



Australian Government
Australian Centre for
International Agricultural Research

Lainim pasin bilong kamapim, bungim na lukautim ol gaden kaikai na pasin bilong lukautim moni taim yu salim kaikai:

*Buk bilong trenim ol liklik lain fama bilong kamapim gaden
kaikai long ol Pasifik ailan kantri long hap wes*



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*Buk bilong trenim ol liklik lain fama bilong
kamapim gaden kaikai long ol Pasifik ailan
kantri long hap wes*

P. Seta-Waken, R. Malie, P. Utama and G. Palaniappan

Editors: C.J. Birch and B.E. Chambers



2016

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Seta-Waken P., Malie R., Utama P. and Palaniappan G. 2016. Lainim pasin bilong kamapim, bungim na lukautim ol gaden kaikai na pasin bilong lukautim moni taim yu salim kaikai: Buk bilong trenim ol liklik lain fama bilong kamapim gaden kaikai longol Pasifik ailan long hap wes (ed. by C.J. Birch and B.E. Chambers).

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ACIAR Monograph No. MN176a

ACIAR Monographs – ISSN 1031-8194 (print), ISSN 1447-090X (online)

ISBN 978 1 925746 71 6 (print)

ISBN 978 1 925746 72 3 (PDF)

Peter Nolan i desainim, Canberra

Karamap: [antap] Ol meri long Tapini i yusim ol samting bilong bus na wokim kompost; [namel] Philmah Seta Waken (NARI) i soim long ol meri long Tapini hau ol i ken wokim ol rot bilong stiaim wara long tomato gaden; [daunbilo] Poela Utama (FPDA) i soim long ol meri long Tapini ol wei bilong bungim na lukautim ol kaikai long taim bilong trening long Ogas 16, 2013. Photos: Barbara Chambers.

Tok i Go Pas

Pasin bilong ol liklik lain fama long kamapim ol gaden kaikai i save helpim ol long i stap gut long sait bilong helt, i stap seif long ol komiuniti bilong ol, na kisim moa moni bilong helpim ol famili bilong ol. Long planti bilong ol Pasifik ailan kantri, ol manmeri long ol taun na siti i sot long ol gaden kaikai. Na ol gaden kaikai i wanpela rot bilong ol manmeri long ol ples long kisim moni. Ol i no gat planti rot bilong kisim moni. I gat gutpela rot bilong kamapim moa gaden kaikai na bai ol man long ol taun tu i gat inap long kaikai, na dispela bai helpim tu ol manmeri long ol ples. Dr Colin Birch of the University of Tasmania i go pas long ACIAR projek SMCN/2008/008, "Increasing vegetable production in Central Province, Papua New Guinea, to supply Port Moresby markets" na dispela projek i luksave long dispela samting. Wankain samting i kamap tu long ol narapela hap bilong PNG na long ol kantri olsem Solomon Islands, Vanuatu, Fiji na Kiribati.

Olsem tasol, wok bilong kamapim na maketim ol gaden kaikai i go bikpela moa na helpim gut ol liklik lain fama. Tasol, ol fama i hatwok long mekim dispela wok, na ol i mas kliagut moa long dispela wok bilong kamapim, bungim na lukautim kaikai, na wokim bisnis long en. I mas i gat trening bilong strongim ol fama long manejim bisnis bilong wok gaden, na i mas i gat ol gutpela trena bilong trenim ol.

Pastaim, mipela i wokim dispela buk bilong helpim ol fama long PNG, na nau mipela i bungim long dispela buk ol gutpela samting planti ACIAR projek i bin kamapim long PNG, Solomon Islands, Vanuatu and Fiji. Mi laik tru dispela buk bai i helpim tru ol trena na ol narapela man long wok hat long winim moa moni na strongim helt bilong ol man long ol Pasifik komiuniti. Sori tru long Dr. Birch i bin dai pinis taim klostu mipela i laik pinisim wok bilong wokim dispela buk.



Dr Nick Austin

Chief Executive Officer

Australian Centre for International Agricultural Research

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Nem Bilong Projek

SMCN/2008/008 Increasing vegetable production in Central Province, Papua New Guinea, to supply Port Moresby markets

Tok Tenkyu

Dispela buk i kamap long rot bilong "Training Needs Analysis Workshops" em tim bilong wok painimaut long yia 2011, 2012, na 2013 i wokim bilong helpim ol fama long Rigo/Koiari, Hiri, Sogeri na Tapini distrik bilong Central Province long Papua New Guinea. Ol lain bilong wokim na skelim ol woksop i olsem: National Agricultural Research Institute (NARI), Fresh Produce Development Agency (FPDA) na Pacific Advent University (PAU); na Australian Centre for International Agricultural Research (ACIAR) projek tim memba long Australia. Mipela i tok tenkyu long planti man husat i insait long ol dispela woksop. Mipela i tok tenkyu moa yet long ol man na meri na ol yangpela long Central Province. Taim mipela i wokim ol trening woksop, ol i givim mipela ol skil na ol save ol i kisim long tumbuna bilong ol.

Na tu, mipela i tok tenkyu tru long ACIAR long givim moni long kamapim dispela buk.

Hau Dispela Buk i Kamap

Dispela buk i kamap long rot bilong ol trening woksop, em hap wok bilong wanpela projek bilong ACIAR, SMCN/2008/008, "Increasing vegetable production in Central Province, Papua New Guinea, to supply Port Moresby markets", na tu, mipela i putim i go insait long dispela buk ol gutpela save i bin kamap long ol narapela project bilong ACIAR long Papua New Guinea (PNG), Solomon Islands, Vanuatu na Fiji.

Long wok bilong PNG, ol man na meri olsem liklik lain fama i kam long kain kain hap bilong Central Province i wok insait long ol woksop bilong ol man na bilong ol meri, em mipela i bin wokim long yia 2011 inap 2013. Namba wan woksop em i olsem "Training Needs Analysis Workshop", na namba tu, Training Development Workshop bilong painimaut wanem ol hap wok bilong ol i hevi bilong ol na ol i nidim trening long ol. Long namba wan woksop, ol man insait long woksop i lukim ol foto bilong ol kain hap wok olsem redim gaden, planim, bungim na salim kaikai, na ol manmeri bilong wan wan ples i toktok namel long ol yet long ol dispela hap wok. Ol i ken skelim ol kain samting olsem: ol i save mekim dispela wok olsem wanem, i gat wanem hevi bilong ol. Orait, nau olgeta long woksop i harim tingting bilong wan wan ples, na ol man, ol meri, na ol yangpela long wan wan ples bai i makim wanem trening ol i mas kisim pastaim na wanem trening bihain. Long namba tu woksop, ol i singautim ol man long ol distrik grup na askim ol long tingim bek wanem trening ol i tok ol i nidim. Ol i luksave olsem ol liklik fama insait long dispela woksop i nidim kain trening olsem: wok bilong kamapim kaikai (wok bilong lukautim graun, lukautim kaikai, na stiaim wara), wok bilong bungim kaikai (redim ol samting bilong salim kaikai, bungim na lukautim kaikai na makim ol prais bilong kaikai) na wok bilong kisim ol save long bisnis (putim moni long benk na wokim rekod). National Agricultural Research Institute Southern Region Centre (NARI SRC) long Laloki i givim trening long ol wok bilong kamapim kaikai, na Fresh Produce Development Agency (FPDA) Southern Region i givim trening long wok bilong bungim kaikai na kisim ol save long bisnis.

Bikos ol wei bilong wok gaden na ekonomi long Central Province i klostu wankain long ol narapela hap bilong PNG na ol Pasifik ailan kantri, ol trening material ol i bin wokim bihain long ol woksop, em mipela i toktok antap, i stap long dispela buk. Olsem na, ol man long ol narapela hap tu i ken yusim. Ol toktok na ol piksa samting i stap long dispela buk i givim infomesen we trena i ken yusim wantaim ol save bilong ol yet long sindaun, ol pasin na kalsa bilong ol man long ples bilong em. Na em i ken kamapim ol toktok em i stret long lain fama em i givim trening long ol.

HAP 1

Trening bilong Wok Gaden

Kirap bilong Tok

Nau dispela buk bai i stori long Trening bilong Wok Garden pastaim long ol narapela trening. Ol tripela topik bilong dispela hap bai i stori long ol wok gaden, moa yet long wok bilong lukautim graun na ol wok na pasin bilong stiaim wara olsem wok bilong dripim wara (drip irigesen) na wok bilong lukautim gaden kaikai. Ol dispela topik bai i stori long bikpela toktok tasol na bai ol trena i ken bihainim sampela pasin bilong wan wan ples, na tu em i ken yusim ol ekspiriens na save bilong em long skulim ol man long taim bilong trening.

Ol Samting bilong Lainim

Long dispela trening, ol man insait long trening inap:

- ▶ lainim wok bilong lukautim graun na kliagut long wai pasin bilong lukautim graun i impoten;
- ▶ kliagut long sampela nupela wei bilong stiaim wara na hau ol i ken bihainim dispela wei wantaim sampela wei bilong ol yet long nau;
- ▶ luksave long ol gras nogut, ol binatang nogut na ol sik bilong ol kumu, na save gut tu long hau ol i ken rausim ol;
- ▶ save gut long hau ol man i ken yusim ol plaua o gras samting bilong wokim marasin bilong kilim ol binatang nogut na kliagut long wanem ol samting em isi long ol man i ken kisim na yusim; na
- ▶ kliagut long seifti i impoten taim ol i yusim ol kemikal long ol gaden.

TOPIK 1

Pasin bilong Lukautim Graun

Ol Samting bilong Lainim

Taim dispela trening i pinis, yu bai inap:

- ▶ stori long wok bilong lukautim graun em i wanem samting, na hau yu ken mekim;
- ▶ stori long stretpela wei bilong lukautim graun; na
- ▶ save gut olsem ol wok bilong lukautim graun i ken helpim graun i holim gut gris bilong en.

Kirap bilong Tok

Ol fama i mas lukautim graun na bai graun i gat strong inap long groim gut ol gaden kaikai. Sapos strong bilong graun i lus, ol landslais, tait wara, hevi bilong graun i lus inap kamap. Wok bilong lukautim graun inap pasim ol dispela hevi. Na taim ol man i yusim graun wantaim gutpela tingting, dispela i ken helpim graun long kamapim gut gaden kaikai inap longpela taim.

Pasin bilong Lukautim Graun

Ol man i save lukautim gut graun, ol bai i mekim ol dispela kain pasin olsem: karamapim gaden, senisim senisim ol samting bilong planim, karamapim gaden long plant na maloloim gaden.

Karamapim gaden

Wok bilong karamapim gaden em i wanem samting?

Em i olsem: Taim ol man i redim pinis gaden bilong planim ol kumu, ol i karamapim long ol drai gras, ol lip, ol sodas, o ol hap pipia kaikai.



Wai em i gutpela long karamapim gaden?

Ol samting bilong karamapim graun (Han Kais i go long Han Sut)-ol sodas, ol hap pipia kaikai, ol lip na ol gras i karamapim ol gaden kaikai

Em bai i:

- ▶ helpim gaden long holim wara na haitim ol gaden kaikai long san long drai sisen
- ▶ pasim ol gras nogut long gro
- ▶ pasim hevi bilong graun i lus bikos em bai i banisim graun long ren na ren i no inap rausim graun
- ▶ strongim graun na holim gris bilong en.



Pasin bilong karamapim gaden (Han Kais i go Han Sut) i holim wara na pasim ol gras nogut na graun i no inap lus

Ol kain kain wei bilong karamapim gaden

I gat tupela kain:

1. **Karamapim long ol samting bilong graun**—Ol i save yusim ol drai gras, ol lip, ol sodas na ol hap gaden kaikai olsem ol skin bilong pinat, kopi, rais na ol namel bilong kon.



Ol kain kain wei bilong karamapim gaden

2. **Karamapim long ol samting ol man i wokim**—Em ol i plastik, faibagras, aluminium foil, wesan, ol ston na gravel.

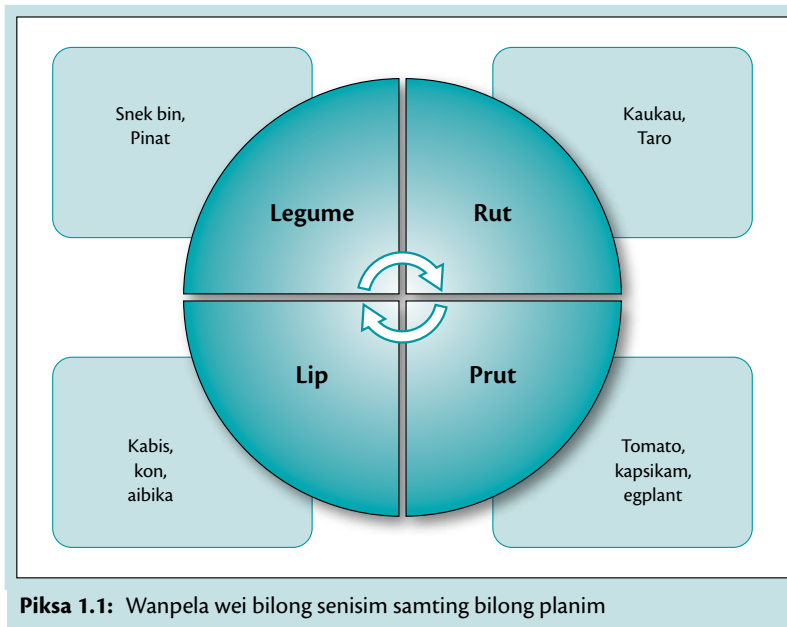


Ol kain kain samting bilong karamapim gaden (Han Kais i go Han Sut)-lait-kala plastik, blakpela plastik

Senisim Senisim ol samting bilong planim

Pasin bilong senisim senisim ol samting bilong planim em i wanem samting?

Em i makim olsem: Yu planim na groim wangepela samting (olsem pinat) long gaden na kamautim pinis dispela pinat, orait, nau yu mas planim narapela samting (olsem kabis) long dispela gaden. Piksa 1.1 i soim wangepela wei bilong senisim senisim ol samting bilong planim. Ol gaden kaikai ol i kolim "legume" olsem pinat na snek bin i save givim nitrogen long graun, na ol narapela kaikai ol i no kolim "legume" olsem kon, aibika, kabis i save pulim na pinisim nitrogen long graun. Bihain long kamautim ol gaden kaikai, em i gutpela long planim narapela samting bilong gaden olsem ol mak olsem spia bilong piksa daunbilo i soim.



Wai em i gutpela long mekim olsem?

Em i gutpela bikos:

- ▶ Sik bai i no kalap long ol gaden kaikai yu kamautim pinis.
- ▶ Graun i ken kisim ol nitrogen taim gaden kaikai ol i kolim "legume" olsem pinat na snek bin i gro.
- ▶ Em i pasim hevi bilong graun i lus taim ol gaden kaikai i gat planti lip na rop olsem snek bins.
- ▶ Kain kain gaden kaikai i ken gro na bai ol fama i ken yusim.



Eksampel bilong kain kain gaden kaikai i gro

Karamapim ol gaden kaikai

Pasin bilong karamapim ol gaden kaikai em i wanem samting?

Em i makim olsem yu karamapim gaden long ol samting olsem pinat na snek bin i save givim nitrogen long graun, dispela bai i lukautim graun. Olsem: ol i save planim na groim ol samting olsem *Pueraria* o *Centrosema* long plantesen bilong kokonat, kakao, oil pam o raba.

Wai em i gutpela long karamapim gaden kaikai?

Olsem gris ol i wokim long grin i save mekim, pasin bilong karamapim gaden kaikai i ken:

- ▶ pasim ol gras nogut long gro
- ▶ holim wara long graun
- ▶ givim nitrogen long graun
- ▶ givim ol kain kain gutpela samting bilong graun na strongim graun
- ▶ pasim hevi bilong graun i lus.



Pueraria sp.—ol legume plant



Centrosema sp.—ol legume plant

Maloloim gaden

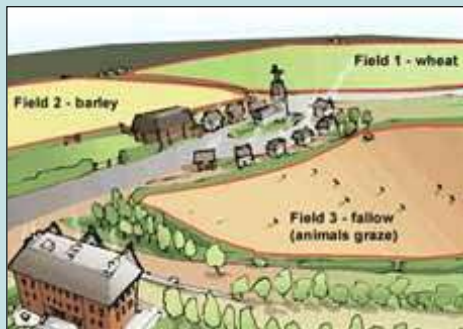
Pasin bilong maloloim gaden em i wanem samting?

Em i makim olsem yu mas maloloim gaden inap sampela hap taim na i no ken planim wanpela samting. Long bipo, ol i save maloloim gaden long tenpela krismas i go inap twenti-faipela krismas, tasol long sampela hap long nau, ol i maloloim gaden long tripela krismas i go inap faivpela krismas tasol bikos ol man i kamap planti tumas na ol i nidim graun.

Wai em i gutpela long maloloim gaden?

Em i gutpela bikos:

- ▶ kisim bek ol kain kain gutpela samting bilong graun
- ▶ kisim bek gris bilong graun
- ▶ kisim bek strong bilong graun
- ▶ daunim o pasim hevi bilong graun i lus.



Pasin bilong maloloim gaden — yusim tumas gaden na i no gat gutpela malolo long en (han kais na han sut antap), gaden i malolo na gras i pulap (han kais daunbilo) na plen bilong planim narapela narapela samting long gaden (han sut daunbilo)

Wei bilong Givim Fetilaisa

I gat fopela wei bilong givim fetilaisa long ol gaden kaikai: tromoi i go, putim fetilaisa long hul bilong planim, spreim fetilaisa long ol lip, spreim fetilaisa long graun.

Tromoi i go

Yu ken tromoi fetilaisa long han o masin i go long gaden na bihain miksim wantaim graun antap long gaden. Dispela isipela wei. Tasol, ating sampela taim, gaden kaikai i no inap kisim gut fetilaisa bikos ol rop i no inap kisim fetilaisa o i gat planti fetilaisa long sampela hap bilong gaden, na long narapela hap, i no gat planti. Na tu, ol i save tromoi fetilaisa long gaden pastaim long planim ol kaikai na sapos bikpela ren i pundaun, dispela inap wasim fetilaisa i go aut long gaden.



Pasin bilong tromoi fetilaisa long gaden

Putim fetilaisa long hul bilong planim

Yu putim fetilaisa arere arere long samting yu planim, osem inap 10-pela cm long ol kumu osem ol kabis, ol tomato na ol kapsikam. Sapos yu laik planim ol sid, yu putim fetilaisa long hul bilong planim na karamapim long sampela graun pastaim long planim ol sid. Em i impoten long karamapim fetilaisa. Sapos yu no mekim osem, fetilaisa bai i "kukim" ol sid, long wanem, gris bilong fetilaisa i strongpela tumas long ol. Dispela pasin bilong givim fetilaisa i gutpela tru bikos fetilaisa i ken givim stret gris bilong en long wan wan plant. Tasol, yu nidim planti hap taim long mekim dispela pasin na sapos fetilaisa i planti tumas, dispela bai i kilim gaden kaikai.



Pasin bilong putim fetilaisa long ol plant

Spreim fetilaisa long ol lip

Yu ken miksim sampela fetilaisa wantaim wara na yusim masin long han na spreim o larim masin yet i spreim long ol lip bilong ol gaden kaikai i gro liklik. Yu mas was gut na mekim dispela pasin bikos sapos yu givim planti tumas fetilaisa, em bai i bagarapim ol plant.



Pasin bilong givim fetilaisa long ol lip

Spreim fetilaisa long graun

Yu ken miksim fetilaisa wantaim wara i go long tenk na yusim pamp, em i save wok long mota, long salim wara fetilaisa i go long paip bilong stiaim wara long gaden o i go long ol spreia/sprinkla na givim wara fetilaisa long graun we gaden kaikai i stap long en. O yu ken miksim fetilaisa wantaim wara long baket na yusim woterim ken long givim fetilaisa long ol plant. Tasol tingim gen. yu mas was gut, nogut yu givim planti tumas na kukim ol plant.



Pasin bilong spreim fetilaisa long graun — yusim woterim ken (han kais) na paip bilong stiaim wara (han sut)

Wanem taim yu ken givim fetilaisa?

Yu ken givim fetilaisa:

- ▶ pastaim long planim ol sid o sut i kamaut;
- ▶ taim bilong planim ol sid; o
- ▶ taim gaden kaikai i wok long gro (*olsem bihain long planim o sut i kamaut pinis*).

I gat narapela narapela taim bilong givim fetilaisa long wan wan gaden kaikai.

Yu yet i mekim 2

► Tingim bek ol gaden long ples bilong yu. Yu yusim fetilaisa? Raitim long tebol.

Nem bilong gaden kaikai	Yu yusim fetilaisa long en?	Wanem kain fetilaisa yu yusim?

► Wanem taim yu givim fetilaisa?

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► Yu bihainim wanem kain pasin bilong givim fetilaisa?

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Wei bilong Wokim Gris long Gaden

Pasin bilong wokim gris long gaden em i wanem samting?

Pasin bilong wokim gris i makim olsem yu yusim pekpek o pispis bilong ol animal o ol plant i sting pinis na yu givim dispela samting long gaden. Dispela samting i olsem ol gutpela fetilaisa i ken givim gris na strong long gaden.

Ol gutpela sait na ol sait nogut bilong en

I gat ol gutpela sait bilong en na ol sait nogut bilong en long yusim dispela kain gris. Tebol 1.1 i soim ol gutpela na nogut long en.

Tebol 1.1: Ol gutpela sait na ol sait nogut bilong en

Ol Gutpela sait 😊	Ol Sait nogut ☹️
<ul style="list-style-type: none"> • Givim moa ol samting bilong strongim graun na ol plant • Plant bai i kisim ol gutpela samting • Graun bai i kisim bek strong • Gaden kaikai bai i kamap planti 	<ul style="list-style-type: none"> • I gat hatwok • Longpela taim i lus pastaim na kaikai bai i kamap • I gat smel nogut • Em i ken hatim tumas na bagarapim ol plant

Ol kain kain gris

I gat tripela kain gris em planti man i yusim:

1. gris ol i wokim long grin o plant
2. gris bilong animal
3. 'ti' o gris wara.



Gris ol i wokim long grin



Gris bilong animal



'Ti' o gris wara.

Gris ol i wokim long grin o plant

Gris ol i wokim long grin o plant em i wanem samting?

Sapos yu laik wokim gris long grin, yu mas larim ol legume plant olsem mukuna o mungbin long gro long gutpela graun inap long taim em i kamapim ol lip. Yu mas digim na planim dispela plant i go long graun long tupela mun bihain long planim (longpela bilong en i kamap inap 20-30 cm). Dispela plant i ken sting kwiktaim bikos skin bilong dispela plant i malumalum.

Gris ol i wokim long grin i ken mekim wok i wankain liklik long karamapim gaden, tasol yu no nidim planti haptaim bilong wokim. Bilong wokim dispela kain gris, planti man i yusim ol legume olsem mukuna, puearia na mungbin.

Wai gris ol i wokim long grin i gutpela?

Gris ol i wokim long grin i:

- ▶ givim ol gutpela samting na strong long graun;
- ▶ daunim o pasim hevi bilong graun i lus; na
- ▶ holim wara long graun.



Gris ol i wokim long grin

Gris bilong animal

Gris bilong animal em i wanem samting?

Gris bilong animal i makim samting ol i wokim long pekpek na pispis bilong animal. Planti man i yusim gris ol i save wokim long pekpek bilong kakaruk, pik na bulmakau. Na ol i save givim dispela gris, em i strong liklik, i go stret long graun long tupela wik pastaim long planim samting. **Tingim olsem yu no ken yusim dispela gris taim em i nupela olgeta na givim stret long graun we gaden kaikai i gro long en bikos taim dispela gris i sting, em bai i go hatpela na hit bilong en i ken kukim na bagarapim gaden kaikai.**

Gris bilong animal i gutpela tru long givim gris long graun. Planti gris bilong animal i gat ol samting bilong strongim ol plant. Olsem na, ol i save kolim em solid fetilaisa. Spit bilong pekpek na pispis bilong animal i go sting i no wankain. Sampela i go sting hariap na sampela em isi isi.

Sapos yu laik gris bilong animal i wok gut, yu mas save gut long bihainim wanem wei na long wanem kain taim bilong givim gris, na wanem kain gris yu laik yusim. Ol i save givim gris bilong animal tupela wik pastaim long planim samting, long wanem, em bai i kamap strong liklik. Tasol, sapos yu givim gris pinis na tupela wik i lus pinis, tasol yu no inap planim samting yet, graun bai i lusim ol samting bilong strongim graun na ol plant. Sapos yu leit long planim samting, tasol yu no laik ol samting bilong strongim ol plant i lus, yu ken planim ol legume olsem samting bilong karamapim gaden kaikai. Em i gutpela bikos ol legume bai i kisim ol samting bilong strongim ol plant.

Tingim olsem wanpela sait nogut bilong gris bilong animal i olsem dispela kain gris inap bagarapim wara sapos em i sink i go daun tru o ron i go daun long ron bilong wara.



Gris ol i wokim long pekpek bilong kakaruk



Gris ol i wokim long pekpek bilong animal



Gris ol i wokim long pekpek bilong meme

'Ti' o gris wara

'Ti' o gris wara em i wanem samting?

I gat tupela wei bilong wokim 'ti' o gris wara olsem long ol plant na long ol animal. Ol i wokim "ti" o gris wara long ol narapela narapela samting (Tebol 1.2) — sapos yu yusim gris bilong animal o famyad, ol i save kolim dispela kain gris olsem **gris bilong animal 'ti'**; na sapos yu yusim gris bilong plant, ol i save kolim **gris bilong plant 'ti'**.

Pasin bilong wokim gris bilong 'ti'

Pasin bilong wokim gris bilong animal 'ti' na pasin bilong wokim gris bilong plant 'ti' i wankain (Tebol 1.3; Piksa 1.2, Piksa 1.3). Tasol, sampela wei bilong holim ol gris i no wankain; gris bilong animal 'ti' i stap longpela taim moa long gris bilong plant 'ti'.

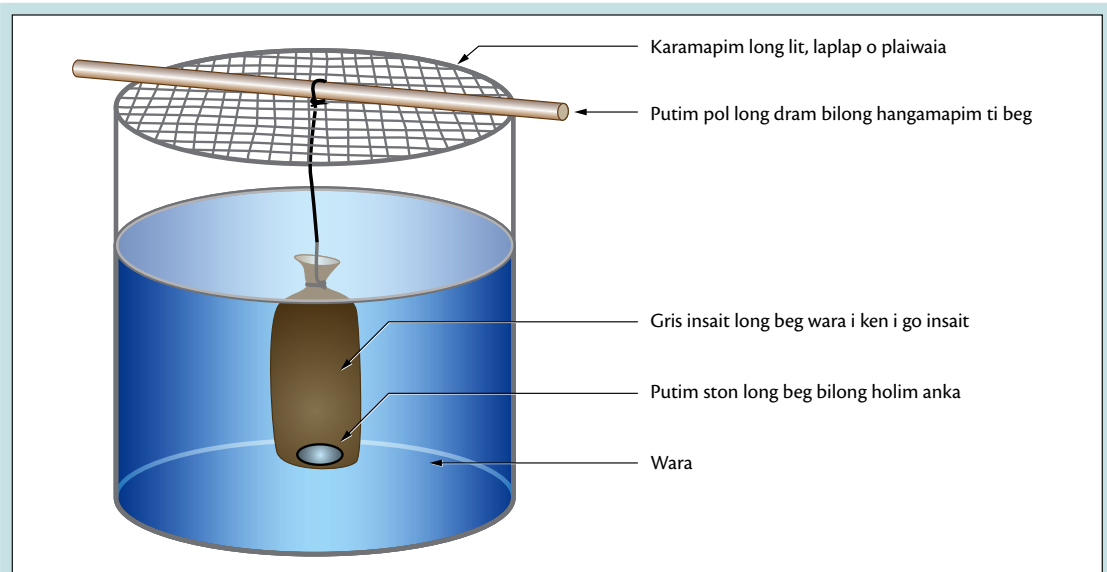
Ol material na ol wei bilong wokim gris bilong animal 'ti' o plant 'ti'

Tebol 1.2: Ol material bilong wokim gris bilong animal 'ti' na plant 'ti'

Gris bilong animal	Gris bilong plant
1. Pekpek bilong ol kain animal olsem pik, kakaruk, meme, sipsip, na bulmakau.	1. Ol grinpela lip–malumalum, i gat mosong na i samting olsem legume
2. Kopra beg o stok fid beg (50 kg)	2. Sit bilong paiauwut
3. Klinpela wara	3. Kopra beg o empti stok fid beg (50 kg)
4. 200-L (44-gallon) dram, ol plastik kontena o baket (10-L/15-L)	4. Klinpela wara
5. Stik o diwai timba	5. 200-L (44-gallon) dram, ol plastik kontena o baket (10-L/15-L)
6. Bikpela ston yu yusim olsem anka	6. Stik o diwai timba
	7. Bikpela ston yu yusim olsem anka

Tebol 1.3: Ol wei bilong wokim gris bilong animal 'ti' na plant 'ti'

Gris bilong animal	Gris bilong plant
1. Bungim gris bilong animal i drai pinis.	1. Bungim tripela kain grinpela lip: <ul style="list-style-type: none"> – malumalum, olsem tapiok – i gat mosong, olsem pamkin – samting olsem legume, olsem glirisidia sed tri, lesina.
2. Pulapim dispela gris long kopra o stok fid beg.	2. Katkatim ol lip i go liklik.
3. Putim bikpela ston i go insait long beg em i pulap long gris, na bai gris i no ken lus i go.	3. Pulapim ol liklik lip long beg.
4. Wokim hul antap long beg na subim stik o timba i go insait bilong holim beg na sanapim stret taim yu putim em i go insait long dram.	4. Putim sit bilong paiauwut long givim ol mineral na em bai i wok olsem marasin bilong rausim gems. Na seksekim gut.
5. Pulapim wara i go inap hap bilong dram o plastik kontena.	5. Putim ston olsem anka, na bai gris i no ken lus i go.
6. Apim beg i pulap long gris na putim em i go insait long dram em wara i stap long en na karamapim long lit, laplap o plaiwaia.	6. Wokim hul antap long beg na subim stik o timba i go insait bilong holim beg na sanapim stret taim yu putim em i go insait long dram.
7. Yusim stik na tantanim 'ti' long olgeta de.	7. Pulapim klinpela wara inap hap bilong dram/kontena.
8. 7-pela de bihain, 'ti' bai i redi bilong givim long graun.	8. Putim beg bilong gris i go insait long dram em wara i stap long en na karamapim dram/ kontena long lit, laplap o plaiwaia.
	9. Yusim stik na tantanim long olgeta moning.
	10. 7-pela de bihain, 'ti' bai i redi bilong givim long graun.



Piksa 1.2: Wokim gris bilong animal 'ti' o plant 'ti'

How to make: Plant 'Tea'

Plant 'tea' is a food for plants made from green leaves and water.

Ready In
7 Days

Plant tea is easy to make and makes crops strong and improves yields.
Christine, Pallisa

1. Soft leaves
For example
Wandering Jew
Tithonia
Cassava

2. Hairy leaves
For example
Pumpkin
Elephant grass
Lab lab

3. Leguminous tree leaves
For example
Acacia
Albizia
Moringa

The leaves contain food that goes in the water and makes the tea.

Wood ash contains minerals and repels pests.

Plant tea is free, easy to make and increases yields

Materials

- Green leaves that will rot
- Wood ash
- Container
- Water

Step by Step

- 1 Collect leaves**
Collect the 3 different types of leaves. Get only green leaves that will rot. Chop the leaves.
Find a container like a bucket, jerry can or pot.
- 2 Fill container**
Almost fill the container with leaves. Add some wood ash.
- 3 Add water**
Fill the container with water.
- 4 Cover**
Cover the container and leave the tea. Stir the tea every morning. After one week the tea will be ready.
- 5 Dilute**
Remove the leaves and use as mulch. Dilute the tea. For each tampeco of plant tea add 2 tampeco of water.
- 6 Apply**
Apply one tampeco of the diluted tea to each plant before flowering. Use the plant tea within 14 days.

Piksa 1.3: Wokim plant 'ti' (kisim long; Forthway, UK (2010))

Givim gris wara long graun

Miksim wara (hamas wara em inap wankain long gris) na yusim woterim ken o ol liklik tin bilong givim dispela gris wara long sait bilong plant. No ken givim gris long reini sisen, nogut gris wara bai i sink i go daun tru long graun.

Ol gutpela sait na ol sait nogut bilong gris bilong plant

Tebol 1.4: Ol gutpela sait na ol sait nogut bilong gris bilong plant

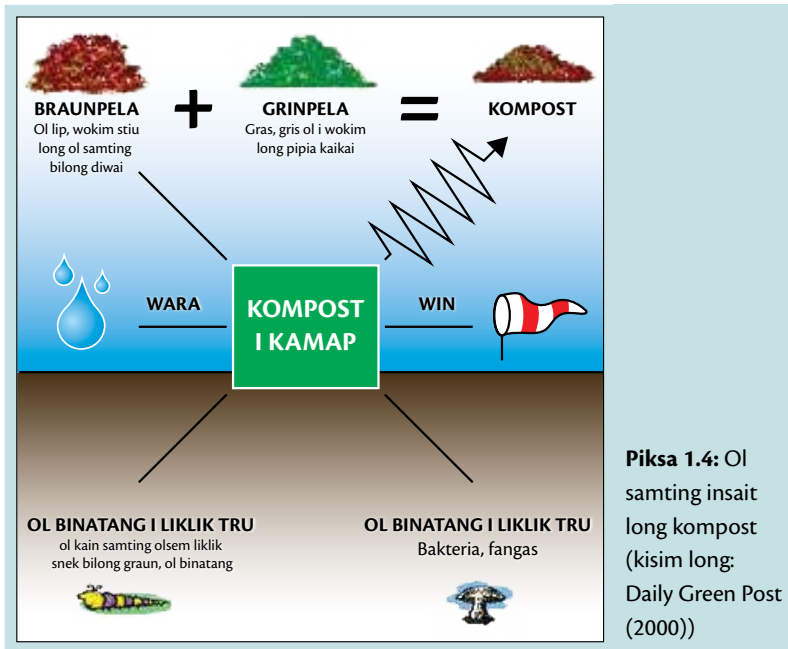
Ol Gutpela sait 😊	Ol Sait nogut ☹️
1. Givim ol kain kain gutpela samting bilong strongim pl plant	1. I gat hatwok
2. Plant bai i kisim gut kwik bikos gris i olsem wara	2. I no inap yusim long reini sisen
3. I ken i stap longpela taim	3. Sapos yu givim stret long ol lip, em bai i kukim ol plant
4. I no nidim bikpela moni	4. I ken bungim na holim inap sotpela taim
5. Lusim sotpela taim na em bai i redi	

Wokim kompost

Kompost em i wanem samting?

Kompost em i kamap taim yu miksim ol gutpela samting bilong graun i sting pinis na i ken yusim olsem fetilaisa. Em i gat kain kain gutpela samting em ol plant i nidim bilong gro gut.

Ol gutpela samting bilong strongim graun i makim ol drai lip, grinpela gras o hap pipia kaikai o skin bilong kaikai, na gris bilong animal. Ol drai lip i save kamapim kabon i kamapim hatpela enejji; na ol grin lip, hap pipia kaikai na gris bilong animal i save kamapim nitrogen na ol binatang i liklik tru long brukbrukim ol gutpela samting bilong strongim graun na mekim ol i sting. Kompost i wok olsem samting bilong welim graun na wok tu olsem fetilaisa, na givim ol gutpela samting long graun. Long narapela sait, kompost i wok olsem marasin bilong kilim ol liklik binatang nogut. Taim kompost i wok long kamap, i mas i gat wara na oksigen bilong ol liklik binatang i ken mekim ol samting i sting (Figure 1.4).



Ol gutpela sait na ol sait nogut bilong kompost

Tebol 1.5: Ol gutpela sait na ol sait nogut bilong kompost

Ol Gutpela sait 😊	Ol Sait nogut ☹️
<ol style="list-style-type: none"> 1. Ol samting yumi save tromoi tasol olsem pekpek o pispis bai i kamap gutpela gen bilong yusim 2. Givim ol gutpela kemikal na welim gut long graun na graun bai i kisim bek strong 3. I no nidim bikpela moni 4. Klinim dotipela graun 5. Kilim ol sik bilong ol plant na ol binatang nogut long graun 	<ol style="list-style-type: none"> 1. Kamapim smel nogut 2. Pulim ol animal olsem maus samting na ol narapela binatang 3. I gat hatwok 4. Nidim bikpela hap taim

Ol kain kain kompost

I gat tupela kain ol fama i save wokim na yusim:

1. 18–30 de kompost (Tebol 1.6 na Tebol 1.7)
2. 3-pela de kompost (Tebol 1.8 na Tebol 1.9)

18–30 de kompost

Tebol 1.6: Ol material bilong wokim 18–30 de kompost

1. Ol stik o mambu bilong wokim banis i gat karamap
2. Kunai gras, ol saksak lip o plastik bilong wokim rup
3. Ol drai lip, ol grinpela gras na nupela gris bilong animal
4. Ol kopra beg o ol banana lip bilong karamapim kompost
5. Ol baklain o tai waia bilong taitim ol kona bilong banis

Tebol 1.7: Ol wei bilong wokim 18–30 de kompost

1. Wokim banis em sais bilong en i olsem 1m (longpela bilong en) × 1m (fatpela) × 1m (antap) na makim wanpela hap i seim sais olsem bilong gris na bai yu ken tanim gris bilong animal.
2. Katkatim ol drai lip na grinpela lip wantaim.
3. Miksim gut tru ol lip yu bin katkatim wantaim nupela gris bilong animal.
4. Hipim ol samting yu bin miksim i go antap inap 1 m.
5. Karamapim dispela hip wantaim kopra beg o ol banana lip.
6. 3-pela o 4-pela de bihain, tanim hip na wok yet long tanim long olgeta tupela de.
7. Insait long 18–30 de, kompost bai i redi na bai yu ken yusim.

3-pela mun kompost

Tebol 1.8: Ol material bilong wokim 3-pela mun kompost

1. Ol stiks o mambu bilong wokim banis i gat karamap
2. Kunai gras, ol saksak lip o plastik bilong wokim rup
3. Ol drai lip, ol grinpela gras na nupela gris bilong animal
4. Ol kopra beg o ol drai banana lip bilong karamapim kompost
5. Ol baklain o tai waia bilong taitim ol kona bilong banis
6. Gris ol i wokim long grin olsem legume
7. Graun antap

Tebol 1.9: Ol wei bilong wokim 3-pela mun kompost

Namba wan hap: Wokim hip

1. Wokim banis em sais bilong en i olsem 2.5m (longpela bilong en) × 2m (fatpela) × 1.5m (antap) na makim wanpela hap i seim sais olsem bilong gris na bai yu ken tanim gris bilong animal.
2. Katkatim ol drai lip na grinpela lip wantaim na putim olsem blanket inap 15 cm tik.
3. Sprinklim gris bilong animal inap long 2 cm antap long ol dispela lip olsem blanket.
4. Putim ol plant (i gutpela sapos em i gris bilong grin) olsem namba tu blanket antap long ol.
5. Sprinklim sit bilong paiawut o blakpela sit bilong paia olsem das antap long gris bilong grin.
6. Wan wan samting olsem blanket i mas 30 cm tik.
7. Sapos weda i drai, sprinklim 4 litera wara bilong mekim ol dispela samting olsem blanket i wet.
8. Mekim ol dispela samting mipela i stori antap planti taim inap long taim hip bilong en bai i go antap inap 1.5 m.
9. Karamapim hip long graun i go antap inap 10 cm bilong pasim ol samting i strongim ol plant i lus.

Namba tu hap: Tanim kompost

1. 1-pela mun bihain, yusim gaden fok na tanim hip.
2. Muvim ol samting i stap antap na ol sait bilong hip i go long namel bilong nupela hip.
3. Tanim hip long olgeta tupela wik inap long taim kala bilong kompost i kamap dak grei.

Namba tri hap: Sekim klostu klostu em i kamap olsem wanem

1. Kirap long namba 8 de na i go, pusim stik i go insait namel bilong hip na pulim em i kamaut. Sapos stik i tuhat, em i gutpela mak. Wok bilong brukbrukim samting i wok long kamap.
2. Kompost bai i redi long yusim taim em i kamap tuhat na kala bilong en i go grei. Dispela bai i kamap insait long 3-pela mun.

Harim: Wanpela samting tasol em i narakain long dispela tupela wei bilong wokim kompost, em long taim bilong kompost i redi long yusim.

Hau yu ken yusim kompost

Yu ken yusim kompost long ol dispela rot olsem:

- ▶ tromoi i go — Tromoi i go nabaut antap long gaden em yu redi pinis long planim samting
- ▶ planim — Brukbrukim graun antap na planim kompost i go insait long graun bipo long planim samting
- ▶ putim long sait — wokim hul long sait bilong plant bilong yu, na putim gris i go insait long dispela hul na miksim wantaim graun na karamapim em.

Harim: Sapos yu no redi long yusim kompost nau, yu ken haitim long kol ples o karamapim wantaim graun i go antap inap 10 cm na bai ol samting bilong strongim ol plant i no ken lus.

Ol Bikpela Poin bilong Topik

Yu mas mekim ol gutpela pasin bilong lukautim graun, sapos inap, na bai ol gutpela samting bilong strongim graun i ken i stap. Dispela ol pasin bai i:

- ▶ pasim hevi bilong graun i lus;
- ▶ givim ol samting bilong strongim ol plant long rot bilong yusim ol narapela narapela gris na kompost;
- ▶ strongim graun; na
- ▶ helpim ol gaden kaikai i gro gut na kamapim planti kaikai.

Ol gutpela pasin bilong lukautim graun i olsem:

- ▶ karamapim gaden
- ▶ senisim senisim ol samting bilong planim
- ▶ karamapim ol gaden kaikai
- ▶ maloloim gaden
- ▶ wokim gris long animal o plant
- ▶ yusim fetilaisa
- ▶ wokim na yusim kompost.



Wokim kompost long ol diwai o gras long bus

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TOPIK 2

Isipela Wei bilong Stiaim Wara

Ol Samting bilong Lainim

Taim dispela trening i pinis, yu bai inap:

- ▶ save long ol kain kain wei bilong stiaim wara;
- ▶ save na stori gut long dripim wara (drip irigesen); na
- ▶ save gut na yusim ol pasin bilong dripim wara long kain kain garden.

Kirap bilong Tok

Wankain long ol man na ol animal, ol plant tu i nidim wara na bai ol i ken gro na i stap gut. Planti fama i lukluk long ren tasol long givim wara long gaden, tasol, em i impoten tru long bihainim ol pasin bilong stiaim wara na bai ol gaden kaikai i ken gro gut long olgeta taim long yia, moa yet long taim bilong san. Sampela gaden kaikai i nidim planti wara moa na long planti taim moa, winim ol narapela kaikai. Olsem: ol kabis i nidim wara moa long ol tomato, na ol kapsikam na ol wotamelon i ken gro gut maski ol i no kisim planti wara. Samting yu mas mekim em long bihainim pasin bilong stiaim wara long gaden na bai ol gaden kaikai i ken gro gut, moa yet long taim bilong san.

Ol Kain Kain Wei bilong Stiaim Wara

Yu mas makim wanpela wei bilong stiaim wara, em gutpela long yu yet. Yu mas lukluk long sais bilong gaden, wara i kam we (kam long hul wara, dam o riva?) na hamas moni yu ken yusim. Piksa bilong 4-pela kain wei bilong stiaim wara i stap daunbilo, na mipela bai i stori moa long wei bilong dripim wara bihain.

1. Long han — nambawan isipela wei, tasol em i gutpela wei bilong givim wara em long yusim han baket na wotering ken. Long han, yu ken karim na givim wara long ol plant.

2. Rot bilong wara o baret — yu ken pampim wara long han o wara pamp na holim long samting bilong holim wara o tenk, na ronim wara i go long ol baret i stap namel long ol gaden. Sampela taim, yu mas i gat wara pamp bilong pulim wara i kam antap long hul wara o riva.
3. Dripim wara — yu ken pampim wara i go long tenk (samting bilong holim wara) na ronim i go long ol tub i gat ol hul bilong dripim wara, na wara bai i drop i go long hap we wan wan plant i stap long en. Dispela wei i gutpela tru sapos ol pipia o sol bilong wara i no pasim ol hul bilong ol tub.
4. Ol ovahet sprinkla — long dispela wei, wara pamp i mas i gat bikpela presa bilong fosim wara na bai ol sprinkla i ken sutim wara i go aut taim ol i wok long tantanim.



Yusim wotering ken na givim wara long ol gaden kaikai



Ol rot bilong wara na ol baret



Isipela wei bilong dripim wara long gaden



Ol ova het
sprinkla

Dripim Wara (Drip Irigesen)

Wok bilong dripim wara em i wanem samting?

Wok bilong dripim wara em i wanpela wei bilong fama i ken givim wara (em fertilaisa i stap insait long en) isi isi long ol rop bilong ol plant long rot bilong ol tub, ol paip na ol valv na ol emita. Tasol, wok bilong dripim wara i no gutpela long sampela gaden.



Drip emita long plant

Tebol 2.1: Ol gutpela sait na ol sait nogut bilong dripim wara

Ol Gutpela sait 😊	Ol Sait nogut ☹️
<ul style="list-style-type: none"> • Yusim liklik wara. • Kisim liklik presa. Em i makim olsem yu yusim liklik moni long baim petrol long pamim. • I no westim wara bikos wara bai i go long wan wan plant. • Wara i go stret long hap we ol plant i sanap long en. • Ol gras nogut i no kamap planti, olsem na i no gat bikpela wok bilong klinim gaden. • Daunim hevi bilong ol binatang nogut/ol sik bilong gaden kaikai. • Daunim hevi bilong graun i wok long lus. • I no gat bikpela hatwok. 	<ul style="list-style-type: none"> • I mas i gat bikpela moni bilong kirapim wok. • I mas i gat mentenans klostu klostu na gutpela wara. • Win inap kisim ol tub na rausim ol i go.



Ol gutpela sait bilong wok bilong dripim wara

Ol samting yu nidim bilong wokim ol rot bilong dripim wara

1. Hap bilong kisim wara — Yu ken kisim wara long ol hul wara, ol hap we wara i ron, ol raun wara, ol wara tenk, ren wara na wara we wotabod i klinim pinis o long ol narapela hap.
2. Tep
3. Filta
4. Join bilong tenk
5. Valv
6. Sabmein (Ol paip em konekt wantaim mein paip)
7. Ol lateral (Ol paip em i konekt wantaim ol sabmein)
8. Maikro-drip na ol konekta/ol elbo
9. Ol stopa

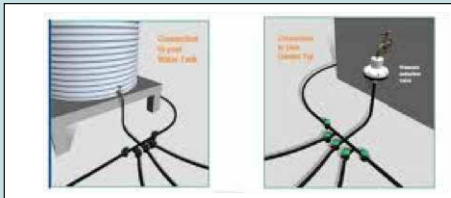
Ol pats na ol fitting bilong sistem bilong dripim wara



1. Hap bilong kisim wara



2. Tep
3. Filta



4. Ol join bilong tenk



5. Valv



6. Sabmein (19mm)



7. Ol lateral (16mm)



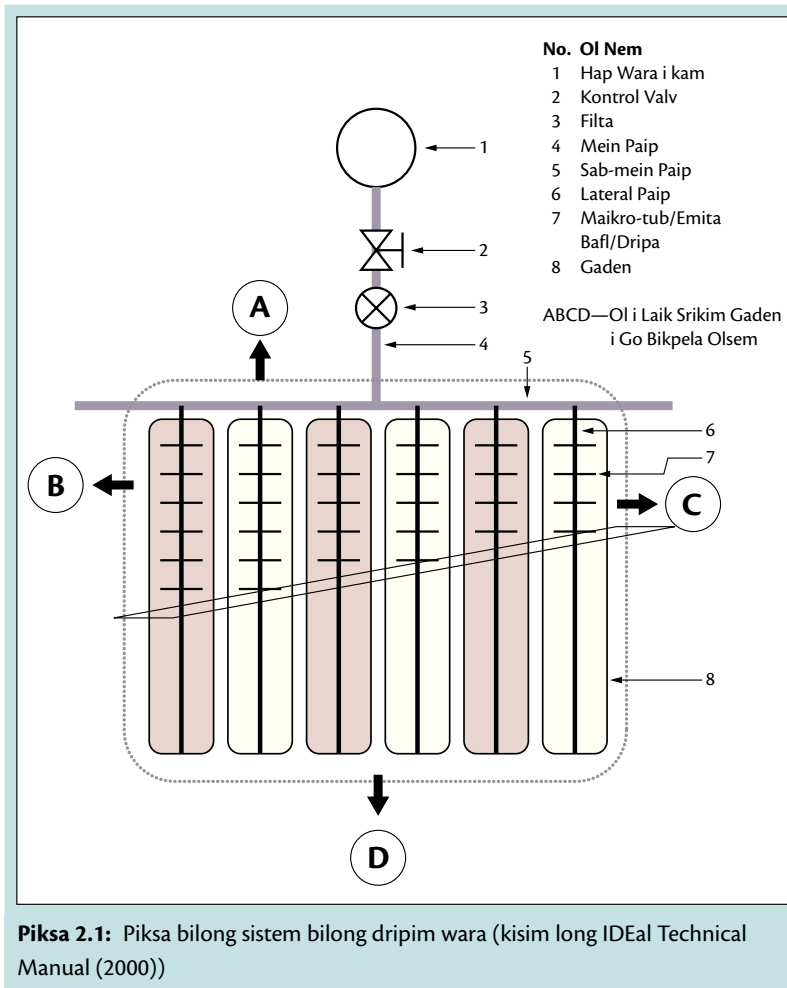
8. Maikro-drip na ol konekta/ol elbo



9. Ol stopa

Wan wan hap bilong sistem bilong dripim wara

Sistem bilong dripim wara i gat 8-pela bikpela hap (Piksa 2.1).



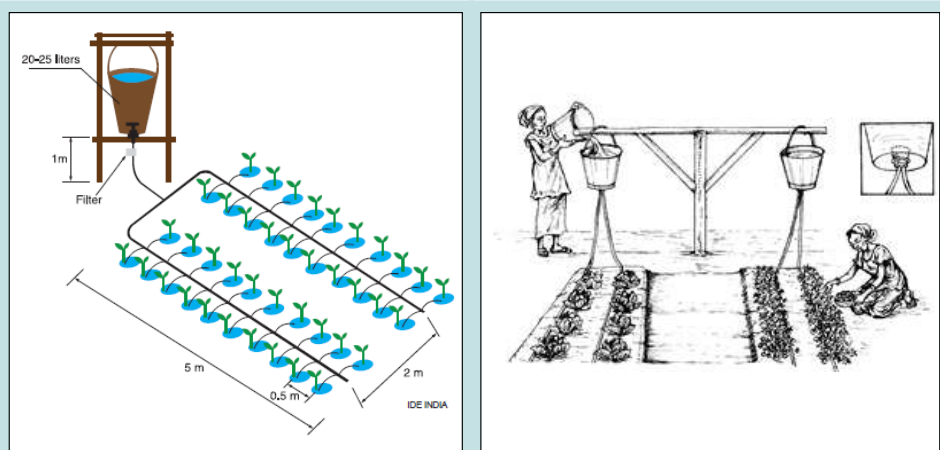
Isipela wei bilong dripim wara

I gat isipela wei bilong ol liklik lain fama i ken wokim long liklik moni. Na ol i nidim:

- ▶ baket kit
- ▶ famili nutrisen kit
- ▶ dram kit
- ▶ kastamais sistem
- ▶ kombo kit.

Baket kit (Piksa 2.2) em i olsem:

- ▶ Ol pats samting bilong wok bilong givim wara long gaden i kam wantaim.
- ▶ I gat 20 lita baket, wanpela o tupela lateral paip inap 5-10 m. Yu ken senisim longpela bilong en inap long spes bilong gaden bilong yu.
- ▶ Em inap givim wara inap long 20 skuea mita (m²).
- ▶ Yu ken hangamapim baket long diwai o stik i stap antap inap 1 m.



Piksa 2.2: Isipela wei bilong yusim baket long givim wara long liklik gaden inap long 20 m²

Ol piksa daunbilo i soim wok bilong dripim wara long wara tenk. Graviti yet i pulim wara i kam daun. Olsem na, tenk i mas i stap antap moa long graun.



Isipela wei bilong yusim tenk long givim wara long liklik gaden

Yu yet i mekim 1

1. Nau yumi bai wokim isipela sistem bilong dripim wara long gaden bilong yu.
2. Traim tingting bek long wanem ol samting yu ken yusim long ples bilong yu, olsem ol mambu, na sais bilong ol, na traим yusim ol na wokim isipela sistem bilong stiaim wara olsem dispela topik i stori long en.

Ol Bikpela Poin bilong Topik

Antap long wok bilong lukautim graun na ol gaden kaikai, wara em i impoten tru bilong plant i ken gro gut na kamapim planti kaikai. I gat kain kain wei bilong givim wara long gaden. I gat sampela isipela wei bilong stiaim wara long gaden, em yu ken traим. Yu mas makim wanpela wei bilong stiaim wara, em gutpela long yu yet. Yu mas lukluk long sais bilong gaden, wara i kam we na hamas moni yu ken yusim.

Sistem bilong dripim wara em i no hatwok long wokim na yusim. Fama i ken kontrolim hamas wara em i laik givim, hamas fetilaisa em i ken tanim wantaim wara. Em i ken larim tasol wara yet i pundaun isi isi i go daun klostu long hap we plant i sanap long en long rot bilong ol valv, ol paip, ol tub na ol emita.

Yu ken baim kit bilong isipela sistem bilong stiaim wara long ol stua bilong ol didiman.

Sampela Save Moa (Referens)

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TOPIK 3

Pasin bilong Lukautim Gaden Kaikai

Ol Samting bilong Lainim

Taim dispela trening i pinis, yu bai inap:

- ▶ stori long wai yumi save kolim sampela plant olsem gras nogut;
- ▶ save gut na stori gut long ol wei bilong daunim hevi bilong ol gras nogut;
- ▶ stori gut long binatang nogut em i wanem samting;
- ▶ luksave long wanem kain binatang bai i bagarapim wanem gaden kaikai;
- ▶ stori gut long ol wei bilong daunim hevi bilong ol binatang nogut;
- ▶ stori long sampela wei bilong redim marasin bilong kilim ol binatang nogut em ol i wokim long ol plant (PDP);
- ▶ luksave long ol sik bilong plant;
- ▶ stori gut long ol mak bilong ol sik bilong plant;
- ▶ stori gut long ol wei bilong daunim hevi bilong ol sik bilong plant; na
- ▶ stori long wai seifti i impoten taim ol man i yusim ol kemikal bilong wok didiman.

Kirap bilong Tok

Bilong lukautim gut ol gaden kaikai, yu mas daunim hevi bilong ol binatang nogut na ol gras nogut em ol i save bagarapim ol gaden kaikai. I gat tripela samting i save bagarapim ol gaden kaikai: ol gras nogut, ol binatang nogut, ol sik bilong plant.

Ol Gras Nogut

Gras nogut em wanem samting?

Gras nogut em i wanpela kain plant i gro long rong ples.

Olsem: ol tomato o ol bin i ken kamap olsem gras nogut sapos ol i gro long graun we ol i planim ol kaukau. Ol gras nogut i ken pasim rot bilong kaikai i kamap gut, blokim rot bilong wara o resis long kisim ol samting bilong strongim ol plant, wara, spes bilong kaikai i gro na pasim san, na dispela i mekim na kaikai i no kamap gut. Em i impoten long luksave long ol gras nogut i bin kam long ovasis olsem yu ken lukim daunbilo. Ol i ken daunim ekonomi bilong PNG na ol Pasifik ailan kantri. Sampela gras nogut i go kamap tu long ol narapela hap bilong graun.



Nut grass



Siam weed



Mikania micrantha



Milk weed

Sampela gras nogut em planti i save long ol i stap long ol gaden bilong ol fama

Ol gras nogut i save mekim wanem long ol gaden kaikai

Ol wok nogut bilong ol gras nogut: Ol gras nogut i save haitim san, pasim spes, stiliim wara na ol gutpela samting bilong strongim ol plant. Dispela i mekim na kaikai i no kamap gut. Sampela gras nogut i save singautim tu ol binatang nogut na ol samting i save kamapim sik.



Ol gras nogut i resis wantaim ol gaden kaikai

Ol gutpela wok bilong ol gras nogut: Tasol, long ples nating, ol gras nogut i ken mekim ol gutpela wok olsem karamapim graun, pasim hevi bilong graun i lus na givim ol gutpela samting bilong strongim graun taim ol i sting. Sampela inap kamap tu ol kaikai o ol marasin.



Ol gras nogut i karamapim graun, na pasim hevi bilong graun i lus

Ol wei bilong daunim hevi bilong ol gras nogut

Yusim han

- ▶ kamautim long han
- ▶ klinim long spet na digim graun
- ▶ katim long masin, bus-naip, o gras-naip.



Yusim han

Yusim ol samting bilong graun

- ▶ karamapim gaden
- ▶ karamapim ol gaden kaikai, i gutpela long yusim legume; dispela i givim gris long graun.



Yusim ol samting bilong graun

Yusim kemikal

- ▶ Ol i save kolim ol kemikal i save kilim i dai ol gras nogut olsem hebisaid.
- ▶ Hebisaid em i ikspensiv na em inap kamapim birua sapos yu no gat ol stretpela tul na i no kisim trening.
- ▶ Sampela hebisaid i kilim ol plant i dai taim ol i tasim lip o bun bilong ol plant. Na ol i kolim dispela kain hebisaid olsem kontek hebisaid.
- ▶ Yu ken yusim ol narapela kemikal olsem glyphosate or Roundup®. Yu putim ol long wanpela hap bilong plant. Taim plant i kisim pinis dispela marasin i go insait long en, nau ol rop bilong en bai i karim marasin i go long olgeta hap bodi bilong plant. Ol i save kolim ol dispela kain kemikal olsem trenlokeitid hebisaid. Tasol, yu mas was gut bikos ol dispela marasin tu i ken kilim ol plant i dai.
- ▶ Ol lain bilong wokim ol kemikal i save raitim ol toksave long ol kontena long wanem kain kemikal fama i ken yusim, na em i ken yusim olsem wanem na wanem taim. Na ol dispela toksave i toktok tu long wanem kain birua inap kamap long ol man, ol animal na ol gaden kaikai.
- ▶ Maski ol kemikal i save kilim i dai kwik ol gras nogut, em i gutpela tasol long yusim long bikpela plentesen olsem bilong kakao, kopi na oil pam.



Ol kemikal bilong kilim i dai ol gras nogut

Ol Binatang Nogut

Ol binatang nogut em i wanem samting?

Ol binatang nogut i makim ol binatang na ol pikinini binatang i save kaikai na bagarapim ol gaden kaikai. Olsem:

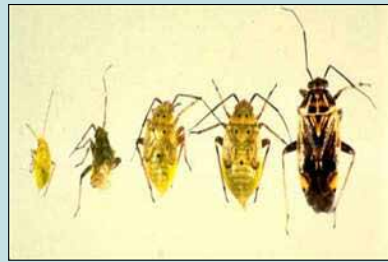
- ▶ ol binatang bilong pulim wara bilong ol plant olsem afid, stink bag, plant hopa na thrips;
- ▶ ol binatang nogut bilong memeim ol plant olsem grasshopa, ketapila na bitol;
- ▶ ol binatang nogut bilong rolim ol lip olsem aibika lip rola na banana skipa; na
- ▶ ol binatang nogut bilong wokim hul samting olsem taro bitol, switpoteto wivil na red band ketapila.



Ol mak bilong ol binatang i pulim wara long ol plant



Binatang nogut bilong memeim ol plant — ketapila



Ol binatang nogut bilong wokim hul — wivil

Ol wei bilong daunim hevi bilong ol binatang nogut

Yusim han

Dispela pasin i makim olsem yu pikim long han bilong yu na kilim ol i dai. Yu ken mekim olsem long liklik gaden tasol, na nambawan gutpela taim bilong mekim em long bikmoning na mekim olsem long olgeta wik.



Yusim han

Yusim ol samting bilong graun

- ▶ senisim senisim ol samting bilong planim
- ▶ planim ol plant i gat smel nogut bilong rausim ol binatang long gaden
- ▶ planim ol kain kain plant ol binatang i no save kaikaim.



Yusim ol samting bilong graun

Yusim ol samting i gat laip

Dispela pasin em long yusim ol samting i gat laip olsem ol binatang, ol pisin na bai yu ken pasim o kilim i da ol binatang nogut. Ol dispela 'gutpela binatang' em ol i save kolim olsem parasait/parasitoid o predeta, i olsem preing mantis (boksing man), ledibed bitol na spaida (maski ol i no binatang). Ol i save kaikaim ol narapela binatang nogut i save bagarapim gaden kaikai.



Yusim kemikal

Dispela pasin em long yusim marasin ol i wokim long ol samting bilong graun o long ol kemikal, bilong kilim i dai ol binatang nogut i save bagarapim gaden kaikai.



Yusim ol samting bilong ol plant

Marasin ol i wokim long ol plant

Marasin ol i wokim long ol plant i olsem:

- ▶ deris (ol rut i gat gig)
- ▶ ol lip na bun bilong tabak
- ▶ ol lip, skin na ol sid bilong diwai nim
- ▶ ol lip na bun bilong marigold
- ▶ lombo (chilli fruits)
- ▶ ol lip bilong popo.



Harim: Lukluk long hap i stori long PDP ol i wokim long lombo na ol sid bilong nim olsem NARI i stori long en.

Marasin ol man i wokim long ol kemikal

- ▶ I gat ol marasin ol man i wokim long ol kemikal. Ol i strongpela marasin, tasol i ken kamapim birua long envairomen, na ikspensiv tru. I gat ol strongpela lo ol man i mas bihainim na bai ol i no ken kisim ol bagarap long en na marasin i no ken bagarapim envairomen.
- ▶ I no gutpela long yusim ol kemikal marasin long liklik gaden sapos yu no save gut long hau yu ken yusim ol kemikal marasin long pasin seif na hau yu mas miksim wantaim wara na givim long gaden, bikos ol i gat gig bilong bagarapim ol man. Tasol, ol dispela kemikal marasin i gutpela long gaden bilong bikpela bisnis. Tebol 3.1 i soim sampela kemikal marasin em ol didiman stua i salim na hau yu ken yusim ol.

Tebol 3.1: Ol marasin bilong kilim ol binatang nogut na ol wei bilong yusim

Ol kemikal	Wei bilong yusim			
	Kaikai	Binatang nogut	Wei bilong miksim wantaim wara	Hau yu ken givim long gaden
Konfido	Kapsikam	Grin Pis afid	1 liklik beg wantaim 5 L wara	Spreim gut tru taim yu lukim mak bilong binatang nogut fes taim. Yu mas spreim baksait long ol lip.
	Tomato			
	Zukini			
	Melon			
	Egplant			
Karate	Kapsikam	<i>Helicoverpa (=Heliiothis) armigera</i>	400–500 mL/ha o 10 mL wantaim 10 L wara	
	Tomato	<i>Earias viteli</i>		
	Zukini	<i>Spodoptera spp.</i>		
	Melon	<i>Silepta derogeit</i>		
	Egplant	Tubemos, afid		

Harim: Bilong yusim ol dispela kemikal, yu mas i gat napsak spreia na seifti ikuipmen. Wei bilong miksim hamas kemikal wantaim hamas wara i no save wankain. Long wan wan kontena, i mas i gat ol toksave long hamas kemikal na wara yu mas miksim wantaim (olsem 10 mL i go long 10 L bilong wara) na hau yu ken yusim.

Ol Narapela Samting Nogut

I gat sampela narapela samting nogut i save bagarapim ol gaden kaikai long ol narapela wei. Olsem: ol vetebret (ol animal i gat bakbon) olsem ken tod na ol pisin o ol snel olsem jaian Afrikan snel.

Yu yet i mekim 1

- ▶ Ol piksa daunbilo i soim sampela binatang nogut. Yu lukim kain binatang olsem long gaden bilong yu? Sapos yes, ol i bagarapim wanem kaikai?



Tomato honwom



Kon iawom



Braun stink bag



Pamkin bitol



Kein tod



Jaiant Afrikan snel



Kapsikam magot

Ol Sik bilong Plant

Ol sik bilong plant em wanem samting?

Sapos plant i no gro gut o i luk "sik" taim yu skelim wantaim narapela plant i luk gut, ating sik i painim em pinis. Yu ken lukim sampela mak taim plant i no gro gut.



Sampela mak bilong ol sik i kamap long ol plant na ol prut

Wanem ol samting i save kamapim ol sik bilong plant?

Ol samting i save kamapim ol sik i olsem:

- ▶ **Fangas**, em i mekim na plant bai i sting, kamapim ol makmak long ol plaua, ol lip na ol bun bilong plant
- ▶ **Bakteria**, em inap mekim wok nogut i wankain liklik long fangas, tasol planti taim, i save kamapim tu stingpela smel
- ▶ **Vairus**, i save kamapim ol mak i wankain long taim ol gutpela samting bilong strongim plant i sot.



Ol mak bilong ol sik fangas i kamapim



Ol mak bilong ol sik bakteria i kamapim



Ol mak bilong ol sik virus i kamapim — tomato moseik virus

Ol sik i save kamap long ol gaden kaikai

Sik wilt

Ol mak bilong sik wilt i save kamap long ol lip. Ol lip i luk i no gat strong, i luk olsem ol i hangamap na i laik i dai. Taim wara i sot, dispela samting i save kamap. Tasol plant bai i kisim bek strong kwiktai sapos yu givim wara long graun na ol rut bilong en i kisim dispela wara. Sapos ol lip i hangamap yet i stap maski yu givim planti wara, em i makim olsem sik i painim plant.

Bilong painimaut gut moa, yu ken katim bun bilong plant, na lukim ol rop insait long bun, em ol i save pulim wara i kam long ol rut na salim i go long ol lip. Sapos yu katim bun longpela-wei na ol dispela rop i soim longpela braunpela lain, na sapos yu katim kros-wei, na lukim ol rop i soim samting olsem braunpela ring, dispela braunpela kala i soim olsem ol lip i hangamap bikos ol dispela rop bilong karim wara i pas pinis. Dispela sik, nem bilong en, sik vaskiula wilt, i save kamap long rot bilong fangas o bakteria.



Tabak i soim mak bilong sik wilt

Sik lip blait

Ol mak bilong sik lip blait i olsem ol liklik braunpela makmak i kamap long ol lip, em i makim dispela braunpela hap bilong lip i dai pinis. Ol dispela makmak bai i gro i go bikpela inap long taim lip olgeta i dai pinis. Sapos em i gutpela taim long sik i gro, em bai i kalap i go long narapela narapela plant, inap long taim em gaden olgeta i bagarap. Sapos dispela sik i kirap taim plant i liklik yet, ol i kolim em olsem sik eli lip blait, tasol sapos sik i kamap taim plant i putim plaua o karim ol kaikai pinis, ol i kolim dispela sik olsem leit blait. Sik lip blait i save kamap long ol tomato, kapsikam, poteto na taro, na fangas i save kamapim dispela sik.



Ol mak bilong eli na leit lip blait i kamap long ol lip bilong tomato (han kais) na pamkin (han sut)

Ol makmak bilong ol lip

I gat kain kain makmak i save kamap long ol lip bilong plant. Sampela makmak i raunpela na liklik na ol i wankain; o sampela ol i no wankain na kai kain sheip; ol narapela makmak i olsem hap skin bilong lip i dai pinis na braunpela, na i gat hul. Sampela taim, fangas (o bakteria) inap kamapim tupela sik o moa long seim plant.



Ol makmak i kamap long ol lip bilong tomato

Yu yet i mekim 2

1. Wokabaut insait long gaden na lukim ol tomato i soim ol mak bilong sik wilt o nogat. Skrapim na kisim graun antap na sekim graun i wet o drai. Sapos em i wet, rausim plant tomato na kisim naip na katim bun longpela-wei na kros-wei, opim, na lukim longpela braunpela lain o braunpela ring.
2. Sekim ol braunpela makmak long ol lip. Sapos ol makmak i ol braunpela ring i luk olsem taget bod bilong dats, ol i kolim ol olsem taget spot na em i makim sik eli blait.
3. Wokabaut long gaden bilong taro. Sekim ol olupela na yangpela lip. Lukluk long ol raunpela na braunpela makmak i stap long ol lip o nogat. Orait, nau, sekim ol olupela lip na lukluk long i gat bikpela na braunpela makmak i stap o nogat. Lukluk tu long hap bilong skin bilong ol lip i dai pinis bikos planti liklik makmak i kam bung, em dispela kain i stap o nogat. Sekim baksait bilong ol lip na lukluk long i gat waitpela ring i raunim ol mak bilong lip o nogat. Sapos i gat, em i makim sik lip blait i painim taro pinis. I gutpela tru long sekim olsem long bikmoning.

Raitim hia ol samting yu lukim:

- a. Ol mak yu lukim

- b. Hamas plant i gat sik

Ol wei bilong daunim hevi bilong ol sik

I gat tripela wei bilong daunim hevi bilong ol sik.

1. Yusim ol samting bilong graun

- ▶ yusim ol plant i no gat sik. Yusim ol gutpela sid, o stik yu katim na kisim long ol gutpela plant
- ▶ klinim gut. Rausim olgeta plant i gat sik (olsem kukim ol blakpela skin bilong kakao), na kukim ol pipia kaikai i stap yet long gaden bihain long yu kamautim pinis ol gaden kaikai
- ▶ senisim senisim ol samting bilong planim. Planim narapela gaden kaikai bihain long kamautim pinis namba wan kaikai, olsem planim ol bin bihain long ol kaukau. No ken planim plant i klostu tumas long narapela plant taim yu planim kon, pinat na taro
- ▶ planim ol gaden kaikai i strong long sakim ol sik olsem planim nupela taro na ol kain kain potato i strong long sakim sik lip blait.

2. Yusim han

- ▶ yusim glashaus o putim ol paip bilong dripim wara na bai yu no gat wok long yusim planti wara
- ▶ pasim ol man, ol animal na ol masin long i go i kam nabaut long gaden sapos ol i no gat wok long mekim olsem.

3. Yusim kemikal

- ▶ yusim marasin bilong kilim i dai fangas em ol kemikal inap pasim ol sik liklik binatang olsem fangas i save kamapim. Yu ken lukim ol dispela kain marasin long Tebol 3.2; Tasol, ol dispela marasin i ikspensiv na yu mas save na was gut long yusim marasin i stret long sik. Taim yu yusim kain kemikal olsem, yu mas was gut long bihainim ol tok i stap long label
- ▶ daunim hevi bilong ol binatang nogut olsem ol afid em ol i save karim ol virus i kam long plant.

Tebol 3.2: Gutpela wei bilong yusim marasin Mancozeb

Kemikal	Wei bilong yusim			
	Kaikai	Sik	Wei bilong miksim wantaim wara	Hau yu ken givim long gaden
Mancozeb	Tomato	Eli blait Leit blait Lip mold Grei lip spot Grei mold	40 g / 16 L napsak o 50 g / 20 L napsak	Spreim taim yu lukim mak bilong sik bilong ol lip long fes taim. Spreim long olgeta 7–10 de. Mekim yet i go inap long taim bilong pikim ol kaikai na bai yu ken pait long lip mold na kisim planti kaikai.

Tingim seifti long taim bilong spreim marasin

- ▶ Yu mas i gat ol stretpela kolos na ikuipmen na bai marasin i no ken bagarapim yu.
- ▶ Taim yu spreim marasin, yu mas werim stretpela kolos bilong karamapim gut bodi bilong yu.
- ▶ Taim win i strong, no ken spreim marasin long hap klostu long ol pikinini o ol man, ol animal o ol kaikai i tan pinis i stap long en.
- ▶ **Tambu tru** long pulim o winim long maus taim gumi i blok.
- ▶ No ken pulapim marasin long napsak spreia i go abrusim mak antap long en.
- ▶ No ken kaikai, dring o smok taim yu holim o yusim marasin.
- ▶ No ken kaikai, dring, o smok inap long taim yu wasim ol han na senisim ol kolos bilong yu.
- ▶ Bihain long yu spreim marasin pinis, wasim spreia, waswas long yu yet, na wasim ol kolos bilong yu.
- ▶ Sapos yu pilim sik bihain long yusim marasin, yu go hariap na lukim dokta. Yu mas tokim em nem bilong marasin yu yusim.

Tromoi ol kemikal

- ▶ No ken kapsaitim hap marasin o wasim spreia klostu long hap bilong wara bilong dring.
- ▶ Bagarapim o rausim olgeta empti kemikal kontena long pasin seif.

Taim bilong kisim kaikai long gaden

- ▶ Yu mas bihainim tok bilong hamas de yu mas wet pastaim bihain long laspela spreia — Ol dispela de i lus pinis, orait nau, yu ken kisim kaikai.

Tok Lukaut Long Marasin Bilong Sprei Long Gaden^{2,3}

Makim ol gutpela marasin

- ▶ Yusim ol marasin ol didman tokim yu long em tasol.
- ▶ Ridim gut ol toksave i stap long botol. Bihainim gut ol dispela toksave.
- ▶ Yu mas bihainim stret toksave bilong didiman long hamas marasin bilong yusim. You mas miksim o skelim inap marasin long yusim long wanpela taim tasol.

² Source: Crop Protection Team, The National Agricultural Research Institute, Papua New Guinea

³ This is the Tok Pisin version of the safety instructions for the use of chemicals.

Gutpela wei bilong karim na lukautim ol marasin

- ▶ Putim ol marasin long hap we ol pikinini, pik na dok i no inap long kisim.
Yu no ken putim marasin long ples yu save putim kaikai.
- ▶ **Olgeta taim** yu mas lusim marasin i stap long tin o botol bilong em yet. Yu no ken yusim ol narapela botol o tin na coke botol. Lukluk na skelim ol tin, nogut ol i lik na kapsait.
- ▶ Baim inap marasin long yusim long sotpela taim tasol, olsem bai yu no inap putim long haus longpela taim.
- ▶ Yu no ken kapsaitim ol pinis marasin botol o tin long kaikai o wara.

Gutpela wei bilong spre

- ▶ Yu mas i gat spre pam na ol samting bilong skelim marasin na karamapim skin bilong yu.
- ▶ Yu mas tingting gut na karamapim gut skin bilong yu taim yu laik holim na yusim strongpela marasin stret long botol.
- ▶ Taim yu spre, yu mas putim ol samting long karamapim skin bilong yu.
- ▶ No ken spreim ol marasin klostu long ol pikinini o man na pik o dok o kaikai.
- ▶ **Yu no ken** winim maus bilong spre pam taim em i pas.
- ▶ Yu no ken pulapim tumas spre pam.
- ▶ Yu no ken kaikai, smok o dring long taim yu spreim marasin.
- ▶ Yu no ken kaikai, dring o smok pastaim long yu waswas na senisim ol kolos.
- ▶ Bihain long yu pinis spre, yu mas wasim spre pam, kolos bilong yu na yu yet.
- ▶ Sapos yu pilim sik bihain long yu yusim marasin, go na lukim dokta hariap tru. Yu mas tokim em stret nem bilong dispela marasin yu bin yusim.

Gutpela wei bilong toromoi pipia marasin

- ▶ No ken ken kapsaitim hap marasin o wasim spre pam klostu long wara bilong dring.
- ▶ Bagarapim o brukim na planim long graun ol marasin botol i pinis long en.

Wanem em i gutpela taim bilong kamautim kaikai bihain long spreim marasin

- ▶ Yu no ken rausim ol kaikai long garden inap long taim ol i makim long toksave long botol marasin.

Sefti Tul long Yusim Ol Marasin



Ol mask bilong nus



Ol glav



Sefti glas



Sefti buts / gam buts



Ovaol



Klinpela wara na sop

Rot bilong Wokim Homeid Marasin bilong Kilim Ol Binatang Nogut⁴

Homeid marasin bilong kilim ol binatang nogut em i wanem samting?

I gat sampela plant long PNG na i kam long ovasis em ol binatang i no save kaikaim. Ol kain plant olsem i gat sampela samting, em ol binatang i no laikim, i stap insait long ol lip, ol rut o ol hap diwai bilong ol. Yu ken wokim marasin bilong kilim ol binatang nogut long ol kain plant olsem, na em i no nidim planti moni bilong wokim. Mipela i save kolim dispela kain marasin olsem **PDP** em i makim olsem marasin bilong kilim ol binatang nogut em ol man i wokim long ol plant. I no wankain long ol kemikal marasin bilong kilim ol binatang, planti bilong ol PDP i no kamapim birua long ol man na yu no gat wok long werim ikspensiv kolos bilong karamapim yu yet taim yu yusim PDP.

Ol samting bilong wokim PDP

Yu nidim:

- ▶ 1-pela namel sais plastik baket (inap long 10 L)
- ▶ ol raba glav
- ▶ diwai hama / strongpela stik
- ▶ plastik streina
- ▶ stik bilong strenim
- ▶ spreia
- ▶ klinpela wara (i gutpela tru sapos em i ren wara)
- ▶ hap sop
- ▶ lombo skin — 350g nupela o 70g drai lombo skin o 1-pela tin pis bilong drai lombo skin
- ▶ ol sid bilong diwai nim — 100g sid o 120g drai sid.



Mau lombo skin



Mau nim skin



Yangpela nim skin

⁴ Source: Crop Protection Team, The National Agricultural Research Institute, Papua New Guinea

Wokim lombo PDP

Ol wei bilong wokim lombo PDP:

1. Putim ol lombo i go insait long baket.
2. Yusim diwai hama o han yu werim glav long en, paitim na smasim ol skin.
3. Putim 1L wara (sais bilong 3-pela 330 mL ken bilong soft-drink) na rabim ol lombo insait long wara long ol han yu werim ol glav long ol.
4. Putim 4-pela tispun bilong ol hap (20g) sop.
5. Larim dispela yu miksim pinis i stap insait long baket inap wanpela nait o wanpela de.
6. Kapsaitim dispela wara long streina bilong rausim ol hap graun na wara i mas i go insait long napsak spreia.
7. Putim sampela wara long inapim mak insait long napsak.
8. Nau, marasin i redi long yu ken spreim long ol gaden kaikai.

Wokim nim PDP

Ol wei bilong wokim PDP bilong nim sid prut.

1. Kisim 100g / 120 nim sid prut.
2. Memeim ol sid.
3. Kapsaitim 1L wara i go long baket na putim ol sid i go insait long en.
4. Tanim wara na ol nim sid yu memeim long ol han yu werim ol glove long ol.
5. Karamapim baket na larim dispela wara i stap insait long baket inap wanpela nait o 12-pela aua.
6. Kapsaitim dispela wara long streina bilong rausim ol hap graun na wara i mas i go insait long napsak spreia.
7. Putim 4-pela tispun bilong ol hap (20g) sop.
8. Putim sampela wara long inapim mak insait long napsak spreia.
9. Nau, marasin i redi long yu ken spreim long ol gaden kaikai.

Ol plant em yu ken wokim marasin bilong kilim ol binatang nogut i stap long lista long Tebol 3.3.

Tebol 3.3: Ol plant em yu ken yusim bilong wokim marasin bilong kilim ol binatang nogut

Ol PDP	Ol nem ol saientist i putim	Hap yu ken painim	Wanem hap bilong plant yu ken yusim	Wanem kain plant
Deris	<i>Derris elliptica</i>	Ol ples daun i wet, 600 m daunbilo long graun	Ol ruts, skuisim	Plant em ol rop i karamap
Nim	<i>Azadirachta Indica</i>	Ol ples daun i drai, olsem Markham Valley o Central Province	Ol sid, memeim	Bikpela diwai
Lombo	<i>Kapsikam frutescens</i>	Ol ples daun na ol ples antap	Pruts, paitim paitim o wokim em i pauda	Liklik plant ol man i groim

Ol PDP	Ol nem ol saientist i putim	Hap yu ken painim	Wanem hap bilong plant yu ken yusim	Wanem kain plant
Pairitram	<i>Tanacetum cinerariifolium</i>	Ol ples i antap moa long 2,200 m, olsem Enga, Western o Southern Highlands	Drai plaua	Plant ol man i groim

Ol foto daunbilo i soim ol plant em ol i save wokim PDP long ol



Plaua na ol lip bilong Nim



Ol plaua bilong Pyrethrum



Diwai Derris



Bodi bilong diwai Derris



Ol rut bilong diwai Derris

Ol Bikpela Poin bilong Topik

Ol gras nogut i ken gro long olgeta hap. Ol gras nogut i save kamap long olgeta hap. Yu ken painim long ol gaden, long graun i gat ol gutpela gras, long wara, antap long ol diwai na olgeta kain hap. Ol gras nogut i save resis wantaim ol gutpela plant long kisim wara, gris bilong graun na san-lait, na long dispela as, ol plant i ken lusim strong long karim ol kaikai. Yumi ken daunim hevi bilong ol gras nogut long ol kain wei olsem: long ol han, long yusim ol samting bilong graun, long masin, long ol kemikal (hebisaid) na long ol samting i gat laip.

Ol binatang nogut i makim ol binatang na ol pikinini binatang i save kaikai na bagarapim ol gaden kaikai. Yumi ken daunim hevi bilong ol binatang nogut long ol han, long yusim ol samting bilong graun na long ol samting i gat laip.

Planti taim, taim plant i bagarap na nau yu luksave pinis olsem sik i painim em. I hatwok long luksave hariap long sik. Taim yu lukim wanpela liklik mak, em i soim

olsem plant i gat hevi pinis. Sampela wei bilong daunim ol sik bilong ol kaikai/plant em long bihainim ol tumbuna pasin, yusim han na yusim ol kemikal.

Long olgeta kain gaden, seifti em i impoten tru taim yu yusim ol kemikal long en. Yu mas haitim ol kemikal long wanpela hap ol pikinini i no ken painim. Werim gut ol kolos/karamap bilong bodi em i impoten tu long taim yu redi long yusim ol kemikal bilong kilim ol gras nogut, binatang na ol sik bilong ol plant/kaikai. Em i bikpela samting tru long bihainim ol stiatok bilong seifti long taim yu yusim ol kemikal na bai yu ken i stap seif long olgeta taim.

Ol marasin bilong kilim ol binatang nogut em ol i wokim long ol plant (PDP) i no save kamapim birua long envairomen na long ol fama. Ol fama inap wokim ol PDP long ol plant samting i stap long bus na bai ol i ken yusim ol long daunim hevi bilong ol binatang nogut long pasin seif.

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HAP 2

Trening bilong Bungim na Lukautim Kaikai

Kirap bilong Tok

Hap 2 bai i stori long pasin bilong bungim na lukautim ol kaikai. Planti taim, planti gaden kaikai i no inap kamap long ol kastama, na em as na ol fama i no kisim gut ol moni. Ol topik bilong dispela hap bai i stori long ol pasin bilong bungim na lukautim gut ol kaikai bilong ol fama i ken karim ol i go stret long ol kastama, na kisim gut ol moni.

Ol stori bilong ol topik i kamapim klia olsem pasin bilong bungim na lukautim ol kaikai em i wanem samting na yu mas lukluk long wanem ol mak na bai yu ken:

- ▶ luksave olsem ol kaikai i gro gut tumas, o skelim olsem em i gutpela long salim long wanem kain ples
- ▶ soim ol prut na ol kumu i mau pinis
- ▶ kisim ol kaikai long gaden
- ▶ makim wanem ol tul bilong yusim long kisim ol prut, ol kumu o ol kaikai long gaden
- ▶ makim narapela narapela wei bilong kisim narapela narapela kaikai long narapela narapela gaden
- ▶ mekim sampela wok long gaden yet, makim ol kaikai, skelim ol kaikai na katim sampela hap bilong ol na stretim
- ▶ pakim long ol bokis o ol kanda basket
- ▶ putim ol kaikai long gutpela ples
- ▶ trenspotim ol kaikai.

TOPIK 4

Trening bilong Bungim na Lukautim Kaikai

Ol Samting bilong Lainim

Taim dispela trening i pinis, yu bai inap:

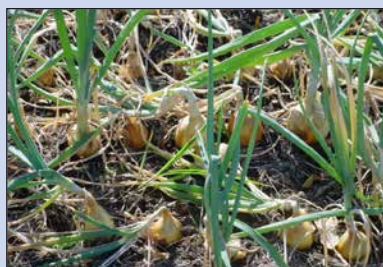
- ▶ daunim hevi bilong lusim ol gaden kaikai taim yu no salim ol long maket;
- ▶ holim ol prut na ol kumu i stap longpela taim moa; na
- ▶ mekim ol prut na ol kumu i stap gut inap longpela taim.

Kirap bilong Tok

Dispela hap bai i stori long hap taim we ol fama i kisim ol kaikai long ol gaden, na karim ol dispela kaikai na salim long maket. Insait long dispela hap taim, planti man olsem ol fama, ol draiva, ol man i wok long holsel, ol stua na ol kastama i mekim ol wok olsem kisim ol kaikai long gaden, wasim, skelim, pakim na trenspotim ol.

Em i impoten long ol fama i luksave long ol mak bilong kisim ol kaikai long gaden long taim stret na bai ol dispela kaikai i ken i stap gut longpela taim. Sapos ol i no kisim ol long taim stret, ol i no inap stap gut longpela taim. Sapos ol fama i kisim ol kaikai long taim stret, dispela i ken daunim hevi bilong ol kaikai i bagarap na lus.

Ol i ken kisim ol kaikai long gaden long ol han o ol sampela tul. Ol i mas was gut taim ol i kisim ol kaikai long gaden, na trenspotim ol. Sapos ol i no was gut, sampela samting bai i brukim, katim o bagarapim ol prut na ol kumu. Kain bruk olsem bai i bringim ol fangas na sampela liklik binatang nogut i save kamapim sampela hevi moa olsem kaikai i sting. Em as tu na, ol kaikai, moa yet long ol kumu, i no inap i stap gut, na lusim wara.



Ol anian i gro inap 5-pela mun



Ol pamkin i redi long kisim

Yu yet i mekim 1

- ▶ Ol wan wan grup i ken toktok long ol supamaket na ol maket i narapela narapela olsem wanem.

Mak bilong Mau Kaikai inap Salim long Maket

I gat tupela kain mak bilong ol kaikai i mau inap long skelim olsem yu ken salim o nogat.

1. Wampela mak bilong ol kaikai i mau em long taim ol kaikai (olsem ol prut, ol plaua, ol lip) i gro gut pinis — sampela taim, dispela em i leit pinis long kisim long gaden na bai ol man i ken kaikai. Lukim ol piksa daunbilo i soim sainis kabis i putim pinis ol plaua na ol tomato i bruk.



Sainis kabis i gro tumas na putim ol plaua na ol tomato i bruk

Harim: Ol stua na ol holsel i no save laikim tumas ol kaikai i mau tumas bikos kain kaikai olsem i no inap i stap longpela taim o ol kastama tu i no laikim.

2. Narapela kain mak bilong mau kaikai i soim olsem ol kaikai i redi long salim. Dispela kain mak inap kamap pastaim long ol kaikai i gro gut tru. Ol piksa daunbilo i soim kain mak i stap pinis long Inglis kabis na ol tomato.



Inglis kabis na ol tomato i mau pinis na redi long salim

Yu yet i mekim 2

- ▶ Wokabaut namel long ol gaden kaikai na traime luksave long narapela narapela mak bilong ol mau kaikai, olsem ol i yangpela yet o olupela pinis. Raitim hia ol mak i narapela narapela kain olsem wanem.

Pasin bilong Bungim Kaikai

Bilong mekim stret wok bilong bungim ol kaikai, yu mas tingting gut long luksave long ol mak bilong ol kaikai i mau, pasin bilong kisim ol kaikai, ol kontena bilong putim ol, ol tul bilong kisim, pakim na trenspotim ol kaikai.

Ol mak bilong ol kaikai i mau

Bilong luksave long ol mak bilong ol kaikai i mau, yu mas lukluk long sais, raupela o longpela, kala bilong kaikai, sais bilong skin kaikai olsem bin na pinat, strong na lukluk bilong kaikai.

Sapos yu kisim ol kaikai taim ol i no mau yet, dispela kain kaikai i no gat gutpela teist. Tasol, ol kaikai yu leit long kisim bai i mau tumas na i gat planti string (Bautista and Mabesa 1977). Ol piksa daunbilo i soim ol mau kaikai em gutpela taim stret long kisim.



Letus i redi long kisim



Kapsikam i redi long kisim

Pasin bilong kisim ol kaikai

I gat 5-pela poin bilong kisim ol kaikai:

1. Kisim ol kaikai long taim i kol stret — nambawan gutpela taim bilong kisim ol kaikai em i bikmoning o taim san i laik i go daun.
2. No ken kisim ol kaikai taim ol i wet long ren o kol bilong nait, long wanem, taim ol kaikai i wet, ol i kamap tuhat hariap taim ples i no kol na bai bagarap.
3. Bungim na putim ol kaikai i no fit long ol man i ken kaikai long wanpela hap, na bungim na putim ol gutpela kaikai long narapela hap.
4. Yusim ol klinpela tul na ol kontena.
5. Yu mas putim ol kaikai yu kisim pinis long ples we san i no sutim lait i kam o kol rum (sapos inap) na bai ol kaikai i kol i stap na wara bilong ol i no lus inap long trenspotim ol.

Ol tul bilong kisim ol narapela narapela kaikai

Wei bilong kisim kaikai i no wankain. I gat wei bilong wanpela kaikai, na narapela wei bilong narapela kaikai:

1. Ol kaikai olsem kaukau, yam na tapiok—Yu ken yusim ol stik na fok bilong digim na rausim graun. Taim yu digim, yu subim stik o fok long hap i longwe liklik long rut bilong kaikai na brukbrukim graun na apim kaikai i kamaul long graun.



Yusim fok bilong kisim ol kaukau

2. Ol kumu olsem kabis na brokoli — i gutpela moa long yusim sap naip bilong katim ol bun bilong ol kumu na sampela hap bilong ol na stretim ol gut. Yu mas holim yet ol lip ausait yu rausim pinis bilong karamapim ol kaikai inap long taim bilong maketim ol.



Yusim sap naip bilong kisim kabis

3. Ol prut olsem mango na popo — Sapos yu no inap pikim ol prut olsem mango na muli long han, em i gutpela long yusim stik bilong pikim ol prut, long wanem, ol prut bai i no pundaun long graun na bruk.



Yusim stik bilong pikim prut na kisim ol mango

4. Raun anian — Yu mas kamautim ol raunpela anian long han.



Kisim ol raun anian long han

Mekim ol wok long gaden yet

Pasin bilong mekim ol wok long gaden yet i makim olsem:

1. Wok bilong katim sampela hap bilong kaikai na stretim i makim rausim ol lip, ol bun na ol narapela hap bilong ol plant, maski ol dispela hap i bagarap o nogat, na bai ol fama i ken stretim ol kaikai gut inap long salim long ol kastama.



Katim sampela hap bilong kabis na stretim gut inap long salim

2. Wok bilong klinim ol kaikai i makim rausim ol hap graun, das, ol binatang o hap ol binatang i bagarapim bipo long maketim ol.



Wasim radis na rausim ol hap graun

3. Wanpela wei long mekim kaikai olsem kaukau, potato na raun anian long stap gut longela taim, ol i kolim Curing. Yu ken putim long hap we i tuhat. Kiuarung em i rot bilong strongim skin bilong kaikai na bai dispela kaikai i no inap sting na wara bilong en i no lus taim ol i putim em long wanpela hap o trenspotim i go long narapela hap. Yu ken mekim dispela wok long gaden bilong yu yet o ol rum.



Kiuarung long ol raun anian

4. Wok bilong skelim ol kaikai i makim rausim na putim i go arasait ol kaikai i bagarap, bruk, i gat sik, ol binatang nogut i kaikaim, na krungut na putim ol gutpela kaikai long narapela hap. Dispela wok i ken helpim yu long makim gutpela prais bilong ol kaikai i go long maket.



Skelim ol mango long maket

5. Wok bilong makim ol kaikai em long wokim ol grup bilong ol kaikai i wankain long sais, kala, raunpela, longpela na strongpela bilong ol.



Makim ol kumu long ol narapela prais

Pakim

Wok bilong pakim ol kaikai em i gutpela long trenspotim, maketim na salim ol i go (Hassan 2010). Yu mas pakim ol kaikai. Dispela bai i helpim yu long lukautim gut ol kaikai taim yu karim ol i go i kam na trenspotim ol. Em i impoten long yusim gutpela samting bilong pakim na bai ol kaikai i no kisim skrap o bruk inap kamap long rot bilong tuhat long ea. Bilong pakim ol kaikai, yu ken yusim ol mambu basket o ol beg ol i wokim long ol rop samting bilong bus. Em i no bikpela moni long wokim, tasol sait nogut bilong en i olsem em i isi liklik long bruk. Yu ken yusim ol strongpela plastik kret, tasol ol i ikspensiv na yu nidim tu ol narapela samting bilong banisim ol prut na ol kumu insait long ol.

Em i impoten long skelim hamas ol kaikai yu pakim long ol beg o bokis na bai ol kaikai i no ken bagarap. Sapos i gat sampela spes insait, ol kaikai bai i seksek tumas na dispela i skrapim skin bilong ol kaikai. Sapos ol i tait tumas, dispela tu bai i skrapim ol skin bilong ol kaikai.



Ol poteto ol i pakim long ol beg



Ol kapsikam ol i pakim long ol bokis



Ol kon ol i pakim long ol plastik kret

Kolim ol kaikai

Kirap long taim bilong kisim ol kaikai long gaden inap long taim bilong baim na kaikai, em i impoten long putim ol long kol ples na bai ol dispela kaikai i ken i stap longpela taim, daunim hevi bilong ol kaikai i lusim planti wara na bagarap.

Bilong mekim temperasa i stap daunbilo, i gutpela long kisim ol kaikai long gaden long bikmoning. Putim ol long hap i no gat sun-lait o ol kol rum bihain long kisim ol kaikai na taim bilong trenspot. Sapos inap, yusim kar i gat friji (refrigerated van).



Kolim ol kumu

Putim ol kaikai

Bihain long kisim ol kaikai long gaden, wantu, yu mas putim ol long ples kol. Sampela taim, yu mas putim ol kaikai long wanpela hap inap sotpela taim na wetim kar long karim ol kaikai bilong yu i go long ol maket. Bilong ol kaikai i stap gut inap long ol kastama i baim na kaikai, yu mas putim ol long ol kol rum. Sapos yu putim ol kaikai long ples kol, ol kaikai i ken stap inap longpela taim moa.



Ol i putim ol kumu bilong salim i go long maket

Trenspotim ol kaikai

I gat sampela as na ol kaikai i no inap i stap gut moa taim ol i wok long trenspotim ol:

- ▶ taim bilong trenspotim ol kaikai, ol kaikai i seksek o ol man i raf tumas long karim i go antap o i kam daun long kar na dispela i skrapim ol skin bilong ol kaikai
- ▶ ol man i tromoi o pundaunim ol beg o bokis kaikai

- ▶ ol kaikai i tuhat (moa yet long taim ol kaikai i stap yet long gaden, sapos ol i no putim ol hariap long ples kol)
- ▶ i no pakim o i no pakim gut
- ▶ ol rot nogut.



Ol man i raf long karim ol beg bilong ol raun kabis na ol kaikai i kisim bagarap

Ol Bikpela Poin bilong Topik

Kirap long taim bilong kisim ol kaikai inap long taim bilong kastama i baim ol, yu mas bihainim gutpela pasin bilong lukautim ol kaikai:

- ▶ Kisim ol mau kaikai long taim stret long kisim.
- ▶ Yusim ol tul i stret long ol kaikai yu laik kisim. Dispela inap abrusim hevi bilong bagarapim ol kaikai.
- ▶ Rausim ol sampela hap bilong kaikai na stretim na bai ol kastama i laikim.
- ▶ Klinim ol kaikai. Rausim hap graun, das na hap ol binatang i bagarapim liklik long en.
- ▶ Skelim ol kaikai na rausim ol hap bilong kaikai i bagarap liklik, bruk, i gat sik, i gat mak bilong ol binatang nogut i kaikaim na i luk nogut, na bai yu ken makim ol gutpela prais long ol.
- ▶ Yusim ol gutpela samting bilong pakim ol kaikai na skelim gut hamas kaikai yu mas putim i go insait.
- ▶ Putim ol kaikai long ples i no gat san-lait o temperasa i daunbilo long en bihain long kisim ol long gaden.
- ▶ Putim ol kaikai long ples kol.
- ▶ Was gut long trenspotim ol kaikai bilong abrusim hevi bilong bagarapim ol kaikai long rot bilong temperasa antap, seksek bilong kar o ol man i raf long karim i go i kam.

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HAP 3

Trening bilong Lukautim Moni

Kirap bilong Tok

Em i bikpela samting tru long ol famili long ol ples i save gut long hau ol i ken lukautim moni bilong ol i ken i stap gut. Ol i ken mekim olsem sapos ol i pilim tru pasin bilong lukautim moni i bikpela samting na kisim ol trening. Ol dispela trening em long helpim ol long save olsem moni em i wanem samting, hau ol i ken kisim moa winmoni, hau ol i ken seivim moni gut bilong helpim sindaun bilong ol long bihain na long wanem hap ol i ken kisim ol dinau na bai wok gaden bilong ol i ken kamap bikpela moa. Planti taim, ol fama i nidim sampela dinau long statim bisnis o mekim ol moni i helpim sindaun bilong ol famili bilong ol sapos ol i luksave olsem tru tru ol i ken bekim ol dispela dinau bihain. Olsem na, ol i mas tingting gut na skelim gut hamas dinau moni ol i ken kisim na hau ol i ken bekim ol. Ol famili bilong ol fama i mas kisim save long ol samting bilong moni na bai ol i ken lukautim gut ol moni bilong ol.

Pasin bilong lukautim moni i impoten tru sapos ol fama i laik kisim moa winmoni na mekim bisnis bilong wok gaden i go bikpela moa. Ol man i mas lukautim ol moni na bai bisnis bilong ol i kamap gutpela moa. Dispela i stret tu long ol fama. Bisnis bilong ol fama bai i pundaun sapos ol i no lukautim gut ol moni.

As tingting bilong dispela hap em long strongim ol fama long lukautim gut ol moni. Olsem na, dispela hap bai i givim ol fama long ol save long:

- ▶ Wokim rekod — Dispela topik bai i skulim ol fama long ol kain kain rekod na helpim ol long save olsem em i impoten long wokim rekod bilong hau ol i yusim na kisim ol moni na bilong wanem ol wok i kamap long gaden.
- ▶ Wokim baset — Ol fama bai i lainim hau ol i ken wokim gut ol baset plen na bihainim ol.
- ▶ Seivim moni — Ol fama bai i lainim wai ol i mas seivim moni, hau ol i seivim na long wanem hap.
- ▶ Lon — Ol fama i mas save long wai ol i nidim lon (olsem dinau) na hau ol i ken kisim olgeta infomesen pastaim bilong save olsem tru tru ol i nidim lon o nogat. Ol i mas save tu long hau ol i ken kisim lon moni na ol i mas mekim wanem ol samting bilong bekim lon moni.

Dispela topik bai i givim ol fama ol gutpela stia tok long hau ol i ken mekim ol gutpela disisen na bai ol i ken wokim gut ol plen bilong lukautim moni, na long dispela rot, wok bisnis na sindaun bilong ol bai i kamap gutpela moa.

TOPIK 5

Wokim Rekod

Ol Samting bilong Lainim

Taim dispela trening i pinis, yu bai save long:

- ▶ wai pasin bilong wokim rekod em i impoten;
- ▶ ol kain kain rekod;
- ▶ hau yu ken wokim rekod bilong kisim na yusim ol moni; na
- ▶ hau yu ken wokim rekod bilong ol wok yu mekim long gaden bilong yu.

Kirap bilong Tok

Em i impoten long wokim ol rekod bilong bisnis bilong wok gaden na bilong hau famili i kisim na yusim ol moni. Em i impoten long wokim stretpela rekod bilong sait bilong bisnis, long wanem, dispela bai i helpim yu long wok bisnis bilong yu bai i inapim ol mak ol lo i makim na long wokim tingting long hau yu ken lukautim ol moni. Sapos yu wokim gut rekod bilong ol moni yu kisim na yusim na bilong ol wok yu mekim long gaden, dispela i ken helpim yu long kisim lon moni.

Bilong mekim ol dispela samting, yu mas wokim ol rekod i kamapim klia wanem ol wok yu mekim na hamas ol moni yu yusim na yusim long wanem ol samting. Bilong bosim gut moni, yu mas raitim hamas moni yu kisim na hamas moni yu yusim. I no gutpela long holim ol dispela samting long tingting tasol" for clarity na i no raitim. Wanpela hevi bilong planti fama i olsem ol i no tingting gut na yusim tasol ol moni long laik bilong ol yet maski ol i mas yusim ol dispela moni long sait bilong bisnis. Narapela hevi i olsem ol fama i givim nating ol kaikai long ol kastama i tok olsem ol bai baim bihain.

Olsem na, em i gutpela tru long wokim rekod bilong hamas moni ol i kisim na yusim. Kain rekod olsem bai i helpim ol fama long luksave long ol moni i go i kam olsem wanem bipo, na helpim tu long wokim ol disisen long hau yu ken yusim moni nau na long luksave long ol moni bai i go i kam olsem wanem long bihain.

Wanem Kain Rekod Yu Mas Wokim?

Yu mas wokim ol rekod bilong ol hamas moni yu kisim na yusim na long wanem ol samting yu yusim ol moni long ol long sait bilong olgeta samting bilong bisnis bilong yu. Na tu, yu mas rekodim hamas lon moni, interes o takis yu bin peim, na ol moni em papa bilong bisnis i yusim bilong helpim bisnis i go het.

I gutpela long wokim ol rekod bilong ol samting i no moni na ol dispela rekod bai i sapotim rekod bilong ol moni. Ol dispela kain rekod i makim ol narapela narapela rekod bilong:

- ▶ ol saplaia
- ▶ ol kastama
- ▶ ol wok
- ▶ hamas aua wan wan wokman i yusim bilong mekim wanem kain wok
- ▶ envairomen olsem weda
- ▶ ol wok ol man i mekim long gaden olsem rekod bilong yusim na menteinim wanem ol tul na ol masin
- ▶ wanem ol samting i stap (stok)
- ▶ hamas ol kaikai i kamap; na rekod bilong ol wok i kamap long gaden olsem brukim na stretim graun, ol det bilong planim kaikai, yusim wanem ol kain fetilaisa na ol kemikal na hamas ol fetilaisa na ol kemikal, wanem kain kaikai i kamap na kaikai i gro olsem wanem.

Rekodim moni

Yu mas rekodim long kesbuk hamas moni yu yusim na hamas moni yu kisim long olgeta wan wan taim yu yusim o kisim. I gat tupela kain rekod i olsem ol **resit** na ol **peimen**. Yu ken yusim tupela narapela narapela buk o wanpela buk i gat tupela hap.

- ▶ Ol resit i makim yu kisim ol sek o ol moni yu kisim long rot bilong salim ol kaikai, ol prut na ol kumu, ol bulmakau, o kain samting olsem.
- ▶ Ol peimen i makim ol moni yu yusim bilong baim ol samting na ol sevis bilong mekim ol wok long gaden.

Kesbuk

Kamapim kesbuk long raitim daun olgeta rekod bilong moni i kam insait long wok gaden na olgeta moni i go aut long ol lain i givim sevis na long baim ol samting bilong wok.

Kesbuk i mas i gat hap bilong moni i kam insait na moni i go aut:

A. Moni i kam insait

Det: Raitim det bilong moni i kam insait.

Ol liklik toktok: Raitim ol samting olsem husat ol i bin baim, wanem samting ol i baim na hamas long dispela samting ol i baim.

Hamas moni yu kisim: Raitim hamas ol moni olgeta yu kisim long rot bilong salim ol samting. Tebol 5.1 i soim rekod pepa bilong ol moni i kam insait long rot bilong salim ol gaden kaikai.

B. Moni i go aut

Det: Raitim det bilong ol moni i go aut.

Ol liklik toktok: Raitim samting olsem yu peim long husat na long wanem as.

Hamas moni yu peim: Yu mas raitim olgeta peimen olsem long moni, sek o ol moni ol i rausim long benk akaun. Tebol 5.2 i soim rekod pepa bilong peim ol samting.

Wan wan man i gat wei bilong rekodim hamas ol moni em i kisim na em i peim. Yu mas strong long lainim yu yet long rekodim ol samting na mekim olsem olgeta taim. Yu mas rekodim ol moni bilong wokim kes flo stetmen na ol baset. Yu nidim olgeta dispela rekod bilong ol resit na ol peimen long ol kesbuk na bai yu ken wokim kes flo stetmen o wokim baset plen bilong mun, bilong olgeta 3-pela 3-pela mun, bilong hap-yia o bilong yia.

Rekod bilong ol samting i no moni

Namba tri em i rekod bilong ol samting i no moni, olsem bilong wanem ol wok i kamap long gaden. Tebol 5.3 (A, B) i soim rekod pepa bilong ol wok i kamap long nesari na gaden.

Tebol 5.1: Eksampel bilong rekodim hamas ol moni i kam insait

Harim: Dispela rebol i yusim PNG kina (K) olesem karensi; Long ol narapela kantri, yu mas yusim narapela karensi na prais bilong kantri bilong yu long blank woksit daunbilo.

Mun:		Oli i kisim ol moni we na hamas moni oli i kisim									
Det	Julai 2013	Salim wanem samting	Hamas kina olgeta	Ol kumu (kina)	Yam	Pis	kakaruk	Kaikai ol man i kukim	kentin	Ol narapela samting	
1/7/13		Salim 1-pela beg bilong aibika	70	70							
5/7/13		Salim 1-pela beg bilong pamkin	100	100							
8/7/13		Salim ol kaikai ol man i kukim (ol skon)	30					50			
9/7/13		Salim ol kaikai ol man i kukim (ol skon)	30					30			
12/7/13		1. Salim 2-pela beg (50 kg) bilong sainis kabis 2. Salim 1-pela beg bilong ol yam	400 300	400 300	300						
14/7/13		1. Salim 1-pela beg bilong sainis kabis 2. Salim 10-pela kakaruk, K30 long wan wan	200 300	200			300				
15/7/13		1. Salim 6-pela kakaruk, K30 long wan wan	180				180				
16/7/13		1. Salim 8-pela kakaruk, K30 long wan wan 2. Salim ol kaikai ol man i kukim (ol skon)	240 46				240	46			
17/7/13		1. Salim 12-pela kakaruk, K30 long wan wan	360				360			200	
17/7/13		2. Presen i kam long pikinini man i stap long taun	200								
18/7/13		1. Salim 4-pela kakaruk, K30 long wan wan 2. Salim 1-pela beg bilong aibika	120 67	67			120				
20/7/13		1. Salim ol kaikai ol man i kukim	40					40			
25/7/13		1. Salim 1-pela beg bilong sainis kabis	200	200							
Ol moni olgeta yu kisim long dispela mun			2,683	1,037	300	0	1,200	166	0	200	
Hap moni bilong laspela mun em i stap yet long kirap bilong dispela mun			860	540	0	0	0	120	0	0	
Olgeta moni yu holim i stap nau			3,743	1,577	300	0	1,200	186	0	0	

Tebol 5.2: Eksampel bilong rekodim hamas ol monii go aut

Mun:	Julai 2013	Ol Peimen													
		Det	Particulars	Hamas kina olgeta	Kos bilong Kamapim ol kaikai	Kos bilong Maketim	Ol kaikai samting bilong Haijin	Skul long bihain	Ol kolos	Komuni-kesen	Haus sik, ol mara-sin	Alkohol, tabak	Kastam	Wantok	Animal
1/7/13	1.	Trensport kos na geit fi	10		10										
	2.	Baim ol kaikai	50			50									
	3.	Ol samting bilong skul long nau	5				5								
	4.	Flex kad	5						5						
2/7/13	1.	Kaikai	10			10									
	2.	Skul long bihain	5				5						20		
	3.	Wantok	20												
	4.	kastam	50									50			
4/7/13	1.	Skul long bihain	5				5								
	1.	Trensport kos na geit fi	10		10										
	2.	Kaikai	30			30									
	3.	Skul long bihain	5				5								
7/7/13	4.	Flex kad	5						5						
	Ol moni olgeta yumi kisim long dispela mun			210	0	20	90	0	20	0	0	0	50	20	
	Hap moni bilong laspela mun em i stap yet long kirap bilong dispela mun			350	50	40	130	20	40	50	0	0	0	0	
	Olgeta moni yu holim i stap nau			560	50	60	220	20	60	50	0	0	50	20	

Tebol 5.3: Eksampl bilong rekod bilong ol samting i no bilong ol moni: Ol rekod bilong ol wok i kamap long (A) Nesari na (B) Gaden
 (A) Ol wok bilong nesari inap 1-pela yia

Kod bilong kaikai	Det ol i tromoi/ planim ol sid	Hamas ol sid o ol trei ol i planim	Det ol sid i sut aut	Hamas ol sid o hamas pasenteji i sui aut	Nesari midiam ol i yusim	Ol narapela toktok o na ol samting yu lukim

(B) Ol wok bilong gaden inap 1-pela yia

Kaikai ol i planim	Hap ol i planim	Det ol i planim	Hamas ol sid o hamas ol trei ol i planim	Det na reit bilong givim fertilaisa	Det na reit bilong givim marasin bilong kilim fangas	Det na reit bilong givim marasin bilong kilim ol binatang nogut	Ol narapela toktok na ol samting yu lukim

Ol Bikpela Poin bilong Topik

Ol bikpela poin bilong tingim:

- ▶ Rekodim olgeta samting i kamap long ol wok gaden olsem ol rekod bilong ol moni na bilong ol wok i kamap long wok gaden. Ol dispela kain rekod bai i helpim ol fama long wokim ol gutpela disisen bilong manejim wok gaden bilong ol.
- ▶ Wokim rekod bilong ol moni yu kisim long rot bilong salim ol gaden kaikai, na wokim narapela rekod bilong peim ol samting long olgeta wan wan de.
- ▶ Wokim wanpela rekod bilong ol moni i kam insait na i go aut long sait bilong famili na narapela rekod long sait bilong wok gaden.
- ▶ Rekod bilong ol wok i kamap long wok gaden em i impoten olsem rekod bilong ol moni.

Sampela Save Moa (Referens)

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TOPIK 6

Wokim Baset

Ol Samting bilong Lainim

Taim dispela trening i pinis, yu bai inap:

- ▶ save gut long baset;
- ▶ kliagut olsem baset i impoten; na
- ▶ wokim ol baset bilong yu yet.

Kirap bilong Tok

Sapos yu no save long hau yu ken wokim baset, yu no inap lukautim gut moni. Long dispela topik, yu bai i lainim baset em i wanem samting, wai baset i impoten na hau yu ken wokim baset bilong yu yet. Taim yu wokim baset, yu bai i luksave long ol samting yu laik winim. Ol dispela samting bai i helpim yu long lukautim gut moni bilong yu yet.

Baset em i wanem samting?

Pasin bilong wokim baset em long wokim plen bilong ol moni i kam insait na i go aut long wanpela hap taim. Baset i helpim wan wan man, famili, na bisnis long wokim ol gutpela disisen long mekim gut ol wok long ol moni. Taim yu wokim gut baset, yu inap save gut hau yu mas yusim moni bilong yu.

Gutpela plen long hau yu yusim ol moni i kam insait em bai i helpim yu long kisim moa winmoni. Man i wokim gut baset bai i lukautim gut moni bilong em na gutpela baset bai i helpim em long wokim ol gutpela disisen long stat bilong wok. Taim yu wokim gut baset, bai yu winim hariap moa ol mak bilong wok bisnis bilong yu na i no gat wok long kisim dinau moni. Gutpela baset i no makim olsem yu mas isi isi tasol long yusim moni, tasol em bai i helpim yu long wokim ol gutpela disisen bilong mekim wok long moni.

Wai baset em i impoten?

Baset em i impoten bikos em i helpim yu long mekim gut wok long moni yu gat. Taim yu makim hamas kina yu bai yusim long wanem samting, olsem bilong wokim baset bilong wok gaden bilong ol kumu, yu save pinis olsem yu bai i yusim ol moni long wanem ol samting. Long dispela pasin, yu kirap pinis long winim ol mak bilong kisim ol winmoni.

Wan wan man na wan wan bisnis i ken wokim baset bilong em.

Baset bilong wok gaden bilong ol kumu

Bilong wokim baset bilong wokim ol kumu, ol fama i mas wokim plen long hau ol bai i yusim ol moni long wanem ol wok. I gutpela tru sapos fama i wokim wan wan baset long wan wan kumu em fama i ken groim long hap bilong em. Ol i save wokim baset long pinis bilong yia long helpim ol wok bilong neks yia, o wokim baset long taim bilong statim wok bilong wanpela kaikai. Fama i ken makim wanem baset i gutpela long en.

I gat tupela kain kos long bisnis bilong wokim ol kumu em ol i bikpela samting long lukluk long ol moni i go i kam. I gat ol kos bilong groing na maketing. I gat ol narapela kos (ol i kolim ovahet kos) olsem dipresiesen (olsem pe bilong samting i go daun bikos yu wok long yusim dispela samting o dispela samting i kamap olupela) bilong ol masin, tasol yumi no bai i stori long dipresiesen long dispela topik.

Ol groing kos em ol i olgeta kos bilong groim ol kumu. Dispela i makim kos bilong ol sid na ol samting bilong planim ol, leba kos long redim graun na trensplanim o planim, na ol kos bilong fetilaisa, rausim ol gras nogut, na daunim hevi bilong ol binatang nogut na ol sik. Bikpela san i save kamap long Central Province na ol narapela hap we weda bilong ol i wankain liklik long en long drai sisen. Olsem na, wok bilong stiaim wara (irigesen) i impoten. Ol fama long ol kain hap olsem i mas rekodim tu ol kos bilong wokim ol rot bilong stiaim wara.

Narapela hap kos bilong wok bilong wokim ol kumu i ol **marketing kos**, em ol i karamapim olgeta kos long kisim ol gaden kaikai i kam long gaden i go long ol lain bilong baim ol olsem supamakem, wolsela, o kastama. Kos bilong maketim ol kumu long longwe maket long siti olsem Port Moresby i makim ol pe bilong kisim ol kaikai long gaden, pakim, trenspotim, pe bilong komiunikesen, karim ol kaikai, maket komisen, geit fi na ol pe bilong ol kaikai i bagarap.

Tebol 6.1: Eksampl bilong baset bilong ol moni lain bilong wokim gaden i kisim na ol moni ol i spendim

Harim: This table uses PNG kina (K) as the currency; for use in other countries, local currencies and local values and costs should be substituted in the blank worksheet below.

kaikai: Tomato (Spes bilong en i 90 cm x 50 cm) Hap bilong planim: 2,500 m²; ol i planim 4,000 plant long dispela hap.	
Ol moni yu kisim (6-pela ton o 6,000 kg, K3/kg)	K18,000
Ol moni yu yusim	
Ol sid (500 g)	K250
Ol wok bilong nesari (kilim gems long graun, wokim kompost, wotering na ol narapela wok gaden)	K150
Redim graun (brukbrukim, digim, kamautim; K0.5/m ² inap 2,500m ²)	K1,250
Trensplanim o planim (10-pela man inap 30 aua; K3 long 1-pela aua)	K900
Sanapim ol stik (10-pela man inap 40 aua; K3 long 1-pela aua)	K1,200
Rausim ol gras nogut (10-pela man inap 30 aua; K3 long 1-pela aua)	K900
Wok bilong kilim ol binatang nogut na ol sik	K180
Wokim rot bilong stiaim wara (haiarim wara pamp na fuel)	K450
Kisim ol kaikai (10-pela man inap 20 aua; K3 long 1-pela aua)	K600
Skelim, grupim na pakim (5-pela man inap 20 aua; K3 long 1-pela aua)	K300
Pakim (300 bokis; K5 long 1-pela bokis)	K1,500
Trenspot kos (300 bokis; K5 long 1-pela bokis)	K1,500
Maket fi na komisen	K700
Komiunikesen kos	K100
OLGETA KOS	K9,980
Ol winmoni: (Ol moni yu kisim – Ol moni yu yusim)	K8,020

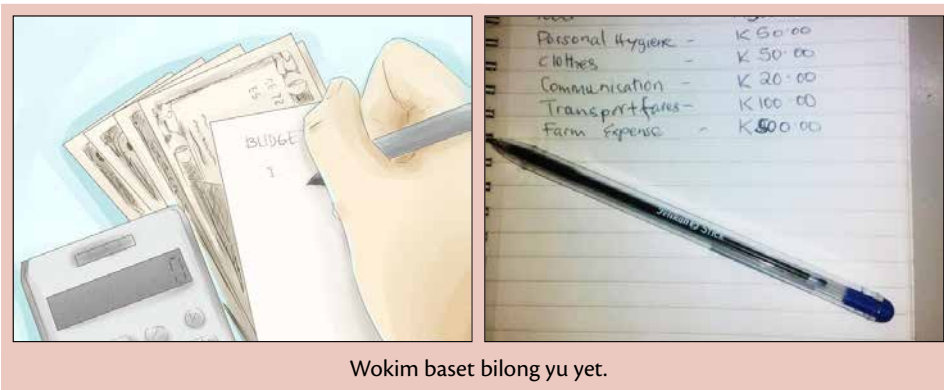
Tebol 6.1(a) Wok-pepa bilong putim ol wok na ol kos bilong groim wan wan kaikai

Ol moni yu kisim (soim ol gaden kaikai, na ol moni yu inap long kisim)	Pe bilong lokol karensi bilong yu
Ol moni yumi yusim	
Ol sid (500g)	
Ol wok bilong nesari (kilim gems long graun, wokim kompost, wotering na ol narapela wok gaden)	
Redim graun (brukbrukim, digim, kamautim; K. /m ² for 2,500 m ²)	
Trensplanim o planim (10-pela man long 30 aua; K. long 1-pela aua)	
Sanapim ol stik (-pela man long aua; K. long 1-pela aua)	
Rausim ol gras nogut (-pela man long aua; K. long 1-pela aua)	
Wok bilong kilim ol binatang nogut na ol sik	
Wokim rot bilong stiaim wara (haiarim wara pamp na fuel)	
Kisim ol kaikai (-pela man long aua; K. long 1-pela aua)	
Skelim, grupim na pakim (-pela man long aua; K. long 1-pela aua)	
Pakim ol bokis (; K. long 1-pela bokis)	
Trenspot kos (-pela bokis; K. long 1-pela bokis)	
Maket fi na komisen	
Komiunikesen kos	
OLGETA KOS	
Ol winmoni: (Ol moni yu kisim – Ol moni yu yusim)	

Baset bilong wan wan man

Wanpela man husat i save lukautim ol moni bilong famili bilong em i ken wokim plen long hau ol i ken yusim ol moni ol i kisim bilong helpim sindaun bilong famili. Dispela man i skelim gut na wokim plen bilong ol moni i kam insait na i go aut, na em bai i luksave long em i ken yusim hamas moni long wanem taim long dispela rot. Gutpela baset i ken stiaim tingting bilong em, na dispela bai i pasim em long spendim tumas moni na daunim hevi bilong dinau na kisim winmoni. Bikpela samting i olsem yu mas wokim baset plen i stret long sindaun bilong yu na bihainim gut.

Em i isi long wokim baset sapos yu wokim lista bilong olgeta pe yu mas spendim. Dispela bai i helpim yu long lukluk long hau ol moni i save i go i kam na luksave tu long wanem ol samting yu westim ol moni long ol.



Wokim baset bilong yu yet.

Hau mi ken wokim baset?

Yu ken bihainim ol isipela wei i stap daunbilong bilong wokim baset bilong yu yet.

Luksave long mak bilong winim

Yu yusim moni bilong mekim wanem? Yu laik peim bek olgeta dinau na bai yu no nid long spendim planti moni? Yu driman long baim kar, salim ol pikinini long yunivesiti o statim bisnis? Em nau, yu mas makim samting yu laik mekim olsem mak bilong winim. Sapos i no gat mak bilong winim, yu no bai mekim samting yu inap mekim long laip bilong yu long taim bihain. Yu ken lukluk long sotpela hap taim, sampela hap taim, o longpela hap taim, na wokim ol baset bilong kain hap taim olsem. Sotpela hap taim i makim 1-pela mun i go 1-pela yia, sampela hap taim em 1-pela yia i go 5-pela yia, na longpela hap taim em winim 5-pela yia.

SMART mak bilong winim

Yu mas makim ol SMART mak bilong winim.

- S:** Specific — Makim stret wanem samting tru tru yu laik mekim.
- M:** Measurable — yu inap lukim hau ol moni bai i go i kam na yu ken winim mak.
- A:** Achievable — Makim samting em tru tru yu inap winim sapos yu yusim gut ol save na ol skil bilong yu.
- R:** Relevant — Mak i mas stret long sindaun bilong yu na bai yu ken winim.
- T:** Time bound — Makim hap taim em yu ken winim mak insait long en.



Makim SMART mak bai i stiaim tingting bilong yu long seivim moni.

Bilong bihainim stret baset, sampela taim, yu mas strong long daunim laik bilong yu, tasol sapos yu makim pinis SMART mak, wok bilong bihainim baset em bai i isi liklik moa.

Eksampel bilong wanpela fama i makim SMART gol i olsem:

- ▶ Mak bilong sotpela hap taim: Inap long pinis bilong dispela yia, bai mi bungim K1,000 bilong go lukim papa bilong mi.
- ▶ Mak bilong sampela hap taim: Inap long yia 2017, bai mi bungim K6,000 bilong salim pikinini i go long yunivesiti.
- ▶ Mak bilong longpela hap taim: Inap long yia 2020, bai mi bungim K30,000 bilong baim trakta.

Harim: Taim yu makim ol mak bilong winim, em i impoten long yu makim hap taim yu laik winim insait long en, wanem samting yu laik mekim, na kliagut long wai em i bikpela samting bilong winim dispela mak. Dispela bai i stiaim yu long winim ol mak.

Moni bilong yu i go olsem wanem

I gat kain taim olsem? yu pinisim olgeta moni pinis, na nau yu luksave yu no gat wanpela samting. Yu tingting planti, wai no gat moni? Moni i go we? Sapos yu no save liklik long moni i go we, em i gutpela long wokim lista bilong olgeta samting yu spendim moni long ol. Sapos yu laik lukautim moni, yu mas save olsem yu yusim moni long wanem ol samting. Wokim lista bilong olgeta samting yu bin yusim moni long ol insait long wanpela mun. Mekim em i kamap olsem wanpela pasin bilong yu, em long raitim hamas moni yu yusim na yusim long wanem samting, na mekim olsem long olgeta wan wan de.

Raitim ol hamas moni yu yusim aninit long nem bilong tripela samting i stap daunbilob:

1. Samting yu mas peim i no gat senis — samting yu mas peim na em i stap wankain long olgeta wan wan mun, olsem rent, fon bil, skul fi.
2. Samting yu mas peim i save senis — samting yu mas peim i save senis senis long wan wan mun, olsem fuel, kaikai.
3. Samting yu laikim — Em ol samting i no olsem yu mas i gat, yu ken stap laip maski yu no gat dispela samting, olsem pati, kaikai long haus kaikai, mobail fon, nupela kolos.

Wokim rekord bilong ol samting yu peim long kain pasin olsem bai i mekim em i isipela long wokim baset na luksave gut long ol samting yu no mas peim.

Long baset bilong yu, rekodim tu hamas moni yu seivim long wan wan mun olsem moni yu spendim. Em i isipela moa yet long seivim moni sapos yu wokim pinis plen bilong en long baset. Na em i impoten tu: Yu no bin tingting long samting bai i kamap, tasol dispela samting i kamap na yu mas spendim moni long en. Long kain taim olsem, yu inap peim maski yu no kisim dinau. Na maski kain samting i no kamap, dispela kain seiving bai i hariapim driman bilong yu i kamap tru.

Yu kisim moni we

Yu mekim kain kain wok na yu save kisim moni, olsem salim ol gaden kaikai, ol pis, kakaruk, bulmakau, ol samting long stua, o kisim kampani pe sapos yu wok long en. Yu ken kisim tu moni taim famili bilong yu i bekim dinau o givim moni olsem presen. I gutpela long wokim lista bilong olgeta wok em yu kisim moni long ol. Tebol 6.2 i soim wanem kain moni dispela famili i kisim na yusim ol long wanem ol samting. Tebol 6.3 i soim eksampel bilong baset. Ol i raitim hamas kina long ol moni ol i kisim na hamas moni ol i spendim, na hamas moni ol i ken seivim.

Tebol 6.2: Eksampel bilong ol moni wanpela famili long ples i kisim na ol moni ol i spendim

Ol moni yu kisim long	Ol moni yu yusim long
Salim ol gaden kaikai	Ol kos famili i peim long wan wan de (olsem kaikai, ol kolos, singsing, skul fi, samting i go long sios)
Salim pis	Ol kos bilong wok gaden long wan wan de (ol kain samting olsem ol sid, ol marasin bilong kilim ol binatang nogut, leba)
Ol kastam wok (olsem braid prais)	Bikpela kos bilong famili long wan wan taim (olsem wokim o stretim haus, bikpela singsing, skul fi)
Lon	Baim trakta
Presen i kam long ol famili	Ol samting spesol

Sapos yu wok long lukluk long hau ol moni i kam insait, dispela bai i strongim tingting bilong yu long painim sans long kisim moa moni.

Yu yet i mekim 1

1. Wokim lista bilong olgeta moni i go aut na ol moni i kam insait long fotnait, mun na yia.
2. Wokim baset bilong yu yet. Yu ken yusim baset pepa hia o yu yet i ken wokim.
3. Makim SMART mak bilong yu yet. Dispela bai i helpim yu long bihainim baset bilong yu.

Tebol 6.3: Eksampel bilong baset em wanpela fama long ples i wokim

Baset bilong mi:

Det:

Ol mani i kam insait

Long wanem rot	Fotnait (kina)	Mun (kina)	Yia (kina)
Salim ol gaden kaikai	50.00	108.33	1,300.00
Salim ol pis	150.00	325.00	3,900.00
Salim ol kakaruk, bulmakau samting	50.00	108.33	1,300.00
Lon			
Presen wantok i givim	20.00	43.33	520.00
Olgeta moni i kam insait	270.00	585.00	7,020.00

Ol moni mi seivim = Olgeta moni i kam insait – Olgeta moni i go aut

Ol moni mi seivim long wan wan fotnait: K54.00

Ol moni mi seivim long wan wan mun: K117.00

Ol moni mi seivim long wan wan yia: K1,404.00

Expenditure (money out)

Ol samting mi peim	Fotnait (kina)	Mun (kina)	Yearly (kina)
Kaikai	80.00	173.33	2,080.00
Eneji	5.00	10.83	130.00
Rent			
Ol kolos	5.00	10.83	130.00
Fuel			
Lans	5.00	10.83	130.00
Bas fea (trenspot)	10.00	21.67	260.00
Fon/flex	5.00	10.83	130.00
Kos bilong helpim wok gaden	40.00	86.67	1,040.00
Animal			
Amamas			
Kos bilong skul lans na ol narapela samting bilong skul	20.00	43.33	520.00
Wantok	5.00	10.83	130.00
Kastam	10.00	21.67	260.00
Sios	27.00	58.50	702.00
Ol kos mi no tingting long kamap			
Ol moni mi seivim	54.00	117.00	1,404.00
Ol narapela samting	4.00	8.67	104.00
Olgeta moni i go aut	270.00	585.00	7,020.00

Kes flo baset

Kes flo baset i gutpela tru long helpim yu long was long hau ol moni i kam insait o i go aut long rot bilong baim ol samting na ol sevis. Sapos yu wok long was long hau ol moni i go i kam, yu inap mekim hariap ol samting bilong daunim hevi bilong moni, em inap kamap bihain. Tebol 6.4 i soim eksampel bilong ol moni i go i kam olsem kes flo long Januero i go Mas.

Tebol 6.4: Kes flo stetmen bilong wanpela famili long Januero i go Mas

Nem bilong famili: Nem bilong ples:

	Januero	Februero	Mas	Olgeta moni
i kam insait (kina)				
IGA 1: Ol kumu	200	140	200	540
IGA 2: Ol prut	500			500
IGA 3: Ol rut kaikai	230		300	530
IGA 4: Ol kakaruk	800	800	800	2,400
IGA 5: Ol banana	150			150
Ol narapela moni i kam insait: presen wantok i givim		300		300
(A) Olgeta moni i kam insait	1,880	1,240	1,300	4,420
Rausim				
Ol moni i go aut (kina)				
1. Kaikai	250	300	300	850
2. Sop na ol narapela samting	60	60	60	180
3. Pawa o kerosin	60	60	60	180
4. Trenspotesen	60	80	40	180
5. Ol kolos	20	200		220
6. Skul fi na ol narapela samting bilong skul	80	60	100	240
7. Bia, pilai laki, smok na buai				
8. Ol narapela samting bilong haus	150			150
9. Wokim na stretim haus				
10. Ol wok bilong komiuniti (ol samting olsem braid prais, funeral)	200		50	250
11. Ol wok bilong sios (10% bilong olgeta moni i kam insait)	188	124	130	442
12. Presen wantok i givim	50		50	100
13. Komiunikesen kos (flex kad na topap)	30	30	30	90
14. Bekim lon	200	200	200	600
15. Ol mani bilong seivim (20% bilong olgeta moni i kam insait)	376	248	260	884
(B) Olgeta moni i go aut	1,724	1,362	1,280	4,366
(A – B) Ol moni i stap yet (sampela i stap/(i sot))	156	(122)	20	54
Balans long pastaim	210	366	244	210
Nupela balans nau	366	244	264	264

Ol Bikpela Poin bilong Topik

Ol bikpela poin bilong tingim:

- ▶ Mekim em i kamap olsem pasin bilong yu long olgeta wan wan de long rekodim olgeta samting yu peim na ol moni yu kisim. Dispela bai i helpim yu long lukluk long hau ol moni i save i go i kam na luksave tu long wanem ol samting yu westim ol moni long ol.
- ▶ Makim SMART mak em inap strongim tingting bilong yu long wok yet long seivim moni.
- ▶ Long baset bilong yu, rekodim ol moni yu seivim olsem samting yu spendim moni long en.
- ▶ Tingim olgeta taim olsem kes flo baset bai i helpim yu long wokim plen bilong ol moni yu yusim na kisim inap long wanpela hap taim olsem olgeta 3-pela 3-pela mun, olgeta 6-pela 6-pela mun, olgeta wan wan yia.
- ▶ Raitim olgeta moni yu spendim i go aninit long nem bilong "samting yu mas peim i no gat senis", "samting yu mas peim i save senis" na "samting yu laikim". Wokim baset bilong samting yu mas peim na traim seivim long ol samting yu laikim.

Sampela Save Moa (Referens)

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TOPIK 7

Seivim moni

Ol Samting bilong Lainim

Taim dispela trening i pinis, yu bai inap:

- ▶ save gut long seivim moni em i wanem samting;
- ▶ kisim save long hau impoten long seivim moni;
- ▶ kisim save long hau yu ken seivim gut moa moni; na
- ▶ makim wanem hap yu bai i putim moni long en.

Kirap bilong Tok

Ol fama long ol ples long Saus Pasifik i nidim ol save bilong stiaim ol yet long seivim moni na bai ol driman bilong ol i ken kamap tru. Taim ol fama i kliagut olsem ol i mas seivim moni long ol samting ol i mas peim bihain, ol bai inap long wokim ol plen long hau ol i mas seivim moni na long wanem hap ol i mas putim moni long en. Dispela topik bai i skulim ol fama long hau ol i ken wokim ol plen bilong seivim moni bilong helpim wok gaden bisnis i go bikipela moa bihain o long peim bikipela kos nau yet ol i no inap long peim.

Seivim Moni em i Wanem samting?

Seivim moni i makim olsem yu makim sampela hap moni na holim ol long sampela hap taim bilong yusim ol bihain, moa yet long yusim ol long samting nau yet yu no inap baim, olsem salim ol pikinini i go long yunivesity, baim haus o kar, o statim bisnis. Nau, piplo i save toktok long seivim moni, tasol tru tru, ol i seivim moni? Yumi olgeta i save olsem em i smat tru long seivim ol moni inap longpela hap taim, tasol planti bilong yumi i painim hat long mekim olsem. Sapos yu laik kamap smatpela man bilong seivim moni, tru, yu mas save long hau yu seivim moni, tasol yu mas skelim gut tu hau yu spendim moni nau yu gat, na hau yu ken kisim moa moni.



Seivim sampela hap bilong ol moni yu kisim long olgeta wan wan taim.
Yu bai i kirap nogut long lukim planti moni yu seivim pinis.

Wai Yu Mas Seivim Moni?

Planti i tok olsem laip i sotpela, olsem na tingting long nau tasol. Em i tru; tasol, tru tru yu inap stap amamas sapos yu jas i stap tasol long wan wan de? Yu ting bai i gat moni inap long salim ol pikinini long skul, baim kar yu driman long en, o peim ol samting yu no ting em bai i kamap olsem sik samting? Long kain taim olsem, yu nidim sampela moni yu bin seivim. Pasin bilong seivim liklik hap moni bai i daunim wari bilong yu taim ol samting i go kranki.

Yu yet i mekim 2

1. Raitim long notbuk sampela as na yu mas seivim moni.

Ol as bilong seivim moni

Yu Mas Kisim Wanem Gutpela Tingting bilong Seivim Moni?

Olsem yumi toktok pinis, planti bai i tok olsem ol i seivim moni bilong helpim ol long bihain, tasol tru tru, ol i mekim olsem ol i tok? Yu ken bihainim ol wei i stap daunbilo bilong seivim gut moni. Pastaim, yu mas makim SMART mak na sekim olgeta samting yu spendim moni long ol.



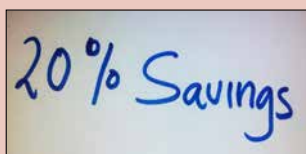
Sapos yu seivim gut moni, yu no bai wari long tumora.

Peim long yu yet pastaim

Taim yu no mekim yet wanpela samting long ol moni yu kisim pinis na dispela moni i stap yet long han bilong yu, orait, yu mas peim long yu yet. Dispela i makim olsem yu seivim sampela hap bilong ol moni yu kisim long seivings akaun bilong yu we yu no fri long kisim moni long en. Sapos yu gat wok skin na kisim ol foftnait pe, yu mas opim seivings akaun na stretim rot bilong benk i ken rausim wantu hamas moni, em yu yet i makim, i go long dispela akaun. Dispela bai i pasim yu long yusim nating na pinisim olgeta moni.

Long ol fama long ples na ol man i no gat ol foftnait pe, i gutpela sapos ol i bihainim tru baset plen. Hap moni yu makim bilong seivim i mas diposit i go long seivings akaun. Makim hamas moni stret yu mas diposit i go insait long seivings akaun long wan wan mun na bihainim tru dispela plen bilong yu yet. Traim bihainim ol dispela wei bilong seivim gut moa. Bai yu kirap nogut long em i isi tru long samting i wok gut:

1. **Seivim 20% bilong ol moni yu kisim. Dispela em i namba wan samting yu mas mekim taim yu kisim moni long han bilong yu.**
2. **10% bilong ol moni yu kisim i mas i go long ol wok bilong sios o ol narapela wok i bikpela samting long yu.**
3. **70% bilong ol moni yu kisim i mas i go long ol narapela samting.**



Opim seivings akaun na seivim 20% bilong ol moni yu kisim.

Yu Seivim Moni We?

I gat tupela hap ol fama long ples i ken seivim moni long en:



1. **seivim long yu yet:** em long seivim o holim moni long sampela bokis long haus, karikarim moni long ol beg, o haitim moni long wanpela ples hait em ol narapela man i no inap painim na stilim.
2. **seivim long benk samting:** seivim moni long benk o mekim olsem long rot bilong seivings na lon sosaiti em ol lo i makim em olsem stretpela ples bilong seivim moni.

Tebol 7.1 na 7.2 i soim ol gutpela sait na ol sait nogut bilong ol dispela wei.

Tebol 7.1: Sampela wei bilong seivim long benk samting

Eksampel bilong seivim moni long benk	Examples bilong seivim moni long ol narapela wei
<ul style="list-style-type: none"> • Seivings akaun long ol benk • Seivings akaun long maikrobenk • Seivim ol moni long diposit akaun i kamapim interest 	<ul style="list-style-type: none"> • Peni bokis long haus • karim raun long bilum na paus • Haitim long ples hait olsem anitim long bed samting long haus • Givim long ol wanblut o ol man yu trastim na bai ol i ken holim long ples seif

Tebol 7.2: Ol gutpela na ol sait nogut bilong seivim long yu yet na long benk samting

	Seivim long benk	Seivim long ol narapela wei
Ol Gutpela Sait 	<ul style="list-style-type: none"> • Seif • Bungim interest • I no hatwok long kisim lon sapos yu seivim moni i stap 	<ul style="list-style-type: none"> • I no hatwok long rausim moni taim yu nidim • I no hatwok long opim akaun
Ol sait nogut 	<ul style="list-style-type: none"> • I hatwok long rausim moni • I hatwok moa long ol fama long ol ples i opim akaun • I hatwok long toktok wantaim ol man bilong benk 	<ul style="list-style-type: none"> • I no seif long holim long haus • I no gat interest • I no gat plen bilong ol moni i ken kamap planti • Fri long yusim bikos yu yet i holim i stap

Yu Putim Moni We?

Yu bin skelim ol gutpela na ol nogut long seivim long yu yet na long benk samting, na yu ken lukim em i gutpela moa long seivim moni long benk samting. Sapos yu seivim moni long benk o narapela lain em ol lo i makim olsem ples bilong seivim moni bai i givim yu interest antap long moni bilong yu. Na tu, em i seif moa long putim moni long benk. Sapos yu holim moni long haus, ol man inap stilim ol moni bilong yu.

Sampela benk long Papua New Guinea em yu ken seivim moni long ol i olsem: the Bank of South Pacific (BSP), ANZ na Westpac. I gat ol mikrobenk olsem Nationwide Microbank, PNG Microfinance na Women's Micro Bank. Yu mas skelim wan wan benk na luksave long wanem benk bai i givim gutpela interest long ol moni yu seivim. Ol benk i no wankain. Olsem na, yu yet i mas glasim gut na makim wanpela benk i nambawan long yu ken seivim moni long en. Fiji Development Bank i tingting strong long sapatim wok didiman na ol i laik givim ol lon inap FJ\$1,000–\$500,000 long ol liklik lain fama na wan wan man.

Ol narapela ples yu ken seivim moni long ol em long seivings na lon sosaiti. Sapos yu wanpela memba bilong ol, yu ken seivim moni. Em i gutpela tru long stadim gut ol gutpela samting bilong ol na ol mak yu mas winim bilong seivim moni long ol, na bai yu ken makim wanpela lain em i nambawan ples long yu yet.

Sampela benk i stap daunbilong em ol i benk ol fama long hap bilong Pasifik i save yusim long seivim o boroim ol moni.



Bank of South Pacific (kisim long: Bing image) na Fiji Development Bank i givim ol lon bilong helpim wok didiman na liklik lain fama (SME) na helpim wan wan man na fama long dispela rot.



ANZ Bank i gat ol brens i stap nabaut insait long kantri. Ol i stap long ol bikpela taun bilong ol provins. (kisim long: Bing image).

PNG National Development Bank i givim ol lon long ol fama na ol narapela SME (kisim long: Bing image).

Westpac Bank i stap long planti hap bilong ol Pasifik kantri.



Nationwide Microbank i gat ol brens long ol taun long olgeta provins (kisim long: Bing image).

Yu yet i mekim 3

1. Mekim wok painimaut na luksave long wanem benk i nambawan gutpela ples bilong seivim moni.
2. Opim nupela seivings akaun.
3. Stat seivim moni long rot bilong dipositim 20% bilong ol moni yu kisim long olgeta wan wan fotnait o wan wan mun.
4. Tingim! Lukluk stret long mak yu laik winim!

Ol Bikpela Poin bilong Topik

Ol bikpela poin bilong tingim:

- ▶ Makim SMART mak yu laik winim taim yu seivim moni.
- ▶ Bilong winim mak bilong seivim, yu mas peim yu yet pastaim.
- ▶ 20% bilong ol moni yu kisim i mas go long seivings; 10% i go long ol bikpela samting olsem sios; na 70% i go long ol narapela samting yu mas peim.
- ▶ Yu mas skelim wan wan benk na luksave long wanem benk i nambawan gutpela benk long yu yet.
- ▶ No ken lusim tingting long opim seiving akaun na stretim rot bilong benk yet i ken dipositim hap moni bilong yu i go long akaun bilong yu sapos yu kisim pe long wan wan fotnait o wan wan mun.
- ▶ Sapos yu mekim bisnis bilong yu yet na kisim kes moni, yu mas tingting strong long winim ol mak bilong yu yet na dipositim moni i go long seivings akaun long olgeta mun.

SAMPELA SAVE MOA (REFERENS)

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TOPIK 8

Ol Lon

Ol Samting bilong Lainim

Taim dispela trening i pinis, yu bai inap:

- ▶ kliagut long fomol kredit i narapela kain long infomol kredit.
- ▶ kliagut long ol narakain wed lain bilong fomol kredit i save yusim;
- ▶ kliagut tru long ol mak yu mas winim long kisim lon; na
- ▶ skelim hau yu ken bekim lon moni.

Kirap bilong Tok

Dispela topik bai i givim infomesen long hau yu ken wokim ol gutpela disisen taim yu laik kisim lon. Lon inap mekim nogut long yu sapos yu no plen gut long hau yu bai i yusim na bekim lon moni. Dispela topik bai i skulim ol fama long kredit em i wanem samting. Lon i no samting narapela i givim nating olsem givim presen; i gat samting yu mas mekim na yu mas bekim lon moni wantaim interest long en. Ol fama husat i laik kisim ol lon i mas wokim plen long hau ol bai i yusim moni, na bai lon i no ken kamap bikpela hevi long ol, nogat. Ol i mas save olsem lon bai kamapim ol moni inap long bekim lon moni. Dispela topik bai i soim ol fama long hau ol i ken kisim lon na long wanem hap ol i ken kisim lon i no gat bikpela interest. Yu ken kisim lon long fomol na infomol wei.

Lon Em i Wanem Samting?

Lon em i moni yu ken kisim long lain bilong lendim moni o long ol narapela man em yu pasim tok wantaim ol long bekim moni wantaim interest long taim bihain. Yu mas wok long bekim sampela hap moni inap long taim yu bekim olgeta lon moni. Ol man i boroim moni bikos ol i no gat inap moni long peim sampela samting na ol sevis long dispela taim.

Wai Yu Nidim Lon?

I gat kain kain as na ol man i kisim lon. Sampela man i boroim moni bilong mekim pe ol i kisim i go bikpela na helpim sindaun bilong ol. Ol narapela i boroim moni bilong kisim amamas o ol samting ol man i no nidim. Dispela i ken mekim na sindaun bilong ol i go nogut moa. Boroim moni bilong kamapim planti moa kaikai long gaden na kisim moa moni em i gutpela as bilong boroim moni bikos dispela bai i mekim sindaun bilong famili i kamap gutpela moa. Ol fama husat i laik mekim wok gaden bisnis bilong ol i kamap bikpela moa, tasol i no gat moni inap long mekim olsem, ol i ken kisim ol lon bilong strongim bisnis bilong ol.



No ken larim lon i kamap wanpela hevi long yu, nogat. Yu mas yusim lon long kamapim moa moni.

Tru tru, yu nidim lon?

Yu mas wokim ol plen long hau yu bai i yusim moni pastaim long kisim lon. Taim yu save tru olsem ol moni yu boroim bai i kamapim moa moni, orait long dispela taim tasol, boroim moni.

Ol lon i no wankain long ol moni ol i givim nating. I gat ol samting yu mas mekim.

Yu Mas Winim Wanem Ol Mak bilong Kisim Lon?

Ol benk na ol lain bilong lendim moni i gat narapela narapela mak bilong lendim moni na narapela narapela lon prodak bilong inapim nids bilong ol kastama. Klostu olgeta benk bai i kisim sampela kain sekiuriti moni pastaim long ol i orait long givim yu lon. Ol benk i no lendim moni wantu tasol, nogat. Ol bai i askim yu long wokim ol plen long hau yu bai i yusim dispela lon. Ol bai i askim yu long wokim ol kain bisnis plen na maketing plen olsem kes flo baset bilong wok gaden bisnis yu tingting long putim moni long en. Em i gutpela tingting tru long mekim wok painimaut long kain kain benk na lain bilong lendim moni long ol prodak ol i gat na ol mak yu mas winim bilong kisim lon. Yu ken kisim lon long benk we yu pilim em i gutpela long kisim lon long en. Askim ol man husat i bin kisim ol lon i wankain liklik long ol lon yu tingting long kisim, long wanem, ol i gat pinis sampela eksperiens long dispela lon. Ol inap givim sampela gutpela tingting bilong helpim yu.

Ol mak bilong lon aplikesen

Lista daunbilo i soim ol samting lain bilong lendim moni inap askim yu taim yu laik kisim lon. I no olsem olgeta lain bai i askim olgeta samting i stap daunbilo.

- ▶ ol rekod bilong soim ol moni yu bin kisim bipo
- ▶ ol rekod bilong soim ol samting yu bin peim (ol resit)

- ▶ ID (aidentifikesen)
- ▶ ol referens em wanpela pas we man i gat gutnem i stori long yu wanem kain man
- ▶ kes flo baset
- ▶ bisnis plen
- ▶ sekiuriti na diposit moni, o wanpela bilong ol
- ▶ tok orait em lain i gat namba i givim bilong ronim bisnis bilong yu (sapos ol i nidim)
- ▶ aplikesen fom yu pulapim pinis.

Hau yu ken wokim ol rekod bilong putim aplikesen long lon

Holim olgeta rekod bilong ol moni yu bin kisim bipo insait long wanpela folda sapos yu mas soim hamas moni yu bin kisim na hamas moni yu bin spendim. Ol rekod bilong ol seiving em i gutpela tu long soim gutpela pasin bilong yu long seivim moni na peim long ol taim stret.

Ol rekod i olsem:

- ▶ sels bilong ol gaden kaikai long stua, supamaket o prosesa
- ▶ ol resit bilong peim ol samting
- ▶ rekod bilong ol pe
- ▶ pasbuk bilong seivings
- ▶ ol benk stetmen.

I gutpela long wokim kesbuk bilong rekodim ol moni yu kisim na ol moni yu spendim long ol samting (ol ikespens). Dispela bai i helpim yu. Kesbuk i gat lista bilong ol moni yu bin kisim na ol kos yu bin peim long bipo, na dispela i ken helpim yu long painimaut hamas moni yu ken kisim na hamas kos yu mas peim long taim bihain na bai yu ken wokim kes flo baset.



Yu Ken Kisim Lon We?

I gat tupela kain kredit em ol fama long ples i ken kisim. Yu ken kisim lon long fomol na infomol wei. Tebol 8.1 na 8.2 i soim hau fomol na infomol lon i narapela narapela na ol gutpela na sait nogut bilong ol.

Tebol 8.1: Eksampel bilong fomol lain na infomol lain bilong givim ol lon

Ol fomol lain	Ol infomol lain
<ul style="list-style-type: none"> • Lon em benk i givim • Lon em seivings na lon sosaiti i givim • Ol lon i kam long kredit skim (sid fanding o distrik kredit skim) 	<ul style="list-style-type: none"> • Moni lenda • Ol lon i kam long wantok (famili memba) • Mekim ol wok • Baim ol samting long kredit

Tebol 8.2: Ol gutpela na ol sait nogut bilong ol fomol na infomol lon

	Fomol kredit	Infomol kredit
Ol Gutpela Sait 	<ul style="list-style-type: none"> • Interest reit i daunbilo moa moa yet long infomol kredit • Givim bikpela lon moni bilong helpim ol bikpela projek 	<ul style="list-style-type: none"> • I no hatwok liklik long kisim
Ol sait nogut 	<ul style="list-style-type: none"> • Planti liklik lain fama i no inap long winim ol mak bilong kisim lon • Nidim sekiuriti o diposit moni pastaim long kisim ol lon 	<ul style="list-style-type: none"> • Interest reit i antap tumas, planti taim, em winim 40% long lon bilong sotpela hap taim • I no save givim ol bikpela lon, winim K.1,000 em nogat tru

Fomol lon em long boroim moni long ol benk na ol lain bilong lendim moni em ol lo i luksave long ol. Kredit i no wankain long ol moni ol narapela i givim nating. Yu mas bekim inap long taim ol i makim. Ol inap askim yu long ol penalti fi na ol fi bilong akaun mentenans, na olgeta samting bai i pinis sapos yu no bekim ol lon.

Yusim kredit long kain taim olsem:

- ▶ yu inap bekim lon moni
- ▶ lon bai i helpim wok gaden bisnis na sindaun bilong yu i kamap gutpela moa
- ▶ yu kligut long ol samting yu mas bihainim bilong kisim fomol kredit.

Olgeta maikrobenk na sampela komerial benk i save givim kredit long ol fama long ol ples na ol man i no wok long ol kampani. Sapos yu tingting long kisim lon bilong mekim wok gaden bisnis bilong yu i kamap bikpela moa, i gutpela long mekim wok painimaut na luksave olsem wanem benk bai i givim ol lon i no gat bikpela interest em i gutpela long yu. Bilong kisim lon, pastaim, yu mas opim seivings akaun wantaim ol lain i givim ol lon i gat seivings interest i antap na interest reit i daunbilo. Yu ken yusim ol moni yu bin seivim olsem samting benk i ken makim bilong holim (collateral) na ol i ken orait long givim lon.

Bekim Lon Moni

Eksasais eksampel daunbilo long hau wanpela fama i ken bekim lon moni bai i givim yu sampela tingting long hau yu ken kalkuletim ol moni bilong bekim lon moni wantaim interest reit.

Olsem:

Fama bilong wokim ol kumu i laik kisim lon bilong mekim bisnis bilong em i kamap bikpela moa na bai em i ken salim ol gaden kaikai long nupela maket. Ol moni (kos) em i nidim bilong mekim bisnis i go bikpela em i K3,000 bilong statim wok. Fama yet i no gat moni inap long mekim bisnis i go bikpela. Olsem na, em i laik kisim lon bilong mekim olsem.

Na nau, dispela fama i go lukim lain bilong benk i save givim ol lon long ol liklik fama i gat kes flo baset i wankain liklik olsem bilong em, na givim aplikesen fom bilong K3,000 long benk. Benk i orait long givim lon na dispela fama i kisim K3,000

lon long flet interest reit bilong 10% inap long wanpela yia. Hap taim ol i makim bilong bekim lon moni em i 3-pela yia. Em i mas kirap bekim lon moni 3-pela mun bihain long fama i kirap salim ol kumu. Kalkulesen daunbilo i soim hau em i mas bekim lon moni insait long 3-pela yia.

Hammas moni dispela fama i givim bek?

- ▶ Bilong statim wok = K3,000.00
- ▶ Hap taim em i mas bekim lon = 3-pela yia = 36 mun
- ▶ Flet interest inap wanpela yia = 10% bilong K3,000.00 = K300.00
- ▶ Flet interest inap 3-pela yia bilong bekim lon = $K300 \times 3 \text{ years} = K900.00$
- ▶ Olgeta moni bilong givim bek = statim moni + flet interest = $K3,000.00 + K900 = K3,900.00$
- ▶ Moni em i bekim long wan wan mun = $K3,900.00 \div 36 \text{ mun} = K108.33/\text{mun}$

Fama bai i bekim **K108.33** long wan wan mun insait long **3-pela yia**.

Ol Wed Bilong Yusim Taim Yu Aplaim ol Lon

Tebol 8.3 i soim ol wed ol i save yusim long taim bilong aplaim ol lon.

Tebol 8.3: Ol wed bilong yusim long taim bilong aplaim lon

Ol wed ol i save yusim	Mining
Interest	Sampela moni moa yu mas peim antap long ol moni yu boroim. Ol bai i sasim long % reit. I gat tupela kain interest bilong ol lon: <ol style="list-style-type: none"> 1. flet interest, em ol i sasim interest antap long ol moni yu pastaim. Ol bai i sasim wankain interest moni long wan wan hap taim ol i makim 2. simpol interest, em ol i sasim interest antap long hammas moni yu boroim yet. Olsem na, interest moni i wok long i go daun taim yu wok long bekim lon moni.
Interest reit	Ol i kolim ol namba bilong Interest long pesenteji (%). Ol i save kolim samting olsem "OO% long mun" o "OO% long yia".
Prinsipal	Principal em i ol moni yu boroim pastaim. Yu mas bekim principal wantaim interest bilong en.
Lon ripeimen	Lon ripeimen em olgeta moni bilong prinsipal na interest wantaim em yu mas bekim. Yu mas bekim peimen long olgeta wan wan mun samting.
Lon tem	Lon tem em i hap taim olsem sampela mun o sampela yia em yu wok long bekim lon moni. Inap long pinis bilong dispela hap taim, yu mas bekim olgeta lon moni.
Fi	Yu mas peim interest, na tu ol narapela moni ol bai i sasim taim yu boroim moni. Ol i kolim ol dispela narapela moni ol i sasim olsem ol fi. I gat kain kain fi olsem: stamp diuti, fi bilong yusim ol sek, fi bilong rausim moni long ol moni yu seivim, na fi bilong leit peimen.
Difolt penalti	You mas peim moa moni long ol man husat i givim lon long yu sapos yu no bekim moni long taim ol i makim. Ol i kolim dispela olsem difolt penalti (o difolt fi).
Areas	Sapos yu stop long bekim lon, yu bai i stap long areas.

Ol wed ol i save yusim	Mining
Colateral (sekiuriti)	Sampela taim, lain bilong givim lon bai holim pastaim ol samting bilong yu olsem ol mani yu seivim, ol diposit, graun, haus o kar, na nau, ol bai i givim lon long yu. Ol i kolim dispela olsem colateral o sekiuriti.
Gres piriod	Sampela taim, yu no gat wok long bekim hariap lon moni bihain long yu kisim prinsipal. Sampela taim, ol i larim yu long sampela hap taim ol i kolim 'gres period' inap long taim yu kirap bekim moni.
Tems and Kondisens	Tems and kondisens i olsem ol tok promis yu mas inapim taim yu boroim moni long lain bilong givim ol lon.

Ol Bikpela Poin bilong Topik

Ol bikpela poin bilong tingim:

- ▶ Lon i no mani narapela man i givim nating — Lon i save kam wantaim ol wok yu mas mekim. Yu mas bekim lon moni wantaim interest.
- ▶ Kisim lon sapos yu luksave tru olsem lon moni bai mekim wok gaden bilong yu bai i kamap bikpela moa na helpim sindaun bilong famili bilong yu. Kisim ol lon bilong kisim amamas tasol em bai mekim sindaun bilong yu bai i go nogut moa.
- ▶ I gutpela tru sapos ol fama i kisim lon long wanpela benk o lain bilong lendim moni, em ol lo i orait long en, em i save givim ol lon wantaim interest i daunbilo moa long interest bilong ol infomol lon.
- ▶ Kisim infomesen long kain kain lon prodak bilong ol narapela narapela lain bilong givim ol lon bipo long yu wokim tingting long kisim lon.
- ▶ Ol fomol benk i save i gat ol mak yu mas winim pastaim long ol i tok orait long givim yu lon. Tingim, yu mas givim olgeta samting wantaim lon aplikesen taim yu aplaim lon.
- ▶ Wokim ol rekod ol i mas lukim olsem ol rekod bilong seivings, ol resit bilong salim ol gaden kaikai, o kain samting olsem na bai yu ken aplaim lon.
- ▶ Yu mas kliagut long hau yu ken kalkuleitim hamas moni yu mas bekim long wan wan mun na sediul bilong mekim olsem.

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