

Food Preservation

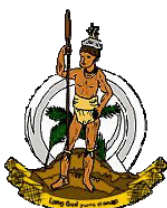
Solar Fruit Dryer

blong

Adapt long Climate Change long Vanuatu



**SPC-GIZ COPING WITH CLIMATE CHANGE
IN THE PACIFIC ISLAND REGION**



Contents

Background mo Introdaksen	4
Food Preservation	4
Adaptesen long Climate Change	4
Value Adding	4
I No Sas Tumas	4
History blong Draem ap Fruits long Vanuatu	4
Hao blong buildim wan Solar Draea	5
Sam Pats blong Solar Draea	5
Materials we bae yu nidim-Model N1	6
Steps blong Buildim Solar Draea MN1	6
Demonstration blong Model N1	6
Samfala Rekomendesen:	7
Sketch blong Model N1	7
Hao blong Draem ap ol Fruit	8
Ol Fruits	8
Samfala Rekomendesen	8
Hao blong Handelem ol Fruits:	9
PawPaw Loli	9
SoSop Balls	10
Wild Raspberry Balls	11
Suka [Sugar] Tamarind	11
Tamarind Syrup	12
Coconut Balls	13
Drae Mango	13
Drae Nangae	14
Drae Pineapple	15
Drae Banana	15
Drae Tomatoes	16
Drae Chili	16
Hot Chili	16
Swit chili	17
Drae Fish	17
Drae Manioc /Cassava chips	18

Kumala Chips.....	18
Banana Chips.....	18
Hao blong Pakegem mo Storem Fruits	19
Taem yu usum Cellophane Plastic blong pakegem drae fruits	19
Comments long saet blong draem ap fruits:.....	20
BLONG KAREM MOA INFORMESEN:	20

Background mo Introdaksen

From wanem nao bae yumi mas draem ap ol fruits?

Food Preservation – Hemi wan wei blong kipim kaekae i save stap sef long taem.

Wetem climate change plante long ol crops mo fruit trees blong yumi lo Vanuatu bae oli stap jenisim ol fasin blong karem/mekem fruit. Folem global warming, bae ol tri oli save givim plante fruit, mo samtaem oli stap givim smol nomo. Samtaem ol fruit oli kam long stret taem, samtaem oli kam we i no taem blong hem folem climate change. Fasin blong draem ap fruits hemi save helpem yumi adapt or save hao blong liv wetem ol jenis blo climate change mo blong sevem or preservem ol kaekae ia nomata wanem taem ol tri oli karem fruit.

Adaptesen long Climate Change

Climate Change hemi wan bigfala issue long Vanuatu, mo hemi minim se bae i kat ol bigfala jenj long laef blong yumi wanwan. No gud ol jenj i kam mo yumi stap nating nomo. Yumi mas stap tekem sam smol smol aksen blong taem we climate i jenj yumi redi long hem finis. Ol aksen ia oli kolem ‘adaptesen’. Wan wei blong yumi laef wetem climate change hemi blong draem ap ol fruit we bae oli save fidim yumi long taem blong climate disasta olsem cyclone.

Value Adding

Taem yu stap draem ap fruit blong salem, oli kolem value adding. Tingbaot taem yu salem wan fres pawpaw long maket. Man i pem long wan low price nomo from hemi fresh fruit mo ino save stap long taem, man we i

pem i mas kaikai pawpaw ia long sem or nekis dei nomo from bae I raef tumas mo bae I go nogud. Be taem yu draem ap, i save stap long taem. Afta bae ol man oli save pem long wan high price, from you adem wan samting long prodak blong yu blong mekem se hemi moa useful long ol man olsem, hemi save stap long taem.

I No Sas Tumas

Fasin blong draem ap ol kaekae mo fruits hemi wan esi mo jip fasin blong kipim kaekae i stap long taem. Long ol aelan blong Vanuatu yumi gat fulap kaekae mo fruits be fulap taem I stap go nogud quick taem from yumi no save sevem mo ol market blong salem kaekae long wan gudfala praes oli stap long wei. Mo tu klaemet blong yumi hemi humid mo hot mekem se kaekae I raep mo go nogud quick taem. Ol Boat, plane mo truck oli expensive blong tekem kaekae i go long market or taon. Transpot I pas long fulap ples mo I tekem long taem bifo i kasem market, taem ia fulap fruits mo kaekae I stap sting finis bifo I kasem market.

Fasin blong draem ap fruits/kaekae I save katem daon sam problem ia mo usum gud everi gudfala kaekae mo resos long wan jip fasin. Yumi save draem ap kaekae nomo long aelan mo lukluk bak long ol olfala fasin blong kipim ol kaekae blong yumi I stap gud long taem.

History blong Draem ap Fruits long Vanuatu

Ol man Vanuatu oli stap draem ap fruit long taem i kam. Long samfala ples, hemi fomem pat long kastom mo kalja long ol aelan. Yumi stap luk ol man oli stap draem ap fruit blong kipim I stap longfala taem. Ol man long Torres oli stap draem ap ol bredfruit blong

givim kaekae bakagen long olgeta long taem blong cyclone.

Kava Sto nao long Port Vila hemi faonda blong commercial [mekem vatu] lo saed blong draem ap fruits long Vanuatu. Mr Charles Long Wah i bin statem bisnis wetem dry kava mo swit pinat (200pkts/yr) long 1962. Evri wik hemi bin stap brodcas long redio blong ol man oli planem mo kava blong Salem. Olsem result blong wok blong hem naoia industry blong kava hemi bitim 7 billion vatu we Mani ia i stap ko bak long ol fama without eni help blong gavman.

Mr. Charles hemi stat blong draem ol narafala fruits long 1987, mo hemi stap inkrisim prodaksen blong hem long evri yia. Tedei Mr. Charles i stap draem ap ol fruit olsem pawpaw, tomato, chili, sosop, raspberry, coconut loli, mango mo suka tamarind. Long evri yia, Kava Store i stap Salem ova long 20 ton tamarind we hemi stap winim ova long 6million long wan yia. Hemia hemi domestic market nomo. Be ol nara kaontri oli stap toktok i kam se oli nidim ova thousand ton blong tamarind long ol own maket blong olgeta.

Vanuatu hemi no save kam part blong expotem ol tamarind iko ovasis yet from long local market nomo yumi stap run short long stock. I minim se yumi mas planem moa long ol tamarind ia we yumi save inkrisim saplae.

Hao blong buildim wan Solar Draea

Sam Pats blong Solar Draea



Mesh wire trays and dehydrator trays on floor tiles



Solar Panel



DC Fans

Materials we bae yu nidim-Model N1

- ✓ 4pcsxPine Nz 150x75 treated
- ✓ 3x 2440 x 1200 plywood flat base (15mm)
- ✓ 1x 2160 Pine NZ 75x50 Treated (6m)
- ✓ 1x 12 Pine 50x50 Treated (6m)
- ✓ 1pcsx Pine NZ 150x50 Treated (6m)
- ✓ 1x Box timber screws 14 -10 x 100mm
- ✓ 3x Box Chip board 10-8 x 100mm
- ✓ 4x Nail Flat HD 500G 100x 4.5mm
- ✓ 3x Nail Flat HD 500G 75x3.75mm
- ✓ 1x Nail BLT 250G 40x2.0mm
- ✓ 1x Nail BLT 500G 50x 2.0mm
- ✓ 1x Pk Bit D'end Philips no.2 65mm
- ✓ 1x Tape measure 10m/33x25mm
- ✓ Resene [painted black]
- ✓ 2 x DC electric fans 3 watts
- ✓ 2 pcsX1.45m Zinic/aluminium steel roofing steel
- ✓ 2pcsx 2.44m Zinic/aluminium plane flat kappa
- ✓ 2 x small solar panels
- ✓ 3m x clear white plastic
- ✓ 2m Grillage Dimier 13x15x25 net wire
- ✓ 2M window screen net

Steps blong Buildim Solar Draea MN1

1. Buildim frames blong draea folem size blong kappa o plywood
2. Usum plywood olsem base blong box
3. Putum flat kappa antap long plywood
4. Katem tufala hol blong fans I go tru long end blong flat kappa mo plywood blong fitim DC fans I go long tufala hol blong fan.
5. Putum 3 pis blong timba antap long base, ova long fans blong putum black kappa I sit daon long hem.
6. Bildim frame blong rof mo kaverem ap wetem clear plastic.

7. Bildim cover blong draea- wan saet we tufala fans I sit daon bae yu kavrem ap gud long tugeta saed. Narafala haf saet, we ol tray I stap long hem bae yu kavremap gud wan saed afta nara saet bae yu mekem blong save openem haf wei olsem windo o doa.
8. Bildim ol frame blong tray mo putum net wires over long frames.
9. Layem down ol tile, flat stone o ol pis wood /timba antap long flat kappa blong putum mesh wire trays antap long hem.
10. Buildim leg, post or stand blong Solar draea i go anatap olsem 1 -2 meters mo blo i blokem dog mo ol animol i no spolem ol connection blong fan wetem solar or pulum aot ol kaekae.
11. Bildim haus o usum spes yu gat finis blong putum draea blong yu insaed long taem blong cyclone.

Demonstration blong Model N1



Rope blong solar panel i konekt wetem DC fans

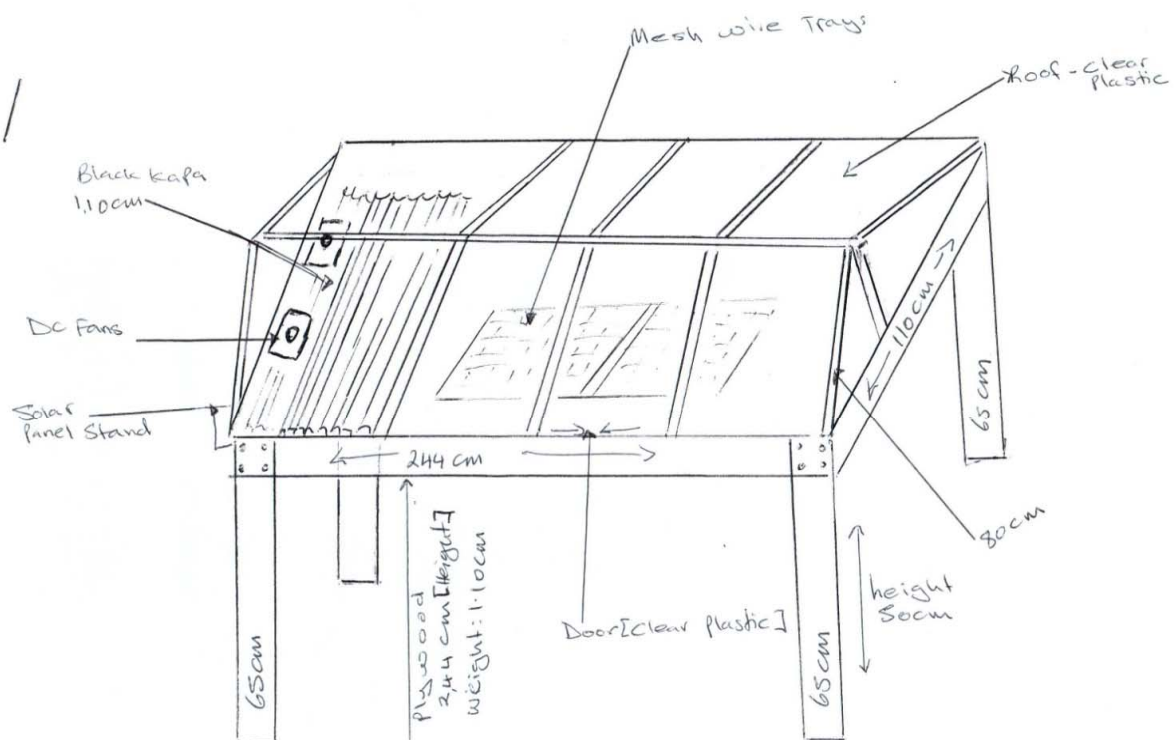
Samfala Rekomendesen:

- Putum Solar Panel antap long frame blong solar draea. o antap long black kapa insaet long solar draea. O long saed blong draea
- Buildim frame blong solar draea depen long risos we yu gat. I save wan flat o tu side- frame



Bildim leg/post blong draea i go ant lo 1-2 meters mo.

Sketch blong Model N1



Hao blong Draem ap ol Fruit

Ol Fruits

I kat 4 main fruits we I stret mo isi blong mekem loli long hem: Pawpaw, Sosop, Wild Raspberry, and Suka [Sugar] Tamarind.

Ol narafala kaekae o fruits we yu save draem ap hemi: Coconut, Mangoes, Nanngae, Banana, Pineapple, Tomatoes, Chili, manioc [cassava], and fish mo ol narafala kaekaie mo fruits.

2 Steps:

Blong mekem drae fruit, I kat 2 main samting we bae yum as mekem:

1. Kukum ol fruit wetem suka mo wota
2. Draem ap long solar fruit dryer

Sapos yu no kukum ol fruit ia festaem, bae oli no save wokat long dryer!!

Samfala Rekomendesen

Hemi impotan tumas blong mekem stret measurement blong mixim ol fruits wetem suka. REMEMBER:

- SUKA nao hemi main samting we I mekem syrup blong yu I gud blong 1) kipim drae fruits I stap long taem mo 2) mekem drae fruits I taste gud.
- Hemi impoten se yu usum stret measurement blong SUKA. From se size mo taste blong ol fruits I diferen, amount blong suka we bae yu usum bae I diferen
- Sapos yu no sua hamas suka blong usum, klosap everi fruits I save work wetem 1 cup suka, 1 cup wota, 1 cup fruits.

Exampol: Usum cup long ol aelands blong measure: 2 cup grated pawpaw, 2 cup wota mo 2 cup suka

- Long ol smol project blong draem ap kaekae bae yu usum: 1 liter wota, 1 kilo suka mo 1 kilo fruits we I redi finis. Sapose hemi wan bigfala project blong draem ap kaekae bae yu yusum: 10kgs blo fruits we I redi finis, 4liters wota mo 2kgs suka.
** Measurement blong wota mo suka bae i depen long kilo blong fruits we yu preperem.
- Hemi importen blong boilem gud suka I mixem gud wetem ol fruits.
- Mekem sua se ol tools blong usum hemi stap klin oltaem.
- Sapos yu mekem gud mix blong ol fruits mo suka bae produk blong yu I save stap long taem mo quality blong hem bae I gud.
- Long ol aelan some taem yumi no gad ol raet tools blong measure mo taem yumi talem 5 kilos hemi klosap 8 fruits pawpaw be hemi maet no stret from size blong fruits hemi diferen. So hemi gud yu thing baot mo mekem wanem I stret folem amount blong fruits o risos we yu gat.
- Taem yu stap draemap ol fruits, hemi important se yu no mas kukum fruits quick taem tumas. Letem I kuk o boil slo blong ol fruits I mix gud wetem suka blong mekem gud syrup. Taem syrup I gud bae hemi helpem drae fruits I no go nogud mo I save stap long taem.
- Hemi important blong no boilem fruits tumas from bae oli kam olsem jam.

- Hemi gud blong mixim mo livim ol fruits wetem suka syrup mix blong I save givim wan gudfala result.
- Syrup: hemi wota blong eni fruits wetem suka we yu boilem, olsem syrup blong pawpaw, mangoe, tamarind etc.
- Cellophane plastic: hemi ol plastic blong peanut o chips we bae yu pakegem ol prodak blong yu.

Hao blong Handelem ol Fruits:

Yu mas tingbaot gud ol shapes mo size blong ol finis prodak (drae kaekae) taem yu stap preperem ol fruit blong kukum mo draem ap. No katem I smol tumas mo rememba se shape mo size I tekem attention mo intres blong pipol sem mak nomo olsem taste blong kaekae.

Fasin blong mekem sua se kaekae I klin oltaem:

Rule namba 1: WASHEM HAND I KLIN OL TAEM

Rule namba 2: WASHEM OL TOOLS BLONG YU MO KIPIM LONG KLIN PLES

Rule namba 3: KAVREMAP OL KAIKAI LONG KLIN NET O KALICO OL TAEM

Rule namba 4: MEKEM SURE SE PLES WE YU STAP PREPEREM OL KAIKAI MO PLES WE SOLAR DRAE I STAP LONG HEM I MAS KLIN OLTAEM!!

Rule namba 5: YU MAS TING BAOT OLTAEM SE HAO MO PLES WE YU PREPERAEM KAIKAI- YU MAS TING BAOT BASIC HEALTH RULES OLTAEM!!



PawPaw Loli



Materials

- ✓ 1kilo blo haf raep pawpaw [we yu karem aot skin mo sids finis]
- ✓ 1liter wota
- ✓ 1kilo suka.

Steps

1. Washem Pawpaw mo karem aot skin mo washem pawpaw bakagen.
2. Gretem [rasrasem] pawpaw usum grater we spes blong hemi I no sol tumas mo getem pawpaw i go long wan dish.
3. Boilem 1 liter wota mo 1 kilo suka. Fastaem long wan sospen. Taem emi boil, yu adem 1 kilo pawpaw i go long wota ia we i stap boil.
4. Boilem mix ia lo 30 minits-tantanem slow usum wan spon.

5. Blong karem aot syrup wota, strainem aot wota blo pawpaw long wan dish mo letem i kolkol lo 2- 5 haos; REMEMBA BLONG STOREM GUD WOTA BLONG SYRUP.
6. Putum plastic or sreen net blong window [mas klin] antap long mesh wire tray.
7. Usum spoon [i depen long size yu wantem] mo arenjem ol mix [pawpaw] olbaot antap long mesh wire trays.
8. Putum pawpaw long solar draea.
9. Tantanem Pawpaw we i stap long tray afta long 8 hours blong mekem se pawpaw i no stick long net.
10. Draem ap bakagen long 1- 2 deis -depen long sun mo karem aot mo rolem usum hand blong yu blong mekem ol shapes blong loli yu wantem.
11. Putum i go bak long mesh wire tray insaed long draea
12. Draem bakagen long 3 deis- depend long sun. Tantanem pawpaw wan taem long wan dei kasem long 3 deis i finis.
13. Karem aot drae Pawpaw long mesh wire trays mo pakegem long cellophane plastics, bottles o jars mo silim gud plastic or sarem gud lid mo storem gud.



SoSop Balls



Materials

- ✓ 1kilo blo raep sosop fruit [we yu karem aot sids mo skin finis]
- ✓ 1liter wota
- ✓ 1Kilo suka

Steps

1. Karem aot skin mo sids blong sosop.
2. Tantanem mo mixim gud sosop insaet long wan dish.
3. Putum 1 liter wota mo 1 kilo suka go lo wan sospen mo boilem.
4. Taem emi boil, adem 1kilo blo sosop i go long wota we i stap boil.
5. Boilem mix ia lo 1 haoa mo 30 minits- Tantanem sloslo mo putum mix ia i stap kolkol blong syrup i mix gud wetem fruits.
6. Sevem aot wota blong syrup mo letem i kolkol lo 2- 5 haos: YU NO MAS FOGETEM blong storem gud syrup.
7. Putum plastic or klin net screen ANTAP long ol mesh wire trays.
8. Usum spoon [depen lo size yu wantem] arenjem sosop olbaot antap long mesh wire trays.
9. Putum sosop long solar draea
10. Usum spoon or hand blong yu mo tantanem Sosop long tray afta 8 haos we yu putum long draea. Fasin ia hemi blong sosop i no fas long tray/net/plastics surface.
11. Draem ap bakagen lo mesh wire trays lo 1 dei depen long sun mo rolem long

- hands blong yu blong mekem ol shapes blong loli we yu wantem
12. Placem ol sosop ia i go bak long mesh wire tray
 13. Draem ap bakagen lo 3 moa deis, tantanem wan taem long wan dei kasem 3 deis i finis.
 14. Karem aot ol drae sosop aot long mesh wire trays mo fulumap long cellophane plastic, bottle o jar mo sareme gud lid o silim gud plastic mo storem gud.

Wild Raspberry Balls

Materials

- ✓ 1kilo blo wild raspberry fruit
- ✓ 1liter wota
- ✓ 1Kilo suka

Steps

1. Karem aot ol rop mo lif long Raspberry fruits.
2. Washem o rinsim gud Raspberry.
3. Putum 1 liter wota mo 1 kilo suka I go lo wan sospen mo boilem.
4. Taem emi boil, adem 1kilo blo raspberry i go long wota we i stap boil.
5. Boilem mix ia lo 1 haoa mo 30 minits- Tantane sloslo mo putum mix ia i stap kolkol blong syrup i mix gud wetem fruits.
6. Sevem aot wota blong syrup mo letem i kolkol lo 2- 5 haos: YU NO MAS FOGETEM blong storem gud syrup.
7. Putum plastic or klin net screen ANTAP long ol mesh wire trays.
8. Usum spoon [depen lo size yu wantem] arenjem raspberry olbaot antap long mesh wire trays.
9. Putum raspberry long solar draea
10. Usum spoon or hand blong yu mo tantanem Raspberry long tray afta 8 haos we yu putum long draea. Fasin ia hemi blong sosop i no fas long tray/net/plastics surface.

11. Draem ap bakagen lo mesh wire trays lo 1 dei depen long sun mo rolem long hands blong yu blong mekem ol shapes blo loli we yu wantem
12. Placem ol Raspberry ia i go bak long mesh wire tray
13. Draem ap bakeken lo 3 moa deis, tantanem wan taem long wan dei kasem 3 deis i finis.
14. Karem aot ol drae Raspberry aot long mesh wire trays mo fulumap long cellophane plastic o lo wan bottle o jar mo sareme gud lid o silim gud plastic mo storem gud.

Suka [Sugar] Tamarind



Materials

- ✓ 1kilo blo drae mo raep Tamarind fruit [we yu karem aot skin finis]
- ✓ 1liter wota
- ✓ 1Kilo suka

Steps

1. Karem aot skin blong drae raep Tamarind kasem 1 kilo.
2. Boilem Syrup: putum 1 kilo suka wetem 1 liter wota long wan sospen mo boilem
3. Taem Syrup i boil, putum everi Tamarind [1kilo] insaed long syrup wota mo letem i boil 5 moa minits, tantanem smol mo

karem aot long fae mo lego i stap ova naet i kolkol lo 2-5 haos.

4. Long nekis dei o afta 5 haos, sevem aot syrup wota
5. Putum plastics o screen net antap long mesh wire trays.
6. Arenjem mix ia long mesh wire trays, putum long solar draea mo draem ap long wan dei [depen long sun]
7. Karem aot Tamarind mo mixim wetem suka mo draemap bagegen lo wan moa dei.
8. Karem drae Tamarind aot long mesh wire trays mo fulumap long cellophane plastics, bottle o jars mo silim gud plastic o sarem gud lid mo storem gud.



Tamarind Syrup

Sirop wota we yu no usum blong draem ap ol fruit, yu save usum blong mekem jus blong drink. Yu save usup sirop wota blong tamarind long fulap narafa samting olsem usum blong kukum mango, sopsop mo pawpaw o usum olsem syrup blong coconut loli. Mo tu u save usum Tamarind Syrup taem yu no gat corn syrup blong kuk wetem.



Materials

- ✓ 3 kgs blong Tamarind we yu karem aot skin finis
- ✓ 4 liters blo wota
- ✓ 1 kg suka.

Steps

1. Putum 4 lita wota wetem 1 kilo suka mo boilem insaed long wan sospen.
2. Taem syrup i boil, adem ap Tamarind I go long boiling syrup wota lo 5 minits
3. Sevem aot Tamarind syrup
4. Blong mekem syrup i thick mo mix gud: Adem ap 1 kilo sugar mo i go long tamarind syrup mo letem I boil lo 2 minits.
5. Letem I kolkol mo storem long bottles.
6. Sapos yu no gat Tamarind fruits blong mekem tamarind syrup- Putum 1 liter wota mo 1 kilo suka I go long sospane mo boilem. Yu save adem ap eni fruits we yu gat olsem 1 kilo, pawpaw, sopsop o pineapple. Wota blong ol fruits ia hemi kam wan syrup, storem gud blong usum taem u stap draem ap fruits.

Coconut Balls



Materials

- ✓ 1 kilo drae coconut fruits we yu grettem finis
- ✓ 1 liter corn syrup [pem long sto]. O saposu yu stap lo aelan yu boilem 1 liter wota wetem 1kg sugar blong mekem syrup.
- ✓ food coloring[color blong mekem cream blong cake]
- ✓ 1 kilo suka.



Steps

1. Graitem (sikarase) drae coconut -white pat blong hem nomo
2. Kareme aot eni brown pis
3. Squeezem out milk blong drae coconut
4. Putum plastic or net screen long mesh wire trays mo putum drae makas blong coconut i go long mesh wire tray ia mo draem lo 1 dei long solar draea
5. Brekbrekem makas blong coconut i smolsmol usum hand blong yu, mekem i kam klosap olsem powder.
6. Mixim 3 kilo dehydrated coconut ia wetem 1 liter blong corn syrup.
7. Rollem ol mix ia long ol smolsmol ball o loli size
8. Kapsaetem color blong cake cream i go long ol diferen bowl [blue, green, red, orange or yellow...]
9. Dipim ol coconut balls i go long ol color we yu wantem
10. Putum ol color coconut balls i go back long dehydrator trays mo draem ap bakagen lo haf dei.
11. Taem coconut rolls oli drae, kareme aot long mesh wire trays mo fulumap long cellophane plastics, bottles o jars mo silim gud plastics o sareme gud lids mo storem gud.

Drae Mango



Materials

- ✓ 1 kilo mango we oli haf haf grin I stap
- ✓ 1 kilo suka
- ✓ 1 Liter wota

Steps

1. Washem ol mango, karem aot skin mo washem bakagen
2. Slaicem tufala sides blong mango lo flat shapes be bae i no thinthin tumas
3. Putum 1 liter wota mo 1 kilo suka long wan sospen mo boilem mix ia lo 10 minits.
4. Putum ol slice mangoes i go long swit wota mix ia mo letem i boil lo 1 haoa 30 minits- bae yu stap tantanem smol.
5. Karem aot long faea mo letem mix i kolkol lo 6 haoa o i stap ova naet [sapos ova naet bae yu boilem smol taem bakagen long nekis dei]
6. Sevem aot syrup i go long wan bowl
7. Arenjem ol pis mangoes long mesh wire trays mo draem ap lo haf dei- depen long sun.
8. Tantanem Mangoes wan taem long wan dei kasem 3 deis i finis.
9. Karem aot drae mangoes aot long mesh wire trays mo fulumap long cellophane plastics, bottles o jars mo silim gud plastics o sarem gud lid mo storem gud.



Taem ol mango oli drae oli swit gud mo hemi wan gudfala helti snak blong ol pikinini.

Drae Nangae



Materials

- ✓ 1 kilo Nangae we yu karem aot shell mo skin finis
- ✓ 1 kilo suka
- ✓ 1 liter wota

Steps

1. Harvestem Nangae
2. Crakem shells blong Nangae sem dei
3. Prepeerem syrup: Boilem 1 kilo suka wetem 1 liter wota
4. karem aot skin blong Nangae mo i redi
5. Dipim Nangae i go long Syrup lo 2 minits
6. Karem aot long faea, drainem aot syrup wota mo spredem Nangae long mesh wire trays.
7. Letem i drae lo 2-3 deis [depen lo sun]
8. Taistem [traem kaikai] drae Nangae afta lo 3 deis- Bae i redi sapos i crunchy.
9. Karem aot Nangae long mesh wire trays mo fulumap long cellophane plastic, bottles o jars mo silim gud plastic o sraem gud lids mo storem gud.

Emi important blong usum Nangae we yu kilim o crackem long sem dei blong mekem i taste fresh istap taem yu draem finis.

Drae Pineapple



Materials

- ✓ 1 Kilo blo raep pineapples we yu slaicem finis
- ✓ 1 kilo suka
- ✓ 1 lita wota

Steps

1. Harvestem mo katem aot skin blong raep pineapples
2. Slaicem pineapples lo circle slices be bae ino thin tumas
3. Preperem syrup: Boilem 1 kilo suka mo 1 liter wota
4. Dipim Pineapple slices i go long syrup mo letem i boil lo 5 minits
5. Drainem aot syrup wota mo putum ol slices lo mesh wire tray mo draem ap long solar draea.
6. Tantanem ol slices wantaem long wan dei kasem 3 deis i finis.
7. Karem aot drae Pineapple long mesh wire trays mo fulumap long cellophane plastics, bottles o jars mo silim gud plastics o sarem gud lids mo storem gud.

Drae Banana



Materials

- ✓ 1 Kilo raep banana we yu karem aot skin finis
- ✓ 1 kilo suka
- ✓ 1 liter wota
- ✓ 4-6 lemons

Steps

1. Karem aot skin blong Banana mo
2. Slaicem Banana lo haf
3. Boilem sugar wetem wota mo adem banana I go long mix ia mo letem I boil 5-10 minits
4. Sevem aot wota mo dipim Banana go long lemon juice
5. Spreadem banana long mesh wire tray
6. Tanem banana wan taem wan dei kasem 3 deis i finis- bae i redi taem color blong banana i brown.
7. Karem aot Banana long mesh wire trays mo fulumap long cellophane plastics, bottles o jars mo silim gud pastic o sraem gud lids mo storem gud.

Drae Tomatoes



Materials

- ✓ Raep Tomatoes

Steps

1. Rinsim gud ol raep Tomatoes
2. Slaicem lo haf
3. Putum long mesh wire trays [Saed we yu katem bae i face I go antap lo sun].
4. Draemap lo 3 deis - tantanem tomatoes wan taem long wan dei kasem 3 deis i finis.
5. Rkarem aot drae Tomatoes long mesh wire trays mo fulumap long cellophane plastics, bottles o jars mo silim gud plastic o sareme gud lid mo storem gud.

Drae Chili



Materials

- ✓ Red o chilli we i redi

Steps

1. Rinsim ol chilis
2. **No katem**, livim i stap lo ful shape blong hem mo putum long dmesh wire trays
3. Draem ap lo 3 deis, tantanem wan taem long wan dei kasem taem 3 deis i finis
4. Karem aot drae Chilis long mesh wire trays mo fulumap long cellophane plastics, bottles o jars mo silim gud plastic o sareme gud lid mo storem gud.



Hot Chili



Materials

- ✓ 1 kilo red chili
- ✓ 2 cup oil
- ✓ 1 pinch salt
- ✓ 2 kalic
- ✓ 2 ginger

Steps

1. Rinsim ol chili.
2. Katem long haf sapos emi bigwan, katem kalic mo ginger.

3. Kretem kalic mo ginger
4. Kapsaitem oil go long sospen, putum tugeta kalic, ginger mo chili mo putum long sospen
5. Kuk blong hav haoa, karemaot mo storem gud long botel.



Swit chili



Materials

- ✓ 1 kilo red chili
- ✓ 2 cup oil
- ✓ 1 kilo sugar
- ✓ 2 kalic
- ✓ 2 ginger

Steps

1. Rinsim ol chili.
2. Katem long haf sapos emi bigwan, katem kalic mo ginger.
3. Kretem kalic mo ginger

4. Kapsaitem oil mo sugar I go long sospen, putum tugeta kalic, ginger mo chili mo putum long sospen
5. Kuk blong hav haoa, karemaot mo storem gud long botel.

Drae Fish



Materials

- ✓ 1 kilo fish
- ✓ 1 spoon salt
- ✓ 1 spoon oil

Steps

1. Katem aot head mo scale blo fish
2. Slaicem olsem we yu wantem mekem fillet o slaicem aot meat blong fish
3. Tantanem fish wetem salt, oil mo pepper long wan plate mo putum long mesh wire tray.
4. Putum long Solar drae lo 2-3 deis [depen long sun] Tantanem wan taem long wan dei kasem 3 deis i finis
5. Fish i shud trun brown taem hemi drae gud
6. Kaream aot drae fish long mesh wire/dehydrator trays mo fulumap long cellophane plastic, bottles o jars mo silim gud plastic o sareme gud lid mo storem gud.
7. Taem u wantem kaikai bae yu save dip fraem, o kukum olsem we yu wantem.

Drae Manioc /Cassava chips

Materials

- ✓ 1 dish blong manioc we yu graitem [rasrasem] finis

Steps

1. Harvestem mo pilim aot skin
2. Washem mo graitem manioc [sapose manioc i gat wota, squeezem aot sam wota blong Manioc.
3. Katem o terem ol leaf blong laplap i redi.
4. Krisim [spreadem cooking oil] long leaf mo putum long wood blong katem meat.
5. Putum smol manioc long leaf mo plastic antap long Manioc. [Karem aot plastic taem yu rollem manioc finis].
6. Rolem manioc wetem wooden roller o bottle blo mekem manioc i thin mo flat gud long leaf [mekem fulap i redi].
7. Putum smol wota long sospane, fulumap wetem 4 stone, putum smol mesh wire antap long ol stone ia mo
8. Putum ol manioc we oli stap long leaf antap long stone ia blong i steamim manioc kasem taem color blong manioc i jenis. [mekem evri wan olsem]
9. Karem aot mo putum long kapa blong i drae long sun lo 5 minits festaem. Afta pulum aot manioc long leaf bifo yu draem ap bakagen
10. Draem ap bakagen long kappa long 2-3 desi depen long sun

11. Karem aot mo storem gud long plastic containa o plastic blong yu save dip frame afta or
12. Yu save dip fraem sem taem.
13. Blong dip frame: Boilem oli lo sospane, putum smol salt mo dip fraem Manioc chips. [Dipim long oil quick taem nomo mo karem aot bakagen].
14. Darinem aot oil mo taem i kolkol smol, pakegem wan taem blong i stap freah. No letem i stap ova naet bifo yu pakegem.
15. Pakegem long cellophane plastics, bottles o jars mo silim gud plastic o sraem gud lids mo storem gud.

Kumala Chips



Materials

- ✓ 1 kilo kumala
- ✓ 1 pila
- ✓ 1 plastic oil

Steps

1. Pilim aot skin blong kumala
2. Slaesem 1 smosmol
3. Tip frae lo oil
4. Pakegem long cellophane plastics

Banana Chips

Materials

- ✓ 1 kilo banana

- ✓ 4 lemon
- ✓ 1 naef
- ✓ 1 pila
- ✓ 1 plastic oil

Steps

1. Pilim aot skin blong banana
2. Tipim long lemon jus
3. Slaesem I smol (ring)
4. Tip frae long oil
5. Pakegem long cellophane plastic

Hao blong Pakegem mo Storem Fruits

Steps blong sterilaezem bottle:

- (1) Boilem wota long wan bigfala pot (sospem)
- (2) Boilem ol empty bottle jam ia insaet long pot lo 15 minits
- (3) Karem aot ol bottles long sospem mo livim lo wan klin ples blo i drae mo redi blong usum.
- (4) Fulumap ol drae fruits [o jam] long bottle mo sareem gud lid blo bottle.
- (5) [FASIN [#5] IA NOMO HEMI NO BLONG USUM LONG OL DRAE FRUITS] Boilem wota long wan dish mo dipim ol bottle i boil lo 1-2 minits nomo.



Fasin ia hemi blong sareem gud lid blong bottle tru long heat blong wota we i boil blo taetem gud lid.

Hemi blong ol drae kaikai- hemi taem yu pakegem ol kaikai olsem jam

Taem yu usum Cellophane Plastic blong pakegem drae fruits



1. Fulumap drae fruits I go long plastic bags
2. Blong silim plastics, usum eni long 3 fala fasin blong silim plastic:
 - Electrical
 - Gas stove
 - Open faea
3. Long gas mo Fae- heatim wan pis iron kasem I warm gud
4. Foldem end blong plastic mo ranem quick taem long end blong warm iron blo plastic I melt smol.
5. Usum finger blong yu blo presem end blo plastic. Hemi packege finis.

Note: Ranem end blo plastic lo warm iron quick taem mo no focem plastic strong long iron. Sam taem bae yu mas mekem tu o tri taem, depen long taem we plastic I sil o klos gud.

3 fala fasin blong silim drae kaekae long plastics



- ✓ Electric Sealer: u save pem lo Store long Vila



- ✓ Putum pis iron long stove blong i warm gud mo ranem end blong plastic againsem iron



- ✓ Long open fae, yu save usum iron blong kuk nomo o fanem wan narafala pis iron blong mekem i warm mo usum olsem sealer blong silim plastic.

Comments long saet blong draem ap fruits:

Hemi gud fala samting, mi salem chips 50 vatu long aelan be taem I kasem market long vila hemi 100 vatu”

“Manioc chips nao hemi gud...no mi no usum drae be hemi sem tingting blong draem ap kaikai”

“Tamarind I gud tumas be I nogat long aelan ia...karem nomo folem rod i go long Vila”

“Mi wantem man blong mi I mekem wan draea ia blong mi, bae I stap nomo long haus”.

BLONG KAREM MOA INFORMESEN:

Christopher Bartlett

Technical Advisor

SPC-GIZ Climate Change Program

Port Vila

Vanuatu

Christopher.Bartlett@giz.de

+678 29594

www.nab.vu

