4%	225	88.6%	23	9.1%	6.3	0.6	8.9%	5.3	83.8%	0.5	7.3%
87528	Vatuvou	Paloa River Catchment	47	2	4.3%	35	74.5%	10	21.3%	0.4	0.1	12.2%	0.4	87.8%	0.0	0.0%
87529	Vatuvou	Pulapu River Catchment	152	6	3.9%	60	39.5%	86	56.6%	1.6	0.1	6.2%	0.8	45.9%	0.8	47.9%
87601	Vaviquinia	Babono River Catchment	195	15	7.7%	140	71.8%	40	20.5%	2.6	0.5	19.0%	1.9	72.6%	0.2	8.3%
87624	Vaviquinia	Sia Maubara Aggregate Catchment	55	2	3.6%	51	92.7%	2	3.6%	3.2	0.2	6.1%	2.9	91.3%	0.1	2.6%
87625	Vaviquinia	Mausako Aggregate Catchment	324	15	4.6%	254	78.4%	55	17.0%	5.4	0.5	9.8%	4.2	77.4%	0.7	12.8%
87626	Vaviquinia	Morae River Catchment	53	0	0.0%	36	67.9%	17	32.1%	2.2	0.1	5.0%	1.1	51.5%	1.0	43.5%
		Totals Maubara AP	**4,003**	**354**	**8.8%**	**2,595**	**64.8%**	**1,054**	**26.3%**	**115.6**	**14.2**	**12.3%**	**72.3**	**62.6%**	**29.0**	**25.1%**

Tabela 66. Uma no Estrada sira iha risko ba erosaun iha PA Maubara

Suco -Catchment Code	*Suco* -Catchment		Total No. of Schools	Schools in Each Erosion Risk Category						Total No. of Health Facilities	Health Facilities in Each Erosion Risk Category					
				Low Risk		Medium Risk		High Risk			Low Risk		Medium Risk		High Risk	
				Number	%	Number	%	Number	%		Number	%	Number	%	Number	%
82401	Gugleur	Babono River Catchment	0							0						
82404	Gugleur	Bautu River Catchment	3	0	0.0%	2	66.7%	1	33.3%	0						
82417	Gugleur	Kaikasa Aggregate Catchment	0							0						
82422	Gugleur	Lois River Catchment	1	0	0.0%	1	100.0%	0	0.0%	0						
82426	Gugleur	Morae River Catchment	2	2	100.0%	0	0.0%	0	0.0%	1	0	0.0%	1	100.0%	0	0.0%
82522	Guiço	Lois River Catchment	1	0	0.0%	1	100.0%	0	0.0%	1	0	0.0%	1	100.0%	0	0.0%
84122	Lissadila	Lois River Catchment	2	0	0.0%	1	50.0%	1	50.0%	1	0	0.0%	1	100.0%	0	0.0%
85001	Maubaralissa	Babono River Catchment	0							0						
85022	Maubaralissa	Lois River Catchment	1	1	100.0%	0	0.0%	0	0.0%	1	0	0.0%	0	0.0%	1	100.0%
87404	Vatuboro	Bautu River Catchment	0							0						
87422	Vatuboro	Lois River Catchment	2	0	0.0%	2	100.0%	0	0.0%	1	0	0.0%	1	100.0%	0	0.0%
87431	Vatuboro	Sanakiana Aggregate Catchment	1	0	0.0%	0	0.0%	1	100.0%	0						
87501	Vatuvou	Babono River Catchment	0							0						
87502	Vatuvou	Batubeleter Aggregate Catchment	0							0						
87506	Vatuvou	Boro River Catchment	0							0						
87518	Vatuvou	Katehuleha Aggregate Catchment	0							0						
87522	Vatuvou	Lois River Catchment	1	0	0.0%	0	0.0%	1	100.0%	0						
87524	Vatuvou	Sia Maubara Aggregate Catchment	2	0	0.0%	2	100.0%	0	0.0%	0						
87528	Vatuvou	Paloa River Catchment	0							0						
87529	Vatuvou	Pulapu River Catchment	1	0	0.0%	1	100.0%	0	0.0%	1	1	100.0%	0	0.0%	0	0.0%
87601	Vaviquinia	Babono River Catchment	2	0	0.0%	1	50.0%	1	50.0%	0						
87624	Vaviquinia	Sia Maubara Aggregate Catchment	0							0						
87625	Vaviquinia	Mausako Aggregate Catchment	1	0	0.0%	1	100.0%	0	0.0%	1	0	0.0%	1	100.0%	0	0.0%
87626	Vaviquinia	Morae River Catchment	0							0						
		Totals Maubara AP	**20**	**3**	**15.0%**	**12**	**60.0%**	**5**	**25.0%**	**7**	**1**	**14.3%**	**5**	**71.4%**	**1**	**14.3%**

Tabela 67. Eskola no Fasilidade Saude sira iha Risko ba Erosaun iha PA Maubara

3.0 Klimatika Vulnerabilidade no Analiza Kapasidade (KVAK)

3.1 Objetivu

Objeitivo final husi projeito nee mak atu iha vizaun komprensivu iha neebe komunidade mak sofre ba risko husi mudansa klimatika induzado dizastre natural: inundasaun, rai-halai, no erosaun. Liu-husi exame dadus GIS no KVAK komunidade, ita sei iha imajem inkluzivu husi saida mak mosu iha kada suco, no sei bele fo sujestaun apropriado atu responde. KVAK mak xave feramento hodi assessu mudansa klimatika, no mos involve no hasae kapasidade no propriadade komunidade; CARE nia abordajem ba adaptasaun mudansa klimatika mak fundamento ba konhesemento katak ema tenki investe hodi transforma no asegura sira nia direito no meios ba moris.

Objeitivo prinsipal husi KVAK nee mak:

Analiza vulnerabilidade ba mudansa klimatika no kapasidade adaptivu iha nivel komunidade: halibur, organiza no analiza informasaun konaba vulnerabilidade no kapasidade adaptivo husi komunidade sira, uma-kain no individual sira. KVAK nee modelu fornese matadalan no feramento ba peskiza partisipatoriu komunidade baze, analiza no aprendisajem.

Kombina ho konhesemnto komunidade no dadus sientifiko atu hamosu komprendesaun neebe diak konaba impakto lokal husi mudansa klimatika: dizafiu ida mak servisu iha nivel lokal konaba adaptasaun mudansa klimatika mak menus informasaun iha nivel-micro konaba impakto. Nee kombinado ho dadus la adequada no informasaun konaba klima no predisaun klimatika. Prosesu husi halibur no analiza informasaun ho komunidade servi hodi konstrui konhesemento lokal konaba kestaun klimatika no estratejia apropriado atu adapta. Excersiziu partisipatoriu no diskusaun assosiado fornese oportunidade hodi liga konhesemento komunidade ba informasaun sientifiko neebe mak disponivel konaba mudansa klimatika. Nee sei tulun interessadas lokal atu komprende implikasaun sira husi mudansa klimatika ba sira nia meios ba moris, atu nunne sira bele analiza risko no planu ba adaptasaun.

Figura 43: Halao KVAK iha iha Suco Lauhata, Municipio Liquiça

3.2 Metodolojia

Metodolojia ba Klimatika Vulnerabilidade no Analiza Kapasidade (KVAK) tulun ita atu komprende implikasaun sira husi mudansa klimatika ba moris no meios ba moris ba ema neebe ita servi. Abordajem nee servisu ho komunidade atu komprende sira nia susceptibilidade ba risko klimatika, nunee mos komprende sira nia prioriadades no exposizaun ba risko hirak nee. Liu-husi kombina konhesemento lokal no esperiensia ho dadus sientifko neebe halibur iha paralelo ho Analiza GIS, resultado nee klaru ba imajem jeral ba vulnerabilidade. Prosesu nee mos konstrui ema nia komprendesaun konaba risko klimatika no estratejia adaptasaun. Nee fornese enkuadramento servisu ba dialogu entre komunidade sira, nunee mos entre komunidade no interessada seluk. Resultado nee fornese fundasaun solida ba identifikasaun estratejia prátika hodi fasilita adaptasaun komunidade baze ba mudansa klimatika. Nee fornese kontekstual ideal hodi analiza atu nunee hodi foti passu tuir mai no dezemvolve aldeia (ka komunidade) planu aksaun resiliente hodi fasilita komunidade atu konsidera potensia jere no mekanismo prevensaun no planu oinsa sira sei mitiga risko hirak nee no konstrui sira nia resilienzia hotu tanto liu-husi buka apoio husi external maibe mos liu-husi sira nia inisiativa rasik.

Metodolojia KVAK nee adopta ona atu halibur no analiza informasaun hodi dezenha inisiativa sira ba adaptasaun mudansa klimatika, nunee mos atu integra kestaun adaptasaun mudansa klimatika ba iha aktividade sira ba meios buka moris no manutensaun no hadiak infra-estrutura, prioritize ida nee hanesan pontus hahu durante iha faze diferente ba iha KVAK, infra-estrutura iha suco sai hanesan topiku prinsipal iha sessaun partisipatorio sira hotu.

Dadus iha nivel suco koletado liu-husi workshop KVAK iha neebe inkluindo ba iha parte aktividade workshop no Ekipa Foko Diskusaun. Dadus sira hotu disagregados liu-husi jenero no implementado husi fasilitador kampo neebe formado, iha konsultasaun ho chefe suco no ekipa EVAS, liu husi ekipa foko diskusaun no aktividade workshop partisipatorio hanesan deskreve iha okos. Metodolojia nee fasilta lider suco no planeador komunidade hodi komprende diak ba prosessu nee no atu bele hatán sira nia nesesidade ba populasaun vulneravel hodi halo mudansa ba sira nia ambiente. Resultado husi worshop iha neebe apresenta ba komunidade atu verifika dadus. Nee importante atu nota katak ema nia presepsaun ba risko sei sempre subjetivo tamba tempo no lokalizasaun, exemplo, sekarik inundasaun mosu iha komunidade foin-lalais nee komunidade sempre konsidera hanesan risko boot ida, maske ida nee hanesan inundasaun dahuluk neebe akontese iha area nee. Hanesan aktividade mapamento GIS neebe halao iha fatin simultaneamente, dadus ida nee la apresenta ba komunidade, maske nunee halao prosesu tuir dalan ida nee iha vantajem atu la influensia responde komundade imajem neebe exato liu ba komunidade nia presepsaun no prioridades. Kada komunidade nia responde ba risko mudansa klimatika desviada ituan bazea ba tipo disaster neebe dala barak fo impakto ba sira, maske nunee ami mos husu ba komunidade atu hatete mai ami konaba disastre neebe akontese frequentamente, hodi nota katak mapa komunidade konaba infras-estrutura ida nebe mak moioria iha risko husi disaster natural.

Mane no feto, iha mundo tomak, iha diferensia prioridades – tamba nee dadus nee disagregado liu-husi jenero, no ami husu mos ba feto no mane hodi produs mapa komunidade neebe diferente. Ida nee sei premite fasilitador sira atu hare iha neebe mak paralelo entre mane no feto nia presepsaun husi ameasa, no premite kada jenero atu hasai sira nia prekupasaun partikular ba sira nia prioridades. Ida neebe mos atu asegura katak feto sira mos espresa sira nia hanoin, iha neebe mak importante normas tipiko jenero iha Timor-Leste iha neebe feto la espera atu koalia-sai iha enkontro sira.

Mapa sira GIS konsidera risko ba mudansa klimatika induzado bazea ba disastre natural konaba probalidade neebe mosu ba sira, bazea ba topografia husi rai. Komunidade hare nee risko tendensia natural husi eventos historiko, gravidade husi impakto no infra-estrutura sira afeitado. Exemplo, sekarik rai-halai mosu kada

tinan maibe iha area rai ida ho laiha infra-estrutura vital, komunidade mak menos provavel atu hare inundasaun hanesan risko boot. Sekarik inundasaun ida akontese iha tinan kotuk no estraga sira nia ai-han no Estrada, sira sempre hare inundasaun sira hanesan risko prinsipal ba sira nia komunidade, maske nunee ida neebe akontese ona. Fasilitador husi KVAK nee la fo kompleta definisaun tekniko ba iha tipo diferensia risko ka pregos hanesan nivel husi konhesemento tekniko nee kompleksu liu ba workshop loron ida no sei sempre diskorajem ba membro komunidade husi involvimento.

Dalan importante ida ba prosesu KVAK nee diferente husi workshop iha passado neebe mak halao iha nivel suco, kompara iha Aldeia, iha neebe kovre signifikamente area geografika boot entre kada workshop. CARE international mos planeado workshop iha sub-distrito atu apoio identifikasaun no prioritizasaun, maibe iha konsultasaun ho authoridade sira dehan katak sira la nesesaria hanesan sira iha ona informasaun neebe presiza.

Prosesu KVAK nee la direita; mapamento GIS nee hamosu iha paralelo ho workshop KVAK no workshop nee rasik atu dezemvolve organikamente. Ida nee xave prioridade ba fasilitador sira atu premite komunidade hodi informa ami konaba sira nia prioridade rasik no presepsaun konaba risko; nee mos premite tempo atu iha diskusaun, no depende ba fasilitador atu akto hanesan guia ida, duke aselera ida nee. Partisipatoriu dahat ba Avaliasaun Feramento Rural (AFR) neebe mak uza iha workshop nee parte ekipa foko diskusaun atu koleta informasaun relasiona ba situasaun passado no agora-nian konaba meios ba moris, temporada no rekursu natural:

- Mapamento Perigos
- Kalendario Sazonal
- Lina do tempo historiko
- Matric Vulnerabilidade

Ba diskrisaun ba uzo feramento hirak nee favour hare iha anekso 2.

3.2.2 Kriterio Seleksaun ba lokalizasaun KVAK

Enkontro partisipatoriu ida organiza husi pesoal PNUD SSRI hodi determina kriteria selesaun ba area rural neebe mak inkluindo, numero populasaun, infra-estrutura, nivel risko klimatika, nivel no eskala lokalizasaun, presenza parseiro dezemvolvimento sira no presenza ka ausência husi Jestaun Risko Natural Baze Komunidade (JRNBK) ekipa inisiativa. Selesaun nee mos konsidera fasilitador nia rekomendasaun bazea ba sira nia esperiensia halao programa dezemvolvimento iha area sira nee.

Lokalizasaun sitiu sira nee selesionado bazea ba iha prinsipio hitu husi kriteria detailhada qualitative no quantititivo, hanesan hatudu iha tabela 68.

Kriteriu Selesaun	Detailhada	Guia
Area rural	Foko KVAK sei servisu iha lokalizasaun rural, no sei la inkluindo sitiu urbana sira neebe besik iha centro municipio.	Area rural sira sei selesionado
Numero populasaun	Populasaun sei sai fator ida iha prosesu selesaun ho populasaun numero-as sei favoreçe; ida nee sei positivamente korelata ho parte rua presiza infra-estrutura no nivel degradasaun ambiental (ho numero populasaun iha ligado ho presiza infra-estrutura barak no nivel degradasaun ás)	Area sira neebe selesionado sei iha numero populsaun ás

Kriteriu Selesaun	Detailhada	Guia
	Selesaun sei tahu konta ba infra-estrutura neebe existe, liu-liu infra-estrutura rural eskala kiik (SSRI); nee sei inkluindo ida neebe infra-estrutura balu deit maibe presiza ás; iha neebe selesaun posivel ho mos fator planu ba hasae infra-estrutura iha futuru; prosesu KVAK sei hare atu determina nivel husi komprimiso ho interassada dezemvolvimento sira no nivel investemento iha area	Area selesionado sei iha entertanto presenza as husi SSRI ka presenza naton agora nee, maibe ho presiza neebe ás, no planu signifikante infra-estrutura foun iha futuru mai
Nivel risko klimatika	Ida nee sei hare ba iha xave risko inkluindo rai-halai, inundasaun no erosaun; nee sei identifika liu-husi mapamento GIS no validade husi verifikasaun kruzada ho xave informador/membro komunidade sira; dala ida tan fator nee espera ho positivamente korelata ho degradasaun ekosistema	Area selesionado sira sei inkluindo lokalizasaun iha neebe aserka ho risko klimatika ás. Lokalizasaun konsiderado iha neebe nivel husi risko klimatika hatudu 50% ba leten
Nivel no eskala husi lokalizasaun	Nivel komprimiso ba prosesu KVAK nee sei lori ba iha konta geografika no foko demografika no potensia ba partisipasaun; exemplo ida iha neebe komunidade disperse mak prosesu KVAK nee sei foko iha aldeia, iha neebe komunidade barak populado prosesu KVAK nee sei foko ba iha nivel vila/suco; prosesu KVAK nee sei hare atu determina nivel sira ba aktividade iha JRNBK on ekipa aktividade sira seluk	Area selesionado sei minimiza potensia ba komprimiso komunidade iha prosesu KVAK nee
Presenza husi parseiro dezemvolvimento	Presenza husi autores diferente iha programa dezemvolvimento komunidade hanesan dezemvolvimento infra-estrutura, inisiativa jestaun ambiental nst.	Inisialmente kolheta informasaun husi chefe suco no depois halo analiza durante workshop KVAK
Presenza ka ausensia husi JRNBK	Presenza ka ausensia husi JRNBK inisiativa, hanesan kuda-ai horis ko agro floresta	Inisialmente kolheta informasaun husi chefe suco no depois halo analiza durante workshop KVAK

Tabela 68: Selesaun Kriteria

3.2.3 Lista final husi Lokalizasaun

Preparasaun ba inplementasaun KVAK nee, inisialmente ekipa halo lista-badak ida ba lokalizasaun 30 atu partisipa iha prosesu KVAK nee mak Municipio Liquiça, Ermera no Baucau. Prosesu selesaun neebe mak kompleta liu-husi faze rua. Faze dahuluk kovre sitiu sanulu; sitiu hirak nee hili rasik husi projeito UNDP SSRI hanesan sira iha ona relasaun servisu neebe mak existe ho sira. Sitiu hirak nee foko liu ba iha relasiona kestaun mudansa klimatika hanesan iha area projeito sira afeitado husi bai-loro naruk, rai-halai, be, irigasaun-kiik no Estrada rural kiik.

Iha faze daruak, inisialmente suco 20 neebe mak listado. Maske nunee, tamba presiza neebe mak prioritize iha area remotas, ida neebe maioria iha risko no tamba dizafiu rekursu finalmente 16 neebe mak selesionado. Selesionado hirak nee bazea ba konsiderasaun husi kriteria qualitativo no quantitative hitu neebe mak apresentado iha tabela 68 iha leten atu nunee bele deside lokalizasaun neebe maioria vulneravel ba risko assosiado ho infra-estrutura kiik. Iha ikus, workshop KVAK nee halao ona iha 23 husi lokasi 26 neebe selesionado. Workshop KVAK nee la halao iha area selesionado 3 tamba kestaun seguransa iha municipio Baucau.

No	Municipio	Posto Administrativo	Suco	Notas
1	Liquica	Maubara	Maubaralisa	Faze dahuluk
2	Liquica	Maubara	Lisadila	Faze dahuluk
3	Baucau	Baucau vila	Gariwai	Faze dahuluk
4	Baucau	Baucau vila	Bahu	Faze dahuluk
5	Baucau	Vemasse	Ossoala	Faze dahuluk
6	Baucau	Quelicai	Lacoliu	Faze dahuluk
7	Ermera	Ermera	Ailelo	Faze dahuluk
8	Ermera	Ermera	Talimoro	Faze dahuluk
9	Ermera	Ermera	Leguimia	Faze dahuluk
10	Ermera	Hatolia	Leimia-Craic	Faze dahuluk
11	Baucau	Quelicai	Laisorolai de Cima	La kompleta (seguransa)
12	Baucau	Quelicai	Maluro	La kompleta (seguransa)
13	Baucau	Quelicai	Laisorolai de Baixo	La kompleta (seguransa)
14	Ermera	Ermera	Ponilala	Faze daruak
15	Ermera	Ermera	Mirtutu	Faze daruak
16	Ermera	Ermera	Lauala	Faze daruak
17	Ermera	Ermera	Estado	Faze daruak
18	Ermera	Ermera	Raimerhei	Faze daruak
19	Ermera	Hatolia	Coliate-Leotelo	Faze daruak
20	Ermera	Hatolia	Lemia Sorimbalu	Faze daruak
21	Liquiça	Bazartete	Fatumasi	Faze daruak
22	Liquiça	Bazartete	Metagou	Faze daruak
23	Liquiça	Bazartete	Leorema	Faze daruak
24	Liquiça	Bazartete	Fahilebo	Faze daruak
25	Liquiça	Bazartete	Lauhata	Faze daruak
26	Liquiça	Maubara	Vaviquinia	Faze daruak
27	Liquica	Liquica	Luculai	La selesionado
28	Liquica	Liquica	Acumano	La selesionado
29	Liquica	Liquica	Hatuquessi	La selesionado
30	Liquica	Liquica	Darulete	La selesionado

Tabela 69. Lista husi lokalizasaun ba workshop KVAK

4.0 Analiza Kruza deskovre husi KVAK no mapa GIS

Informasaun qualitativo kolheta durante KVAK nee analizado no kombinado ho faktos neebe mak hetan husi estudo mapamento tekniku risko. KVAK halao ona iha area prinsipal alvu ba projeito neebe iha perigos boot ba ambiental, risko, impakto no esperiensia mekanismo jere no implementado husi feto no mane ba iha sira nia rekurso maior meios ba moris.

Analiza tuir mai konsidera ba perigo tolu – inundasaun, erosaun no rai-halai – no sira nia impakto ba infra-estrutura iha neebe informasaun relevante disponivel, kombina faktos husi risko ba eksposizaun analiza sira jenerado husi mapa sira GIS no faktos maior husi resultado workshop, inkluindo mekanismo jere. Liu-husi sesaun nee ami uza tabela tolu atu nunee efikas-liu hatudu ami nia resultado nee. Ba ida dahuluk nee hanesan fo fiskalizasaun ida tantu rai-halai, erosaun no inundasaun mak hanesan kestaun ida iha suco tomak; resultado husi GIS neebe mak hatudu iha presentajem no responde komunidade neebe klasifikado entre 0 – 3, 0 neebe laiha risko no 3 neebe extremu-liu risko-ás. Tabela daruak hare klean liu tan neebe mak risko iha; espesialmente foko ba iha: Estrada, uma, eskola no centro saude sira. Ami mos inkluindo koluna seluk hanesan ami sempre hetan komunidade nia hanoin konaba ponte hetan risko no sira nia Sistema be – maske nunee ida nee laos ami nia foko relatoriu, ami sente prudente atu rekonhese sira. Hanesan ho Tabela dahuluk, resultado GIS nee hatudu iha presentajem, no resultado KVAK mak entre 0-3, no dependente ba iha faktos. Ba datoluk no tabela final entre sesaun KVAK hatudu tantu dadus KVAK no dadus GIS nee korelata no koresponde, ka tantu resposta nee diferente. Sekarik resultado iha neebe konkordansia, ami hetan nee util tebes atu hakerek iha nivel risko, naton, mediu ka ás, entre iha kaixa. Resultado nee halibur liu-husi mapamento GIS no KVAK sei triangulado entre meta analiza iha ikus husi relatoriu nee no sei informa konaba oinsa hodi hahu ho diak.

Proposta husi analiza nee mak atu hare iha korelasaun direita entre presepsaun komunidade relasionado ba risko mudansa klimatika, no saida mak mapa GIS sira relata hanesan area sira iha risko. Ida nee interesante atu hare parte junta rua husi dadus nee rasik iha parte seluk hanesan ida nee fo hanoin ida ba moris komunidade, no laos deit revela sira nia presepsaun ba risko, maibe mos ba saida sira preserve mak infra-estrutura vital. Mapa GIS hare iha: inundasaun, rai-halai no erosaun, no potensia impakto ba buat tolu hirak nee ba iha: Estrada, uma, eskola no fasilidade saude – resultado KVAK nee hatudu katak komunidade balu sempre la perseve eskola ka centro saude nee sei sai hanesan parte importante husi infra-estrutura. Tamba deit presepsaun neebe diferente ba risko no prioridade, resultado KVAK nee diferente mak'as liu husi Suco ba Suco – ida nee labele hare hanesan falhansu ida, informasaun komunidade mak subjeitivo no mos tenki hare hanesan parte pintura boot ida. Nee interesante bainhira GIS no resultado KVAK forte-liu konkorda ho ida seluk - iha mos evidensia substantiva hodi haforsa presepsaun KVAK no bele informa desizaun ida neebe atu halo ba iha oinsa atu hahu. Area ida neebe iha disharmonia forte entre GIS no resultado KVAK bai-bain indika katak area sei benefisia husi investigasaun profunda.

Nee importante atu nota katak komunidade sira barak mak la esperiensia inundasaun. Inundasaun tipiko, tamba be-sae husi be-dalan lokal, neebe mak refere hanesan inundasaun iha mapa GIS no KVAK EDF – maske komunidade barak relata ida nee laos hanesan problema ida, inundasaun be suli habelar regularmente mosu no hare sei sai prekupasaun maior ba komunidade sira. Prekupasaun ba inundasaun be suli habelar sei mosu iha tekstu kraik kada tabela.

Nee analiza suco husi KVAK no mapa GIS neebe deskovre mak hanesan tuir mai.

Suco Ponilala, Posto Administrativo Ermera, Municipio Ermera

Suco Ponilala, Post Administrativo Ermera, Municipio Ermera

Komparasaun husi Dadus GIS no Presepsaun Komunidade relasiona ba Perigos husi nivel Risko

	Rai-halai	Erosaun Solu	Inundasaun
GIS	Laiha Risko (75%)* naton (6.4%) Med (6.2%) ás (12.4%)	Laiha Risko (0%) naton (0.4%) Med (33.1%) ás (66.5%)	Laiha Risko
KVAK (m)	Med (1.35)**	Naton (0.65)	Laiha Risko
KVAK (f)	Med (1.13)	Med (1.13)	Laiha Risko

*hanesan % husi total iha suco= hektar 847

** hanesan médio klasfiksaun husi presepsaun risko husi matric vulnerabilidade ho maximú klasfikasaun 3

Suco Ponilala, iha parte norte husi PA Ermera, mak rai-naruk no populado barak no kovre area rai hektar 847. Posibilidade ba potensia estragus no perigos eventus katastropiku neebe mak ás. **Rai-lolo vertikais neebe ba** iha mota Gleno mak **la adequado ba konstrusaun ba kualker infra-estrutura.** Komunidade hato'o katak uainhira tempo udan rai-halai mosu regularmente ho referensia ba rai-halai kuaze tinan-tinan komesa 2000. Iha 2014 rai-halai ida mosu halo **estraga rai hektar hat** no hanesan resultado mak afeita plantasaun kafe, Estrada rural 1,5km, natar, cemeterio, konstrusaun eskola, no Sistema fornesemento be iha **Aldeia Hatoposi, Sacoco no Nunupu.** Ekipa feto sira adicionalmente mensiona katak **erosaun** sempre mosu kuaze iha tinan-tinan no maioria afeita tóos, espesialmente iha **Aldeia Sacoco no Nunupu.**

Bazea ba dadus GIS, Suco Ponilala la konsidera atu iha risko ba inundasaun, iha neebe mak valida husi presepsaun komunidade. Maske nunee, komunidade hato'o katak suco nee iha inundasaun be suli habelar iha risko neebe naton. Ekipa mane sira mensiona iha **inundasaun be suli habelar neebe mak akontese iha 2007 iha Aldeia Sacoco, Nunupu, Hatuposi no Eroho,** iha neebe resulta fo destruisaun ba natar, Estrada rural, ponte kiik sira, eskola publiku no uma komunidade governo.

Komparasaun husi Dadus GIS no presepsaun Komunidade bazea ba perigos no infra-estrutura liu-husi nivel risko

	Estrada (Total=8.8km)		Uma (Total=479)		Eskola (Total=2)		Fasilidade Saude (Total=0)		Seluk
	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	KVAK (m/f)
Rai-halai	Laiha Risko (98.2%) Naton (1.8%)	Ás (3.0)/ Ás (3.0)	Laiha Risko (97.9%) Naton (1.5%) Med (0.2%) ás (0.4%)	Med (2.0)/ Naton (1.0)	Laiha risko (100%)	Med (2.0)/ Laiha (0.0)	n/a	n/a	Sistema be, pontes/Sistema be
Erosaun Solu	Med (28.8%) ás (71.2%)	Naton (1.0)/ ás (3.0)	Naton (0.6%) Med (31.5%) Ás (67.8%)	Med (2.0)/ Med (2.0)	Med (50%) Ás (50%)	Laiha Risk (0.0)/ laiha Risko (0.0)	n/a	n/a	Sistema be, pontes/Sistema be
Inundasaun	La konsidera iha risko =>								

Membro komunidade sira realsa katak iha **2014 aproximadamente Estrada 1.5km neebe mak kompletamente diskonekta** no labele asseso husi transporte publiko iha **Aldeia Hatuposi no Nunupu.** Eventos neebe hanesan **afeitado Aldeia Sacoco,** iha neebe kuaze 100m husi Estrada rural signifikante estragos, iha neebe kaixa gabion hatu'ur ba. Reparasaun estrada no konstrusaun infra-estrutura eskala kiik mak nafatin require iha area nee. Membro komunidade bai-bain utiliza material lokal nebe disponivel no servisu voluntario atu halo reparasaun Estrada nebe estragos minor no ponte kiik. Sira mos kuda ai-horis lokal hodi proteze solu husi rai-halai, uza sira nia rekursu rasik no Chefe suco normalmente komunika ho authoridade distrito ba reparasaun boot. Hanesan mekanismo jere hodi mitiga efeitos ba iha uma sira populasaun afeitado bele evakua husi sira nia uma ba iha lokalizasaun neebe seguru no depois koko atu reparasaun ho ajuda husi membro komunidade seluk. Similarmente ba eskola sira, komunidade bai-bain ajuda atu repara estragos minor, maske nunee sekarik estragos mak grave, mak authoridade distrito halo pedido assitensia.

Membro komunidade sira fiar katak iha erosaun solu iha suco nee tamba sira lakon fertilidade solu iha to'os no sedimentasaun iha kanal drainajem no mota-hun (konsekuensia komum husi erosaun solu). Hanesan mekanismo jere komunidade, espesialmente hirak neebe hela besik iha area afeitado, asegura katak parte estragos sira husi estrada bele uza fila fali liu-husi hasai material solu neebe mak blokeado estrada nee. Komunidade sujere implementa inisiativa bio-enjineeria ba iha sitiu area Estrada **iha Suco Sacoco no Hatuposi.**

Vizaun jeral probabilidade risko bazea ba GIS + klasifikasaun Komunidade

	Estrada (Total=8.8km)	Uma (Total=479)	Schools (Total=2)	Fasilidade saude (Total=0)
Rai-halai	La konkorda	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	n/a
Erosaun solu	La konkorda	Konkorda – mediu risko	La konkorda	n/a
Inundasaun	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	n/a

Rekomendassun sira: aldeia prioridade sira iha suco nee mak sei benefisia signifikamente husi planeamento asaun resiliensia tamba risko no preserva risko bazea ba historiko esperiensia inkluindo **Aldeia sira Hatuposi, Nunupu no Sacoco.** Iha mos diskrepansia iha presepsaun komunidade husi risko ba erosaun solu no potensia estratejia risko neebe hasoru hanesan indikado husi mapamento GIS. Atesaun espesifiko ba iha perigos husi erosaun solu no estratejia mitigasaun durante ba resiliensia planeamento asaun mak rekomenda. Nee importante atu nota katak rai-lolo vertikais neebe tun ba iha Mota Gleno mak adequada atu konstruisaun ba kualker infra-estrutura, no presiza nee konsidera durante implementasaun inisiativa saida deit.

Suco Mertutu, Posto Administrativo Ermera, Municipio Ermera

	Rai-halai	Erosaun Solu	Inundasaun
GIS	Laiha Risko (94.5%)* Naton (2.3%) Med (1.3%) Ás (1.9%)	Naton (1.9%) Med (34.5%) Ás (63.6%)	Laiha risko (99.8%) Ás (0.2%)
KVAK (m)	High (3.0)**	Med (2.0)	Med (2.0)
KVAK (f)	High (3.0)	High (3.0)	Med (2.0)

*as % of total in suco= 674 hectares

** as average rating of risk perception through vulnerability matrix with maximum rating 3

Suco Mertutu mak rai-naruk, densamente povoada no intensivamente agrikula. Risko seriu maioria **erosaun solu, maibe iha estrutura xave rua – eskola ida no fasilidade saude ida –nee mak iha risko ás husi erosaun no inundasaun.** Total husi area rai Suco Mertutu mak hektar 714, sira nee hotu Kaptasaun Mota Lois.

	Estradas (Total=10.3km)		uma (Total=644)		Eskolas (Total=3)		Fasilidade Saude (Total=1)		Seluk
	GIS	KVAK (m/f)	GIS	KVAK (m/f)	KVAK (m/f)	KVAK (m/f)	GIS	KVAK (m/f)	KVAK (m/f)
Rai-halai	Laiha risko (88.9%) Naton (4.9%) Med (3.1%) Ás (3.1%)	Med (2.0)/ Naton (0.0)	Laiha Risko (96.9%) Naton (0.5%) Med (0.3%) Ás (2.0%)	Ás (3.0)/ Ás (3.0)		Laiha (0.0)/ Laiha (0.0)	Laiha Risko 100%	Laiha risko 100%	Sistema be/ n/a
Erosaun Solu	Naton (0.6%) Med (24.3%) Ás (75.1%)	Ás (2.0)/ Ás (2.0)	Naton (5.1%) Med (36.5%) Ás (58.4%)	Ás (3.0)/ Ás (3.0)		Laiha risko (0.0)/ laiha risko (0.0)	Ás 100%	Laiha risko 100%	Sistema be / n/a
Inundasaun	Laiha risko 100%	Laiha risko 100%	Laiha risko 100%	Laiha risko 100%		Med (2.0) Med (2.0)	Ás (100%)	Ás (3.0) Ás (3.0)	

Mertutu provas sei sai interesante anomalia ho deit rai hektar 40 husi area total hektar 714 neebe mak konsidera iha risko ba rai-halai. **Membro komunidade 47 (Mane 27 no feto 20)** neebe atende iha workshop KVAK nee hatete katak Suco Mertutu mak iha **risko ás ba rai-halai.** Sira halo komentarius nee bazea ba rai-halai neebe mosu iha 2013-14 iha **Aldeia Hohtino, Apido, Railorin no Tatabauria,** iha neebe resulta destruisaun ba area plantasaun, rai-agrikula, uma komunidade, no estrada rural 500m, inkluindo Sistema drainajem iha sitiu estrada.

La hanesan bai-bain proporsaun ás ba estrada neebe passa liu-husi area risko rai-halai ba halo komparasaun husi suco seluk no evidensia husi Ermera nia tereno dizafia notoriamente. Tuir mane sira iha komunidade, estrada neebe mak iha risko nivel mediu ba rai-halai, konsidera katak rai-halai neebe mak akontese iha 2013-14. Sira mos mensiona katak superficie husi estrada maioria solu no fatuk-kiik sira no laiha estrada konkreta parte sistema drainajem no laiha parede retensaun. **Komunidade normalmente hasai material solu no planta residuos** neebe blokea estrada no sistema drainajem ho sira nia inisiativa rasik atu halo estrada bele sira liu ho diak. Impakto husi rai-halai ladun iha efeito signifkante ba iha uma maioria. Kontradisaun faktos nee, membro komunidade sira hatete katak uma sira iha **risko ás ba rai-halai** konsidera rai-halai nee mosu iha 2013-14. Hanesan mekanismo jere, ema afeitado evakua husi sira nia uma ba fatin neebe seguru no **depois halo reparasaun ba sira nia uma ho apoio husi membro komunidade sira seluk.**

Suco Mertutu mak **susceptivel ás ba erosaun solu.** Durante KVAK nee feto sira deskreve katak komunidade iha risko ás ba erosaun, ekipa mane sira dehan iha risko mediu. Ekipa feto sira mos dehan katak erosaun mosu kuaze tinan-tinan no maioria afeita uma sira, plantasaun, rai-agrikula no drainajem sitiu estrada iha aldeia tomak. Iha tempo udan, Sistema be iha **Aldeia Hotino** sai perigo tamba akontesemento husi erosaun, iha neebe espesifikamente afeita be-matan sira, possu no linha-pipa ba fornese be.

Razaun ba risko erosaun nee mak halakon fertilidade solu iha rai-agrikula no sendimentasaun iha drainajem no mota-hun. Hanesan mekanismo jere komunidade, espesialmente hirak neebe mak hela besik area sira afeitado, aseugra katak parte estragos husi estrada bele uza dala ida tan liu-husi remova materiais rai sira neebe

blokeado estrada nee. **Komunidade sujere implementasaun inisiativa bio-enjineeria** ba iha parte area estrada. Tuir presepsaun komunidade uma sira neebe mak iha risko ás iha relasaun ho erosaun.membro komunidade sira **laiha mekanismo jere** iha fatin, maibe depende ba apoio external husi governo no ONG sira.

Parte mapamento GIS no komunidade konkorda katak iha risko inundasaun signifikante ba xave infra-estrutura, hanesan klinika. Komunidade halo esforsu signifikante atu desvia mota husi destruisaun mosu iha tinan-tinan, maibe ba prevensaun tempo naruk nee sai-husi sira nia kapasidade no eventualmente mota-ninin sei erode no afeita ba konstrusaun eskola.

Vizaun jeral probabilidade risko bazea ba GIS + klasifikasaun komunidade

	Estrada (Total=10.3km)	Uma (Total=644)	Eskola (Total=3)	Fasilidade Saude (Total=1)
Rai-halai	Konkorda– naton/laiha risko	La konkorda	Konkorda– naton/laiha risko	Konkorda-laiha risko
Erosaun solu	Konkorda risko ás	Konkorda risko ás	La konkorda	La konkorda
Inundasaun	Konkorda– naton/laiha risko	Konkorda– naton/laiha risko	Agree – medium risk	Konkorda risko ás

Rekomendasaun: konsidera ba risko vulnerabilidade ba Suco Mertutu iha neebe kuaze 100m husi estrada iha risko ba rai-halai no 10km iha risko ba erosaun, iha posibilidade atu halao rehabilitasaun estrada no inisiativa manutensaun sei inkluindo protesaun ba infra-estrutura eskala kiik, espesialmente ba superficie konkreta, drainajem iha sitiu estrada no parede retensaun, nunee mos intervensaun ba bio-enjineeria. Atu asegura fornesemento be, iha neeba iha oportunidade atu halo rehabilitasaun Sistema fornesemento be nian neebe mak existe nunee mos konstruisaun ba Sistema fornesemento foun be, hanesan pedido husi komunidade durante iha diskusaun. Aspeito fornesemento be sei presiza halo avaliasaun tan hanesan kestaun atetude espesifiku ida. Rekomenda neebe mak ás tebes katak komunidade engaje iha aksaun planeamneto hodi komprende diak ba risko espesifiko neebe mosu no bele responde no mitiga dizafiu sira iha futuru. Ida nee inkluindo fo atensaun ba eskola no fasilidade saude iha risko ás no inkluzaun hodi responde liu ba 90% husi total uma klasifikada hanesan risko ás no mediu ba erosaun.

Suco Lauala, posto Administrativo Ermera, Municipio Ermera

	Rai-halai	Erosaun solu	Inundasaun
GIS	Laiha risko (96.6%)* Naton (0.3%) Med (3.1%) Ás (0%)	Naton (4.0%) Med (44.1%) Ás (51.9%)	Laiha risko (93.3%) Naton (6.7%)
KVAK (m)	Med (1.35)**	Laiha risko	La identifikado
KVAK (f)	Med (1.92)	Med (1.92)	La identifikado

*hanesan % ba total iha suco= hektar 1,454

** hanesan médiu klasifikado ba presepsaun risko liu-husi vulnerabilidade matric ho maximu klasifikado 3

Iha Suco Lauala problema prinsipal mak erosaun solu no liu metade husi area rai, uma sira no estrada sira mak klasifikada hanesan risko ás. Husi area total rai ba Suco Lauala mak hektar 1,454, sira nee hotu iha Kaptasaun Mota Lois. Nee assosiado ho mota Lois nia maior tributaries, Mota Gleno.

Komparasaun ba Dadus GIS no tuir presepsaun Komunidade ba Perigos no Infra-estrutura husi Nivel Risko

	Estradas (Total=4.0km)		Uma sira (Total=522)		Eskola sira (Total=1)		Fasilidades saude (Total=0)		Seluk
	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	KVAK (m/f)
Rai-halai	Laos iha risko 100%	Ás (3.0)/ Ás (3.0)	Laiha Risko (99.8%) Med (0.2%)	Ás (3.0) Ás (3.0)	Laiha risko (100%)	Laiha (0.0)	n/a	n/a	Ponte kiik/Sistema be
Erosaun Solu	Naton (2.6%) Med (41.2%) Ás (56.2%)	Laiha risko/ Ás (3.0)	Naton (2.7%) Med (32.2%) Ás (65.1%)	Laiha risk/ laiha risko	Ás (100%)	Laiha Risko (0.0) Naton (1.0)	n/a	n/a	Ponte kiik/Sistema be
Inundasaun	Laiha risko (81.3%) Iha risko (18.7%)	La identifikado	Laiha Risko (92.3%) Iha risko (7.7%)	La identifikado	Laiha risko (100%)	La identifikado	n/a	n/a	

Membro komunidade komentariu katak rai-halai mosu iha kuaze tinan-tinan hahu husi 2001 to'o agora iha Aldeia Sari, neebe mak iha resultado fo destrusaun ba hektar 10 husi komunidade rai-agrikula no plantasaun kafe, Sistema-be tradisional husi au (bamboo), ba uma komunidade sira no estrada rural 12m inkulindo ponte kiik ida.

Mapa GIS no opiniaun komunidade iha probabilidade: mapa nee hatudu laiha ameasa ba estrada sira maske nunee komunidade fiar katak neeba iha risko as husi rai-halai iha sira nia hela fatin. Komunidade bai-bain halo reparasaun ba pontes husi estragos minor uza-ai no kuda ai-horis lokal hodi prevene rai-halai. Tuir presepsaun komunidade uma sira neebe iha risko as ba rai-halai tamba uma sira iha **Aldeia Sari** destroi hotu ona tamba kauza husi rai-halai neebe mak mosu **kuaze tinan-tinan komesa iha 2001.** Hanesan mekanismo jere, ema sira afeitado evakua husi sira nia uma ba iha fatin seguru no depois koko atu hadiak uma sira ho apoio husi komunidade sira seluk.

Suco Lauala mak susceptivel ba erosaun solu maibe durante KVAK, feto sira deit mak deskreve iha risko mediu ba erosaun tamba erosaun mosu kuaze tinan-tinan komesa iha 2005 iha **Aldeia sira Hohana, Hatuhei no Uluehan** maske nunee mane la identifika erosaun hanesan risko ida. Husi feto, hatete katak erosaun maioria afeita ba plantasaun kafe, rai-agrikula, drainajem iha sitiu estrada no ponte kiik sira. Estrada blokeiado tamba sedimentasaun makaás neebe komum liu. Hanesan mekanismo jere komunidade, espesialmente hirak neebe hela besik iha area sira afeitado, foti inisiativa atu asegura partes estragas atu nunee estrada bele uza hanesan hasai material rai neebe blokea estrada no kuda ai-horis lokal. Maske eskola mosu iha area risko ás, feto sira identifika nee hanesan risko naton, no mane sira la perseve ida nee hanesan risko. Komunidade sira ajuda atu halo reparasaun ba estragos minor, maibe, nee depende ba iha volume husi estragos, autoridade eskola komunika ho departamento relevantes atu hadiak area parte neébe estraga. Iha Suco Lauala mos laiha **fasilidade saude.**

Maske inundasaun laos problema ida iha komunidade nee, inundasaun be suli habelar neébe relata hanesan kestaun ida no perigo ba estrada balu, pontes no uma sira. Normalmente komunidade halo reparasaun minor ba iha ponte kiik sira liu-husi uza ai-lolon hodi nunee bele fasilita transportasaun, sira mos planta ai-horis lokal hodi prevene rai-halai. Hanesan mekanismo jere, ema neebe afeitado husi inundasaun be suli habelar hasai tiha be no hamos taho no sedimentasaun seluk husi uma. Iha Suco Lauala laiha **fasilidade saude.**

Vizaun jeral probabilidade risko bazeada ba GIS + Klasifikada Komunidade

	Estrada (Total=4.0km)	Uma (Total=522)	Eskola (Total=1)	Fasilidades saude (Total=0)
Rai-halai	La konkorda	La konkorda	Konkorda – naton/laiha risko	n/a
Erosaun solu	konkorda – med/Ás	La konkorda	La konkorda	n/a
Inundasaun	La konkorda	La konkorda	Konkorda – naton/laiha risko	n/a

Rekomendasaun: Suco Lauala risko boot mak efeitos husi erosaun ba iha estrada. Nee potensialmente bele mitiga liu-husi halao intervensaun bio-enjineeria hodi proteze estrada nee, bainhira estrada sira seluk protektivo infra-estrutura bele assesso. Iha neeba diskrepansia klaru sobre aptada risko sira no risko atual. Komunidade sei benefisia husi involvimento barak konaba fahe resultado mapamento espesifiko no forma no planu aksaun implementasaun atu mitiga risko ás hanesan efeitos husi erosaun ba uma sira no eskola sira.

Suco Estado, posto Administrativo Ermera, Municipio Ermera

	Rai-halai	Erosaun Solu	Inundasaun
GIS	Laiha risko (91.0%)* Naton (0.8%) Med (6.3%) Ás (1.0%)	Naton (2.3%) Med (49.3%) Ás (48.4%)	Laiha risko (99.5%) Iha risko (0.5%)
KVAK (m)	Low (1.0)**	Low (0.69)	Not identified
KVAK (f)	Med (1.07)	Med (1.36)	Not identified

*hanesan % husi total iha suco= hektar 1,264

**hanesan media klasifikado presepsaun risko husi matric vulnerabilidade ho klasifikado maximu 3

Suco Estado iha area rai-ás no remotas, ho agrikultura prinsipal mak kafe. Problema prinsipal ida mak erosaun solu maioria ho nivel risko mediu ba ás. Rai-halai iha risko ituan ba infras-estrutura. Total area rai husi Suco Estado mak hektar 1,264, hirak nee hotu iha Kaptasaun Mota Lois.

	Estrada (Total=10.7km)		Uma (Total=500)		Eskola (Total=2)		Fasilidades Saude (Total=1)		Seluk
	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	KVAK (m/f)
Rai-halai	Laiha Risko (97.3%) Med (2.7%)	Ás (2.0)/ Ás (1.0)	Laiha Risko (99.4%) Med (0.6%)	Med (2.0)/ Naton (1.0)	Laiha Risko (100%)	Laiha Risko (0.0)/ Laiha Risko (0.0)	No Risk (100%)	Laiha Risko (0.0)/ Laiha Risko (0.0)	n/a/ ponte kiik, Sistema be
Erosaun Solu	Naton (1.6%) Med (66.2%) Ás (32.2%)	Med (2.0)/ Ás (3.0)	Naton (0.8%) Med (58.2%) Ás (41.0%)	Naton (1.0)/ Naton (1.0)	Med (50%) High (50%)	La identifikado	Med (100%)	La identifikado	n/a/ ponte kiik, Sistema be
Inundasaun	Laiha Risko (100%)	Laiha Risko (0.0)/ Laiha Risko (0.0)	Laiha Risko (100%)	Laiha Risko (0.0)/ Laiha Risko (0.0)	Laiha Risko (50%) Iha Risko (50%)	Laiha Risko (0.0)/ Laiha Risko (0.0)	Laiha risko (100%)	Laiha Risko (0.0)/ Laiha Risko (0.0)	

Jeralmente komunidade Evita atu hela ka konstrui Estrada iha rai-lolon ho tereno neebe labele assesso, no iha deit uma tolu no Estrada 300m neebe hetan iha fatin balu iha Suco Estado. Iha 43 membro komunidade (mane 28 no feto 15) hirak neebe atende iha workshop KVAK nee dehan katak Suco Estado iha risko mediu ba rai-halai. Sira mos fo komentariu katak rai-halai mosu iha **2006-07 no 2012-15,** resulta destruisaun ba estrada rural, ponte kiik, uma komunidade, plantasaun no be-matan iha **Aldeia Tasakina, Saramata, Coração de Jesus, no Sinai.** Efeito husi rai-halai nee signifikante liu ba iha be-matan tamba ema tesi-ai iha floresta nee.

Tuir ekipa mane sira, nivel husi estrada nee iha risko ba rai-halai mak mediu, laiha rai-halai neebe mosu iha **2006-07 no 2012-15.** Membro komunidade bai-bain uza material lokal neebe mak disponivel no voluntari amente servisu atu halo reparasaun minor ba estragos estrada no ponte kiik sira. Sira mos planta ai-horis lokal atu proteze ba solu husi rai-halai, uza sira nia inisiativa rasik. Suco Estado iha area ba risko mediu ba rai-halai; maske nunee, imapkto husi rai-halai ladun fo efeitos siginifkante liu ba **uma-sira.** Hanesan mekanismo jere, ema afeitado sira evakua husi sira nia uma ba iha fatin seguru no depois koko atu hadiak ba uma ho hetan apoio husi MSS.

Suco Estado mak susceptivel ás ba erosaun solu. Feto sira komentariu katak **erosaun mosu kuaze tinan-tinan** iha neebe maioria afeita rai-agrikula, plantasaun no drainajem espesialmente iha Estrada ninin iha **Aldeia sira hanesan Huitasu, Erbure, Rematu no Hamrik Metin.** Risko erosaun ba estrada neebe idetifika ona mak mai husi sedimentasaun ba iha drainajem be-dalan iha parte estrada. Hanesan mekanismo jere komunidade halo reparasaun **temporaria** ba estragos minor no planta ai-horis hodi kaer solu. Mapa sira GIS sujere no resultado KVAK la konkorda konaba nivel risko ba uma; tuir komunidade nia presepsaun, tantu feto no mane konsidera uma sira sei iha risko naton tamba erosaun iha neebe mapa GIS sujere sira iha risko mediu no ás. Hanesan mekanismo jere familia sira afeitado sei evakua ba iha fatin seguru no konstrui hikas/reparasaun ba uma sira ho apoio neebe mai husi MSS.

Maske inundasaun la sente atu iha risko, inundasaun be suli habelar mosu tinan-tinan iha **Aldeia Huitaço, Hamrik Metin,** no **Coração de Jesus,** resulta ba estragos estrada rural, ponte kiik sira, uma komunidade, plantasaun ai-han no plantasaun seluk.

	Estrada (Total=10.7km)	Uma (Total=500)	Eskolas (Total=2)	Fasilidade Saude (Total=1)
Rai-halai	La konkorda	La konkorda	konkorda – laiha risko	konkorda – laiha risko
Erosaun Solu	Konkorda – mediu/Ás	La konkorda	La konkorda	La konkorda
Inundasaun	konkorda – naton/ laiha risko	konkorda –naton/ laiha risko	konkorda – naton/laiha risko	konkorda – laiha risko

<u>Rekomendasaun</u>: konsidera ba risko vulnerabilidade husi Suco Estado, 0,3km estrada rural mak iha risko ba rai-halai no 10.7km estrada neebe mak hetan risko husi erosaun. Iha posibilidade atu halao rehabilitasaun estrada no ho inisiativa manutensaun neebe mak inkluindo infra-estrutura eskala kiik no intervensaun bio-enjinéria. Diskrepansia sira neebe existe entre presepsaun komunidade sira no risko atual, espesialmente ba erosaun risko ba uma, eskola no fasilidade sira no adicionalmente risko inundasaun toó iha eskola. Planu aksaun tuir mai neebe mak rekomenda atu dezemvolve ho komunidade, nee sei uza hodi ajuda komunidade hodi komprende diak risko sira no dezemvolve estratejia sira hodi mitiga risko hirak nee.

Suco Raimerhei, posto Administrativo Ermera, Municipio Ermera

	Rai-halai	Erosaun Solu	inundasaun
GIS	Laiha Risko (94.2%)* naton (0.6%) Med (5.1%) Ás (0.1%)	Naton (1.6%) Med 42.3%) Ás (56.1%)	
KVAK (m)	Med (2.0)**	Naton (0.91)	
KVAK (f)	Ás (2.7)	Med (2.70)	

*iha % husi total iha suco= hektar 761

** nee médiu klasifikado presepsaun ba risko liu-husi matric vulnerabilidade ho klasifikado maximu 3

Suco Raimerhei mak povoadu barak-liu no intensivamente rai-agrikula. Rai degrada no vegetasaun kovre ho esparse. Fator hirak nee halo partikulamente vulneravel ba erosaun. Total area rai husi Suco Raimerhei mak hektar 808, hirak nee hotu iha Kaptasaun Mota Lois.

Komparasaun Dadus GIS no Presepsaun Komunidade tuir Perigos no infra-estrutura husi Nivel Risko

	Estradas (Total=3.2km)		Uma (Total=396)		Eskolas (Total=1)		Fasilidades Saude (Total=0)		Seluk
	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	KVAK (m/f)
Rai-halai	La Risko (100%)	Ás (3.0)/ Ás (3.0)	Laiha risko (99.7%) Med (0.3%)	Ás (3.0)/ Med (2.0)	Laiha risko (100%)	Laiha Risko (0.0)/ laiha Risko (0.0)	n/a	n/a	Pontes kiik/Sistema be,pontes kiik
Erosaun Solu	Med (34.4%) Ás (65.6%)	Laiha risko (0)/ Ás (3.0)	Naton (0.6%) Med (31.5%) Ás (67.8%)	Med (2.0)/ Med (2.0)	Med (100%)	La identifika	n/a	n/a	n/a/ Pontes kiik, Sistema be
Inundasaun	La konsidera iha risko=>						n/a	n/a	

Superficie husi estrada mak ho fatuk-kiik no solu neebe seidauk iha estrada konkreto. Rai-halai akontese iha **2003 Aldeia Karimbala, iha 2005 Aldeia Moris Foun** no **kuaze tinan-tinan iha Aldeia Loumou, Nazare, Timlete, Raimaran no Mate Restu,** resulta hodi estraga estrada, drainajem iha sitiu estrada, ponte kiik sira no plantasaun sira. estrada afeitado husi rai-halai neebe mak la protezido husi parede retensaun ka kaixa gabion tamba nee kona impakto husi rai-halai. Komunidade iha area sira afeitado hasai solu no taho neebe mak blokea estrada no asegura be suli liu-husi be-dalan neebe mos depois rai-halai. **Sira halo ida nee iha kada semana durante udan monu rai, espesialmente iha sitiu Karimbala (Tarmauhahi).** Komunidade mos hadiak ponte sira neebe at ho ai-lokal neebe disponivel hodi halo estrada bele utiliza fali. Mane sira iha komunidade hatete katak risko husi rai-halai mak ás ba sira nia uma no feto sira hatete katak risko nee mediu. Hanesan mekanismo jere, ema sira afeitado evakua husi sira nia uma ba iha fatin seguru no koko hadiak fali uma ho tulun husi komunidade, sira mos troka ai-tuan sira no uza mos kalen atu proteze husi estragos. Nee deklara iha KVAK katak erosaun afeita rai-agrikula hodi kauza produkividade-tun no afeita plantasaun, be-matan no estrada rural. Tuir komunidade **erosaun mosu kuaze tinan-tinan.** Presepsaun komunidade ba iha risko erosaun ba uma sira konkorda ho mapa GIS, klasifika iha mediu/ás.

Vizaun jeral ba probabilidade risko bazea ba GIS + Klasifikado Komunidade

	Roads (Total=3.2km)	Houses (Total=396)	Schools (Total=1)	Health Facilities (Total=0)
Rai-halai	La konkorda	La konkorda	konkorda – naton/laiha risko	n/a
Erosaun solu	La konkorda	konkorda – risko mediu/ás	La konkorda	n/a
Inundasaun	n/a	n/a	n/a	n/a

Rekomendasaun:

Konstruisaun ba parede retensaun no monta kaixa gabion mak rekomenda hodi fo protesaun ba estrada. Erosaun solu hamosu risko ba numero uma substansial no komunidade sei benefisia husi avaliasaun tuir mai no planeamento hodi mitiga risko iha area nee.

Suco Ailelo, posto Administrativo Ermera, municipio Ermera

	Rai-halai	Erosaun Solu	Inundasaun
GIS	Laiha Risko (95.2%)* naton (1.0%) Med (1.3%) Ás (2.5%)	Naton (35.2%) Med (47.1%) Ás (17.7%)	Laiha Risk (89.7%) Iha Risko (10.3%
KVAK (m)	La identifikado**	Med (1.35)	La identifikado
KVAK (f)	Med (1.83)	La identifikado	La identifikado

*nee % total iha suco= hektar 2,629

** nee médiu klasifika husi presepsaun risko liu-husi matric vulnerabilidade ho klasifikado maximu 3

Suco Ailelo inkluindo naton, tetuk, sitiu-mota rai inklinado ba inundasaun neebe mak populado esparse liu, rai-lolon ás, populado barak liu iha area inklinado ba rai-halai no erosaun. Total area rai husi Suco Ailelo mak hektar 2,629, nee hotu (100%) iha Kaptasaun Mota Lois. Membro komunidade atus ida tolu (mane 46 no feto 57) neebe mak atende iha workshop KVAK.

Komparasaun husi Dadus GIS no Presepsaun Komunidade tuir perigos no infra-estrutura husi nivel risko

	Estrada (Total=11.2km)		uma (Total=368)		Eskolas (Total=5)		Fasilidade Saude (Total=0)		Seluk
	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	KVAK (m/f)
Rai-halai	Laiha risko (100%)	La identifikado/ Med (2.0)	Laiha risko (99.8%) Ás (0.3%)	Med (2.0)/ Naton (1.0)	Laiha risko (100%)	Naton (1.0)/ Laiha (0.0)	n/a	n/a	n/a/ posto eletrisidade
Erosaun solu	Naton (31%) Med (48.7%) Ás (20.3%)	Med (2.0)/ La identifikado	Naton (14.9%) Med (54.4%) Ás (30.7%)	Naton (1.0)/ La identifikado	Naton (40%) Med (40%) Ás (20%)	Naton (1.0)/ La identifikado	n/a	n/a	Ponte kiik, Sistema-be/posto eletrisidade
Inundasaun	Laiha Risko (94.6%) Iha risko (5.4%)	La identifikado / La identifikado	Laiha Risk (98.6%) Iha Risko (1.4%)	La identifikado/ La identifikado	Laiha risko (100%)	La identifikado / La identifikado	n/a	n/a	

Maske mapa sira GIS reklama iha neeba laiha risko rai-halai iha Ailelo, ekipa feto hatete katak **rai-halai mosu iha tinan-tinan,** destroi plantasaun kafé, kulturas alimentar, estrada rural no posto eletrisidade iha **Aldeia Leirema.**

Ekipa KVAK komentariu katak erosaun mosu **hahu husi tinan 2007,** resulta destroi plantasaun kafé, tos-batar, estrada rural, rai-agrikula no be-matan iha **Aldeia Nalmeik no Boebaka**

Maske iha neebe laiha risko inundasaun mares (husi tasi), feto sira refere ba iha inundasaun be suli habelar iha **Aldeia Leirema iha 2000, 2012 no 2015** iha neebe resulta destruisaun ba plantasaun, rai-agrikula, no pecuaria sira neebe mak mate. Ekipa mane hatete katak ponte kiik sira, estrada rural, plantasaun kafé neebe destroi tinan-tinan iha **Aldeia Nakrobo, Turema Hohuú Bestarn, Aitos, no Erleta,** hanesan resultado ida husi inundasaun be suli habelar.

Vizaun jeral ba probabilidade konaba GIS + Klasifikado Komunidade

	Estrada (Total=11.2km)	Uma (Total=368)	Eskolas (Total=5)	Fasilidade Saude (Total=0)
Rai-halai	Konkorda-mediu	La konkorda	Konkorda – naton/laiha risko	n/a
Erosaun Solu	Konkorda-mediu	La konkorda	La konkorda	n/a
Inundasaun	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	n/a

Rekomendasaun:

Risko signifikante mosu ba iha komunidade nee mak iha estrada, datoluk mak uma sira no eskola sira resulta husi erosaun solu. Maske nunee, la konsidera kestaun signifikante ida husi komunidade, inundasaun negativo liu afeita aldeia sira iha tinan barak no iha eskola ida mak iha risko ás. Nee rekomenda atu halao tan avaliasaun hodi konstrui sasukat protektivo ba estrada no uma sira no eskola neebe iha risko uainhira estratejia mitigasaun diskute liu-husi aksaun planeamento.

Suco Talimoro, posto Administrativo Ermera, municipio Ermera

	Rai-halai	Erosaun Solu	inundasaun
GIS	Laiha risko (86.8%)* naton (11.0%) Med (1.9%) Ás (0.3%)	Naton (10.7%) Med (64.4%) Ás (24.9%)	Laiha Risko (100%)
KVAK (m)	Med (1.9)**	La identifikado	La identifikado

*nee % total iha suco= hektar 450
** hanesan meediu klasifikado ba presepsaun risko liu-husi matric vulnerabilidade ho klasifikado maximu 3

Suco Talimoro mak iha foho sira besik Gleno nia klaran, neebe mak ladun rai-naruk hanesan area balu besik sira. Risko as menus liu ba rai-halai no erosaun maibe nafatin ameasa signifikante husi kategoria naton ba mediu. Total area rai husi Suco Talimoro mak hektar 450, sira hotu (100%) iha Kaptasaun Mota Lois. Husi total 76 membro komunidade sira (mane 27 no feto 49) mak atende KVAK workshop.

Komparasaun husi Dadus GIS no Prespsaun Komunidade tuir Perigos no Infra-estrutura liu-husi Nivel Risko

	Estrada (Total=6.5km)		Uma (Total=292)		Eskolas (Total=2)		Fasilidade Saude (Total=0)		Seluk
	GIS	KVAK *	GIS	KVAK	GIS	KVAK	GIS	KVAK	KVAK
Rai-halai	Laiha risko (95.4%) Naton (2.7%) Ás (1.9%)	Ás (3.0)	Laiha risko (93.8%) Naton (4.1%) Med (1.4%) Ás (0.7%)	Med (2.0)	Laiha risko (100%)	Med (1.5)	n/a	n/a	Ponte kiik
Erosaun Solu	Naton (10.1%) Med (57.8%) Ás (32.1%)	La identifika	Naton (12.7%) Med (62.0%) Ás (25.3%)	La identifika	Med (100%)	identifika	n/a	n/a	Ponte kiik
Inundasaun	Laiha risko (100%)	La identifika	Laiha risko (100%)	La identifika	Laiha risko (100%)	La identifika	n/a	n/a	

*Facilitator did not identify which data belonged to the male and female groups

Feto sira hatete katak rai-halai mosu iha **2015,** resultado destroisaun ba natar, uma komunidade no area plantasaun sira iha **Aldeia Lebuai no Mankabia.** Mane sira hatete katak rai-halai mosu iha **1999, 2007-2009 no 2014,** resulta iha destruisaun ba estrada rural, natar no uma komunidade iha **Aldeia Diru Anwei, Lissa Luli, Mau-Bara Kai-pu, Nunu-lau, Manleki no Degenu-siku, Ulu-Ana.**

Suco Talimoro laiha buat ida mak konsidera sei iha risko ba inundasaun liu-husi mapamento. Membro komunidade fahe esperiensia katak iha neeba laiha risko inundasaun iha **Suco Talimoro,** maibe sira esperiensia inundasaun be suli habelar iha tinan-tinan iha **Aldeia Lebuai** no **Mankabia** iha neebe resulta destroi kulturas alimentar, area plantasaun sira, konstruisaun eskola, estrada rural, tanki kaptasaun be no pipa be-hemu. Mane sira komentariu konaba inundasaun iha **2007-2009 no 2014-15 iha Daru Watu Lau, E'e Solo so, Mau Lau, Nunu-Lau Manleki, Degenu-siku,** iha neebe resulta hodi destroi uma komunidade, tos-batar, natar, pipa be-hemu, plantasaun kafé no pecuaria neebe mak mate.

	Estrada (Total=6.5km)	Uma (Total=292)	Eskolas (Total=2)	Fasilidade Saude (Total=0)
Rai-halai	La konkorda	La konkorda	Konkorda – naton/laiha risko	n/a
Erosaun Solu	La konkorda	La konkorda	La konkorda	n/a
Inundasaun	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	n/a

Rekomendasaun:

Iha diskrepansia neebe klaru entre informasaun GIS no presepsaun komunidade, iha komunidade neebe mak la sente risko erosaun solu maske parte rua iha porsaun signifkante ida ba estrada no uma sira neebe mak iha risko ás. No mos informasaun GIS indika Suco nee sei iha risko, iha neebe mak konfirmado husi komunidade, esperiensia komunidade hatudu iha neebe signifikante negative afeita tamba inundasaun. Rekomenda katak informasaun mapamento mak diskute ho komunidade no aksaun planeamento mak halao hodi investiga husi kauza sira ba estragos husi inundasaun no kria estratejia mitigasaun.

Suco Leguimea, posto Administrativo Ermera, municipio Ermera

	Rai-halai	Erosaun Solu	Inundasaun
GIS	Laiha risko (98.1%)* Naton (0.2%) Med (1.0%) Ás (0.7%)	Naton (0.9%) Med (36.6%) Ás (62.5%)	n/a
KVAK (m)	Med (1.93)**	La identifika	n/a
KVAK (f)	Med (1.67)	La identifika	n/a

*nee % total iha suco= hektar 850

** nee médiu klasifika ba presepsaun risko liu husi matric vulnerabilidade ho klasifika maximu 3

Suco Legimea mak lokaliza iha area remota liu iha municipio. Nee iha problema seriu liu mak risko ba erosaun, ho kuaze 99% husi total area iha risko ás. Total area rai Suco Legimea mak hektar 850, nee (100%) neebe mak iha Kaptasaun Mota Lois. Total membro komunidade 80 (mane 25 no feto 55) atende workshop KVAK.

	Estrada (Total=8.7km)		Uma (Total=295)		Eskolas (Total=2)		Fasilidade Saude (Total=0)		Seluk
	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	KVAK (m/f)
Rai-halai	Laiha risko (100%)	Ás (3.0) Med (2.0)	Laiha risko (97.6%) Med (1.7%) Ás (0.7%)	La identifika/ Med (2.0)	Laiha risko (100%)	La identifika infra-estrutura iha risko	n/a	n/a	Pontes kiik/pontes kiik
Erosaun Solu	Med (28.8%) Ás (71.2%)	La identifika/ La identifika	Naton (0.6%) Med (31.5%) Ás (67.8%)	La identifika/ La identifika	Med (50%) Ás (50%)	La identifika infra-estrutura iha risko	n/a	n/a	La identifika/ La identifika
Inundasaun	La konsidera iha risko =>						n/a	n/a	

Tuir feto sira neebe mak atende iha KVAK, rai-halai mosu iha tinan-tinan, resulta destruisaun ba ponte kiik sira, uma, estrada rural no rai-agrikula iha **Aldeia Villa Maria.** Mane sira komentariu katak rai-halai mosu iha tinan-tinan hodi resulta destruisaun ba plantasaun kafe, kulturas alimentar, estrada rural, Sistema be, fasilidade publiko (kapela no posto eletrisidade) iha **Aldeia Vila Rei, Rai Masin, Fatmaunalo, Bisokmou no Pohuia**. Mane sira komentariu mos durante iha tempo udan, ponte kiik sira, Sistema drainajem nunee mos estrada mak parte infra-estrutura nebe hetan sofre maioria ba rai-halai no inundasaun be suli habelar.

Vizaun jeral ba probabilidade Risko bazea ba GIS + klasifika komunidade

	Estrada (Total=19.6km)	Uma (Total=793)	Eskolas (Total=5)	Fasilidade Saude (Total=1)
Rai-halai	La konkorda	La konkorda	Konkorda – naton/laiha risko	Konkorda – laiha risko
Erosaun Solu	konkorda – mediu/Ás	Konkorda – risko mediu	La konkorda	La konkorda
Inundasaun	Konkorda – laiha risko	Konkorda – naton/iha risko	Konkorda – naton/laiha risko	Konkorda – laiha risko

<u>Rekomendasaun:</u>

Klaru Rai-halai hamosu risko signifikante ida ba iha komunidade ho esperiensia historiku indika estragos sedu-liu no 99% rai sira iha risko. Estrada iha komunidade nia let hasoru risko ás liu hodi estraga tamba rai-halai. Tuir tan, erosaun solu mosu iha risko signifikante ida hodi taka 2/3 ba uma sira iha komunidade maibe la konsidera hanesan ameasa ida ba komunidade. Aksaun planeamento ho estratejia mitigasaun klaru ho atensaun espesifiko ba iha estrada no uma sira nee mak rekomenda.

Suco Leimea-Craic, posto Administrativo Hatolia, Municipio Ermera

	Rai-halai	Erosaun Solu	Inundasaun
GIS	Laiha Risko (94.9%)* Naton (0.8%) Med (1.2%) Ás (3.1%)	Naton (19.6%) Med (56.2%) Ás (24.2%)	Laiha risko (93.3%) Iha risko (6.7%)
KVAK (m)	La identifika **	Low (0.79)	La identifika
KVAK (f)	Med (1.5)	La identifika	La identifika

*nee % total iha suco= hektar 2,875

** nee médiu klasifika ba presepsaun risko liu-husi matric vulnerabilidade ho klasifika maximu 3

Suco Legimea-Craic mak populado esparse liu no sira nia ema konsentrado iha fatin prinsipal rua ba iha rai sitiu-mota. Risko prinsipal mak erosaun. Total area rai Suco Legimea-Craic mak hektar 2,875, nee hotu iha Kaptasaun Mota Lois.

Komparasaun husi Dadus GIS no tuir presepsaun komunidade ba perigos no infra-estrutura husi Nivel Risko

	Estrada (Total=1.3km)		Uma (Total=273)		Eskolas (Total=2)		Fasilidade Saude (Total=1)		Seluk
	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	KVAK (m/f)
RaI-halai	Laiha Risko (100%)	La identifka / High (3.0)	Laiha Risko (100%)	La identifika/laiha risko (0.0)	Laiha Risko (100%)	La identifka/la identifika	Laiha Risko (100%)	La identifka/la identifika	La identifka/la identifika
Erosaun Solu	Naton (11.4%) Med (88.6%)	Laiha Risko (0.0)/ La identifka	Naton (14.3%) Med (74.7%) Ás (11.0%)	Laiha Risko (0.0)/ La identifika	Med (50%) Ás (50%)	La identifka/la identifika	Med (100%)	La identifka/la identifika	La identifka/la identifika

Inundasaun	Laiha Risko (80.8%) Iha risko (19.2%)	La identifka/la identifika	Laiha Risko (93.4%) Iha risko (6.6%)	La identifka/la identifika	Laiha Risko (100%)	La identifka/la identifika	Laiha Risko (100%)	La identifka/la identifika	

Ita bele hare iha tabela leten katak mapa sira GIS no opiniaun komunidade konaba infra-estrutura neebe mak iha risko husi rai-halai diferensia dook-liu.

Erosaun mosu sei sai ameasa boot ba komunidade nia infra-estrutura, maibe membro komunidade laiha konhesemento ba ida nee – hare rekomendasaun iha kraik nee.

	Estrada (Total=1.3km)	Uma (Total=273)	Eskolas (Total=2)	Fasilidade Saude (Total=1)
Rai-halai	La konkorda	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	Konkorda – laiha risko
Erosaun Solu	La konkorda	La konkorda	La konkorda	La konkorda
Inundasaun	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	Konkorda – laiha risko

Rekomendasaun:

Risko prinsipal iha komunidade mak hasoru erosaun solu afeita uma sira no eskola ida. Tuir tan, uma neebe lokaliza iha mota ninin hasoru risko adicional ba inundasaun. Sasukat protektivo no estratejia mitigasaun afeita ba iha infra-estrutura sei bele responde liu-husi aksaun planeamento implementasaun ba planu hirak nee. Uma sira iha mota ninin susceptivel ba inundasaun sei kosidera atu aloka fila fali ba fatin seluk. Servisu balu tan neebe presiza halo hotu ho komunidade atu asegura katak sira informa ho diak konaba saida mak erosaun, no impakto ba iha sira nia komunidade.

Suco Coilate-Letelo, posto Administrativo Hatolia, Municipio Ermera

	Rai-halai	Erosaun Solu	Inundasaun
GIS	Laiha risko (93.6%)* Naton (0.9%) Med (2.3%) Ás (3.2%)	Naton (2.3%) Med (42.4%) Ás (55.3%)	Laiha risko (99.9%) Iha Risko (0.1%)
KVAK (m)	Ás (2.11)**	La identifika	La identifika
KVAK (f)	Ás (2.3)	La identifika	Med (1.67)

*nee % husi total iha suco= hektar 2,688

** nee médiu klasifika ba presepsaun risko husi matric vulnerabilidade ho klasifika maximu 3

Suco Coilate-Letelo mak hanesan ho Ailelo, populado barak-liu no intensivamente viveiro iha area ás, maibe populado esparse liu ba menus assessivel iha rai-lolon sira naton. Rai hirak nee extremu liu risko ás ba erosaun. Impakto husi nee mos notisiavel hanesan deposita rai-henek no fatuk iha inundasaun planicie iha Mota Marobo no Lois. Total area rai husi Suco Letelo mak hektar 2,688, nee hotu (100%) iha Kaptasaun Mota Lois. Total ema komunidade 69 (mane 55 no feto 14) neebe mak partisipa iha workshop KVAK nee.

Komparasaun husi Dadus GIS no tuir presepsaun komunidade ba Perigos no infra-estrutura husi Nivel Risko

	Estrada (Total=16.2km)		Uma (Total=606)		Eskolas (Total=0)		Fasilidade Saude (Total=2)		Seluk
	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	KVAK (m/f)
RaI-halai	Laiha risko (99.6%) Med (0.4%)	Ás (3.0)/ Ás (3.0)	Laiha risko (99.8%) Ás (0.2%)	Med (2.0)/ Ás (3.0)	n/a	n/a	Laiha risko (100%)	Med(2.0)/ La identifika	Sistema be, pontes kiik/Sistema be
Erosaun Solu	Naton (1.9%) Med (58.4%) Ás (39.7%)	La identifika/la identifika	Low (3.5%) Med (35.0%) Ás (61.5%)	La identifika/la identifika	n/a	n/a	Med (50%) High (50%)	La identifika/la identifika	La identifika/la identifika

Inundasaun	Laiha risko (99.9%) Iha risko (0.1%)	La identifika / Ás (3.0)	Laiha risko (100%)	La identifika/ Laiha risko (0.0)	n/a	n/a	Laiha risko (100%)	La identifika/la identifika	La identifika/la identifika

Rai-halai mosu **kuaze tinan-tinan,** resulta destruisaun ba plantasaun kafe, Sistema be (be-matan, linha-pipa no tanki estora prinsipal), uma komunidade, estrada rural no posto eletrisidade. Iha neeba ausensia drainjaem iha parte estrada no estrada ho fatuk kiik no superficie solu, laiha superficie konkreta. Membro komunidade sira planta ai-lokal tuir estrada atu estrada iha forsa ida hodi kombate rai-halai. Durante rai-halai membro komunidade sira monitoriza hela situasaun nee no foti inisiativa rasik hodi hadiak estrada neebe estraga no hasae solu husi estrada leten atu nunne bele passavel. Membro komunidade sira mos evakua husi sira nia uma hanesan ejijensia durante rai-halai no konstrui fila fali sira nia uma ho sira nia inisiativa rasik.

Iha Suco Coilate-Letelo, hektar 2,687 (99.9%) neebe mak konsidera sei laiha risko ba inundasaun no hektar ida (0.1%) iha risko ba inundasaun. Ekipa feto sira hatete katak risko ba inundasaun mediu, espesialmente iha **Aldeias Manu Lete no Hauhei** iha neebe inundasaun mosu kuaze tinan-tinan, resulta iha destruisaun ba rai-agrikula sira no rural estrada inkluindo Sistema drainajem. Drainajem iha parte estrada iha suco iha drainajem manual maibe laiha drainajem konkreto.

Vizaun jeral ba probabilidade Risko bazea ba GIS + klasifika komunidade

	Estrada (Total=16.2km)	Uma (Total=606)	Eskolas (Total=0)	Fasilidade Saude (Total=2)
Ral-halai	La konkorda	La konkorda	n/a	konkorda – laiha risko
Erosaun Solu	La konkorda	La konkorda	n/a	La konkorda
Inundasaun	La konkorda	konkorda –naton/ laiha risko	n/a	konkorda – laiha risko

<u>Rekomendasaun:</u>

Maske nunee komunidade klaru ona hodi halo planeamento aksaun positivu atu responde ba risko rai-halai, komunidade sei bele benefisia husi drainajem konkreta husi parte estrada hodi proteze liu-tan estrada nee. Maibe komunidade ladun hare risko ba erosaun solu, maske liu 98% uma sira mak iha risko mediu no ás ba perigos. Komunidade sei benefisia husi planeamento espesifiko ba iha protesaun hasoru erosaun solu ba uma sira.

Suco Leimea-Sorinbalo, posto Administrativo Hatolia, Municipio Ermera

	Rai-halai	Erosaun Solu	inundasaun
GIS	Laiha Risko (90.6%)* Naton (1.6%) Med (1.7%) Ás (6.1%)	Med (22.7%) Ás (77.3%)	n/a
KVAK (m)	Med (1.62)**	Low (0.46)	n/a
KVAK (f)	Med (1.5)	la identifika	n/a

*nee % husi total iha suco= hektar 859

**nee médiu klasifika ba presepsaun risko husi matric vulnerabilidade ho klasifika maximu 3

Suco Leimea-Sorinbalo mak kiik, remota no populado esparse. Maibe, area rai barak mak degrada grave-liu – hirak nee hotu tama iha risko mediu ba ás husi kategoria erosaun. Total area rai husi Suco Leimea-Sorinbalo mak hektar 859, nee hotu iha Kaptasaun Mota Lois. Total membro komunidade 85 (mane 56 no feto 29) neebe mak partisipa iha workshop KVAK nee.

Komparasaun husi Dadus GIS no tuir presepsaun komunidade ba Perigos no infra-estrutura husi Nivel Risko

	Estrada (Total=3.8km)		Uma (Total=120)		Eskolas (Total=0)		Fasilidade Saude (Total=0)		Seluk
	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	KVAK (m/f)
RaI-halai	Laiha Risko (100%)	Ás (3.0)/ Ás (3.0)	Laiha Risko (99.2%) Ás (0.8%)	Med (2.0)/ Naton (1.0)	n/a	n/a	n/a	n/a	Ponte kiik, Sistema be/ Pontes, Sistema be
Erosaun Solu	Med (25.7%) Ás (74.3%)	La identifika/ La identifika	Med (9.2%) Ás (90.8%)	La identifika/ La identifika	n/a	n/a	n/a	n/a	Sistema be/ n/a
Inundasaun	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	

Rai-halai neebe mak mosu iha **2013 iha Aldeia Aipule** no kuaze iha tinan-tinan hahu husi 2003 iha **Aldeia Taka Mata, Brogbou, Aipule no Hambulu**, hodi resulta destruisaun ba kafé no plantasaun vanilla, estrada rural, no natar. Rai-halai kompletamente destroi ba natar no komunidade labele tan utiliza rai.

Leimea-Sorinbalo iha proporsaun boot husi area neebe mak iha risko ás ba erosaun. Membro komunidade planta ai-lokal hodi hametin estrutura solu no sira evakua husi uma bainhira rai-halai mosu no sira repara ho apoio husi MSS.

Vizaun jeral ba probabilidade Risko bazea ba GIS + klasifika komunidade

	Estrada (Total=3.8km)	Uma (Total=120)	Eskolas (Total=0)	Fasilidade Saude (Total=0)
RaI-halai	La konkorda	La konkorda	n/a	n/a
Erosaun Solu	La konkorda	La konkorda	n/a	n/a
Inundasaun	n/a	n/a	n/a	n/a

Rekomendasaun:

Ameasa signifikante liu ba komunidade nee mak erosaun solu neebe afeita ba uma sira. Komunidade hatudu esforsu neebe klaru hodi to'o estratejia mitigasaun atu proteje ba estrada mak hanesan planta hodi hametin estrutura solu. Uma sira neebe iha risko sei halo tan avaliasaun hodi mitiga estragos husi erosaun solu. Ho Informasaun barak neebe passa ba komunidade, aksaun planeamento no implementasaun bele efetivu.

Suco Fahilebo, posto Administrativo Bazartete, Municipio Liquica:

	Rai-halai	Erosaun Solu	Inundasaun
GIS	Laiha Risko (93.8%)* Naton (3.2%) Med (2.2%) Ás (0.8%)	Naton (3.5%) Med (47.5%) Ás (49.0%)	Laiha Risko (99.5%) Iha Risko (0.5%)
KVAK (m)	Med (1.38)**	Naton (0.94)	La identifika
KVAK (f)	Med (1.08)	Naton (1.00)	La identifika

*nee % husi total iha suco= hektar 2,410

** hanesan médiu klasifika ba presepsaun ba risko husi matric vulnerabilidade ho klasifika maximu 3

Suco Fahilebo mak iha remota extremu liu ho asseso limita. Maske iha neeba laiha rai-lolo naruk, nee foho deit no menus-liu ho vegetasaun, halo risko erosaun nee perigo makaás liu. Total area rai Suco Fahilebo mak hektar 2,410, ho hektar 1,851 (76.8%) iha Kaptasaun Mota Comoro no hektar 559 (23.2%) iha Kaptasaun Mota Moraeloa.

Komparasaun husi Dadus GIS no tuir presepsaun komunidade ba Perigos no infra-estrutura husi Nivel Risko

	Estrada (Total=0km)		Uma (Total=211)		Eskolas (Total=1)		Fasilidades Saude (Total=1)		Seluk
	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	KVAK (m/f)
RaI-halai	La identifika	Ás (3.0)/ Ás (3.0)	Laiha Risko (95.7 %) Naton (2.4%) Med (1.4%) Ás (0.5%)	Naton (1.0)/ Laiha Risko (0.0)	Laiha Risko (100%)	Laiha Risko (0.0)/ Laiha Risko (0.0)	Laiha Risko (100%)	Laiha Risko (0.0)/ Laiha Risko (0.0)	Pontes kiik/ Sistema be
Erosaun Solu	La identifika	Ás (3.0)/ Med (2.0)	Low (1.4%) Med (39.8%) Ás (58.8%)	Naton (1.0)/ Naton (1.0)	Ás (100%)	Laiha Risko (0.0)/ Laiha Risko (0.0)	Ás (100%)	Laiha Risko (0.0)/ Laiha Risko (0.0)	Pontes kiik/ Sistema be
Inundasaun	La identifika	La identifika/ La identifika	Laiha Risko (99.5%) Iha Risk0 (0.5%)	La identifika/ La identifika	Laiha Risko (100%)	La identifika/ La identifika	Laiha Risko (100%)	La identifika/ La identifika	La identifika/ La identifika

Membro komunidade total lima nolu resin ida (mane 27 no feto 24) hirak neebe mak atende iha workshop KVAK nee hatete katak **Suco Fahilebo** mak risko mediu ida ba rai-halai. Sira mos komentariu katak rai-halai mosu iha **2000 ate 2015,** resulta hodi fo destruisaun ba trilhas kiik, ponte kiik, uma komunidade, rai-agrikula, plantasaun kafé no be matan iha **Aldeia sira Titneta, Baunalogeun, Baunamaria, Talkuku, Bouhaet, Mau-Orailalan, Tuhitu leten, hatsarlelo no Burean**. Komunidade hautud katak rai-halai orijinado mai-husi area besik ba sitiu mota.

Mapa GIS la identifika estrada ofisial ruma, maibe membro komunidade sira fiar katak ameasa husi rai-halai ba estrada mak extremu-liu ás tuir mai ekipa feto KVAK nia, uma sira laiha risko ba rai-halai no tuir ekipa mane sira nivel risko ba uma sira rai-halai mak konsidera naton ba rai-halai neebe mosu **iha 2000 ate 2015** no uma sira simu estragos ituan. Hanesan mekanismo jere familia sira afeitado evakua ba iha fatin seguru no hadiak fali sira nia uma simu apoio husi MSS.

Durante KVAK feto nia ekipa deskreve katak **Suco Fahilebo** hanesan risko mediu ba erosaun iha neebe ekipa mane nia deskreve nee iha risko naton. Komunidade mos komentariu katak erosaun mosu kuaze tinan-tinan neebe maioria afeita ba iha rai-agrikula, korente no drainajem estrada ninin. Tuir komunidade nivel risko erosaun ba uma sira mak naton iha estragos minor neebe esperiensia. Embora komunidade rekonhese risko nee ba eskola, agora dadaun nee sira laiha estratejia jere.

Membro komunidade fahe informasaun katak laiha risko inundasaun iha Suco Fahilebo maibe esperiensia inundasaun be suli habelar iha tinan-tinan iha **Aldeia sira Hatalin, Ermeta no Fatuneco,** iha neebe resulta estragos ba estrada rural, uma sira komunidade no rai-agrikula. Orijinalmente laiha mota iha Suco Fahilebo maibe tamba laiha aksaun espesifiko neebe mak foti to'o iha korente, korente kiik sira sai fali mota, neebe bele kauza estragos husi inundasaun.

Vizaun jeral ba probabilidade Risko bazea ba GIS + klasifika komunidade

	Roads (Total=0km)	Houses (Total=211)	Schools (Total=1)	Health Facilities (Total=1)
Ral-halai	Disagree	Agree – low/no risk	Agree – low/no risk	Agree – no risk
Erosaun Solu	Disagree	Disagree	Disagree	Disagree
Inundasaun	Agree – no risk	Agree – low/no risk	Agree – low/no risk	Agree – no risk

Rekomendasaun:

Ameasa signifikante liu ba komunidade nee mak tamba erosaun solu afeita ba iha eskola no fasilidade saude, rua nee iha area risko ás, bainhira komunidade la hare risko nee no iha neeba laiha estratejia jere diak neebe iha fatin. Risko sira seluk hare atu bele mitiga diak ka minimiza liu-husi esforsu komunidade. Aksaun planeamento no fo informasaun bei-beik konaba perigos erosaun solu ba iha eskola no fasilidade saude sei benefisia ba komunidade. GPS kordena ba estrada no lokaliza sei bele halao ona, atu nunee bele iha idea diak ba risko neebe sira hasoru. Komunidade tenki simu formasaun planu aksaun relasiona ba jere estragos ba iha eskola no fasilidade saude.

Suco Fatumasi, Administrative post Bazartete, Liquica Municipality

	Landslide	Soil Erosion	Flood
GIS	No Risk (466%)* Low (14.7%) Med (6.8%) High (9.7%)	Low (3.5%) Med (24.2%) High (72.3%)	No Risk (99.8%) At Risk (0.2%)
KVAK (m)	Low (0.94)**	Low (0.94)	Not identified
KVAK (f)	Low (0.88)	Low (0.94)	Not identified

*nee % husi total iha suco= hektar 677

** hanesan klasifika médiu ba presepsaun risko husi matric vulnerabilidade ho klasifika maximu 3

Suco Fatumasi mak iha elevasaun ás no rai-lolo naruk. Ida nee iha risko ás mai husi rai-halai no erosaun, tipiko ba iha kaptasaun norte iha Municipio Liquiça. Total area rai husi Suco Fatumasi mak hektar 677, ho hektar 267 (39.7%) iha Kaptasaun Mota Moraeloa, 248 (36.7%) iha Kaptasaun Mota Carbutaeloa, no hektar 160 (23.6%) iha Kaptasaun Mota Caicassa. Membro komunidade total 67 (mane 37 no feto 30) neebe mak partisipa iha workshop KVAK.

Komparasaun husi Dadus GIS no tuir presepsaun komunidade ba Perigos no infra-estrutura husi Nivel Risko

	Estrada (Total=11.3km)		Uma (Total=262)		Eskolas (Total=3)		Fasilidade Saude (Total=1)		Seluk
	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	KVAK (m/f)
RaI-halai	Laiha risko (78.8%) Naton (9.7%) Med (5.4%) Ás (6.6%)	Med (2.0)/ Med (2.0)	Laiha risko (76.3%) Naton (8.4%) Med (6.1%) Ás (9.2%)	Med (2.0)/ Med (2.0)	Laiha risko (100%)	Laiha risko (0.0)/ Laiha risko (0.0)	Laiha risko (100%)	Laiha risko (0.0)/ Laiha risko (0.0)	Sistema be, ponte s kiik/ n/a
Erosaun Solu	Med (21.9%) High (78.1%)	Med (2.0)/ Med (2.0)	Naton (0.8%) Med (27.9%) Ás (71.3%)	Med (2.0)/ Med (2.0)	Ás (100%)	Laiha risko (0.0)/ Laiha risko (0.0)	Ás (100%)	Laiha risko (0.0)/ Laiha risko (0.0)	Sistema be, ponte s kiik / n/a
Inundasaun	La konsidera iha risko =>								

Turi membro komunidade rai-halai mosu kuaze tinan-tian, **espesialmente hahu 2013,** no hodi afeita produsaun hudi no batar, uma komunidade, estrada rural no ponte kiik, espesial liu ba konstrusaun infra-estrutura estrada neebe liga **Fatumasi no Lauhata.** Aldeia neebe afeita maioria mak **Durbasa no Metir**

Iha **Fatumasi,** iha neebe rekursu transportasaun limitado tebes, rai-halai solur sai **estrada parte sesaun badak ida** bele Isola komunidade sira, prevene kulturas husi merkado, hadook labarik sira husi eskola no prova moris ameasado ba ema neebe presiza apoio mediku. Rai-halai afeita komunikasaun estrada no Sistema drainajem. Sira mos bele afeita kondisaun solu: rai-agrikula neebe besik iha area rai-halai iha Aldeia Metir mak labele uza tamba kondisaun solu durante tempo udan neebe mak ladiak. Ai-lokal neebe mak planta ladun iha efeito signifikante ba situasaun nee. Liu-liu ba impakto rai-halai ba parte estrada, no membro komunidade mak foin lalais nee depende ba iha apoio husi liur. Rai-halai mos fo impakto ba linha pipa be ba Sistema-be iha tempo udan.

Erosaun mosu kuaze tinan-tinan, resulta destroi estrada rural, drainajem parte iha astrada ninin, no impakto ba ponte kiik ida iha Aldeia Metir. Durante tempo udan kondisaun ponte kiik sira sai at liu no ida nee laiha posibilidade atu uza transporte publiko. Membro komunidade laiha mekanismo jere neebe mak existe ba ida nee, maibe depende liu ba apoio externa.

Vizaun jeral ba probabilidade Risko bazea ba GIS + klasifika komunidade

	Estrada (Total=11.3km)	Uma (Total=262)	Eskolas (Total=3)	Fasilidade Saude (Total=1)
RaI-halai	La konkorda	La konkorda	Konkorda – Naton/laiha risko	Konkorda – laiha risko
Erosaun Solu	Konkorda – mediu/ás	Konkorda – mediu/ás	La konkorda	La konkorda
Inundasaun	Konkorda – Naton/laiha risko	Konkorda – Naton/laiha risko	Konkorda – Naton/laiha risko	Konkorda – Naton/laiha risko

Rekomendasaun:

Ho presentajem ás ba estrada iha risko husi parte rua rai-halai no erosaun, nee rekomenda halo rehabilitasaun no manutensaun ba estrada, inkluindo infra-estrutura estrada nesesaria hanesan bueiros (gorong-goron) kiik no monta kaixa gabion neebe presiza. Ida nee tenki forte no qualidade neebe mak diak hanesan estrada neebe komunidade relata no kaiza gabion sira estragos ona husi udan boot iha passado.

Hatudu katak komunidade hein liu ba iha apoio husi liur atu redus impakto husi risko hirak nee, no nunee sira labele tan halao aktividade ruma hodi prevene ka mitiga hasoru potensia risko, ho idea nee husi suco rekomenda katak atu dezemvolve Planu Aksaun Resiliente ida ba Aldeia atu nunee bele asegura planeamento komunidade ba oin hodi prevene impakto iha futuru ba rai-halai no erosaun.

Suco Lauhata, posto Administrativo Bazartete, MunicipioLiquica

	Landslide	Soil Erosion	Flood
GIS	No Risk (84.1%)* Low (7.7%) Med (7.0%) High (1.2%)	Low (10.5%) Med (45.6%) High (43.9%)	No Risk (94.8%) At Risk (5.2%)
KVAK (m)	Med (1.56)**	Low (0.89)	High (2.00)
KVAK (f)	High (2.14)	High (2.00)	High (2.57)

*as % of total in suco= 2,001 hectares
** as average rating of risk perception through vulnerability matrix with maximum rating 3

Suco Lauhata inkluindo area kosteira, foho no rai-lolo naruk. Risko prinsipal mak mai husi inundasaun besik iha mota boot rua nia ibun. Ameasa ba uma sira barak no estrada tamba risko inundasaun nee mak ás iha populado neebe barak liu no besik iha Liquiça Vila. Total area rai husi Suco Lauhata mak hektar 2,001 no ho hektar 865 (43.2%) iha Kaptasaun Mota Caicassa, 682 (34.1%) iha Kaptasaun Mota Carbutaeloa, hektar 329 (16.5%) iha Kaptasaun Agregando Inur Pilila, hektar 67 (3.3%) iha Kaptasaun Mota Moraeloa no hektar 58 (2.9%) iha Kaptasaun Agregando Emeta.

Komparasaun husi Dadus GIS no tuir presepsaun komunidade ba Perigos no infra-estrutura husi Nivel Risko

	Roads (Total=22.5km)		Houses (Total=631)		Schools (Total=3)		Health Facilities (Total=0)		Other
	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	KVAK (m/f)
RaI-halai	No Risk (99.6%) Low (1.8%)	High (3.0)/ High (3.0)	No Risk (97.9%) Low (1.5%) Med (0.2%) High (0.4%)	Med (2.0)/ Low (1.0)	No risk (100%)	Not identified as infrastructure that is at risk	n/a	n/a	n/a/ Water system
Erosaun Solu	Low (22.7%) Med (64.1%) High (13.2%)	Low (1.0)/ High (3.0)	Low (10.6%) Med (76.7%) High (12.7%)	Med (2.0)/ Med (2.0)	Med (100%)	Not identified as infrastructure that is at risk	n/a	n/a	n/a/ Water system
Inundasaun	No Risk (94.8%) At Risk (5.2%)	Med (2.0)/ High (3.0)	No Risk (77.5%) At Risk (22.5%)	Med (2.0)/ High (3.0)	No Risk (100%)	Not identified as infrastructure that is at risk	n/a	n/a	n/a/ Water system

Membro komunidade komentariu katak rai-halai mosu iha tinan-tinan iha area sira risko ás, resulta destruisaun ba: uma sira komunidade, rai-agrikula; plantasaun, parede retensaun, no Sistema-be iha **Aldeia sira Pisu Leten, Kamalehu, Raukesa, Kamegiulu no Pisu Kraik.** Hanesan mekanismo jere komunidade planta-ai sira, hasai sedimentasaun husi kanal parte estrada no organiza Tara Bandu. Maske nunee ekipa feto nian sente katak nivel risko ba uma husi rai-halai nee mediu, no ekipa mane nian sente katak risko nee naton, konsidera kata rai-halai neebe mosu tinan-tinan. Hanesan mekanismo jere, familia afeitado evakua ba iha fatin seguru uainhira evento rai-halai no hadiak/repara uma sira ho apoio husi MSS.

Durante KVAK nee, ekipa feto nian deskreve katak Suco iha risko mediu mai husi erosaun iha neebe ekipa mane nian deskreve ida nee hanesan risko naton. Feto nia ekipa komentariu katak erosaun mosu iha **2015,** iha neebe afeita makaás ba be-matan, drainajem no rai-agrikula komunidade, espesialmente iha **Aldeia Kamegiulo, Raukasa, Pisu Kraik and Pisu Leten**.

Tuir feto nia ekipa, nivel risko ba Estrada husi erosaun mak ás no tuir mane nia ekipa risko nee mediu, konsidera erosaun mosu iha 2015. Hanesan mekanismo jere komunidade planta-ai sira, hasai sedimentasaun husi drainajem parte estrada no organiza Tara bandu. Familia sira repara sira nia uma uainhira erosaun mosu.

Area sira inklinado inundasaun kuaze inteiramente iha area ho kaptasaun badak, besik ba mota ibun. Area boot rua mak **PA Bazartete** nebe inklinado ba inundasaun no nee konstrui-as iha **Liquiça Vila no Lauhata.** Prosesu maioria responsavel iha nee ba volume boot husi be tun ba rai-naruk depois periodu udan monu rai prolongado (oras balu ka dala ruma loron tomak), ka depois kurto, udan monu rai intense. Ida nee hanesan sempre sai kazu, halo problema ba aktividade umano konstrui infra-estrutura iha cidade rua neebe mak la fornese drainajem adekuado hodi be suli. Cidade nee rasik akto hanesan barraje, haforsa be sae no suli liu kanal mota ninin. Durante workshop KVAK, feto nia ekipa deskreve suco nee hanesan iha risko ás husi inundasaun embora mane sira nia ekipa dehan katak iha risko mediu. Feto nia ekipa fo komentariu katak inundasaun neebe mak mosu iha **2011** no maioria afeita uma sira komunidade no sistema-be no plantasaun, espesialmente iha **aldeias Raukasa, Pisu Leten, Pisu Kraik no Kamalehu**. Hanesan mekanismo jere hodi mitiga risko neebe estraga estrada husi inundasaun komunidade kuda-ai, hasai sedimentasaun husi drainajem iha parte estrada no organiza Tara Bandu. Iha eventos husi inundasaun neebe estraga ba uma sira, hanesan mekanismo jere familia afeitado sira hadiak uma sira nee.

Vizaun jeral ba probabilidade Risko bazea ba GIS + klasifika komunidade

	Estradas (Total=22.5km)	Uma (Total=631)	Eskolas (Total=3)	Fasilidade Saude (Total=0)
RaI-halai	La konkorda	La konkorda	Konkorda – naton/laiha risko	n/a
Erosaun Solu	konkorda – mediu/ás	konkorda – mediu/ás	La konkorda	n/a
Inundasaun	La konkorda	La konkorda	Konkorda – naton/laiha risko	n/a

Rekomendasaun:

Ho ida nee area sira iha risko ás no afeitado ona husi rai-halai no inundasaun mak relativamente kiik nee sei rekomenda atu servisu ho komunidade hodi foka ba iha estratejia preventativa iha area hirak nee atu nunee hetan resultado lalais em termus ba mitigasaun risko. Komunidade mensiona katak nee planta ona ai-horis hanesan mekanismo preventativa ida husi estragos mak nafatin relata, hoi da nee rekomenda katak abordajem no metodolojia komunidade mak uza reve ho hare tuir presiza atu halo aktividade nee efikas liu.

Suco Leorema, posto Administrativo Bazartete, Municipio Liquica

	Rai-halai	Erosaun Solu	Inundasaun
GIS	Laiha risko (87.8%)* naton (6.0%) Med (2.0%) Ás (4.2%)	Naton (1.0%) Med (44.5%) Ás (54.5%)	Laiha risko (99.9%) Iha risko (0.1%)
KVAK (m)	Ás (1.75)**	La identifika	La identifika
KVAK (f)	Ás (2.50)	Ás (2.33)	La identifika

*nee % husi total iha suco= hektar 2,235

** hanesan médiu klasifika ba presepsaun risko husi matric vulnerabilidade ho klasifika maximu 3

Suco Leorema mak populado barak liu konsidera katak nee remota liu. Iha numero balu husi mota kiik sira no rai-lolo naruk. Erosaun mak risko boot-liu, ho area balu iha risko ás ba rai-halai iha parte norte. Total area rai husi Suco Leorema mak hektar 2,235, ho hektar 1,243 (55.6%) iha kaptasaun Mota Comoro, 864 (38.7%) iha Kaptasaun Mota Lois, hektar 94 (4.2%) iha kaptasaun Mota Moraeloa, no hektar 34 (1.5%) iha Kaptasaun Mota Carbutaeloa.

Komparasaun husi Dadus GIS no tuir presepsaun komunidade ba Perigos no infra-estrutura husi Nivel Risko

	Estradas (Total=19.6km)		Uma (Total=793)		Eskolas (Total=5)		Fasilidade Saude (Total=1)		Seluk
	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	KVAK (m/f)
RaI-halai	Laiha Risko (91.1%) Naton (4.6%) Med (2.5%) Ás (1.8%)	Med (2.0)/ Ás (3.0)	Laiha Risko (94.8%) Naton (1.7%) Med (1.1%) Ás (2.4%)	Naton (1.0)/ Ás (3.0)	Laiha Risko (100%)	La identifika hanesan infra-estrutura iha risko	Laiha Risko (100%)	La identifika hanesan infra-estrutura iha risko	La identifika/la identifika
Erosaun Solu	Naton (2.2%) Med (53.4%) Ás (44.4%)	Naton (0.0)/ Ás (3.0)	Naton (0.9%) Med (33.8%) Ás (65.3%)	Naton (0.0)/ Med (2.0)	Med (60%) Ás (40%)	La identifika hanesan infra-estrutura iha risko	Med (100%)	La identifika hanesan infra-estrutura iha risko	La identifika/la identifika
Inundasaun	Laiha Risko (100%)	La identifika/la identifika	Laiha Risko (100%)	La identifika/la identifika	Laiha Risko (100%)	La identifika/la identifika	Laiha Risko (100%)	La identifika/la identifika	La identifika/la identifika

Em termus total area, Suco Leorema iha maioria rai neebe mak iha risko ás ba rai-halai ho hektar 94. Hirak nee hotu iha Kaptasaun Mota Comoro. Aspeito interesante ida ba area sira iha risko mak iha Kaptasaun Mota Comoro katak iha balu husi sira mak iha area risko as no iha extremu husi rai-as iha parte Suco Leorema. Membro komunidade sira hamutuk lima nolu resin hitu (mane 33 no feto 24) neebe atende iha workshop KVAK. Mane sira komentariu katak rai-halai mosu tinan-tinan resulta fo destruisaun ba uma komunidade no plantasaun iha **Aldeia Kutulau, Bukumera, Urema, Railuli, Urluli no Hatuhoui**. Feto sira komentariu katak rai-halai mosu seriu liu iha **2004 no 2014,** no resulta hodi destroi estrada, uma, plantasaun no Sistema be iha **Aldeia Kutulau no Railuli.** Membro komunidade bai-bain uza materiais lokal neebe mak disponivel no servisu voluntariu atu halo reparasaun minor ba estrada neebe mak estraga no ponte kiik sira depois rai-halai. Sira mos kuda-ai lokal atu koko proteze ba solu husi rai-halai, uza sira nia inisiativa rasik. Chefe Suco normalmente komunika ho autoridade distrito ba reparasaun boot. Tuir presepsaun komunidade nian, mane sira esplika katak uma sira iha nivel risko naton ba rai-halai bazea ba sira nia esperiensia husi rai-halai neebe mak mosu iha kada tinan, maske nunee feto sente katak uma sira iha risko nivel as bazea ba rai-halai neeba mak mosu iha **2004 no 2014 iha aldeia Kutulau.** Hanesan mekanismo jere, ema afeitado evakua husi sira nia uma ba fatin seguru no depois koko hadiak uma ho aujda husi membro komunidade seluk.

Durante workshop KVAK komunidade deskreve katak suco nee iha ona risko as ba erosaun, hatete tan katak nee mosu husi **2008-2015**, maioria afeita ba komunidade nia rai-agrikula, espesialmente iha **aldeia sira Manulateten, Railuli, Urema no Fatuhou**. Tuir komunidade, nivel risko ba estrada mai husi erosaun mak médiu, bazea ba esperiensia ba erosaun huso **2008 ate 2015** iha neebe afeita barak liu ba iha ponte kiik sira. Hanesan ho rai-halai, membro komunidade sira bai-bain uza materiais lokal neebe mak disponivel no servisu voluntariu hodi halo reparasaun ba estragos minor iha estrada no ponte kiik. Sira mos kuda-ai lokal atu proteze solu, mai husi sira nia inisiativa rasik. Chefe suco normalmente komunika ho autoridade distrito konaba reparasaun boót. Tuir komunidade nia presepsaun mane sira sente katak uma sira neebe nivel risko mediu ba erosaun, tamba erosaun neebe mosu iha **2008-2015.** Hanesan mekanismo jere, ema afeitado koko atu repara uma ho ajuda husi membro komunidade seluk depois erosaun mosu.

Membro komunidade sira ladun konsidera inundasaun hanesan risko ida. Maibe, sira dehan posibilidade iha inundasaun be suli habelar neebe makaás liu. Ekipa mane nia mensiona katak iha inundasaun be suli habelar iha **2007-2008** iha neebe resulta hodi estraga rai-agrikula, plantasaun no uma komunidade.

Vizaun jeral ba probabilidade Risko bazea ba GIS + klasifika komunidade

	Roads (Total=19.6km)	Houses (Total=793)	Schools (Total=5)	Health Facilities (Total=1)
Ral-halai	Disagree	Disagree	Agree – low/no risk	Agree – low/no risk
Erosaun Solu	Agree – medium / high	Agree – medium risk	Agree – medium risk	Disagree
Inundasaun	Agree – low/no risk	Agree – low/no risk	Agree – low/no risk	Agree – low/no risk

<u>Rekomendasaun:</u>

Komunidade foin lalais nee halo sasukat prevensaun balu atu redus impakto risko, espesialmente ba erosaun no rai-halai. Hatudu katak sira mak relata estragos ba infra-estrutura bazea ba ida nee rekomenda katak komunidade presiza visita dala ida tan atu dezemvolve Planu Aksaun Resiliente Aldeia atu nunee hodi mitiga risko impakto negativo. Embora area ida iha risko naton mai husi inundasaun, komunidade relata estrada, pontes, drainajem no sistema be signifikante estraga husi inundasaun be suli habelar, ho nunee rekomenda atu esplora kestaun hirak nee nafatin atu identifika area sira espesifiku no neebe kauza husi inundasaun no esplora abordajem atu mitiga impakto husi eventus hirak nee.

Suco Metagou, posto Administrativo Bazartete, Municipio Liquica

	Rai-halai	Erosaun Solu	Inundasaun
GIS	Laiha risko (64.7%)* Naton (19.2%) Med (6.0%) Ás (10.1%)	Naton (0.3%) Med (28.6%) Ás (71.2%)	n/a
KVAK (m)	Med (1.19)**	La identifika	La identifika
KVAK (f)	Med (1.19)	Med ()	La identifika

*nee % husi total iha suco= hektar 626

** hanesan médiu klasifika ba presepsaun risko husi matric vulnerabilidade ho klasifika maximu 3

Suco Metagou mak primariamente iha kaptasaun norte ho risko substanisal ba rai-halai no kuaze area hotu iha risko mediu no ás ba erosaun. Total area rai Suco Metagou mak hektar 626, ho hektar 312 (49.8%) iha Kaptasaun Mota Carbutaeloa, 226 (42.5%) iha Kaptasaun Mota Gularloa, no hektar 48 (7.7%) iha Kaptasaun Mota Lois. Membro komunidade total 69 (mane 56 no feto 13) mak partisipa iha workshop KVAK.

Komparasaun husi Dadus GIS no tuir presepsaun komunidade ba Perigos no infra-estrutura husi Nivel Risko

	Estrada (Total=7.1km)		Uma (Total=285)		Eskolas (Total=1)		Fasilidade Saude (Total=1)		Seluk
	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	KVAK (m/f)
RaI-halai	Laiha risko (82.6%) Low (14.4%) High (3.0%)	Ás (3.0)/ Ás (3.0)	Laiha risko (82.1%) Naton (7.7%) Med (2.1%) Ás (8.1%)	Naton (1.0)/ Naton (1.0)	Laiha risko (100%)	Laiha risko (0.0)/ Laiha risko (0.0)	Laiha risko (100%)	La consider infra-estrutura hanesan iha risko	Ponte kiik, Sistema be, posto eletrisidade/ Ponte kiik, Sistema be, posto eletrisidade
Erosaun Solu	Med (52.5%) Ás (47.5%)	La identifika/la identifika	Med (36.5%) Ás (63.5%)	La identifika/la identifika	Ás (100%)	La identifika/la identifika	Med (100%)	La consider infra-estrutura hanesan iha risko	La identifika/la identifika
Inundasaun	La konsidera iha risko =>								

Rai-halai mosu kuaze tinan-tinan resulta estraga plantasaun kafe, estrada rural, drainajem, uma komunidade, posto elertisidade, tanki be no ponte kiik sira, partikularmente iha **Aldeia Asorlema no Metiluly.** Membro komunidade sira planta ai-lokal tuir sira nia inisiativa rasik hodi koko prevene husi rai-halai mosu.

Membro komunidade indika katak udan boot fo impakto signifikante ba estrada rural, kanal no ponte kiik sira. Kauza husi udan boot nee impakto barak iha area neebe mak sofre husi erosaun solu iha probabilidade katak erosaun kauza importante ida iha area sira neebe mak estragos ás.

Laiha area ruma iha Suco Metagou atu iha risko ba inundasaun.

Vizaun jeral ba probabilidade Risko bazea ba GIS + klasifika komunidade

	Estrada (Total=7.1km)	Uma (Total=285)	Eskolas (Total=1)	Fasilidade Saude (Total=1)
RaI-halai	La konkorda	konkorda – naton/laiha risko	konkorda – naton/laiha risko	konkorda – naton/laiha risko
Erosaun Solu	La konkorda	La konkorda	La konkorda	Konkorda – risko Mediu
Inundasaun	n/a	n/a	n/a	n/a

Rekomendasaun:

Prekupasaun prinsipal no kestaun sira neebe mak foti husi komunidade mak konaba infra-estrutura estrada no iha neebe fo risko as husi erosaun, inisiativa rehabilitasaun no manutensaun neebe mak rekomenda, iha neebe inkluindo infra-estrutura estrada kiik hanesan goron-gorong kiik no drainajem parte iha estrada. Komunidade presiza formasaun hasae kapasidade atu nunee hodi rekonhese sinal husi erosaun, no hatene oinsa kombate ida nee.

Suco Vaviquinia, posto Administrativo Maubara, Municipio Liquica

	Rai-halai	Erosaun Solu	Inundasaun
GIS	Laiha risko (80.8%)* Naton (5.7%) Med (10.0%) Ás (3.5%)	Naton (5.4%) Med (46.3%) Ás (48.3%)	Laiha risko (97.3%) Iha risko (2.7%)
KVAK (m)	Med (1.43)**	La identifika	Ás (1.0)
KVAK (f)	Ás (2.33)	La identifika	La identifika

*nee % husi total iha suco= hektar 1,946

** hanesan médiu klasifika ba presepsaun risko husi matric vulnerabilidade ho klasifika maximu 3

Suco Vaviquinia inkluindo area sira iha kosteira no rai-lolo. Maubara Vila iha suco ida nee, iha neebe problema boot mak erosaun solu no tuir kosteira husi leste aumenta risko inundasaun. Total area rai husi Suco Vaviquinia mak hektar 1,946, ho hektar 771 (39.6%) iha Kaptasaun Agregando Mausako, 439 (22.6%) iha Kaptasaun Mota baboon, hektar 423 (21.7%) iha kaptasaun Mota Morae, no hektar 313 (16.1%) iha Kaptasaun Agregando Maubara Sia.

Komparasaun husi Dadus GIS no tuir presepsaun komunidade ba Perigos no infra-estrutura husi Nivel Risko

	Estrada (Total=13.4km)		Uma (Total=627)		Eskolas (Total=3)		Fasilidade Saude (Total=1)		Seluk
	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	KVAK (m/f)
RaI-halai	Laiha risko (97.2%) Naton (1.4%) Med (1.4%)	Ás (3.0)/ Ás (3.0)	Laiha risko (96.2%) Naton (1.0%) Med (0.8%) Ás (2.0%)	Laiha risko (0.0)/ Ás (3.0)	Laiha risko (100%)	La konsidera infra-estrutura hanesan iha risko	Laiha risko (100%)	La konsidera infra-estrutura hanesan iha risko	Sistema be/Sistema be
Erosaun Solu	Naton (9.9%) Med (75.5%) Ás (14.6%)	Naton (1.0)/ Ás (3.0)	Naton (5.1%) Med (76.7%) Ás (18.2%)	Med (2.0)/ Med (2.0)	Med (66.7%) Ás (33.3%)	La konsidera infra-estrutura hanesan iha risko	Med (100%)	La konsidera infra-estrutura hanesan iha risko	La identifika/la identifika
Inundasaun	Laiha risko (93.8%) Iha risko (6.2%)	Med (2.0)/ La identifika	Laiha risko (98.4%) Iha risko (1.6%)	Med (2.0)/ La identifika	Laiha risko (100%)	La konsidera infra-estrutura hanesan iha risko	Laiha risko (100%)	La konsidera infra-estrutura hanesan iha risko	La identifika/la identifika

Total membro komunidade 74 (mane 43 no feto 31) neebe mak atende workshop KVAK. Feto nia ekipa deskreve katak Suco Vaviquinia identifika hanesan risko as ba rai-halai no mane sira deskreve katak ida nee hanesan risko médiu. Sira halo komentariu nee bazea ba iha rai-halai neebe mosu kuaze tinan-tinan **iha aldeia Pametapu, Nunuana, Darulara no Delesivaty** iha neebe resulta destruisaun ba area plantasaun sira, rai-agrikula, uma komunidade, no estrada rural iha neebe inkluindo Sistema drainajem, tanki kapitasaun no linha pipa. Rai-halai prinsipalmente mosu iha area sira lokalizado iha rai-lolo ligasaun ba iha mota ka mota-kiik oan. Tanki kapitasaun aát hotu tamba rai-halai, linha pipa parte balu destroi ona no rai-halai mos afeita be-matan balu.

Presepsaun komunidade ba risko husi rai-halai iha probabilidade ho dadus GIS: tuir membro komunidade sira, nivel risko ba iha estrada husi rai-halai mak as; ida nee tamba parte balu husi estrada (partikularmente kanal drainajem no estrada nia isin) iha aldeia Nunuana signifikante estraga bainhira rai-halai mosu. Hanesan mekanismo jere membro komunidade sira, espesialmente hirak neebe mak hela besik iha area sira afeitado, foti inisiativa atu asegura parte estraga husi estrada sei bele utiliza tan liu husi hasai materiais solu neebe mak blokea estrada nee. Maibe, **membro komunidade sujere hodi implementa bio-enjineria ida iha area parte estrada**. Rai-halai afeita uma membro komunidade iha kada tinan no hanesan mekanismo jere, ema afeitado sira evakua husi sira nia uma ba iha fatin seguru no depois koko atu hadiak uma ho apoio husi membro komunidade sira seluk no ho apoio externa.

Maske nunee dadus hatudu katak iha nivel risko signifikante husi erosaun iha suco nee, komunidade sira ladun identifika hanesan perigos maioria neebe mak sira hasoru oras nee dadaun.

Komunidade hatete katak iha mos risko mediu ida em termos possibilidade ba inundasaun. Mane nia ekipa hateten katak inundasaun neebe boot iha **2014** iha **aldeia sira hanesan Morae no Vaviquinia Vila. Iha Morae,** ida nee mosu iha area kosteira. Eventos nee assosiado ho anin-boót-hu mai husi tasi too iha foho. Inundasaun prinsipalmente mosu husi mota kiik-oan sira neebe lokalizado iha foho kotuk aldeia nee. Tamba iha nebe laiha vegetasaun iha area nee, velosidade superficie solur mos hotu rapidamente no drainado makaás husi be tama iha area residensial sira.

Iha **aldeia sira hanesan Morae no vaviquinia Vila** parte balu husi estrada estraga signifikante liu, kanal drainajem neebe blokeado tamba taho no estrada-lolon afeitado mai-husi inundasaun. Hanesan mekanismo jere membro komunidade sira, espesialmente hirak neebe hela besik iha area afeitado sira, foti inisiativa atu asegura parte estragos husi estrada hodi bele utiliza nafatin liu husi hasai materiais solu neebe blokeado estrada. Maibe, membro komunidade sira sujere mos ho inisiativa atu implementa bio-enjineria ba iha area parte estrada ninin. Mane nia ekipa sente nivel risko ba uma sira mai husi inundasaun nee mediu, ida nee bazea ba esperiensia iha **aldeia Morae** iha neebe mosu inundasaun boot iha 2014.

Vizaun jeral ba probabilidade Risko bazea ba GIS + klasifika komunidade

	Estrada (Total=13.4km)	Uma (Total=627)	Eskolas (Total=3)	Fasilidade Saude (Total=1)
RaI-halai	La konkorda	La konkorda	Konkorda – naton/laiha risko	Konkorda – laiha risko
Erosaun Solu	Konkorda – mediu/Ás	Konkorda – risko mediu	La konkorda	Konkorda – risko mediu
Inundasaun	La konkorda	La konkorda	Konkorda – naton/laiha risko	Konkorda – laiha risko

<u>Rekomendasaun:</u>

Maske iha area barak mak iha risko neebe mak kiik, komunidade iha ona esperiensia ba numero eventos balu iha tinan nee katak iha impakto signifikante no kauza estragos. Iha area espesifiko hirak nee no iha impakto boot ba iha estrada. Maske komunidade halo ona sujestaun konaba oinsa atu prevene impakto sira hanesan nee

iha futuru, no inisiativa hirak nee rekomenda bele apoio. Ida nee inkluindo inisiativa bio-enjineria ba estrada neebe mak afeitado mai-husi rai-halai iha aldeia Nunuana. No mos atu assesso ba area mota kiik oan sira neebe mak kauza husi inundasaun iha Morae, ida nee rekonhese katak iha neeba laiha vegetasaun no problema ida no intervensaun apropriado ida bele redus risko iha futuru husi inundasaun iha area nee. Estrada mos hetan estragos iha aldeia Vaviquinia Vila no Morae, dala ida tan membro komunidade sujere inisiativa implementa bio-enjineeria iha area estrada ninin sira hirak nee mak rekomenda atu apoio.

Suco Maubaralissa, Posto Administrativo Maubara, Municipio Liquiça

	Rai-halai	Erosaun Solu	Inundasaun
GIS	Laiha risko (74.7%)* Naton (8.8%) Med (13.5%) Ás (3.0%)	Naton (5.2%) Med (46.9%) Ás (47.9%)	n/a
KVAK (m)	Med (1.50)**	La identifika	n/a
KVAK (f)	Med (1.62)	La identifika	n/a

*nee % husi total iha suco= hektar 1,252

** hanesan médiu klasifika ba presepsaun risko husi matric vulnerabilidade ho klasifika maximu 3

Suco Maubaralissa nee suco ida neebe mak iha rai-ás, iha mota nia-let entre Kaptasaun Mota Lois no Babono. Iha norte hasoru rai-lolo iha Kaptasaun Mota Babono nee iha risko as ba rai-halai. Risko erosaun nee mediu ka as iha suco nee tomak. Total area rai husi Suco Maubaralissa mak hektar 1,252, ho hektar 765 (61.1%) iha Kaptasaun Mota Babono no hektar 487 (38.9%) iha Kaptasaun Mota Lois.

Komparasaun husi Dadus GIS no tuir presepsaun komunidade ba Perigos no infra-estrutura husi Nivel Risko

	Estradas (Total=6.4km)		Uma (Total=275)		Eskolas (Total=1)		Fasilidade Saude (Total=1)		Seluk
	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	KVAK (m/f)
RaI-halai	Laiha risko (89.2%) Naton (5.6%) Med (5.2%)	Ás (3.0)/ Ás (3.0)	Laiha risko (87.6%) Naton (4.4%) Med (5.5%) Ás (2.5%)	Laiha risko (0.0)/ Laiha risko (0.0)	Laiha risko (100%)	La konsidera infra-estrutura hanesan iha risko	Laiha risko (100%)	La konsidera infra-estrutura hanesan iha risko	Sistem-be, ponte kiik/ Sistema-be
Erosaun Solu	Naton (13.7%) Med (55.9%) Ás (30.4%)	La identifika/la identifika	Naton (10.5%) Med (49.8%) Ás (39.6%)	La identifika/la identifika	Naton (100%)	La identifika/la identifika	High Risk (100%)	La identifika/la identifika	La identifika/la identifika
Inundasaun	La konsidera iha risko =>								

Membros komunidade 93 (mane 65 no feto 28) hirak neebe mak atende iha workshop KVAK hatete katak **Suco Maubaralissa** jeralmente area iha risko mediu ba rai-halai. Feto sira komentariu katak rai-halai mosu iha **2012,** resulta destruisaun ba plantasaun kafe, plantasaun-nu, tos-batar no produtos minor balu hanesan talas. Rai-halai mos afeita ba estrada rural no sistema drainajem iha **aldeia sira haanesan Nunulete no Darulema**. Ekipa mane nia mos komentaria katak rai-halai mosu iha **1991, 2012 no 2015,** resulta destruisaun ba tanki kapitasaun be, plantasaun kafe, rai-agrikula no estrada rural iha **aldeia sira hanesan Mukulara, Watupu, Kaliwatu no Patuge**.

Membro komunidade fiar katak estrada sira jeralmente iha risko as mai husi rai-halai no ho probabilidade sei bazea ba sira nia esperiensia iha **2012** uanihira rai-halai no kauza estragos.

Laiha area ruma neebe mak konsidera iha Suco Maubaralissa atu sai risko ba inundasaun. Komunidade konkorda katak iha neeba laiha risko jeral ba inundasaun iha Suco Maubaralissa maibe sira fahe esperiensia inundasaun husi be neebe suli habelar iha **2000 no 2002 – 2012** iha nivel mediu iha **aldeia Nunulete no Darulema.** Inundasaun be suli habelar fo distruisaun ba plantasaun batar (inkluindo batar iha isin ona neebe atu kolheta), ai-farinha no pekuaria hetan moras. Durante tempo udan, estrada rural no Sistema drainajem nee mak infra-estrutura neebe hetan sofre husi inundasaun be suli habelar.

Vizaun jeral ba probabilidade Risko bazea ba GIS + klasifika komunidade

	Estrada (Total=6.4km)	Uma (Total=275)	Eskola (Total=1)	Fasilidade Saude (Total=1)
RaI-halai	La konkorda	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	Konkorda – laiha risko
Erosaun Solu	La konkorda	La konkorda	Konkorda – naton/laiha risko	La konkorda
Inundasaun	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	Konkorda – laiha risko

Rekomendasaun:

Maske nunee iha ona risko naton ba rai-halai no inundasaun iha suco tomak, aldeia Nunulete no Darulema afeitado husi inundasaun be suli habelar no rai-halai hodi estraga ba infra-estrutura no properiadade. Rekomenda hodi dezemvolve Planu Aksaun Resiliente ba Aldeia atu nunee komunidade iha aldeia hirak nee bele mitiga hasoru impakto negativu husi rai-halai ka inundasaun iha futuru.

Suco Lissadila, Posto Administrativo Maubara, Municipio Liquiça

	Rai-halai	Erosaun Solu	Inundasaun
GIS	Laiha risko (96.2%)* Naton (1.6%) Med (1.7%) Ás (0.5%)	Naton (14.4%) Med (70.1%) Ás (15.4%)	Laiha risko (90.4%) Iha risko (9.6%)
KVAK (m)	Med (1.31)**	La identifika	La identifika
KVAK (f)	Med (1.50)	La identifika	La identifika

*nee % husi total iha suco= hektar 5,495

** hanesan médiu klasifika ba presepsaun risko husi matric vulnerabilidade ho klasifika maximu 3

Suco Lissadila mak suco ida hetan apoio husi SSRI makaás. Prinsipalmente iha rai-lolo no inkluindo area extensaun ba iha inklinado inundasaun Mota Lauveli, iha neebe inundasaun sai hanesan risko seriu. Total area rai husi Suco Lissadila mak hektar 5,495, sira hotu (100%) iha Kaptasaun Mota Lois.

Komparasaun husi Dadus GIS no tuir presepsaun komunidade ba Perigos no infra-estrutura husi Nivel Risko

	Estradas (Total=16.9km)		Uma (Total=759)		Eskolas (Total=2)		Fasilidade Saude (Total=1)		Seluk
	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	KVAK (m/f)
Rai-halai	Laiha Risko (97.6%) Naton (1.2%) Med (0.6%) Ás (0.6%)	Ás (3.0)/ Med (2.0)	Laiha Risko (98.2%) Med (0.7%) Ás (1.1%)	Med (2.0)/ Med (2.0)	Laiha Risko (100%)	Naton (1.0)/ Ás (3.0)	Laiha Risko (100%)	Naton (1.0)/ La identifika	Sistema be/Sistema be
Erosaun Solu	Naton (16.0%) Med (68.5%) Ás (15.6%)	La identifika/la identifika	Naton (7.1%) Med (65.9%) Ás (27.0%)	La identifika/la identifika	Med (50%) Ás (50%)	La identifika/la identifika	Med (100%)	La identifika/la identifika	La identifika/la identifika
Inundasaun	Laiha Risko (86.6%) Iha Risko (13.4%)	La identifika/la identifika	Laiha Risko (90.8%) Iha Risko (9.2%)	La identifika/la identifika	Laiha Risko (100%)	La identifika/la identifika	Laiha Risko (100%)	La identifika/la identifika	La identifika/la identifika

Membro komunidade sira hamutuk 100 (mane 58 no feto 42) hirak neebe mak atende iha workshop KVAK konkorda katak jeralmente sira sente Suco Lissadila mak area risko mediu ba rai-halai. Ekipa feto nia mos komentariu katak rai-halai mosu iha **2015,** resulta hodi fo distruisaun ba natar, uma komunidade no area plantasaun iha **aldeia sira Lebui no Mankabia.** Mane mos komentariu katak rai-halai mosu iha **1999, 2007-2009** no **2014-15**, resulta destruisaun ba natar sira, estrada rural, area plantasaun sira no uma komunidade iha **aldeia sira Diru Anwei, Lissa Luli, Mau-Bara, Kai-Pu, Nunu-Lau, Manieki, Degenu-Siku no Ulo-Ana**.

Membro Komunidade la identifka erosaun hanesan perigo ida sira hasoru ka prekupa ho.

Suco Lissadila mak iha Kaptasaun Mota Lois nia klaran ho risko boot ba inundasaun. Membro komunidade hatete sira sente iha neeba laiha risko inundasaun jeral iha Suco Lissadila maibe sira deit saida mak esperiensia ba inundasaun be suli habelar ho nivel as. Ekipa rua mensiona hotu katak inundasaun be suli habelar iha tinan tomak, inkluindo iha **aledia sira Daru Watu-Lau, E´e Solo So, Gou Mau Lua, Nunu-Lau, Manleki, Degenu-Siku**, resulta hodi fo destruisaun ba komunidade nia uma sira, toos-batar, linha pipa ba be-hemo, Sistema be no pekuaria barak mak mate. Inundasaun be suli habelar mak problema prinsipal ba suco nee tamba kuaze rai no properiadade sira lokalizado besik liu ba be. Estrada sira iha inklinado inundasaun no la-fui asphalt, ka sekarik sira fui-asphalt, entaun asphalt sira nee destroi hotu ona no estrada sai fali hanesan rai-rahun/taho no mesak britas/fatuk deit.

Vizaun jeral ba probabilidade Risko bazea ba GIS + klasifika komunidade

	Estradas (Total=16.9km)	Uma (Total=759)	Eskolas (Total=2)	Fasilidade Saude (Total=1)
RaI-halai	La konkorda	La konkorda	La konkorda	Konkorda – laiha risko
Erosaun Solu	La konkorda	La konkorda	La konkorda	La konkorda
Inundasaun	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	Konkorda – laiha risko

Rekomendasaun:

Area sira inklinado ba inundasaun be suli habelar no besik ba be – fila fali halo metodikal avaliasaun, PAAR no halao treinamento hasae kapasidade atu asegura komunidade informa ho diak konaba saida mak erosaun, oinsa hodi lokaliza ida nee no oinsa atu prevene.

Suco Gariuai, Posto Administrative Baucau Vila, Municipio Baucau

	Rai-halai	Erosaun Solu	Inundasaun
GIS	Laiha Risko (100%)*	Naton (73%) Med (26.8%) Ás (0.2%)	Laiha Risko (100%)
KVAK (m)	La identifika **	Naton (1.24)	La identifika
KVAK (f)	Naton (0.47)	La identifika	La identifika

*nee % husi total iha suco= hektar 4,378
** hanesan médiu klasifika ba presepsaun risko husi matric vulnerabilidade ho klasifika maximu 3

Suco Gariuai mak primariamente tetuk no as, iha perigos neebe hasoru mak erosaun, iha neebe ho risko naton no mediu. Total area rai husi Suco Gariuai mak hektar 4,378, ho hektar 4,227 (96.6%) iha Kaptasaun Mota Seiçal, no hektar 151 (3.4%) iha Kaptasaun Agregando Baucau. Membro komunidade 96 (mane 46 no feto 50) mak atende iha workshop KVAK. Maske nunee risko naton jeralmente husi inundasaun, membro komunidade mos relata frequente inundasaun be suli habelar no impakto relasionado.

Komparasaun husi Dadus GIS no tuir presepsaun komunidade ba Perigos no infra-estrutura husi Nivel Risko

	Estrada (Total=18.6km)		Uma (Total=697)		Eskolas (Total=6)		Fasilidade Saude (Total=0)		Seluk
	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	KVAK (m/f)
RaI-halai	Laiha Risko (100%)	La identifika / Laiha Risko (0.0)	Laiha Risko (100%)	La identifika / Laiha Risko (0.0)	Laiha Risko (100%)	La identifika / Laiha Risko (0.0)	n/a	n/a	La identifika/la identifika
Erosaun Solu	Naton (81.2%) Med (18.3%) Ás (0.5%)	Laiha Risko (0.0)/ La identifika	Naton (86.2%) Med (13.8%)	Laiha Risko (0.0)/ La identifika	Naton (66.7%) Med (33.3%)	Laiha Risko (0.0)/ La identifika	n/a	n/a	Sistema be/ n/a
Inundasaun	La konsidera iha risko =>								

Feto sira mensiona katak rai-halai neebe mosu iha 2012, resulta iha destruisaun ba plantasaun no parte balu mak area floresta iha **aldeia Uatacamana.** Erosaun mak ameasa potensia ba inklinado inundasaun ba iha **Mota Seiçal,** no konsidera jeralmente nivel risko mediu ida. Fator kontribusaun primaria mak menus kovre husi vegetasaun no rai kahor ho rai-henek, friavel natural ba iha solu. Suco sira iha Kaptasaun Mota Seiçal iha area luan husi rai neebe mak eksposizaun ba risko mediu ida husi erosaun. Durante workshop KVAK mane nia ekipa deskreve katak suco iha ona risko mediu ba erosaun. Sira mos komentariu katak la identifika erosaun hanesan perigo ida iha **2010 no 2013,** iha neebe afeita dala barak ba rai-agrikula, natar no Sistema irigasaun iha aldeia **Loritoni, Wailesu no Banaá.** Feto nia ekipa la indika erosaun hanesan perigo ka la perkupa ida.

Ekipa feto nia komentariu katak ba inundasaun be suli habelar iha 2012 -2015 **iha aldeia sira Uai Resa, Loro Tuni, Uai Lolo, Liliba Builukilori no Wailesu**, iha neebe resulta destruisaun ba natar no area plantasaun, linha pipa be hemu, kluturas ai-han (batar no hudi), estrada rural no pekuaria. Mane nia ekipa komentariu katak inundasaun be suli habelar neebe mosu regularmente hahu **2000 iha aldeia sira Lacunabu´u, Samabere, Liu Isi-Loritui, Waires, Buidura, Cailolo, Wailesu, Sabileu no Lisibina**, iha neebe resulta hodi destruisaun ba natar, hudi, pekuaria, Sistema be, kaixa gabion no Sistema irigasaun. Inundasaun mak problema prinsipal husi komunidade iha Suco Gariuai. Tipo ida nee kontribui perigos ba destruisaun ba estrada rural, ponte kiik no Sistema be. Inundasaun be suli habelar mos afeita irigasaun iha area no liu to natar hektar 10.

Vizaun jeral ba probabilidade Risko bazea ba GIS + klasifika komunidade

	Estrada (Total=18.6km)	Uma (Total=697)	Eskolas (Total=6)	Fasilidade Saude (Total=0)
RaI-halai	Konkorda – laiha risko	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	n/a
Erosaun Solu	La konkorda	La konkorda	La konkorda	n/a
Inundasaun	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	n/a

Rekomendasaun:

Ida nee rekomenda presiza avaliasaun dala ida tan hodi halao iha suco nee hodi esplora estratejia atu redus erosaun no impakto husi inundasan be suli habelar.

Suco Bahu, posto Administrativo Baucau Vila, municipio Baucau

	Rai-halai	Erosaun Solu	Inundasaun
GIS	Laiha Risko (100%)*	Naton (81.1%) Med (17.2%) Ás (1.7%)	Laiha Risko (100%)
KVAK (m)	Naton (0.43)**	La identifika	La identifika
KVAK (f)	Naton (0.48)	La identifika	La identifika

*nee % husi total iha suco= hektar 1,147

** hanesan médiu klasifika ba presepsaun risko husi matric vulnerabilidade ho klasifika maximu 3

Suco Bahu halai husi Baucau plato kraik eskarpa iha Baucau Vila ba iha kosta, no perigos nebe hasoru mak erosaun, iha neebe ho deit risko kiik, iha balu risko mediu no risko ás ituan. Total area rai husi Suco Bahu mak, hektar 1,474, ho hektar 786 (53.3%) iha Kaptasaun Mota Seiçal no hektar 688 (46.7%) iha Kaptasaun Agregando Baucau. Membro komunidade total 60 (mane 20 no fetom 40) atende iha workshop KVAK nee.

Komparasaun husi Dadus GIS no tuir presepsaun komunidade ba Perigos no infra-estrutura husi Nivel Risko

	Estrada (Total=9.0km)		Uma (Total=660)		Eskolas (Total=3)		Fasilidade Saude (Total=1)		Seluk
	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	KVAK (m/f)
RaI-halai	Laiha Risko (100%)	Laiha Risko (0.0)/ Low (1.0)	Laiha Risko (100%)	Laiha Risko (0.0)/ Laiha Risko (0.0)	Laiha Risko (100%)	Laiha Risko (0.0)/ Laiha Risko (0.0)	Laiha Risko (100%)	Laiha Risko (0.0)/ Laiha Risko (0.0)	La identifika/la identifika
Erosaun Solu	Naton (88.9%) Med (10.0%) Ás (1.1%)	La identifika/la identifika	Naton (65.3%) Med (33.5%) Ás (1.2%)	La identifika/la identifika	Naton (100%)	La identifika/la identifika	Naton (100%)	La identifika/la identifika	La identifika/la identifika
Inundasaun	La konsidera iha risko =>								

Laiha area ruma iha Suco Bahu mak konsidera sei iha risko ba rai-halai. Ekipa komunidade konfirma ida nee liu husi klasifikasaun Suco Bahu hanesan area risko kiik. Ekipa feto nia mos fo komentariu katak rai-halai akontese iha **2011 no 2013,** resulta destruisaun ba iha estrada rural, area plantasaun no natar iha Central no Watudere. Mane sira komentariu katak rai-halai mosu iha tinan-tinan iha **aldeia Batevai no Buile** iha neebe estraga kanal drainajem sira no natar.

Komunidade la indika erosaun hanesan perigo ida sira esperiensia ka prekupa ba.

Vizaun jeral ba probabilidade Risko bazea ba GIS + klasifika komunidade

	Estrada (Total=9.0km)	Uma (Total=660)	Eskolas (Total=3)	Fasilidade Saude (Total=1)
RaI-halai	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko
Erosaun Solu	Konkorda – naton/laiha risko	La konkorda	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko
Inundasaun	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko

Rekomendasaun:

Suco Bahu laos area prioridade hodi halo intervensaun.

Suco Ossoala, Posto Administrativo Vemasse, Municipio Baucau

	Rai-halai	Erosaun Solu	Inundasaun
GIS	Laiha Risko (91.8%)* Naton (1.9%) Med (3.9%) Ás (4.4%)	Naton (38.0%) Med (38.8%) Ás (23.2%)	Laiha Risko (98.1%) Iha Risko (1.9%)
KVAK	Med (1.38)**	La identifika	

*nee % husi total ih suco= hektar 6,508
** hanesan médiu klasifika ba presepsaun risko husi matric vulnerabilidade ho klasifika maximu 3

Suco Ossouala mak populado esparse liu. Infra-estrutura balu iha risko ba inundasaun maibe jeralmente hirak nee konstrui iha area sira inklinado ba inundasaun. Total area rai husi Suco Ossouala mak hektar 6,508, ho hektar 4,561 (70.1%) iha Kaptasaun Mota Vemasse no hektar 1,947 (29.9%) iha Kaptasaun Mota Laleia. Membro komunidade total 62 (mane 25 no feto 37) neebe atende iha workshop KVAK nee.

Komparasaun husi Dadus GIS no tuir presepsaun komunidade ba Perigos no infra-estrutura husi Nivel Risko

	Estrada (Total=2.0km)		Uma (Total=201)		Eskolas (Total=2)		Fasilidade Saude (Total=2)		Seluk
	GIS	KVAK *	GIS	KVAK	GIS	KVAK	GIS	KVAK (m/f)	KVAK (m/f)
RaI-halai	Laiha Risko (100%)	Ás (2.5)	Laiha Risko (100%)	Med (1.5)	Laiha Risko (100%)	Laiha Risko (0.0)	Laiha Risko (100%)	Laiha Risko (0.0)	Sistema be (pipa)
Erosaun Solu	Naton (70.0%) Med (30.0%)	La identifika	Naton (58.7%) Med (39.3%) Ás (2.0%)	La identifika	Med (100%)	La identifika	Naton (100%)	La identifika	La identifika/la identifika
Inundasaun	Laiha Risko (100%)	La identifika	Laiha Risko (88.6%) Iha Risko (11.4%)	La identifika	Laiha Risko (100%)	La identifika	Laiha Risko (100%)	La identifika	La identifika/la identifika

*Facilitador la identifika dadus ba feto no mane

Ekipa komunidade neebe mak atende iha workshop KVAK hatudu katak Ossouala jeralmente area iha risko mediu ba rai-halai. Ekipa feto nian komentariu katak rai-halai mosu iha 2013, resulta iha destruisaun ba komunidade nia uma, area plantasaun, rai-agrikula, Estrada rural, tanki be no linha pipa ba be-hemu iha aldeia Noinewai. Mane sira komentariu katak rai-halai mosu iha tinan-tinan iha aldeia Kaunura, Boiloibora, Uaicaihu, no Huineuai, resulta iha destruisaun ba sistema irigasaun sira, natar, kanal be, estrada rural, kanal drainajem no komunidade nia uma.

Mane konkorda ho mapa GIS sira, katak uma sira laos iha risko husi erosaun, maibe, feto nia ekipa sente katak risko nivel ás ba rai-halai, possivel tamba estragos ba uma sira susteina ba rai-halai iha 2013.

Tuir mapa GIS sira, iha neeba jeralment risko naton – mediu impakto ba iha infra-estrutura husi erosaun nee tuir dadus, no membro komunidade sira ladauk hare erosaun hanesan risko ida.

Membro komunidade hatete iha neeba laiha risko inudasaun jeral iha **Suco Ossouala,** maibe sira mos fahe informasaun katak sira esperiensia ba inundasaun be suli habelar iha nivel mediu. Ekipa feto nia komentariu katak ba iha inundasaun be suli habelar iha 2014 iha Noinewai hodi resulta destruisaun ba area plantasaun sira, rai-agrikula, uma, estrada rural no Sistema irigasaun. Mane sira komentariu konaba inundasaun iha **2011-2014 iha aldeia Huineuai,** resulta destruisaun ba natar, area

plantasaun sira, rai-agrikula, estrada rural no sistema irigasaun no sistema be (pipa). Komunidade klasifika risko inundasaun hanesan naton, maibe ida nee bele hatete katak risko ba estrada husi inundasaun nebe mak ás no ba uma sira nee mediu.

Vizaun jeral ba probabilidade Risko bazea ba GIS + klasifika komunidade

	Estrada (Total=2.0km)	Uma (Total=201)	Eskolas (Total=2)	Fasilidade Saude (Total=2)
RaI-halai	La konkorda	La konkorda	Konkorda – Risko naton	Konkorda – laiha risko
Erosaun Solu	Konkorda – laiha risko	La konkorda	La konkorda	Konkorda – Risko naton
Inundasaun	Konkorda – Risko naton	Konkorda – Risko naton	Konkorda – Risko naton	Konkorda – laiha risko

Rekomendasaun:

Maske nunee komunidade balu prekupa ba rai-halai jeralmente risko naton no iha neeba prekupa ituan ba erosaun. Enbora inundasaun jeral mak hare hanesan risko naton, inundasaun be suli habelar indika hanesan perkupasaun ida tamba nee rekomenda iha suco nee hodi visita tan dala ida atu nunee assessu detailhada liu husi kauza inundasaun be suli habelar no potensia estratejia.

Suco Lacoliu, Posto Administrativo Quelicai, Municipio Baucau

	Rai-halai	Erosaun Solu	Inundasaun
GIS	Laiha Risko (92.6%)* Naton (1.3%) Med (3.6%) Ás (2.5%)	Naton (7.0%) Med (59.6%) Ás (33.4%)	Laiha Risko (100%)
KVAK (m)	Naton (1.18)**	La identifika	La identifika
KVAK (f)	Med (1.93)	La identifika	La identifika

*nee % husi total iha suco= hektar 741

** hanesan médiu klasifika ba presepsaun risko husi matric vulnerabilidade ho klasifika maximu 3

Suco Lacoliu mak razoavelmente povoada barak liu iha Massif Matebia hun. Rai balu no infra-estrutura mak iha area inklinado ba rai-halai erosaun. Total area rai husi Suco Lacoliu mak hektar 741, ho hektar 464 (62.6%) iha Kaptasaun Mota Seiçal no hektar 277 (37, 4%) iha Kaptasaun Uai Muhi. Membro komunidade total 62 (mane 36 no feto 26) mata atende iha workshop KVAK.

Komparasaun husi Dadus GIS no tuir presepsaun komunidade ba Perigos no infra-estrutura husi Nivel Risko

	Estradas (Total=3.6km)		Uma (Total=501)		Eskolas (Total=2)		Fasilidade Saude (Total=0)		Seluk
	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	GIS	KVAK (m/f)	KVAK (m/f)
RaI-halai	Laiha Risko (95.3%) Naton (1.7%) Med (3.0%)	Med (2.0)/ Ás (3.0)	Laiha Risko (92.8%) Naton (1.0%) Med (3.2%) Ás (3.0%)	Naton (1.0)/ Ás (3.0)	Laiha Risko (100%)	Naton (1.0)/ Naton (1.0)	n/a	n/a	Sistema be/Sistema be
Erosaun Solu	Naton (3.5%) Med (53.7%) Ás (42.8%)	La identifika/la identifika	Naton (11.2%) Med (57.9%) Ás (30.9%)	La identifika/la identifika	Med (50%) Ás (50%)	La identifika/la identifika	n/a	n/a	La identifika/la identifika
Inundasaun	La konsidera iha risko =>						n/a	n/a	

Ekipa komunidade neebe mak atende iha workshop KVAK hatete katak Lacoliu mak area risko mediu ba rai-halai. Feto nia ekipa komentariu katak rai-halai mosu iha **2010-2015,** resulta destruisaun ba area plantasaun no kulturas bazikas iha **aldeia Bikasi no Suri-isi.** Mane sira komentariu katak rai-halai mosu iha **2008-2015,** resulta destruisaun ba natar, rai-agrikula, area plantasaun iha **aldeia sira hanesan Sira-Isi, Bugata, Buidiga no Suti-Isi**.

Laiha husi Suco Lacoliu neebe mak konsidera sei iha risko ba inundasaun. Membro komunidade sira konkorda iha neeba laiha risko inundasaun jeral iha Suco Lacoliu maibe sira fahe esperiensia katak inundasaun be suli habelar iha nivel mediu no feto nia ekipa komentariu katak inundasaun be suli habelar mosu iha 2010-15 iha **aldeia sira hanesan Bikasi, Sira-isi, Togu Bere Isi, Birikasi Isi no Buagata**, hodi resulta ba iha destruisaun natar no kami. Mane nia ekipa komentariu konaba inundasaaun be suli habelar iha 2012 iha aldeia **Sira-Isi, Bugata, Buidiga, Suti-Isi no Toho-Isi**, iha neebe mak resulta hodi destroi natar no rai-agrikula.

Vizaun jeral ba probabilidade Risko bazea ba GIS + klasifika komunidade

	Estrada (Total=3.6km)	Uma (Total=501)	Eskolas (Total=2)	Fasilidade Saude (Total=0)
RaI-halai	La konkorda	La konkorda	Konkorda – naton/laiha risko	n/a
Erosaun Solu	La konkorda	La konkorda	La konkorda	n/a
Inundasaun	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	Konkorda – naton/laiha risko	n/a

Rekomendasaun:

Komunidade hato'o prekupasaun konaba rai-halai no inundasaun be suli habelar no fo ezemplo ba eventos foin-lalais no iha passado katak hodi halo estraga ka destroi propriadade sira no infra-estrutura. Maske ida nee laos prioridade as husi suco atu hare-tuir nee mak rekomenda hela katak iha planu aksaun resiliente aldeia ida sei bele fo benefisia ba komunidade hodi identifika estratejia mitigasaun no redus impakto futuru.

4.1 Analiza Meta KVAK

Jeralmente analiza komparativu husi dadus tekniku GIS no esperiensia komunidade no prioridade hodi produs resultado interesante balu hanesan iha esboso okos nee.

Persepsaun ba risko

Maske suco balu komesa hatudu ona sinal klaru atu iha risko signifkante ba infra-estrutura, sira seluk konfirma katak esperiensia ona risko naton liu no ida nee ajuda ho prosesu planeamento. Interesante liu, no la espera, iha numero area balu neebe hetan responde diferente husi dadus GIS no komunidade ho substansialmente boot, no iha neebe diferensias natural iha neeba signifikante diferente seriu ida nee sujere ba area iha neebe, ezemplo ida lokalizasaun espesifiko iha risko neebe mak boot liu no maske nunee intervensaun partikular ba area neebe probabilidade atu iha impakto boot. Ezemplo ida tan iha deit parte estrada nian neebe mak kiik iha risko neebe as ba rai-halai dadus GIS dala ruma sujere ida nee laos prioridade ida (ida nee sei iha 98% risko naton). Maibe komunidade sei identifika sekarik iha 2% neebe mak aktualmente hetan impakto regularmente no nivel impakto ba iha komunidade; liu husi servisu ba parte kiik iha estrada nee, iha mos possivel atu fo benefisia boot ba suco tomak. Analiza ida nee atu fornese vizaun jeral neebe valores tebes ba alvu intervensaun, maske avaliasaun dala ida tan iha area/infra-estrutura espesifiko sei presiza tan. Area sira neebe mak hasoru risko klaru sei benefisia mos hodi halao passu mai tuir husi KVAK no analiza ba dezemvolve planu komunidade (hanesan Planu AKsaun Resiliente) atu hahu implementa estratejia hodi mitiga risko hirak nee. Tabela 70 iha sessaun rekomendasaun fo detailhada risko sira no rekomendasaun husi suco. Vizaun jeral hare katak servisu balu neebe presiza iha suco rua nolu resin tolu husi suco rua nolu resin hat, maibe antes infra-estrutura baze halo intervensaun importante katak presiza investigasaun neebe tenki halao sai husi nivel aldeia nee, ba aldeia hirak neebe mak sente sei iha risko husi rai-halai, inundasaun no/ka erosaun solu.

Maske konkluzaun diak-liu relasaun ho inundasaun husi responde komunidade katak ladun hetan akontesemento nee, importante atu hatene katak komunidade identifika ona inundasaun nee kestaun ida. Nee laos mai husi kategoria neebe hanesan husi inundasaun ba proposta husi mapamento GIS. Inundasaun mosu no akontese ba iha baze extremu regular no tenki tau-matan ba, tantu hanesan parte atu hare-tuir husi projeito nee ka entidade separado ida. Ida nee mos posivel katak komunidade konfuzaun jestaun paisajem ba mudansa klimatika – esplikasaun ida possivel ba akontesemento inundasaun deflorestasaun no dezertifikasaun ba ambiente.

Partisipasaun Membro ekipa EVAS iha workshop KVAK

Durante faze-1 KVAK nee, partisipasaun husi membros EVAS hanesan ladun signifikante. Maibe, iha faze-2 sira nia presenza neebe mak diak liu. Husi lokalizasaun 13, iha area sira hotu area 3 mak membro EVA partisipa iha prosesu KVAK no ativamente fasilita sessaun bazeando ba iha formasaun neebe aprende husi TOT. Sira nia partisipasaun asegura properiadade ba projeito nee, maske nunee ida nee hanesan tekniku foun ba sira atu implementa. Ida neebe observado katak partisipasaun husi membro EVAS depende ba iha DDO respeitivo, maibe, maioria ba membros EVAS neebe mak interesante no sira sente katak sira nia knar no responsabilidade. Ida nee importante atu mensiona iha nee katak transportasaun mak esensial ba membro EVAS atu visita kampo tantu em termus ba transporte ka kustu transporte.

Partisipasaun feto iha KVAK

Husi numero partisipasaun total iha workshop KVAK 13, feto 44% no mane 56%. Ida nee razoavelmente diak mixo en termus presenza, durante workshop nee observado katak kuaze 25% ba partisipasaun feto mak ativamente involve iha diskusaun no seluk la partisipa ativamente exceto durante excersiziu mapamento. Ekipa feto sira dezenha exato mapa sira kompara ba ekipa mane sira halo kuidado diak iha nia detailhada; nee possivelmente iha refleksaun ida konaba saida mak komfortavel no ho saida iha sira nia konhesemento. Ida nee

ho probabilidade bainhira iha responde ba perigos no impakto husi risko iha komunidade mane tradisionalmente ida nebe mak atu halo desizaun no hodi responde. Ida nee signifika katak feto hatene ituan deit mai husi buat hirak nee.

Proseso, neebe barak liu husi tempo historiku no matric vulnerabilidade. Nee mos sujere ona katak tamba feto nia mobilidade redus iha komunidade hanesan kompara ho mane, sira nia konhesemento no esperiensia mak limitado liu ba iha vizinho imediata husi sira nia uma. Observasaun tan katak feto tende komfortavel liu uza sira nia lingua lokal, no barak husi sira neebe mak la komprende Tetum. Hanesan bai-bain hetan iha komunidade rural, iha neebe feto ladun komfortavel atu halo diskusaun iha topiku foun no husi ba mane sira atu responde no lidera diskusaun nee. Feto nonok barak liu iha chefe aldeia nia oin, ida neebe mak esplika situasaun nee barak liu iha okaziaun barak. Durasaun husi KVAK nee limitado tebes ba loron ida; nee hatudu katak hanesan sira nia knar loro-loron. Iha xave aprendisajem balu liu-husi prosesu nee no mos konsiderasaun ba feto nia orariu, fo tempo ba iha prosesu nee, asegura interpreta no fasilitador feto disponivel no mantein separado ekipa feto/mane ba diskusaun nunee mos aktividade atu nunee bele promove feto nia partisipasaun ativa.

Mekanismo Jere Komunidade

Hanesan parte husi prosesu KVAK, husu komunidade tipo mekanismo jere saida mak sira uza hodi relata tipos perigos diferente, no infra-estrutura diferente iha komunidade. Mekanismo jere hirak nee fornese imajem ida ba kapasidade komunidade atu responde ba perigos klimatika antes, durante no depois sira mosu. Ida nee importante kapasidade komuidade efikas neebe existe mak konstrui ba iha apoio ruma, planeamento ka responde intervensaun hodi nunee atu uza abilidade lokal no konstrui properiadade. Hodi nunee assesso ba efikasia ba mekanismo jere komunidade neebe ita konsidera nivel 4 ba kapasidade komunidade hasoru risko klimatika:

- Absorvente/asetasaun: extensaun iha neebe komunidade bele no absorver deit ka aseita ba efeito ho ituan ka laiha responde
- Responsivu: abilidade komunidade atu reajem no responde ho solusan ba kestaun imediata (fixu, hamos)
- Adaptivo: extensaun iha neebe komunidade bele no bele muda sira nia hahalok no implementa aktividade foun hodi prevene impakto iha futuru, bai-bain bazea ba impakto sira neebe esperiensia iha passado
- Transformativo: abilidade husi komunidade atu sai resiliente liu-tan – hodi dezemvolve no implementa planu aksaun sira no estratejia parte rua atu prevene no responde ba risko klimatika, inkluindo ba hirak nee seidauk esperiensia iha passado

Liu-husi konsiderasaun mekanismo jere komunidade neebe mak existe bele komprende ho diak iha nivel komunidade. Oras nee estratejia limitado iha nivel komunidade nia let atu jere risko klimatika, numero komunidade hatete katak bainhira perigo ruma mosu sira depende ba iha apoio external husi governo no ONG sira atu responde ba ida nee. Maibe numero ruma ba responde seluk mai husi workshop KVAK hanesan detailhada iha okos nee.

Evakuasaun

Maioria husi komunidade involve iha workshop KVAK hatudu katak evakuasaun iha infra-estrutura relevante neebe sai mekanismo jere primaria iha faze risko klimatika. Iha termos praktika nee meios katak bainhira perigos ida mosu membro komunidade sira sei halibur termos kritiku ba sobrevivencia (ai-han, be, roupa, osan, sasan medicina) no husik area nee. Mekanismo jere nee komum-liu iha kazu ba uma sira. Hanesan mekanismo jere nee mak puramente iha nivel absorvente hanesan bainhira individualmente mak hasai sira nia-an no sasan seluk seguransa, sira la responde ba impakto husi perigos. Ida nee hanesan dalan efikas atu redus impakto ba ema ka propriadade maibe la sufisiente ba mekanismo jere.

Hamos no hadiak

Mekanismo jere seluk neebe mak citado husi komunidade sira hodi hamos estrada, hasai sendimentasaun husi drainajem no kanal halo reparasaun temporaria ba pontes, fornesemento be no uma sira atu nunee bele uzavel iha provizaun nia laran antes halo rekonstruisaun. Ida nee inkluindo, ezemplo, se nia uma mak afeitado husi inundasaun, dreinando be no hamos taho no sedimentasaun husi uma, ka komunidade hadiak estrada neebe mak monu ho monta ai-baluk atu nunee bele util. ida nee klaru katak iha komunidade barak hatete nee sai aktividade regular no ekipa sira servisu hamutuk atu asegura estragos ba iha infra-estrutura hetan responde duni. Nee mak mekanismo jere responsivu neebe mak fornese immediate solusaun ba tempo badak ba perigos klimatika, neebe nesesaria maibe dala ida tan la sufisiente em termos husi mekanismo jere hanesan estragos sira mosu nafatin no requere opiniaun signifikante atu bele hadiak totalmente no rekonstrui.

Rekonstrusaun

Rekonstrusaun infra-estrutura mak hanesan responde komum seluk ida, iha nee koalia konaba reparasaun permanente no servisu rekonstrusaun ba infra-estrutura husi impakto inisial. Maioria husi ekipa komunidade konsidera rekonstrusaun mak hanesan mekanismo jere ida neebe importante ho simu apoio balu husi membro komunidade seluk, husi ONG sira no husi governo. Nee mak, tempo naruk, nafatin mekanismo jere responde hanesan bainhira hatán ba impakto husi perigos espesifiko klimatika neebe mak akontese iha fatin, ida nee la prevene ka planu ba hirak nee.

Planta ai-horis

Kuaze metade husi komunidade sira mak halao KVAK relata katak sira planta ai besik iha be-matan ka ba iha rai neebe mak inklinado ba rai-halai atu nunee proteze sira, 'kaer solu' no prevene estraga tan. Maioria husi hirak nee relata katak hanesan mekanismo empregado depois perigos ida esperiensiado iha area balu, nafatin hanesan responsivu iha extensaun balu, maske nunee ida nee konsidera hanesan kapasidade adaptivu ida iha altersaun nee hanesan hahalok normal hodi bele prevene iha futuru no estragos mai tan. Komunidade hirak nee iha komprendesaun baziku bainhira sira kuda-ai ida nee hanesan dalan efikas ida atu mitiga risko klimatika, maibe sira nia konhesemento detailhada oinsa, iha neebe no bainhira planta hahu mosu hodi minimixa ba efeitos neebe mak mixu.

Protesaun ba infra-estrutura

Numero kiik husi komunidade relata katak sira halao aktividade balu hodi prevene estragos ba infra-estrutura espesifiko iha formas uza fatuk hanesan bareira ka blokea hodi prevene estragos, asegura manutensaun lao nafatin ba iha infra-estrutura nee iha perguntas ida. Dala ida tan nee hatudu katak komunidade sira komprende iha pergunta nee presiza ba infra-estrutura atu nafatin forte hodi bele prevene estragos husi potensia perigos klimatika, maske numero balu husi hirak nee relata halao ona depois perigos signifkante ida akontese. Komunidade ida ka rua atualmente sujere katak metode espesifiko ba prevensaun husi klimatika perigo neebe estraga, hanesan uza kaixa gabion atu disvia ka redus be-inundasaun no aktividade bio-enjineeria. Nee hatudu katak komunidade komesa konsidera ba abordajem transformative ba mekanismo jere hanesan preventiva prevensaun, planeamento no estratejia sira.

Jeralmente, uainhira komunidade mosu hodi komisiona iha mekanismo jere hirak nee responsivu liu no ituan halo prevene estragos iha futuru ka prepara ba perigos klimatika. Saida mak sira halo nee efikas ho porposta atu minimiza estragos responsivamente, maibe nee ladun efikaz em termos ba kapasidade jeralmente atu resiliente. Maske nunee, komentariu balu hahu atu hanoin konaba prevensaun bazea ba sira nia esperiensia historiko ba impakto no estragos ba sira nia infra-estrutura. Nee responde natural, no komum katak sasukat preventiva seidauk bele halao to'o komunidade komprende liu ona impakto hanesan eventus (ezemplo depois

sira esperiensia ida). Nee mos representa oportunidade hodi uza esperiensia hirak nee atu enkorajem ba komunidade iha pergunta no sira seluk bele foti abordajem transformativu liu tan hodi prevensaun, planeamento no redusaun risko disaster.

Hanesan nivel komunidade responde mekanismo jere mak apresenta iha area balu, ida nee sei rekomenda katak hirak nee bele konstrui tan ho kapasidade konstrusaun iha komunidade sira hodi komprende diak ba kauza sira no efeito ba perigos espesifiko no oinsa mekanismo jere hanesan planta-ai horis, konstrusaun bele seguru fali no protesaun ka aktividade manutensaun bele redus ba risko negativu impakto. Formasaun no demostrasaun konaba espesifikamente oinsa atu halo ida sei bele importante. Atu nunee bele foti abordajem transformative no konstrui komunidade resiliensia iha nivel neebe mak ás prosesu klean liu hodi komprende ba risko no solusaun posivel, hodi prioritiza xave infra-estrutura no dezemvolve no implementasaun aktivasaun planu hanesan komunidade hodi responde hirak nee sai vital ida. Nee bele halo remata liu-husi prosesu aksaun planeamento resiliente aldeia no intende sei bele dezemvolve planu aksaun ruma neebe liga ba prosesu Planeamento Posto Administrativa, atu asegura halo desizaun nain-sira iha inofrmasaun detailhada nesesaria hodi bele apoio komunidade resiliente.

5.0 Limitasaun no Aprendesajem

Mapamento GIS

Hanesan ho peskiza espesifiko balu, resultado sira husi representa estudo mapamento komprimiso ida entre ideal no fativel. Servisu mapamento kovre neebe define liu-tan komesa estudo nee iha inisiu, TMAP hanesan aprende liu tan konaba SSRI nia presiza, tipo husi risko sira mak interese liu husi programa, natureza husi dadus neebe disponivel ba servisu sira nunee, no lokalizasaun no extensaun ba iha area tenki analiza no mapado.

Exato, detailahda, toó ohin loron dadus espasial mak iha fornesemento ituan ba Timor-Leste. Iha kontekstu husi estudo nee, dadus signifkante limitasaun liu mak ba solu, udan monu rai no tipo sira balu ba infra-estrutura mak hanesan sistema irigasaun, fornesemento sistema-be no pontes. Dadus konjunta injusto ba hirak nee hanesan nee balu existe ona, maibe sira menus liu dokumentado, falta iha detailhada, desatualizado, no sempre la kompleta. Iha kazu ba ponte sira, ezemplo hanesan, dadus sira disponivel inkluindo ponte 21 ba interamente area estudo nee; ida nee klaru duni la kompleta no indika katak ponte barak iha Timor-Leste seidauk tahu iha mapa.

Limitasaun barak mak dadus sira neebe existe la dokumentado ho diak no ladun komprende ho diak. Ida nee problema komum ida ba analista GIS no sientifiku sira seluk, no adicionalmente ladauk hatene rekursu husi dadus nee, ida hira ona, oinsa dadus nee produs no oinsa klasifikado ida nee halo defisil liu tan atu prosesa no analiza. Identifika ba dadus konjunta neebe disponivel, halao fotokopia hirak nee, no hodi halo peskiza atu nunee bele komprende saida mak exatamente sira hatudu, nee leba tempo no estreito moldura tempo ba komprimiso meios estudo neebe tenki halo iha momento nee. Ida nee nudar lisaun neebe aprende husi projeito nee; hodi kovre area servisu ba qualidade oras nee dadaun no disponibilidade ba dadus sira iha Timor-Leste iha moldura tempo fulan 12 ba projeito nia kompletamente sei iha ativado ho analiza rigoroso liu tan. Maske nunee, ita iha tempo neebe mak disponivel hodi bele produs informasaun neebe valiozo liu atu nunee bele ajuda atu identifika area sira ba risko boot ka kiik no util informasaun tekniku nee hanesan ponto hodi hahu atu involve komunidade sira no hariko ita komprendesaun uza komunidade nia esperiensia.

Projeito nee ultimo liu assesso kontribuisaun fator geografika pinsipal 4 ba iha tipos risko diferente 3 (rai-halai, erosaun no inundasaun) iha nivel 3 diferente (naton, médiu no ás) no halo examinasaun entre variasaun espasial iha risko no distrbuisaun husi tipo diferente 4 husi infra-estrutura, atraves ba teritoriu okupado husi posto administrativo 8, suco 79 no partes kaptasaun mota 34. Resultado ambisiozu ida nee kovre numero bo'ot ba dadus no informasaun no interrelasoens ba iha variavel hirak neebe mak kompleksu no numeroso. Komprende sira, dokumentasaun no aprensenta hirak nee ho klaru, ho dalan signifkativo nee dizafia bo'ot maibe ikus liu

resultado iha informasaun detailhada liu neebe mak disponivel antes no numero aprende barak risko iha area sira no perigos iha lokalizasaun alvuado.

Workshop KVAK

Tuir mai proseso mapamento, projeito nee halao workshop KVAK iha suco selesionado atu nunee validade, hariko no hetan komprendesaun neebe klean liu ba iha risko no impakto ba komunidade sira iha no hasoru. Hanesan ho mapamento aktividade, xave limitasaun mak linha tempo. Iha nee parsialmente tamba faktos ambisiozu enkuadrado projeito entre iha tempo terminado fulan 6, maibe mos tamba atraza iha aktividade mapamento kauza husi difikuldade hodi identifika peretos tekniku nesesaria iha Timor-Leste nia laran atu halao mapamento GIS ho teknolojia apropriado. Hanesan tempo disponivel ba workshop KVAK la premite ba nivel KVAK aldeia, ami halao workshop iha nivel suco iha neebe ho efeitos atu dezenha ba iha infra-estrutura iha suco laran tomak ba iha mapamento no diskusaun. Iha passado workshop hanesan nee halao ona iha nivel aldeia aprendesajem maioria iha nee mak iha nivel suco ho loron ida workshop KVAK mak badak liu atu halibur informasaun neebe klean. Maske nunee, ami bele halibur numero signifikante husi dadus konaba risko no perigos neebe hasoru husi komuidade sira, iha sira nia esperiensia passado no xave area sira ba vulnerabilidade. Ami mos bele hadiak durante abordajem ba kursu ba projeito liu husi identifika presiza no oportunidade depois workshop faze premeiro inkluindo diskusaun konaba komunidade mekanismo jere hanesan parte husi analiza matric vulnerabilidade. Fornese informasaun valiozo adicional konaba tipo husi aktividade no responde komunidade mak oras nee dadaun empregado atu nunee mitiga ka responde ba perigos.

Em termos ba iha implementasaun husi workshop KVAK nee rasik, limitasaun maior ida mak konaba situasaun seguransa iha Baucau. Enkuanto ami espera liu katak ida nee sei la prevene ami husi halao servisu ho komunidade iha area sira hotu, ikus liu nee signifka katak hodi labele kompleta workshop KVAK 3 neebe planeado no workshop ida iha nivel distrito ida. Maibe, ami bele halo oportunidade barak iha distrito sira seluk atu inklui iha aktividade foun involve iha formasaun no hasae kapasidade ba pessoal nivel distrito ba iha util mapa sira. Ida nee la iha planu servisu original, maibe liu husi kursu projeito nee sai klaru katak iha abilidade baziko no konhesemento sei bele halo diferensia boót ba iha pessoal relevante, halo sira tau-an hodi uza dadus nee valiozo iha futuru.

Partisipasaun komunidade dizafiu ida iha suco balu, partisipasaun to'o ho tarde iha ezemplo hodi fo todan ba iha tempo disponivel neebe mak limitado. Ami mos hasoru difikuldade atu asegura numero representante husi feto neebe atu atende, iha suco ida atualmente hodi kansela workshop tamba laiha feto neebe mak konvida husi lider lokal sira. Nee hatudu katak importante tebes atu servisu ho loder lokal sira ho komunidade iha inisiu projeito atu komprende no apoio feto nia partisipasaun. Ami apresia PNUD nia apoio iha desizaun hanesan nee no ida nee vital katak feto ativamente involve iha diskusaun hirak nee. Iha parte nee tamba sira kaer konhesemento valiozo no esperiensia no lori prespektiva diferente ba iha konversasaun, no mos atu investe sira direitamente hodi kaer knar bo'ot iha kestaun komunidade. Embora ba workshop barak neebe ita iha menus liu husi 40-60% partisipante feto, iha sira barak maka la ativa sira nia partisipasaun. Ida nee nota katak iha diferente husi suco ba suco maibe hodi nota presiza tan (no aprendesajem) katak presiza tempo signfikante atu investe iha servisu ho komunidade parte rua atu komprende ba valor no importansia ba workshop KVAK, maibe mos fo importansia no nesesidade ba feto nia partisipasaun ativa. Mai tuir tan workshop sei diak liu dezenha atu hetan feto nia presiza inkluindo espalha liu numero loron balu atu premite ba feto nia knar loro-loron no tarefas, atu asegura fatin mak apropriado no asseso fasil, katak iha neeba fasilitador feto no interpretador (hanesan ami hetan konfortavel liu util lingua lokal aparte husi Tetum).

Limitasaun maioria ida ba projeito nee, no kesi ba iha moldura tempo, laiha abilidade atu kolheta lokalizasaun pontu-be. Ida nee util hodi informa ami konaba inundasaun, maibe dadus mak kolheta ona husi BESIK, no la fahe habelar.

Finalmente ida nee la possivel ho moldura tempo no rekurso ba projeito nee atu inkluindo aktividade verifikasaun mak hanesan visita hodi identifka infra-estrutura (agora no ausente) hodi foti GIS kordena no

observa ba konidsaun. Ida nee sei aumenta valor signifikante ba qualidade no disponibilidade ba dadus existe no subjetividade nesesaria ba presepsaun komunidade. Maibe, limitasaun esboso, finalmente projeito fornese numero boot ba dadus ba qualitativo no quantitativo ho analiza akompanhamnento neebe mak seidauk jenerado antes no finalmente sei ajuda atu informa no guia servisu futuru iha area nee.

6.0 Rekomendasaun

Mapamento GIS

Numero rekomendasaun balu bele halo espesifikamente iha relasaun ba iha komponente mapamento. Uluk liu tenki komprende ba forsas no fraquezas husi estudo mapamento no utiliza mapa sira no estatistiko hodi jenerado apropriado liu. Perfil risko dokumentado iha nee atu fornese baze ida ba planeamento eskala larga regional no ida nee sei aumenta benfisio sekarik resultado neebe mak relata atualiza iha nee ka refinado bainhira foun, idea detailhado liu dadus sei disponivel. Util la apropriado sei inkluindo halo selesaun sitiu ba projeito espesifiko ho infra-estrutura eskala kiik, determina route no alinhamento ba estrada ka linha pipa, ka dezenha pontes, estrada ka estrutura kontrolu be, baze neneik konaba komponente mapamento GIS husi estudo nee.

Daruak, rekomenda katak iha numero inisiativa balu neebe presiza halo tuir mak halao atu minimiza valor husi komponente mapamento GIS. Seriu kompleks husi mapa sira iha formatos oi-oin neebe diferente, koleksaun boot husi dadus GIS no detailhada risko jenerado estatistiko husi projeito nee bele utiliza iha dalan oi-oin liu husi diferente interessada sira, maibe ida nee probabilidade katak potensia uza-nain sira sei presiza hodi komprende no interpreta mapa sira nee no tabela sira. Atu ajuda hirak nee utiliza ba hanesan ekipa barak ba interessada ho possivel, ida nee rekomenda katak balu ka sira hotu tuir mai neebe presiza halao mak:

- Tradus parte xave husi relatoriu ida nee iha Tetum
- Dezemvolve, dokumen no implementa planu id aba jestaun no dessiminasaun mapa sira no estatistiko
- Halao workshop seriu ida atu explora uza diferente ba mapa sira liu-husi ekipa interessada sira diferente
- Mekanismo instituto ba kapturasaun komentariu husi uza-nain sira hodi informa jestor sira no peskiza nain sira hanesan oinsa hodi util resultado husi estudo neebe iha ona, no oinsa sira hadiak iha estudo futuru

Finalmente nee mak rekomenda katak Timor-Leste nia governo no dezemvolvimento neebe habelar iha komunidade atu passu husi agora hodi ajuda atu to'o Timor-Leste nia future neebe requere husi dadus sira nee. Nee meios ida inisiasaun no fornese apoio ba tempo naruk ba koleksaun dadus neebe mak barak no inisiativa jestaun. Ezemplo tipo husi dadus mak essensial ba monitorizasaun ba sustenabilidade ba nasaun nia dezemvolvimento inkluindo klima no estatistiko klimatika; be-rai okos no superficie quantidade, qualidade be, taxa rekarga; mudansa iha kovre rai, uza-rai no pratikas jestaun rai; no inventorio ba nasaun nia infra-estrutura properiadade.

Atu uza diak, dadus iha kategoria nee mak presiza detailhada neebe diak no ho kovertura nasional. Sira mos presiza atu atualiza frequentamente no regularmente, tamba mundu dinamika no mudansa kondisaun. Hanesan Timor-Leste iha instituto programa ida hodi halao census populasaun nasional no uma iha kada tinan lima, no foin lalais nee investe iha detailhada, topografia iha nasaun tomak no inisiativa mapamento kovre rai, ida nee presiza programa oi-oin ba tipo seluk husi dadus. Liu husi identifika presiza hirak nee, programa inisiasaun longu prazu ba koleksaun dadus, instituisaun neebe iha ba programa hirak nee no komitte rekursu suficiente atu susteinha sira iha futuru, se nasaun hodi bele konstrui rekursu dadus ba lider politikos sira, sientifiko, enjineiro no jestor programa neebe mak presiza ba tinan 10, 20, no 50 husi agora

Klimatika Vulnerabilidade no Analiza Kapasidade:

Faktos husi workshop KVAK no fornese informasaun no analiza mai husi aktividade mapamento GIS fornese idea importante id aba iha risko espesifiko no hasoru perigos husi komunidade ba iha suco alvu. Ida nee extremo liu

informasaun valiozo no rekomenda katak ida nee hodi uza atu ajuda area sira prioridade, iha aldeia, suco ka nivel posto administrativo, ba iha alvu apoio. Area indikado sira neebe mak sai ponto prinsipais hodi investigasaun detailhada no avalisaun nafatin. Komunidade neebe partikular ka infra-estrutura neebe mak iha risko as no mekanismo jere agora nee seidauk identifika, komunidade hirak nee sei prioritiza ba interese partikularmente iha aldeia sira neebe mak identifikado iha suco KVAK hanesan sofre partikularmente impakto as husi perigos, ka area sira iha neebe komunidade nia sujestaun mak diferente sei iha esperansa bazea ba dadus mapamento. Vizaun jeral husi analiza kruza neebe mak apresenta iha Tabela 70.

Suco	**Nivel prioridade**	**Detailhadas**
Ponilala, Ermera	Naton/mediu	Aldeias Hatuposi, Nunupu no Sacoco presiza planu aksaun komunidade resiliente.
Mertutu, Ermera	Ás	Susceptivel as ba erosaun no rai-halai. Fornesemento be aspeito presiza reve. Requere planu aksaun komunidade.
Luala, Emera	Naton/mediu	Presiza bio enjineeria ba estrada. Diskrepansia entre perseve no risko atual. Planu aksaun komunidade sei benefisia komunidade.
Estado, Ermera	Mediu	Diskrepansia entre perseve no risko atual. Rehabilitasaun estrada no manutensaun sei benefisia komunidade no nunee mos planu aksaun atu dizafia erosaun no rai-halai.
Raimerhai, Ermera	Ás	Rai-halai annual iha: Aldeia Karimbala, Moris Foun, Loumou, Nazere, Timlete, Raimaran no Mate Restu. Risko as ba erosaun iha kada komunidade,investigasaun klean no rekomenda planu aksaun komunidade
Ailelo, Ermera	Mediu	Foku estrada iha suco tomak. Inundasaun be suli habelar iha: Aldeia Leirema, Nakrobo, Turema, Hohuú Bestarn, Aitos no Erleta
Talimoro, Ermera	Mediu/Ás	Foku ba iha inundasaun be suli habelar iha: Aldeias Lebui, Mankabia, Daru Watu Lau, E'e Solo so, Gou Mau Lau, Manleki, Degenu-siku ba planu aksaun
Leguimea, Ermera	Ás	Foku iha Aldeia sira Villa Maria, Vila Rei, Rai Masin, Fatmaunalo, Bisokmou no Pohuia ba planu aksaun komunidade – rai-halai no erosaun
Leimea – Craic, Ermera	Naton/mediu	Foku ba iha lokalizado tuir mota no erosaun besik iha uma no eskola sira.
Coilete – Letelo, Ermera	Naton	estrada – konkreta parte drainajem requere planu aksaun, hasae konsensia konaba erosaun.
Leimea-Sorinbalo, Ermera	Mediu/Ás	Hasae konsensia konaba erosaun. Requere planu aksaun iha aldeia sira hanesan Taka Mata, Brogbou, Aipule and Hambulu.
Fahilebo, Liquica	Mediu	Estrada enredo Requere planu aksaun iha: Aldeias Titneta, Baunalogeun, Baunamaria, Talkuku, Bouhaet, Mau-Orailalan, Tuhitu leten, hatsarlelo no Burean (erosaun)
Fatumasi, Liquica	Ás	Kulturas, uma sira no pontes vulneravel ás liu ba rai-halai no erosaun iha suco tomak.
Lauhata, Liquica	Naton/mediu	Estratejia Preventativa tenki hanorin ba komunidade sira
Leorema, Liquica	Mediu/Ás	Foku ba iha Aldeia sira hanesan Kutulau, Bukumera, Urema, Railuli, Urluli no Hatuhoui (rai-halai no erosaun) planu aksaun ba komunidade
Metagou, Liquica	Naton/mediu	Rehabilitasaun no manutensaun no presiza treinamento hasae kapasidade, sei benefisia husi planu aksaun komunidade.
Vaviquinia, Liquica	Mediu/Ás	Apoio inisiativa bio-enjineria ba iha area parte estrada halo investigasaun klean tan

Suco	Nivel prioridade	Detailhadas
Maubaralissa, Liquica	Mediu	Aldeia sira hanesan Nunulete no Darulema Iha risko ba inundasaun be suli habelar. Rekomenda planu aksaun komunidade
Lissadila, Liquica	Mediu	Foku ba iha uma sira iha: aldeia Diru Anwei, Lissa Luli, Mau-Bara, Kai-Pu, Nunu-Lau, Manieki, Degenu-Siku no Ulo-Ana. Inundasaun be suli habelar iha: aldeias Daru Watu-Lau, E´e Solo So, Gou Mau Lua, Nunu-Lau, Manleki, Degenu-Siku afeita barak liu infra-estrutura iha komunidade
Gariuai, Baucau	Naton/mediu	Inundasaun be suli habelar afeita barak liu iha aldeia Daru Watu-Lau, E´e Solo So, Gou Mau Lua, Nunu-Lau, Manleki, Degenu-Siku
Bahu, Baucau	Laos prioridade ida	
Ossoala, Baucau	Naton	Requere avaliasaun atu hetan kauza husi inundasaun be suli habelar
Lacoliu, Baucau	Naton	ARAP sei benefisia komunidade

Tabela 70. Vizaun jeral rekomendasaun husi Suco

Ida nee rekomenda katak aldeia espesifiko bele agora identifika atu halao Planu Aksaun Aldeia Resiliente (PAAR). PAAR ida tenki teste modelo partisipatoriu planeamento komunidade atu hasae resilensia bazea ba servisu ho komunidade hodi analiza resultado husi prosesu KVAK no planu projeito no requere intervensaun bazea ba ida nee. Liu husi fasilitasaun diskusaun ida kovre vulnerabilidade no risko identifikado ona, komunidade bele ona hodi dezemvolve planu hirak nee ba mitigasaun no minimizasaun ba risko prioridade no problema sira. Planemaneto aktividade ida nee bele hetan apoio liu husi implementasaun no ligado ba iha suco, posto administrativo ka proseso planeamento nivel municipio. PAAR nee proseso ida neebe fornese mos abordajem transformativo atu komunidade iha mekanismo jere, no iha fiar, hanesan enkoraja komunidade atu konsidera risko no probabilidade impakto iha oin husi perigos ruma neebe mak akontese, ho troka mak premite ba preventativa efikas no sasukat responde hodi tahu iha fatin ka planeado.

Komunidade balu sei benefisia husi hasae kapasidade no hasae konsensia ba iha komprendesaun saida mak potensia risko. Hanesan hatudu iha faktos, komunidade barak la hatene konaba erosaun hanesan nee, ida nee la tangivel mosu hanesan rai-halai ida. Ami fiar komunidade sei benefisia husi aprendesajem neebe mak liga entre erosaun solu no rai-halai no inundasaun, no sei fornese feramento atu kombate ida nee antes tama iha disaster neebe serius liu tan. Ida nee sei liga ho hasae kapasidade neebe maka rekomenda iha nivel komunidade husi mekanismo jere, partikularmente ba iha protesaun ba infra-estrutura, planta ba ai-horis no konstrusaun seguru fali. Mekanismo tolu nee ida mak hasae tiha ona husi komunidade hanesan mekanismo jere neebe sira uza neebe sei efikas liu tan sekarik apoio.

Klaru liu komunidade balu mak iha risko boot duke sira seluk, no komunidade balu mak halo esforsu proativo hodi kombate risko sira hanesan rai-halai. Eskala too abordajem tenki adopta nivel apropriado ba intervensaun ba kada komunidade mak implementa.

Hanesan deklara iha oin husi relatoriu nee, KVAK mak bai-bain halao iha nivel aldeia, maibe ami mos konshelo husi lider sira sub-distrito katak sira iha dadus nesesaria. Nee provas katak ero (sala) ida hanesan ita labele kolheta dadus ho klean konaba kada individual komunidade. Hanesan parte husi suplementaria projeito ami sei konshelo klean ba estudo aldeia, no koleksaun kordenado ba kada komunidade nia xave infra-estrutura. Uainhira ami bele atu lokaliza infra-estrutura ba iha mapa sira GIS, ita bele triangulado informasaun komunidade no fornese responde apropriado ida ho relasaun oinsa sira dizafia risko relevante. Ida nee konshelo hodi hahu iha nivel aldeia hanesan bainhira ita iha informasaun nesesaria ba servisu konaba fundasaun ba sosiadade; ida nee fasil atu ampliar projeito nee iha nivel suco, no knar eventualmente atu halao iha Timor-Leste tomak. Devido ba kustu reparasaun konstante ba iha infra-estrutura, sentido ekonomiku hodi halao projeito hirak nee atraves iha nasaun – haforsa no premitindo komunidade atu mantein sira nia infra-estrutura. Nee uanihira iha tempo desentralizasaun fasil liu hanesan komunidade sei bele ona suficiente an.

7.0 Konkluzaun

Estudo nee produs koleksaun mapa s, geografikamente referensia dadus no estatistiko, presepsaun komunidade no dadus qualitativo no analiza vulnerabilidade komunidade no kapasidade neebe hamutuk komposto husi rekursu informasaun neebe valiozo liu. Dadus barak neebe prosesa no analiza nee laos foun, no iha barak husi informasaun neebe halibur sai hanesan surpreza ida. Ema hirak neebe hela iha Quelicai hatene ona katak rai-halai buat ida komum husi rai-lolo husi Foho Matebian; ema sira husi Guiço hatene katak area neebe sira hela no agrikula iha Mota Lois nia oin mak inklinado ba inundasaun; no agrikultor iha Fatubessi, Leguimea no Ponlilala hatene erosaun rai mak problema persistente iha neeba. Saida mak projeto nee atu halo mak: halibur evidensia hamutuk, prosesa no analiza ho sistematikamente, no pakote faktos sira liu husi dalan ida atu nunee bele assessivel no util ba iha interessada sira barak. komunidade nia uma, eskola sira, sistema fornesemento-be'e, kanal irigasaun no estrada mak iha ameasa persistente mai husi inundasaun, rai-halai no erosaun , agora iha ona evidensia dokumentario atu apoio sira nia esperiensia no presepsaun.

Importante hanesan, resultado husi projeto nee sei serve hodi informa ba ema neebe laiha konhesemento premeiro-mão konaba risko klima-relasionado iha area analizado no mapado. Desizaun barak konaba saida mak infra-estrutura konstrui no iha neebe ida nee konstrui iha Dili, no frequentamente ka politika nain-sira, jestor programa, planeador no enjineiro sira hirak neebe mak halo desizaun ladun iha informasaun neebe barak uza baze saida ba sira. Mapa , dadus kamada GIS, risko estatistiko no informasaun social halo disponivel liu husi estudo ida nee sei ajuda hodi informa halo desizaun nain sira konaba natureza, magnitude no extensaun ba perigo natural iha area remotas, area rural sira. Iha momento ida nee, sira sei halo kiik-oan maibe kontribuisaun signifikante atu hetan informasaun hodi priense falha sira no halo desizaun neebe mak diak.

Uza iha estatistikal no geografiko informasaun risko, ida nee importante katak ema hatene forsas no limitasaun balu. Mapa hatudu variasaun jeral iha distribuisaun risko ba inundasaun, rai-halai no erosaun. diak nian mak hodi lokaliza maior ba 'ponto prinsipais' no ba karateriza individual ba Posto Administratsaun sira no kaptasaun Suco hanesan 'kiik', 'mediu' ka ás partikular ba risko kategoria. Indikadores diak husi risko relativa. Saida mak sira hatudu mak area ho koor mean, iha neebe ho risko as kompara ba area ne'ebe ho koor kinur, iha neebe as liu fali ba area ho koor matak. Embora sira utiliza liu ho planeamento eskala boot no dezemvolvimento infra-estrutura, sira sei la adekuada detailhada ho viabilidade ka enjineeria dezenha servisu. Mapa no estatistiko risko sei fo guia hodi utiliza hodi konstrui no oinsa atu konstrui iha neeba, sei bele ajuda atu identifika area ne'ebe hodi halo identifikasaun tan, maibe iha oportunidade nee ho deit pontu atu komesa. Estudo klean ho servisu kampo neebe extensivu no uza dadus kojunta barak liu sei presiza ba identifika areas atu komprende liu tan ameasa ba infra-estrutura mai husi inundasaun, rai-halai no erosaun iha sitiu espesifiko.

Kualidade husi resultado nee mak ba iha ekstensaun boot husi refleksaun ba ideas sira neebe ho qualidade. Iha komum maioria projeito nee ba Timor-Leste, qualidade husi dadus neebe disponivel mak mistura liu. Dadus diak ba elevasaun no rai-lolo, lokalizasaun ba uma sira, eskola no fasilidade saude, no kanal mota neebe hetan, maibe dadus ba kovre rai, estradaa no solu as liu jeneralizado no la atualiza. Ida nee menus liu iha dokumentado, nee defisil tebes hodi komprende exato liu saida mak hatudu no oinsa atu uza ida nee. Data konjunta seluk, mak hanesan udan monu-rai, pontes, sistema be'e no baliza administrativa, mak fraku em termos ba detailhada, exato no kompleta. Mos, seleksaun ba iha dadus konjunta hodi uza, klasifika katak dadus, atribuindo valores risko no todan no interpreta resultado sira husi subjeito hotu ba grau balu ba informa no julgamento. Analista konaba projeito nee iha, no posivel ekstensaun, reve ba literatura no konsulta no subjeito ba kestaun espesialista, maibe laiha receita uniko katak hatete 'ida nee dalan diak' ka 'ida nee mak dalan los' hodi halao analiza risko iha Timor-Leste'. Iha neeba laos konjunta unika ba kriteria katak nee mak diak definitivu liu ka los liu kompara ba sira seluk. Geolista, hidrologista, sientista solu no enjineiro iha nivel konhesemento neebe mak diferente, esperiensia diferente no hanoin nebe diferente konaba oinsa no iha neebe atu konstrui estrutura sira.

Hanesan mos konhesemento komunidade no komprendesaun ba kauza teoritikal balu no aspeito tekniku ba perigos klimatika, kauza estragos no risko, embora projeito fornese oportunidade diak ida atu eduka

komunidade sira iha kestaun balu, ida nee fo impakto ba iha responde sira neebe halo. Hanesan nota iha leten katak iha mos probabilidade sei influensia bazea ba proximidade no esperiensia personal ba perigos neebe akontese dadaun. Maske nunee, laiha ida husi hirak nee mak mai iha tempo badak hodi invalida resultado ba projeito nee, maibe ema halo desizaun bazea ba resultado hirak nee, tenki hatene katak saida mak sira fo nudar vizaun jeral ba risko relativo no ameasa sira neebe mak boot iha area sira; presepsaun no reasaun mai husi komunidade ba risko no vulnerabilidade neebe mak labele utiliza hanesan predisaun ba saida mak perigos neebe bele mosu iha fatin, ka exato impakto saida sei resulta iha futuru.

Husi resultado projeito nee labele hare hanesan 'final'. Sira representa hodi interpretasaun ba dadus balu neebe produs iha tempo partikular ida ba iha partikular proposta. Sira passu iha dalan ida nee hodi hadiak komprendesaun konaba ameasa ba infra-estrutura husi perigos klima-relasionado iha rural Timor-Leste, maibe sira laiha meios ida definitivo. Ba sientista, tekniko no fasilitador sira involve hodi halao projeito nee, peskiza nee positivamente hadiak ona hodi komprende kauza neebe fundamento ba inundasaun, rai-halai no erosaun solu. Ami espera katak informasaun neebe apresenta ho formas iha mapa sira, dadus GIS, estatistiko risko no relatoriu tekniku hodi serve atu informa sira seluk. Ba membro komunidade sira no representante governo ida nee mos fornese oportunidade valiozo ida hodi haklean sira nia komprendesaun ba risko no perigos, vulnerabilidade no prioridade iha komunidade no feramento tekniku balu hodi analiza. Ida nee hodi hatur iha posizaun nebe excelente hodi avansa atu uza informasaun hodi halao informa diak no nivel komunidade ho efikas halo aksaun planeamento. Projeito ida nee bele hare hanesan pontus hahu iha neebe informasaun tekniko no presepsaun komunidade inisial kolheta ona hodi ajuda inisia analiza ba iha area risko sira espesifiko iha neebe sai alvuado no intervensun ho komunidade bele halo. Ida nee iha fatin hodi forma ba fahe dadus tekniko ho komunidade sira, hasae kapasidade komunidade em termos mekanismo jere hanesan tuir rekomendasaun no dezemvolve planu aksaun komunidade resiliente hodi ajuda haforsa esforsu, no atu identifika intervensaun hodi minimiza ka mitiga ameasa iha futuru.

Referensia sira

CITL, 2012. *Relatoriu Avaliasaun Vulnerabilidade.* Publikado husi CARE International iha Timor-Leste, Dili, Dezembro 2012.

Fell, R., Corominas J., Bonnard, C., Cascini, L., Leroi, E and Savage, W.Z., 2008. 'Matadalan ba rai-halai susceptivel, perigos no zonasaun risko ba planeamento uza rai'. *Engineero Geolojia Vol. 102.* pp. 85-98. Elsevier Publikasaun, Julho 2008.

Gashaw, W. and Legesse, D., 2011. 'Avaliasaun perigos inundasaun no Risko utiliza GIS no remote sensor iha Fogera Woreda, Noroeste Ethiopia', iha Basia Hidrografika *Nile: Hydrolojia, Klimatika no Uza-be.* Editado husi Dr. Assefa Melesse. Publikado husi Siensia Springer no bisnis media, B.V., 2011.

Direitor Jeral ba Estatistika, 2013. *Census ba Populasaun no Uma iha Timor-Leste, 2010 - Atlas.* Dili, 2013.

Geoscience Australia, 2015. 'Kauza saida rai-halai?': http://www.ga.gov.au/scientific-topics/hazards/landslide/basics/causes

Governo Victoria, 2007. *Rekurso Erosun no Rai-halai iha CCMA Region: Definisaun husi Termus*. http://www.ccma.vic.gov.au/soilhealth/resource/definitions.htm

Ministerio Administrasaun Estatal no Ordenamento Teritorio, *2009. Diploma Ministerial No: 199/GM/MAEOT/IX/09, Que fixa o número de Sucos e Aldeias em Território Nacional.* Dili, 2009

Nithya, S.E. and Prasanna P.R., 2010. 'Abordajem integrado ida ho GIS no Remoto Sensor Tekniko ba Perigos Zonasaun Rai-halai'. Jurnal Internasional ba *Geomatics and Geosciences.* Vol 1 (1), 2010.

Pareta K. and Pareta U., 2012. '*Modelling Integrado basia Hidrografika no karaterizasaun uza GIS no Remoto Sensor Tekniko'. Jurnal Indiano ba Engineria.* Vol. 1 (1), Novembro 2012.

WorldClim, 2015: http://www.worldclim.org/

NASA JPL, 2015: http://asterweb.jpl.nasa.gov/gdem.asp

UNDP, 2012. *Avaliasaun Nasional Perigos KOmprehensivo no Mapamento iha Timor-Leste: Relatorio Teknika konaba Metodu ba Avaliasaun Perigos.* Dili, Agusto 2012.