

Manual:

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blong

Adapt long Climate Change long Vanuatu



VANUATU DEPARTMENT OF LIVESTOCK

&

SPC-GIZ COPING WITH CLIMATE CHANGE

IN THE PACIFIC ISLAND REGION



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Introdaksen

Ol scientist ol agree se klaemet istap jenis. Hemia nao wanem oli singaotem global warming. Igat fulap samting i contribute long global warming. Hemi igat increase blo urganization, deforestation mo rapis fasen blo sakem ol agrikajarol waste. Klaemet jenis hemi causem ol samting olsem rise blo silevel mo temperaja.

Climate Change we yumi stap luk bambae hemi mekem se ol laefstok oli no kro gud, mo bae i daerekly mo indaerekly affectem ol laefstok animol. Daerekly, bae hemi increasem core body temperaja blo olgeta. Indaerekly, bae hemi redusem aviability blo kakai mo sos blo kakai blo ol laefstok animol. Ol impak blo klaemet jenis i no save stop, be yumi save redusem effect blo olgeta long pefomens blo ol laefstok animol. Igat 2 strateji we manual ia lukluk long olgeta. Hemi blo genetically modifaem genetic make up blo wan animol mo modifaem envaeroment blo animol blo kriatem wan 'maekro-klaemet' we i moa kolkol long kalem we istap aotsaed long haos blo pik.

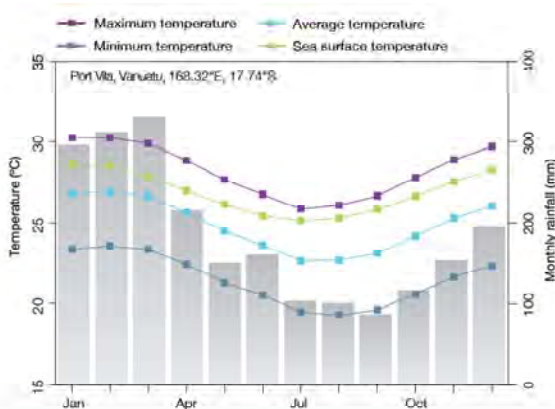


Image i kam long VMGD mo PCCSP¹

¹ Vanuatu Meteorological and Geohazards Department mo Australian Pacific Climate Change Science Program, Vanuatu Brochure 2011

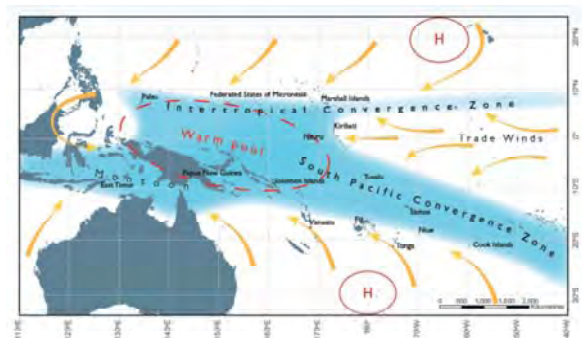
Wanemia Climate Change?

Climate blong Vanuatu tedei

According long Vanuatu Meteorological & Geohazards Dipatmen and the Pacific Climate Change Science Program, Vanuatu averej tempereja long wan yia hemi bitwin 23.5-27.5 degri centegrade. Jenis long tempereja long wan sisen igo kasem nara sisen hemi oltaem folem jenis blong tempereja blong solwota long ocean. Long Vanuatu yumi gat 2 sisens-wom mo wet sisen long Novemba igo kasem Eprel mo kol drae sisen long Mei kasem Oktoba.

Long Vanuatu ren i stap kam from South Pacific Convergence zone. Ol renfall I hapen from ea we I stap kam antap long wom wota long ples we win I stap kam wanples mo mekem se I gat tanda stom. Hemi mekem se hemi kam bigwan mo krosem Saot Pacifik ocean long Solomon Aelan igo kasem Es blong Cook Aelans Long wet sisen Saot Pacifik Convergence zone o ples we win I stap mit tugeta I stap kam bigwan mo I stap muv igo saot, mo I stap mekem se yumi kasem bigfala ren I foldaon long Vanuatu. long presa sistem I fom long ples ia mo oltaem hemi kam olsem hariken long taem o sisen blong hariken.

Ol bigfala hill o mountain tu oli mekem se I gat ren I foldaon long sam aelan blong yumi. Long wet sisen ren I foldaon bigwan nao long saot es saed blong ol bigfala hill mo hemi dipen long ol bigfala aelan mo ino tumas long drae sisen espesili long not wes saed blong aelan.



Long Vanuatu climate hemi jenis plenti long wan wan yia from El Nino Southern Oscillation. Hemia hemi wan paten blong climate we I stap across long tropikol Pacifik Ocean mo I afektem weta raon long wol. I gat 2 stej blong El Nino-Southern Oscillation: El Nino mo La Nina. I gat tu wan stej we hemi stap long nutrel. Long Vanuatu, El Nino events hemi mekem ples I drae mo tu I mekem se wet sisen I kam leit lebet mo tu kolkol long nomol drae sisen. La nina hemi mekem oposit samting i hapen long Vanuatu

Tropical Saeklon o Hariken

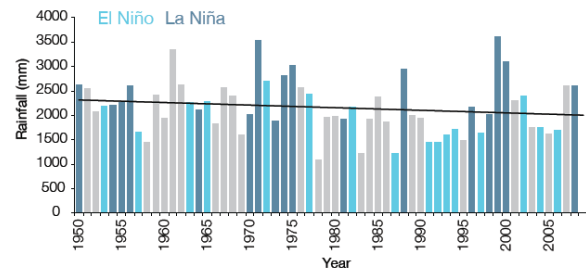
Hariken I stap kilim Vanuatu long manis Novemba kasem Eprel everi yia. Long las 40 yia we i pas, 94 hariken I bin pass klosap long Vanuatu, mo aot long hemia averej blong 2 o 3 hariken I pass long wan sisen. Namba blong hariken long wan yia hemi difren long ol narafala yia we I pass mo long sam yia ino kat be long samfala yia I gat moa bitim 6 saeklon.

Tempereja mo Renfall

Meteo i stap lukim tempereja long Vanuatu I stap go antap since 1950. Long Port Vila, maximum tempereja hemi go antap 0.17 degri centegrade evri ten yias. Tempereja inkris ia hemi stret wetem global paten blong climate change. Long sem period yia I bin gat dekris long averej ren we I foldaon long wan yia.



Vanuatu i stap hot i ko; Image i kam long VMGD mo PCCSP²



Vanuatu rain i stap jenj oltaem; Image i kam long VMGD mo PCCSP³

Solwora I kam antap

Taem solwota I stap kam wom long ocean hemi expand mo mekem se level blong solwota I kam antap. Ice we I melt I stap help tu blong mekem level blong solwota I kam antap.

Meteo i faenem se solwora long Vanuatu I stap kam antap long 6 milimita long evri yia. Hemia I bigwan bitim ol nara ples raon long wol.



² Vanuatu Meteorological and Geohazards Department mo Australian Pacific Climate Change Science Program, Vanuatu Brochure 2011

Jusum Farm Site

I gat sam impotent samting we fama mas luluk long olgeta taem hemi stap jusum ples blo builtem haos pik blo hem.

Seleksen blo ples blo builtem fam hemi impotent. I gat fulap samting we I affektem seteksen blo yu. Hemia nao sam samting we yu olsem fama I mas tink baot.

1. Kraon blo yu mas sandy groan. Hemi i meanem se wota isave ko turu long hem isi nomo.
2. Haos blo pik i facem wan saot-is daereksen (prevailing wind).
3. Kraon i hill lelebet blo letem wota blo ren i ron aot esi.
4. I gat ol bikfala stampa blo tri klosap blo blokem strong wind mo saeklon.
5. I gat ol bikfala stampa blo tri we i blokem sun long taem blo drought o derae sesen.
6. I stap klosap long wota. I alowem fama blo tekem aot toti blo fanis kwik taem mo isi.
7. Klosap long market.
8. Klosap long rod.

Karon blo yu i letem ren i ko turu isi nomo

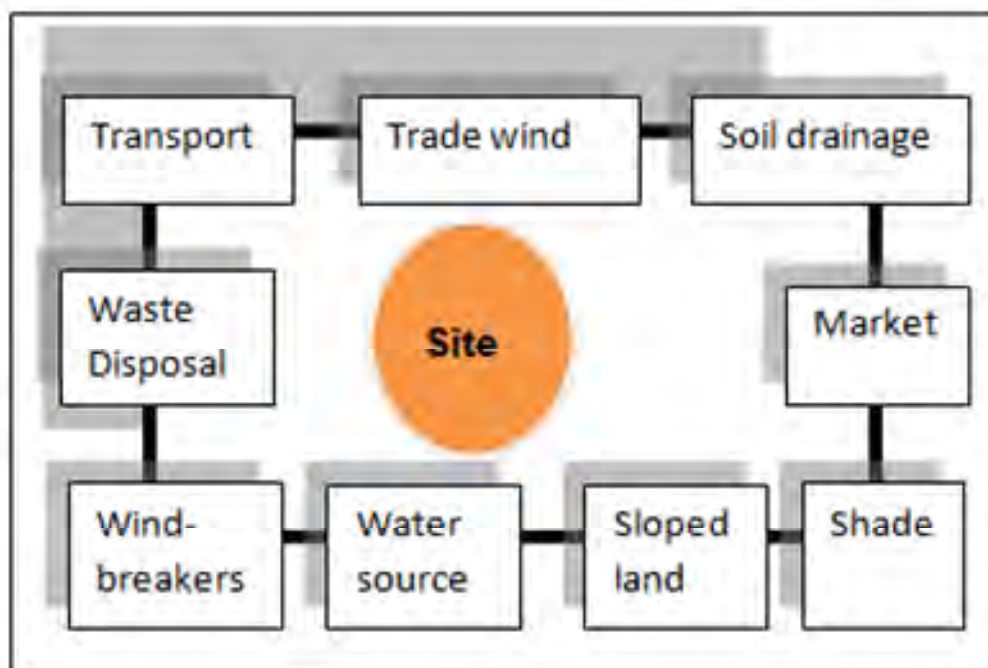
Wan long fas samting we fama i mas lukaotem hemi kaen kraon we hemi builtem haos pik blo hem. Hemi impotent se fama builtem haos long kraon we i letem wota blo ren i ron turu kwik taem. Gudfaka kraon noa hemi wan sandy soil. Hemi kraon we i laet mo ino heavi. Kraon we i hefi olsem clay ino letem wota blo ron turu isi. Hemia i mekem ol pool blo wota olbaot mo gudfala ples blo ol bebet oli kro long hem.

Saot East Trade Wind

Saot-Is win hemi impotent mo useful. Fama isave usem win ia blo mekem pik blo hem i stap kolkol oltaem. Fama isave usem tu blo mekem haos pik ino smel tumas. Taem yu builtem haos pik, yu mas putem long wan daereksen we hemi facem saot-is trade win. Win ia isave helpem pik blo istap kolkol.

Wan ples we i hill smol

Wan flat ples bae imekem wota blo ren ifulap mo mekem ol smolmol pool olbaot. Wota ino save ron aot kwik taem. Ol smolmol pool blo wota oli ol gudfala ples blo ol bebet oli bon, kro mo kam fulap long hem





Hemi impotent se fama i buitem haos pik long wan ples we i hill lelebet. Be ino mas hill tumas. Hemia bae i no allowem wota blo ren blo fomem ol smolsmol pool olbaot.

Windbreak o ol Tri blo Stopem Strong Wind

I mas gat ol bikfala tri long ples blo pik. Ol tri imas mekem wan boundri raon long ples blo pik. Sipos ino gat ol bikfala tri, igud blo yu plantem sam. Ol tri ia bae oli stopem strong wind long taem blo saeklon.

Ol Shade Tri

Lif blo ol tri isave bloken sun. Hemi isave kriatem wan klaemet we pik isave kro gud long hem. Wan klaemet we ino hot tumas. Hot sun isave mekem sunburnt long ol albino pik mo olgeta we oli gat waet skin. Sun isave mekem pik i harem gud mo ino kakae gud.

Klosap long Wota

Wota i impotent long pik. Hemi helpem pik long fulap wei. Hemi helpem pik istap kolkol. Hemi helpem pik i putem temperja blo bodi blo hemi i stap daon. Taem oatsaed tempereja iko andap tumas, enased blo blodi blo pik iko andap tu. Sipos bodi tempereja iko andap bitim 38.5°C, pik bae i ded.

Karem Aot Doti

Fama i mas gat wan strateji blo tekem aot ol doti long haos pik. Strateji ia i mas gat (i) wanem taem blo tekem aot doti mo (ii) wea blo shakem ol doti ia.

Lo nara saed fama isave gat wan strateji we i tanem doti i kam wan prodak we hemi save usem. Hemi save taenm i kam ol earthworm, fertiliser o biogas. Wanem strateji we fama i usem, hemi impotent se strateji ia i sustenabol mo envaeromen-friendly. Ples blo haos pik i mas fasilitaetem removal blo ol doti.

Klosap long Market

I gud blo haos pik istap klosap long market. Hemi bae ikatem daon cost blo transpotem ol pik iko long market. Mo tu hemi impotent se fama isave kasem market long ples ples we fam istap long hem. Hemia bae I help katem daon kos blong transpotem ol pik i ko long market market. Sapos market i stap klosap, ol pik oli spendem smol taem nomo long trak taem fama i transpotem olgeta. Bae ino gat bikfala janis blo gat tumas brus long mit blo pik sipos fama i transpotem olgeta long wan short distant nomo. Hemia bae i help blo keepem mit blo pik istap long wan hae kwaleti.

Klosap long Rod

Sipos fam i stap long wan aelan, hemi impotent blo gat akses blo ol boat o ship blo mofem ol pik iko long market. Hemi impotent blo stap klosap long rod blo ship we iko long market. Hemia long vila mo santo. Mo tu i mass stap klosap long rod blo trak.

Desaen blo Fam mo Haos

Hemi impotent blo gat wan gudfala desaen blo fam mo haos blo pik blo katem daon impak blo klaemet jenis long ol pik blo yu.

Haos blo Pik

Lo kastom blo yumi ol man Vanuatu, pik i stap lukaotem kakae blo hem wan nomo. Hemia i minem se ol pik ol stap ronron nomo olbaot long vilij. Oli no stap long wan fanis o haos. Afta ol ol misnari oli kam, ol bubu oli putem ol pik ensaed long fanis. Nao ia ol man long agrikalja oli advaesem yumi blo putem pik ensaed long haos.

Taem pik I stap ensaed long haos I gud from:

1. Pik i spentem fulap eneji blo hem blo kam fatfat be ino blo lukaotem kakae mo shelta.
2. Bae igat moa smolsmol pik oli laef sipos oli bon ensaed long haos.
3. I moa isi blo maintainem helt blo pik sipos oli stap ensaed long haos.
4. Imoa isi blo fidem ol pik taem oli stap ensaed long haos.
5. Imoa isi blo kollektem manure mo usem olsem fertelaesa sipos ol pik oli stap ensaed long haos.

Klaemet jenis mo Haos blo Pik

Klaemaet jenis i mekem (i) temperaja i ko andap, (ii) humidity i ko andap, (iii) ren i ko andap mo ikam fulap taem mo (iv) wind i blow bikwan mo strong. Olsem wan maneja, fama i mas protektem ol pik

blong hem long ol samting ia. Wan wei hemi blo buitem haos we hemi desaenem blo protektem ol pik long ol samting ia. Sipos desaen blo haos i gud, bae hem save kriatem wan 'maero-klaemaet' ensaed long hoas we i difren long hemia we i stap aotsaed long haos. Hemis bae i protektem ol pik. Hemia nao diskasen blo sam desaem we fama i save usem.

Pele Pik Husbandry Trail Unit (PPHTU)

Objektif blo buitem Pele Pik Husbandry Trial Unit (PPHTU) hemi blo mekem wan sistem we i allowem pik blo adapt long klaemet jenis. Desaen o strakja blo haos mo kaen pik we fama i usem i mas katem daon ol rapis effect blo klaemet jenis.

PPHTU i testem sam kaen desaen we i katem daon ol rapis effect blo klemet jenis. Ol desaen ia oli jenisem o luluk long improvem genetic-make up blo pik mo ol teknik blo lukaotem pik.

PPHTU I lukluk lo ol samting ia:

1. Floa
2. Wol
3. Drenej
4. Ruf
5. Post
6. Haos blo gat bebe (farrowing pen)
7. Haos blo kru (growing pen)
8. Ples blo salem pik (selling pen)
9. Ples blo exsisaes (exercise pen)



Igat ol difren pat blo PPHTU. Ej pat i gat difren wok mo i wok blo improvem laef blo pik. Ol pat ia oli wok tugeta mo wanwan blo helpem pik i kru gud mo tu blo fam i wok gud.

Ol difrem pat blo PPHTU i gat:

1. Farrowing Unit
2. Breeding Unit
3. Grower Unit
4. Selling Unit
5. Exercise Area
6. Garden Plots
7. Chicken Unit
8. Water Tank
9. Mixed Crop Farm (Root Crop and Vegetables)
10. Storage and Cooking Shed
11. Animals



Farrowing Haos

Farrowing unit hemi ples we ol mama pik oli gat pikinini. Hemia i gat 4 smol rum ensaed. Ej wan lo ol rum ia i gat difren kaen floa. Hemia i gat sand bis, saw das, kroan mo cement floa. Ol foto oli sowem ol mesamen blo wanwan rum. Taem ol smolmol pik i bikwan fama i putem olgeta lo growing pen (Grower Unit).

Pupos: ol difren brid (kaen pik) oli stap lo difren rum we igat difren kaen floa. Hemia i blo helpem fama blo recodem pefomens blo wan wan brid lo difren kasen floa.

Grower Haos

I gat 8 smolmol rum ensaed lo Grower Unit. Fo lo wan saed mo 4 lo nara saed. Floa blo haos, i gat san bis, saw dust, kraon mo cement floa. Ol mesemen blo ol rum i stap long ol foto.

Pupos: hemia i blo putem ol difren hybrid blo ol difren mama lo ol difren rum. Hemia mbae helpem fama blo recodem pefomens blo ol pikinini pik (haebrid) ia lo ol 4 difren kaen floa ia.

Exsisaes Aria

Ples ia hemi blo allowem ol pik oli exsisaes. Ol pik i mas exsisaes lo wan regular intevol blo stap helti mo gat strong bon. Sipos oli stap long taem tumus lo wan smol rum, bae bon blo olgeta i kam sofsof. Taem oli ko lo exsisaes aria, oli dikem kraon tu. I gat ol gudfala kakai ensaed lo kraon we oli kakai taem oli dikem kraon. Mesamen blo Exsisaes aria hemi 5m x 2.5m.

Selling Pens/ Root Crops/Vegetable Gardening

Fama i mofem ol pik i ko long sales yard lo taem blo sale. Lo ples ia nao fama i displaem olgeta. I gat 4 smolmol fanis eferiwan we fama i save mofem ol pik raon lo olgeta.

Fama i plantem ol kakae olsem rut crop mo vestibol we oli rere hariap long ol smolmol fanis ia. Fama i save kakai ol kakai ia mo tu hemi save usem olsem sos blo vitamin blo ol pik. Fama i letem ol pik iko ensaed lo ol karen ia taem kakae hemi rere.

Fama i sakem manure o doti blo pik blo olgeta fofala kaen floa ia lo karen olsem organic fertilizer. Fama i recordem ol pefomens blo ol plant ensaed lo ej lo ol 4 smolmol fanis ia. Fama i save comparem ol data blo faenem which doti we ikam lo which kaen floa nao i mekem ol plant i kro moa gud.

Karen blo Rut Crop

Wan nara component blo PPHTU hemi wan mixed root crop karen. Fama i sakem ol doti blo fanis pik lo karen ia olsem organic fertilizer. Fama i save saken doti blo pik stred long karen ia o kurem fastaem lo boxis blo kurem doti blo pik.

Fanis

Saes blo PPHTU hemi 1410m². I gat 2 fanis, wan i raonem hoas blo pik mo nara wan i raonem haos blo pik mo karen blo mixed crop. Wire blo faol i raonem fanis we istap aotsaed mo hemia blo pik i raonem hoas blo pik.

Haos blo Faol

Ruf blo haos foal hemi lif kokonas. Wol blo hem i waea blo foal. Ol post, rafter, purlin, mo bracing ol ol lokol wud nomo. Floa hemi wan timba platform. Height blo floa hemi 30 cm above lo kraon. Hemia i blo allowem fama i collectem sisit blo faol mo usum olsem organic fertilizer. I gat wan sheet blo metal andanit lo floa blo collectem sisit blo faol.

Tank blong Wota

Tank blo wota hemi 6000 lita. Wota we ruf blo haos pik i katsem i ron ko lo tank ia. Ol pik oli drink lo tank ia nao from we ino gat wan natjurol sos blo wota klosap.

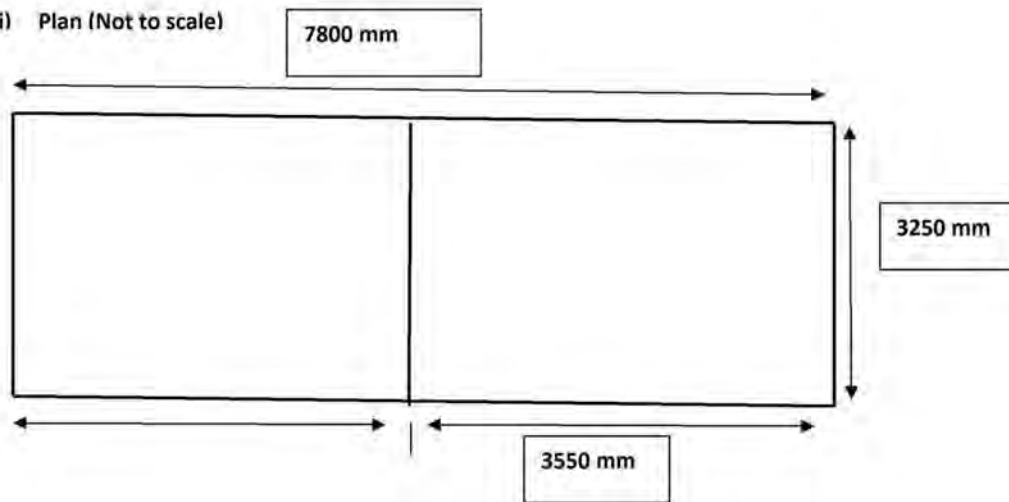
Haos blong Storem Tul, akai mo Kukum Kakai

Haos i gat tu rum. Wan blo storem kakai mo ol tul mo nara wan hemi blo cookem kakai blo pik. Wol blo rum blo storem kakai mo ol tul hemi kapa. Wol blo rum blo cook hemi open nomo. Haos ia hemi wan lean-two strakja. Height blo tall end hemi i 230 cm mo lower end hemi 200 cm.

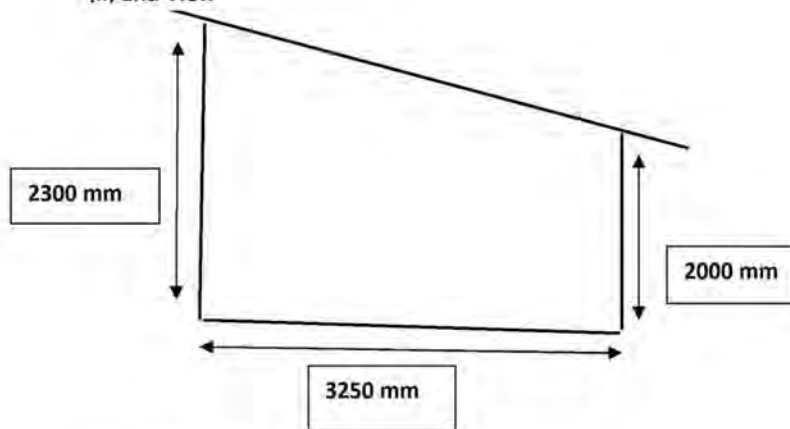


A. Storage and Cooking Shed

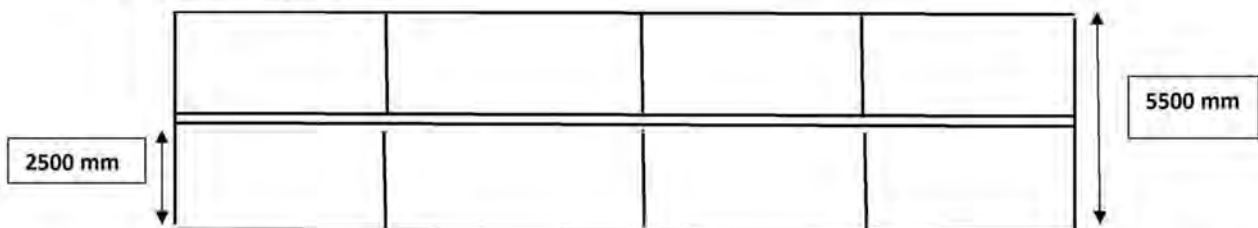
(i) Plan (Not to scale)



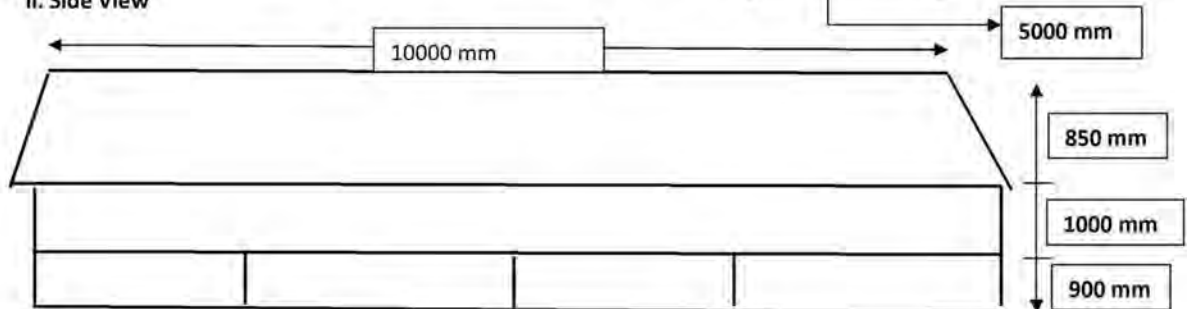
(ii) End View



B. Grower Unit (Plan)



ii. Side View



Pele Climate Testing

Floa

I gat 4 kaen floa we PPHTU i comparem, andanit long wan cement base. Risen blo comparem 4 kaen floa ia hemi blo fanem aot which kaen nao pik i kro gud lo hem. Fasen blo klinem floa blo pik hemi blo safelem aot ol doti wetem shovel. Hemia hemi from ino gat wota lo Pele. Ol doti olem skin blo kokonas i help blo doanem smel blo pispis blo pik. I isi tu blo tekem aot ol doti ia.

Fama ino allow blo klinem floa wetem wota from ino gat enaf lo Pele. Wota we i stap, oli usum blo pik i drink.

Fofakla kaen floa we oli testim lo PPHTU igat:

1. Sanbis floa
2. Saw dust floa
3. Graon floa, mo
4. Cement floa.

Wol blong Rum blong Pik

I gat 3 kaen wol we PPHTU i testim. Stadi ia hemi blo faenem aot which kaen blo wol nao pik i kro gud lo hemi lo wan hot ples, olem we climate change bae I mekem. Ol kaen wol ia igat:.

1. Cement wol,
2. Timber wol, mo
3. Wol blo waea blo pik.

Ruf

Ruf blo haos hemi kapa. Natangura ino gat lo Pele, hemi nao from wanem oli no usum lif natangura. Kapa nao i moa accessibol lo Pele.

Post

Ol post blo Farrowing Unit, Breeding Unit, Grower Unit, and Storage-Cooking Unit hemi lokol post mo 100 x 100 treated NZ (pine) timber nao oli usem. Ol rafter mo purlin oli ol treated NZ (pine) timber tu. Hemia hemi blo mekem i isi blo nailem kapa iko lo hem.



Feeders mo Drinkers

Feeders mo drinkers hemi ol ples blo kakae mo drink. Desaeen blo tufala samting i allowem (i) fama blo putem kakae mo wota ensaed mo no spill mo mekem ples i wetwet mo sofmud. Desaeen blo tufala tu i imas mekem i isi blo klinem tufala. I gat feeder mo drinker lo eferi rum.



Fanis Post

Ol post blo fanis hemi ol lokol materiol. Namariu nao oli usum from we hemi hadwud we stap lo Pele. I gat fulap namariu lo Pele, hemia nao risen blo usum namariu. Concept hemi from ol lokol post ol no sas, mo oli stap klosap lo fam mo fama.



DRINKER

FEEDER

Ol Brid we oli Adapt lo Klaemet Jenis

Vanuatu I kat samfala local brid we oli save adapt long climate change ol exotic brid we oli save kro lo wan hot ples or envaeromen. Pele I stap mekem sam samting blong helpem pik i adapt lo hot klaemet blo Vanutau. Fes samting hemi krosem ol exotic brid wetem lokol brid. Strateji ia i beis lo tinktink we tugeta brid ia bae tufala passem ol gudfala samting lo pikinini blo tufala. Exotic brid bae i passem ability blo kro harriap, gat bikfala bodi, i hefi mo gat plante pikinini i ko long pikinini blo yufala. Lokol brid bae i passem ability blo kro gud lo hot klaemet. Outcome blo kros ia, we hemi wan haebrid bae i gat combaenaesen blo ol gudfala ability blo exotic brid mo lokol brid. Hemi bae i mekem offspring bae i gat bikfala bodi, plante pikinini mo adapt lo klaemet jenis.

Lokal Vanuatu Pik Brid

Yumi save defaenem toktok ia "brid" olsem ol kaen blo pik we oli gat sem physikol characteristics, olsem kala blo hair, mo shape blo bodi. Yumi save krupem ol kaen pik we yumi gat lo Vanuatu akotin lo physikol characteristic blo olgeta i ko long (i) olgeta we yumi karem ikam lo Vanuatu, (ii) olgeta we oli netif blo Vanutau, mo (iii) olgeta we yumi krosem betwin olgeta we i kam ensaed mo olgeta we oli netif lo Vanuatu.

Ensaed lo manual ia, bae yumi rifea lo olgeta we oli kam ensaed lo Vanuatu olsem ol 'exotic brid'. Olgeta we oli netif blo Vanuatu, mabe yumi singaotem olgeta olsem ol 'lokol brid'. Olgeta we oli ol offspring blo kros blo exotic mo lokol brid, mbae yumi rifea lo olgeta olsem ol 'haebrid'.

Ol Exotic Brid lo Pele

(i) Large white boar

(ii) Large white sow, mo

(iii) Black and white spotted sow



Large White Boar



Sapos yu lukim bigfala bol hemi moa gud



Black Spotted Sow



Large White Sow

Ol Lokol Brid long Pele

1. Local spotted (Black and white)
2. Local greyish white coat
3. Local red coat, and'
4. Wild sow



Local Spotted Sow



Local Grayish White Sow



Local Red Sow



Wild Sow

Ol Hybrid Brid long Pele

I gat 2 wei (fasen) blo mekem wan haebrid. Wan wei hemi blo krosem tufala exotic brid. Nara wei hemi blo krosem exotic brid wetem lokol brid. Wanem combanasen we fama i usem hemi stap lo wanem nao fama i wantem karem aot lo maret ia. Hemi samfala kros maret we oli usem long Pele:

- (i) Large white x wild pig sow
- (ii) Large white x local black and white spotted sow
- (iii) Large white x local red coat sow
- (iv) Large white x exotic black and white spotted sow
- (v) Large white x large white sow

Characteristic blong Exotic Brid

Toktok ia characteristic i rifea lo ol physikol apiarens blo pik mo hao hemi behave/ak. Characteristic hemi rifea tu long ability blo pik i kro hariap mo i mekem fulap kinini. Hemi rifea tu lo ability blo pik i kro gud lo wan hot klaemet.

Exotic brid igat bikfala bodi compea lo ol lokol brid. Ol adult oli 2 taem moa bikwan bitim ol lokol brid. Hemia i minim se lo wan wan animol, exotic brid i mekem moa mane blo fama.

Exotic brid hemi kro moa hariap bitim ol lokol brid. Hemia minim se exotic brid i kasem weight blo salem moa hariap lo lokol brid. Advantej blo hemia hemi lo kos blo luk aotem exotic brid.

Sow we hemi exotic brid hemi produse moa smolsmol pik mo igat hae percentej blo ol smolsmol pik oli laef kasem taem blo tekem aot olgeta lo mama blo olgeta.

Rimemba, **Moa smosmol pik = Moa pik blo salem = Moa mane blo fama**

Problem wetem ol Exotc Brid

Ol exotic brid oli no pefom gud lo wan hot klaemet o envaeromen. Hemia from we olgeta oli kam lo wan kolkol envaeromen. From we oli kam aot lo wan kolkol envaeromen, oli nidem wan envaeromen we I kolkol mo igat plante wota blo kro gud. Ol pik ia oli nidem wan temperaja we I lo blo kro gud. Oli no kro gud mo no mekem plante pikinini lo wan hot klaemaet.

Ol exotic brid oli no save faetem gud ol bebet blo sik blo ol tropikol klaemet. Oli save sik

kwik taem nomo. Oli save kasem ol wom blo gut isi nomo.

Ol exotic brid oli kakai smol nomo taem klaemet i hot. Hemia i minim se pik ino stap karem enaf niutrien we hemi nidem lo kakai we hemi kakai. Niutrien we hemi kakai ino naf blo maintenem bodi blo hem mo kro o mekem ol smolsmol pik.

Ol exotic brid oli nidem moa wok blo lukaotem olgeta. Fama imas manejem gud olgeta. Hemi mas fidem olgeta gudfala quality kakai mo fulap kakai. Hemi mas givem olgeta fulap klin wota, spesoli lo taem blo drought o drae. Fama i mas putem ol exotic brid lo wan klin fanis.

Exotic brid ino kro gud mo mekem plante pikinini lo wan envaeromen we i hot. Hemia i mekem oli no kro gud mo gat fulap pik.

Rimemba, **Moa problem wetem pik = Less mane blo fama**

Characteristic blong Local Brid

Lokol brid hemi save toleraetem ol bebet blo sik we i common lo Vanuatu. Hemia ol bebet olsem wom blo gut. Ol lokol pik oli developem wan natjurol resistance lo ol common sik.

Lokol brid hemi wan hardy animol. Hemia i minim se i save toleraetem wan hot klaemet. For exampol, wan klaemet we igat hae temperaeja mo humidity. Hemi save toleraetem tu longfala period blo ren mo extreme renfol.

Lokol brid i adapt gud lo wan klaemet we i stap jenis. From we hemi wan kaen animol we i strong, mo i adapt gud lo klaemaet jenis mo ol impak blo hem.

Rimemba, **Tolerance lo Sik + Tolerance to Hush Klaemet = Adaptaesen lo Klaemet Jenis**

Problem wetem Local Brid

Lokol brid i kro slo. Hemia i save mekem i sas blo lukaotem hem. From we i tekem long taem blo hemi rere blo salem. Longfala taem ia i minim plante kakai blo fidem pik lo hem.

Hemi no mekem plante pikinini. Hemi save mekem nomo 4-5 pikinini. Smol namba blo ol pik hemi minim se fama isave mekem smol mane nomo.

Lokol brid i gat smol bodi mo ino hefi. Smol bodi i minim smol o lo cacass weit

Risen blong Maretem Pik

Exotic brid i save kro hariap mo produse ol bikfala pik be ol pik ia oli no save kro gud lo wan hot envaeromen. Lo nara saed ol lokol pik oli kro gud lo wan hot envaeromen be oli no ol bikfala pik mo sow ino save bonem fulap pikinini.

Fama i wantem animol we i pefom gud lo wan hot envaeromen mo kro hariap, mo i gat fulap pikinini mo hae percentej blo ol pikinini ia ol laef kasem taem we hem i karem aot olgeta lo mamma pik, even lo wan hot envaeromen.

Taem fama i krosem exotic wetem lokol brid, hemi stap combaenem ol gudfala characteristic blo exotic mo lokol brid. Pikinini pik we i kam aot lo kros ia hemi wan 'haebrid. Haebrid ia i gat ol gudfala characteristic we kam lo exotic mo lokol brid.

Haebrid pikinini ia isave kro hariap, toleraetem ol bebet blo sik, i moa bikwan lo lokol parent blo hem, i produse moa

pikinini pik mo hemi adapt lo klaemet jenis mo ol impak blo hem.



Cross Breeding of Exotic and Local Breeds in Pictures

Large white Boar

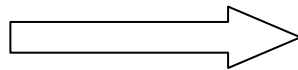


Local spotted sow

Hybrid of Large white boar x Local sow offspring



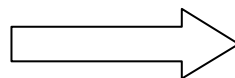
(ii) Large white x



Hybrid of Large white boar
Large white sow



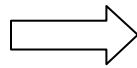
(iv) Wild sow



Hybrid of Large white boar x
wild sow



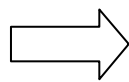
**Local greyish white coat
local greyish white sow**



Hybrid of Large white boar x



**Local reddish coat sow
reddish coat sow**



Hybrid of Large white boar x local



Glossary

Adapt pik i save kro gud lo envaromen ia o no gat

Brid kaen blo pik olsem landrace mo large white

Charecteristic fisikol kala o shape blo pik. Hemi inklutum tu hao pik i behave o ak

Exotic Brid kaen pik we i kam lo ova sea. Hemia ol pik olsem large white mo landrace

Haebrid animol we i kam aot lo kros blo exotic mo lokol brid

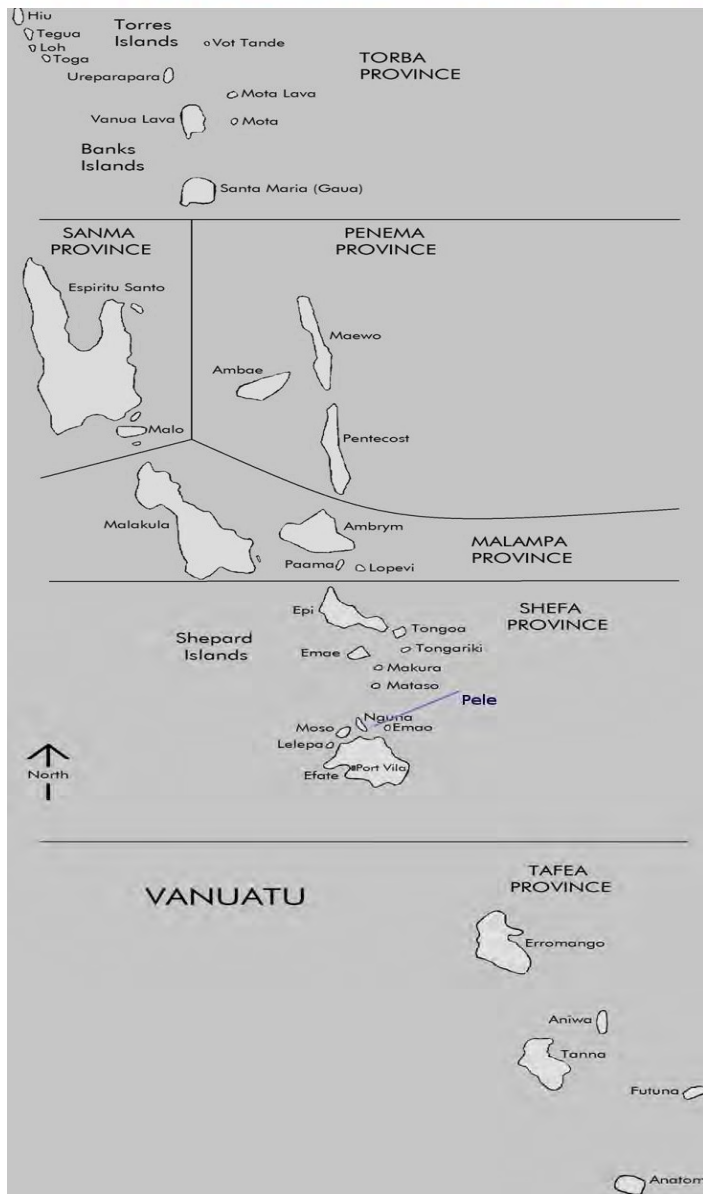
Humidity hemia i refea lo amaon blo wota we istap lo aea o atmosphere

Laefstok animol ol animol we fama i lukaotem olgeta blo salem o kakai olgeta

Maero-klaemet hemia i wan smol klaemet ensaed lo haos pik. Hemi mo difren lo hemia we istap aotsaed

Lita hemia i minim numba blo ol smolsmol pik lo wan raon we mama pik ia kat pikinini

Lokol Brid hemia ol kaen pik we oli netif lo vanutau



GIZ is a federally-owned enterprise that supports the German government in the field of international development cooperation. For more than 30 years, GIZ has been cooperating with Pacific Island partners in strengthening the capacity of people and institutions to improve the lives of communities for this generation and generations to come. GIZ is an implementing agency providing support through technical cooperation to balance economic, social and ecological interests through multi-stakeholder dialogue, participation and collaboration.

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