Monitoring & Evaluation Plan
for
Livelihood Improvement Pilot Activities
in SI-SFRM

August 12, 2021

Hiromi YAMAUCHI
On behalf of Livelihood Improvement Pilot Activity Team

Solomon Islands Government
Ministry of
Forestry & Research

JICA

Contents of M&E Plan
(Contents of This Session)

1. Introduction

2. Concepts of M&E of Livelihood Activities
   2.1 What is M&E?
   2.2 Keywords for implementing M&E

3. M&E Plan
   3.1 AF M&E Plan
   3.2 M&E for Other Livelihood Activities

4. Discussion
5. Wrap up

Solomon Islands Government
Ministry of
Forestry & Research

JICA

1. Introduction

- M&E is important to proceed activities on tract while making necessary modification.

- Regarding AF, some monitoring activities, such as field inspections and checking records, have been conducted by the project staff in collaboration with community members.

- However, it is necessary to conduct M&E more systematically with common understanding among people concerned including MOFR officials and community members.

- The M&E plan (draft) indicates objectives, items/criteria, methods, implementation structures, and schedule of M&E for livelihood improvement activities, including AF.

- The plan will be finalized through discussion with MOFR officials and the community members.

---

2. Concepts of M&E of Livelihood Improvement Activities

2.1 What is M&E?

- "M&E" are often grouped together and used as one word. In this plan, however, monitoring and evaluation are distinct as below though two function related each other. (JICA 2016, OECD 2011)
- Monitoring:
  - ✓ To check progress of activities through periodical and continual data collection based on a plan
  - ✓ To revise the plan to proceed with the activities properly
- Evaluation:
  - ✓ To determine relevance, effectiveness, impact, efficiency, and sustainability of an activity (a project) at the end of the project
  - ✓ To improve the project and reflect lessons learnt to other similar projects

2.2 Keywords for implementing M& E

6 keywords for implementing M&E

1) Natural scientific dimension & Socio-economic dimension

2) Evidence-based monitoring (data collection & analysis)

3) Recording keeping

4) Transparency & Accountability

5) Participation (Subjectivity)

6) Simplicity & Visualization

---

3. M&E Plan

3.1 AF M&E Plan

3.1.1 AF Monitoring

(1) Objectives

– To assess whether AF activities progress according to the AF implementation plan

– To identify challenges and issues related to AF activities and take measurements against them

– To revise the AF implementation plan based on the results of monitoring to conduct AF activities more effectively and efficiently

(2) Monitoring item/Data collection

Item	Data	Means/Tool	Remarks
Site selection	Location, Boundary	• Drone • GPS	Conducted in FM monitoring
Layout (AF plot establishment)	Species, Number of each species, Survival, Growing conditions	• Field observation	Monitoring Form-1
Work plan	Activities, Timing	• Discussion • Record checking	Monitoring Form-2
Input	Planting materials, Labor	• Record checking	Monitoring Form-4
Management	Management structure, Management rules	• Discussion	Monitoring Form-3
Benefit sharing	Harvest, Sales, Usage of benefit, Ratio of benefit sharing	• Record checking • Discussion	Monitoring Form-4

Solomon Islands Government
Ministry of
Forestry & Research

JICA

---

(3) Monitoring Form
Form-1: Agroforestry Plot

Photo		Photo
Photo		Photo
Photo		Photo

Solomon Islands Government
Ministry of
Forestry & Research

JICA

(3) Monitoring Form
Form-2: Progress & Condition (Plant-wise)

Crop/ Tree	Plan (Day/Month/ Year)	Actual (Activity & Condition)	Remarks (Reasons for gap/Findings)	Way forward

(3) Monitoring Form
Form-3: Major Findings & Challenges

Topic	Findings/Challenges	Lessons/Measurements

(3) Monitoring Form
Form-4: Cost & Benefit

■ **Production Cost & Sales (Financial input & output)**

Item		Cash In	Cash Out	Balance	Remarks
Production Cost	Material Cost				
	Labor Cost				
	Total				
Sales	Timber				
	Crop				
	Total				
Balance (Sales - Production Cost)					
Borrowed from Fund					

■ **Materials & Harvest for Domestic Use (Material input & output)**

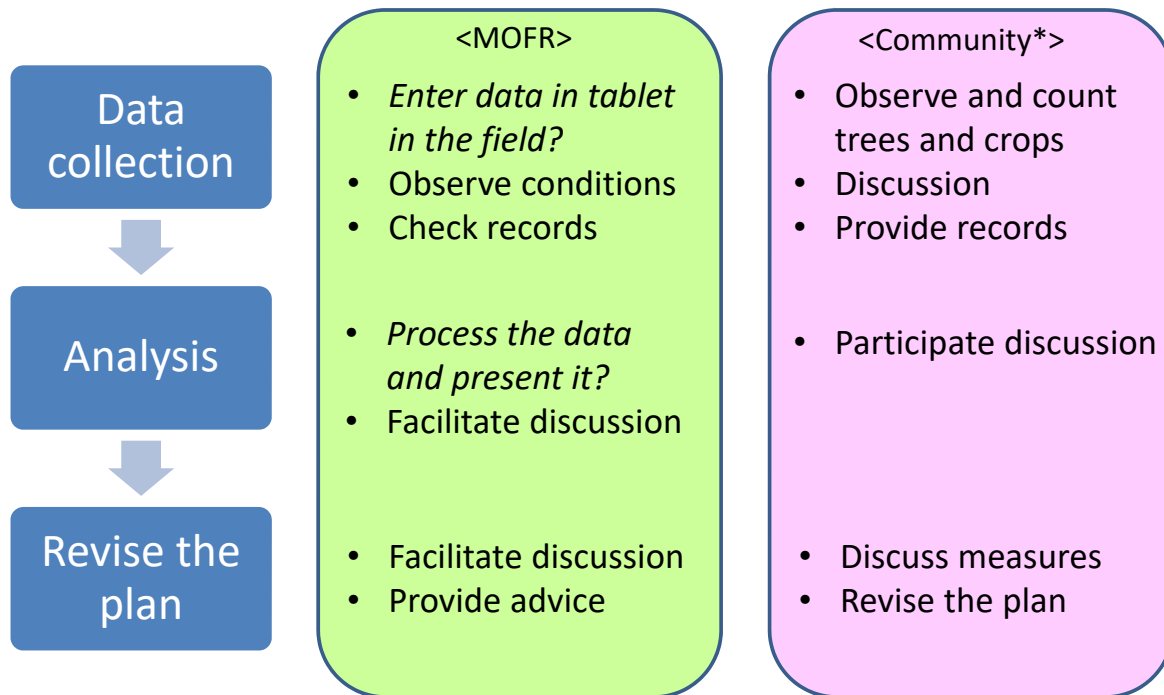| Item	Description	Remarks
Materials	• Item (e.g. planting materials, charcoal) • Number/volume • Usage	
Harvest for domestic use	• Item (crop, fruit, timber) • Volume of yield/use • Usage	

Solomon Islands Government
Ministry of
Forestry & Research

JICA

Form-4: Cost & Benefit   <Sample>

■ **Production Cost & Sales (Financial input & output)**

Item		Cash In	Cash Out	Balance	Remarks
Production Cost	Material Cost		1,071		Tool, Petrol, Transportation
	Labor Cost		1,096		Food for work in AF plot
	Total		**2,167**		
Sales	Timber	500			@$10 x 50 pieces (6"x1")
	Crop	135			Bean: @$5 x 20, Corn:@$35x1
	Total	**635**			
Balance (Sales - Production Cost)				**-1,532**	
Borrowed from Fund		1,937		405	Cash in hand

■ **Materials & Domestic Use (Material input & output)**

Item	Description	Remarks
Materials	• Chicken manure and charcoal for soil improvement	
Harvest for domestic use	• 3 pieces of timber for community hall renovation • 5 bundles of firewood shared among community members	

Solomon Islands Government
Ministry of
Forestry & Research

JICA

(4) Structure & Role

Data collection	<MOFR>	<Community*>
	• *Enter data in tablet in the field?* • Observe conditions • Check records	• Observe and count trees and crops • Discussion • Provide records
Analysis	• *Process the data and present it?* • Facilitate discussion	• Participate discussion
Revise the plan	• Facilitate discussion • Provide advice	• Discuss measures • Revise the plan

*Note: AF sub-committee takes initiatives, but all other community members are requested to participate.

3.1.2 AF Evaluation

(1) Purpose

- To assess to what extent the objectives of AF pilot activities have been achieved. <Relevance at community level>

- To assess to what extent AF may contribute to sustainable forest resource management. <Relevance at project level>

- To assess the efficiency of AF in terms of time, cost, and energy in comparison with garden and tree plantation <Efficiency>

- To diagnose strengthen and weakness of AF in terms of land use, product, productivity, labor intensiveness, pest management, etc. <Effectiveness>

- To identify positive and negative impact on community society in terms of decision making, institutional capacity and gender <Impact>

- To make provision for continuation of AF practice <Sustainability>
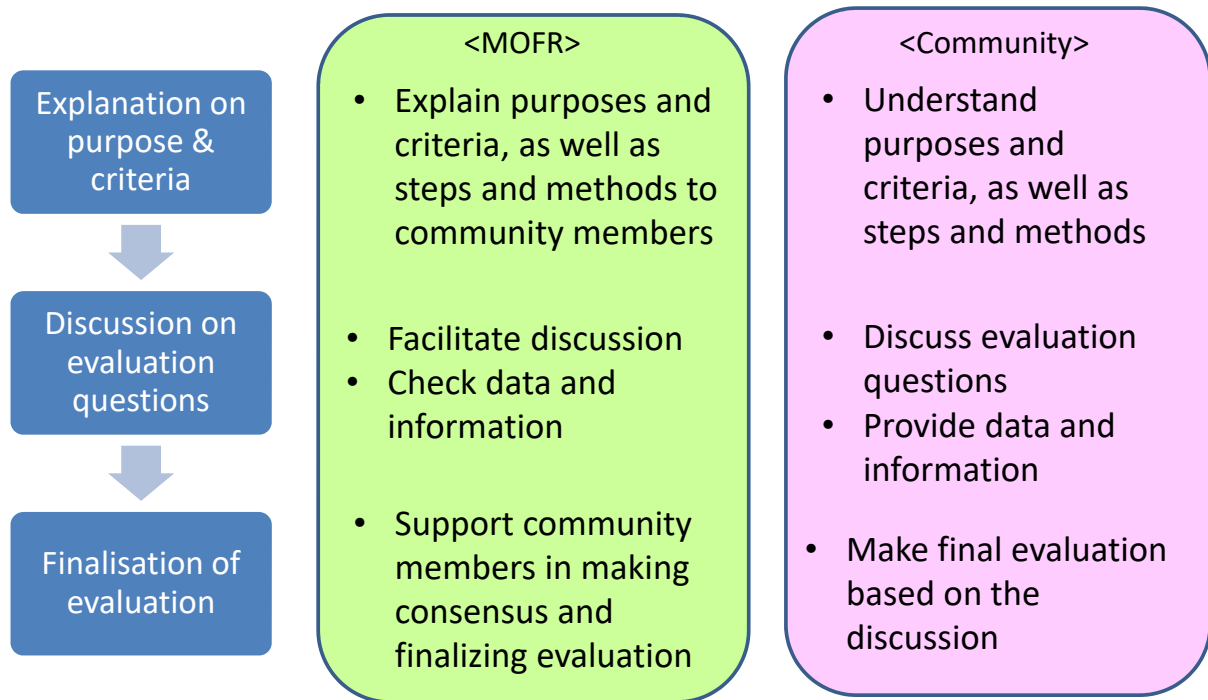
(2) Criteria & Evaluation Questions

Criteria	Evaluation Question
Relevance	• To what extent have the objectives of AF training plot indicated in the AF Implementation Plan achieved? • To what extent may AF contribute to realization of SFRM?
Efficiency	• Does input and out put balance in terms of cost, time, and labor? • Comparing with garden/tree plantation, does AF require much input in terms of cost, time, and labor?
Effectiveness	• Comparing with garden/tree plantation, what kind of strengthen and weakness does AF have in terms of land use, product, productivity, pest problems, etc.?
Impact	• What kind of positive impact has AF bought? • What kind of negative impact has AF brought?
Sustainability	• Do you want to continue the AF plot? • Do you want to expand the AF plot or develop a new AF plot? • Do you have any plan to apply AF practice on your garden or forest plantation?

(3) Evaluation Form

Criteria	Evaluation Question	Description	Evaluation*
Relevance	• To what extent have the objectives of AF training plot indicated in the AF Implementation Plan achieved? • To what extent may AF contribute to realization of SFRM?		
Efficiency	• Does input and out put balance in terms of cost, time, and labor?		
	• Comparing with garden/tree plantation, does AF require much input in terms of cost, time, and labor?		
Effectiveness	• Comparing with garden/tree plantation, what kind of strengthen and weakness does AF have in terms of land use, product, productivity, pest problems, etc.?		
Impact	• What kind of positive impact has AF bought?		
	• What kind of negative impact has AF brought?		
Sustainability	• Do you want to expand the AF plot or develop a new AF plot?		
	• Do you have any plan to apply AF practice on your garden or forest plantation?		

*Evaluation: (A) Very high/much, (B) High/Much, (C) Relatively low/less, (D) Low/Least

(4) Structure & Role

Flow	<MOFR>	<Community>
Explanation on purpose & criteria	• Explain purposes and criteria, as well as steps and methods to community members	• Understand purposes and criteria, as well as steps and methods
Discussion on evaluation questions	• Facilitate discussion • Check data and information	• Discuss evaluation questions • Provide data and information
Finalisation of evaluation	• Support community members in making consensus and finalizing evaluation	• Make final evaluation based on the discussion

*Note: AF sub-committee takes initiatives, but all other community members are requested to participate.

Solomon Islands Government
Ministry of Forestry & Research

JICA

---

(5) Timing & Schedule

- ■ Monitoring
  - ➢ Periodically & continually
  - ➢ In case of AF in SI-SFRM, once per quarter

- ■ Evaluation
  - ➢ Before, Mid-term, End, Post
  - ➢ In case of AF in SI-SFRM, one time toward the end of the project

- ■ M&E Report
  - ➢ 2nd quarter in FY 2022

	FY 2021				FY2022	
	1st	2nd	3rd	4th	1st	2nd
Monitoring		▬		▬		
Evaluation			▬		▬	
M&E Report						▬
Project	→					

Solomon Islands Government
Ministry of Forestry & Research

JICA

3.2 M&E for Other Livelihood Improvement Activities

(1) Monitoring

1) Basic policy
- Conduct monitoring by activity (e.g. pig farming)
- Prepare monitoring system (incl. format) as simple as possible for future management by Interest Group (IG)
- Modify the system and format flexibly
- Encourage relevant stakeholders to participate

2) Monitoring items (Pig farming)
- Number of pigs
- Growth conditions (body size: length, heart girth)
- Use (Amount of meat: consumed, given to others, sold; income)
- Cost (feed, medication, others)
- Problems / challenges

Monitoring format - 1

Pig No.	Aug 21		Sep 21		Oct 21		Nov 21		Dec 21		Jan 22		Feb 22		Mar 22	
	Length (cm)	Heart girth (cm)	Length (cm)	Heart girth (cm)	Length (cm)	Heart girth (cm)	Length (cm)	Heart girth (cm)	Length (cm)	Heart girth (cm)	Length (cm)	Heart girth (cm)	Length (cm)	Heart girth (cm)	Length (cm)	Heart girth (cm)
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
Ave.																
Ave. weight																

Monitoring format - 2

Date	No. of pigs							Body weight (Ave.) (kg)	Use				Cost (SBD)			Problems / challenges & Remarks
	Current	Gain	Eat	Give	Sale	Death	Missing		Home consump-tion (kg)	Give (kg)	Sale (kg)	Income (SBD) (in case of sale)	Feed	Medication	Others	
Total																

---

3) Structure
- Major player: IG members
- Supporters: MoFR, Project staff,
- Advisors: MoAL

4) Timing
- Initiate upon piglet procurement
- Monthly
  (Note: MoAL might be invited bi-monthly)

(1) Review / Evaluation

1) Basic policy
- Conduct review/evaluation by activity (e.g. pig farming)
- Prepare review/evaluation system (incl. format) as simple as possible for future management by Interest Group (IG)
- Modify the system and format flexibly
- Encourage relevant stakeholders to participate

2) Monitoring items (basically common for all activities)
- Six assessment criteria
  - Objectives
  - Relevance
  - Performance
  - Effectiveness
  - Cost-effectiveness
  - External factors

3) Structure
- Major player: IG members
- Supporters: MoFR, Project staff,
- Advisors: MoAL

4) Timing
- Bi-annual (Review)
- Before the project termination (Evaluation)

Review / Evaluation format

Criterion for assessment		Question	Level			Description/ Explanation
			A	B	C	
1	Objectives	What were the original/ primary objectives of this activity?	NA			
		Are the primary objectives still appropriate? Are there other objectives?				
		What do you expect by participating in this activity?	NA			
		What should the future objectives be?				
2	Relevance	Is the activity appropriate to achieve the objectives?				
		If not, what are the alternative options?	NA			
3	Performance	Are the time allocation and schedule for the activity efficient?				
		Are the methods (tools, approaches, etc.) applied for implementation of the activity appropriate?				
		Is the activity carried out according to principles of good practices (equity, culture, gender, etc.) in the community?				
		To what extent have the information sharing/ exchanges been made amongst the local participants, and between the IG members and other villagers?				
		What problems/ constraints have arisen?	NA			
		How were the problems/ constraints dealt with/ overcome?	NA			
		What improvements should be made to the performance of the activity in the future?	NA			

		Question	A	B	C	
4	Effectiveness	To what extent have expected outputs been achieved? If there is no output achieved, what are the reasons?				
		How satisfactory was the training for the stakeholders?				
		Is there any more training necessary for the participants to make the activity more effective? If yes, what kind of training areas?	NA			
5	Cost-effectiveness	Was the cost of the activity reasonable for what it achieved?				
		Would it be possible to achieve the same outputs at less cost? If yes, what should be done?	NA			
		How realistic would it be to replicate the work, incorporate it in government projects/ programs or make it self-financing?	NA			
6	External factors	Are there government/ or policy changes?	NA			
		Are there economic and social changes?	NA			
		Are there changes in the policy and practice of the donor (JICA)?	NA			

Note: Level A: high/outstanding, B: intermediate, C: low/abysmal

4. Discussion

5. Wrap up

➤ Concept of M& E

- Importance of M&E
- Difference between Monitoring and Evaluation

➤ AF Monitoring
- Monitoring item
- Monitoring form
- Monitoring structure – Roles of MOFR

➤ AF Evaluation
- Criteria & Evaluation questions
- Evaluation form
- Evaluation structure – Roles of MOFR
- Schedule of evaluation

5. Wrap up (cont')

➢ Monitoring for Other Livelihood Improvement Activities (Piggery)
- Basic Policy
- Monitoring Item
- Structure
- Timing
- Monitoring format

➢ Review / Evaluation for Other Livelihood Improvement Activities (Piggery)
- Basic Policy
- Assessment Criteria
- Structure
- Timing
- Review / Evaluation Format

Solomon Islands Government
Ministry of
Forestry & Research

JICA

Tagio Tumas

Evaluation of
Agroforestry Pilot Activity
in Komuniboli

25 & 26 July, 2022
Agroforestry Team
SI-SFRM

MOFR/JICA

Contents

1. Review the Evaluation Plan on AF
2. Review the evaluation results at the last meeting

3. Conduct evaluation on the AF Pilot Activity from the remaining criteria

4. Comments (impression, lessons learnt, recommendation, etc.)

1. Review the Evaluation Plan on AF

■ Purpose

- To what extent the objectives of AF pilot activities has been achieved.

- To assess what extent AF may contribute to sustainable forest resource management.

- To verify the efficiency of AF in terms of time, cost, and energy in comparison with garden and tree plantation.

- To diagnose strengthen and weakness of AF in terms of land use, product, productivity, labor intensiveness, pest management, etc.

- To identify positive and negative impact on the community

- To make provisions for continuation of AF practices

■ Evaluation Question

Criteria	Evaluation Question
Relevance	• To what extent have the objectives of the AF training plot indicated in the AF implementation plan achieved? • To what extent may AF contribute to realization of SFRM?
Efficiency	• Does input and output balance in terms of cost, time, and labor? • Comparing with garden/tree plantation, does AF require much input in terms of cost, time, and labor?
Effectiveness	• Comparing with garden/tree plantation, what kind of strengthen and weakness does AF have in terms of land use, variety of product, productivity, pest problems, etc.?
Impact	• What kind of positive impact has the AF practice brought? • What kind of negative impact has the AF practice brought?
Sustainability	• Do you want to continue the AF plots? • Do you want to develop a new AF plot? • Do you have any plan to apply AF practice on your own garden or tree plantation? • Have you applied AF practice on your own garden or tree plantation?

2. Review the evaluation results at the last meeting
■ Relevance

Question		Achievement	Comment
To what extent have the objectives of the AF training plot indicated in the AF implementation plan achieved?			
Object ives	1. To generate income		
	2. To improve food security		
	3. To improve knowledge and skills on AF		
	4. To learn and practice effective land use to maximum benefit		
To what extent may AF contribute to the realization of SFRM?			

<Achievement> A: High, B: Intermediate, C: Low

Implementation of Evaluation on 26 May 2022

Explanation by MoFR officer

Community members listening to the explanation

Youth group presentation

Women's group discussion

Final evaluation

Men's group presentation

2. Assess the AF Pilot Activity
■ Relevance

Question		Achievement	Comment
To what extent have the objectives of the AF training plot indicated in the AF implementation plan achieved?			
Object ives	1. To generate income		
	2. To improve food security		
	3. To improve knowledge and skills on AF		
	4. To learn and practice effective land use to maximum benefit		
To what extent may AF contribute to the realization of SFRM?			

<Achievement> A: High, B: Intermediate, C: Low

■ Relevance <Results>

Question		Achiev.	Comment
To what extent have the objectives of the AF training plot indicated in the AF implementation plan achieved?			
Object ives	1. To generate income	A	<Men> A: - Because we sold products. Produce short, medium, and long-term crops. - Less expenses. <Women> A: - In the past, each household needed to contribute itself. But, now crops harvested AF plot can be used for offering (for religious events/community event). - Income generated from AF plot formed the canteen, which is very helpful for community members, since they don't need to move around from shop to shop to find necessary items. <Youth> A: - Store sacks from AF plot 1 crops.

■ Relevance <Results>

Question	Achiev.	Comment
To what extent have the objectives of the AF training plot indicated in the AF implementation plan achieved?		
Object ives 2. To improve food security	B	<Men> B: - 50% of food consumption. - AF sub-committee need to formulate rules and regulation on the canteen. <Women> A: - During work, we don't need to pay for food because food is already there. - At the time when we faced food shortage in each household, AF Plot responded to them. (AF Plot address to that issue/AF Plot provided food to households.) <Youth> B: - Not enough benefit from crops during AF Plot 1 activities

Note: After discussion, women's group agreed that the level of achievement was "B".

■ Relevance <Results>

Question	Achiev.	Comment
To what extent have the objectives of the AF training plot indicated in the AF implementation plan achieved?		
Object ives 3. To improve knowledge and skills on AF	A	<Men> A: - Improve knowledge on planning to plant crops, fruit trees, and trees on one particular field. <Women> A: - We improved knowledge and skills on management. - Improve technique, skills, and knowledge. Those were applied to individual gardens. <Youth> A: - Gain new ideas how to organize a garden.

<Achievement> A: High, B: Intermediate, C: Low

■ Relevance <Results>

Question		Achiev.	Comment
To what extent have the objectives of the AF training plot indicated in the AF implementation plan achieved?			
Object ives	4. To learn and practice effective land use to maximum benefit	A	<Men> A: - Preserve land and forest from unnecessary clearing. - Time management (can save time for moving one garden to other or tree plantation). <Women> - Maximize land use rather than to use large areas. Like AF plot, there 3 different plants on one plot. Start from short, medium, and long-term (In AF plot, short, medium, and long-term plants were planted on one plot). <Youth>A: - Through AF Plot 1 we get an idea how to organize garden and practice in AF Plot 2. (The idea got through AF Plot 1 will be practiced in AF Plot 2.)

<Achievement> A: High, B: Intermediate, C: Low

■ Efficiency

Question	Achievement	Comment
Comparing with garden/tree plantation, does AF require much input or less input in terms of cost, time, and labor?		
Does input and output balance in terms of cost, time, and labor?		

<Achievement> A: High, B: Intermediate, C: Low

■ Efficiency

AF vs. Local Gardening
- AF is better than garden because of time management (no need to go to one place to another. All activities are conducted only at one place) - AF is better than garden because it needs less labour for weeding, site preparation, etc. - AF needs more cost than garden because of labour intensive. But. If AF is established and managed by the community as a collective activity, AF is not costly because the community members participate in AF activities (no need to pay for the community members.)

■ Efficiency & Effectiveness

	Strength/Advantage	Weakness/Disadvantage
Agroforestry		
Garden		
Tree Plantation		

■ Efficiency

Question	Achievement	Comment
Does input and output balance in terms of cost, time, and labor? Are you satisfy with benefits obtained through AF pilot activity comparing with your time and energy spent for it? Do you think that you could obtain enough benefits (crops) comparing with your time and energy spent for the AF activities?		

<Achievement> A: High, B: Intermediate, C: Low

■ Impact

Question	Achievement	Comment
What kind of positive impact does AF have?		• Improve agricultural skills through AF activities • A canteen was developed by using AF revenue, which contributes to improvement of convenience of lives. • Improve community's capacity for planning, record keeping, and collective working through AF and other pilot activities.
What kind of negative impact does AF have?		

<Achievement> A: High, B: Intermediate, C: Low

■ Sustainability

Question	Achievement	Comment
Do you want to continue the AF plots? Why?		
Do you want to develop a new AF plot? - Why did the community decide to establish AF Plot 2?		• Komuniboli community has began to develop the second plot.
Do you have any plan to apply AF practice on your own garden or tree plantation? - Why?		
Have you applied AF practice on your own garden or tree plantation? - Why?		

<Achievement> A: High, B: Intermediate, C: Low

---

3. Comments (Impression, Recommendation, etc.)

Evaluation of
Agroforestry Pilot Activity
in Falake

21 July – 22 July, 2022
Agroforestry Team
SI-SFRM

Solomon Islands Government **Ministry of Forestry & Research** **MOFR/JICA** JICA

Programme

1. Review the results of evaluation conducted in May

2. Conduct evaluation from other viewpoints

3. Updated Cost & Benefit

4. Comments (impression, lessons learnt, recommendation, etc.)

Solomon Islands Government **Ministry of Forestry & Research** JICA

1. Review the results of evaluation conducted in May

■ Purpose

- To what extent the objectives of AF pilot activities has been achieved.

- To assess what extent AF may contribute to sustainable forest resource management.

- To verify the efficiency of AF in terms of time, cost, and energy in comparison with garden and tree plantation.

- To diagnose strengthen and weakness of AF in terms of land use, product, productivity, labor intensiveness, pest management, etc.

- To identify positive and negative impact on the community

- To make provisions for continuation of AF practices

■ Evaluation Question

Criteria	Evaluation Question
Relevance	• To what extent have the objectives of the AF training plot indicated in the AF implementation plan achieved? • To what extent may AF contribute to realization of SFRM?
Efficiency	• Does input and output balance in terms of cost, time, and labor? • Comparing with garden/tree plantation, does AF require much input in terms of cost, time, and labor?
Effectiveness	• Comparing with garden/tree plantation, what kind of strengthen and weakness does AF have in terms of land use, variety of product, productivity, pest problems, etc.?
Impact	• What kind of positive impact has the AF practice brought? • What kind of negative impact has the AF practice brought?
Sustainability	• Do you want to continue the AF plots? • Do you want to develop a new AF plot? • Do you have any plan to apply AF practice on your own garden or tree plantation? • Have you applied AF practice on your own garden or tree plantation?

2. Assess the AF Pilot Activity
■ Relevance

Question	Achievement	Comment
To what extent have the objectives of the AF training plot indicated in the AF implementation plan achieved? <Objectives> 1. To try alternative approach to slush and burn 2. To try new practice of planting trees and crops on the same land 3. To generate income throughout the year 4. To obtain long, medium, and short-term benefits **5. To reduce workload through AF practice** **6. To produce timber without putting pressure on natural forest** 7. To create shade by planting trees for crops and human being 8. To protect crops from strong wind **9. To learn organized ways of crop and tree cultivation and management including record keeping** 10. To learn what kind of crops are suitable for shaded area under trees **11. To examine how much AF contributes to soil improvement**		
To what extent may AF contribute to the realization of SFRM?		

<Achievement> A: High, B: Intermediate, C: Low

Implementation of Evaluation in Falake

Explanation by MOFR officer

Outcome of men's group discussion

Men's group discussion

Women's group discussion

Youth group presentation

Youth group discussion

■ Relevance

Question	Achievement	Comment	
To what extent have the objectives of the AF training plot indicated in the AF implementation plan achieved? <Objectives> 1. To try alternative approach to slush and burn	A	<Men's Group>	
		AF Plot	**Slush & Burn**
		1. Side selection 2. Plot measurement 3. Plot design measurement for long/medium & short term plants 4. Land clearance (no burning) 5. Crop measurement 6. Crop selection 7. Planting/beating up 8. AF maintenance 9. Harvesting/Selling/Domestic use/Recording/Replanting	1. Site selection 2. Blush & Burn 3. Planting 4. Maintenance 5. Harvesting 6. Marketing/Consumtion 7. Benefit sharing 8. Repeat the process to other site

<Achievement> A: High, B: Intermediate, C: Low

■ Relevance

Question	Achievement	Comment
To what extent have the objectives of the AF training plot indicated in the AF implementation plan achieved? <Objectives> 2. To try new practice of planting trees and crops on the same land	A	<Youth Group> - Because we learn how to properly organize crops in rows - Time - Cost (money) effective - Management - Less effort - Less destruction on natural forest and land

<Achievement> A: High, B: Intermediate, C: Low

■ Relevance

Question	Achievement	Comment
To what extent have the objectives of the AF training plot indicated in the AF implementation plan achieved? <Objectives> 3. To generate income throughout the year	A	<Women's Group> - It was confirmed that they could harvest crops every month. (and crops were sold in the community) - E.g. Last one year - May 2022: Cassava - Apr 2022: Potato - Mar 2022: Ginger - Feb 2022: Taro - Jan 2022: Hongkong taro - Dec 2021: Bean - Nov 2021: S/Cabbage - Oct 2021: Peanut - Sept 2021: Corn - Aug 2021: Banana - Jul 2021: Ginger - Jun 2021: Cassava

<Achievement> A: High, B: Intermediate, C: Low

---

2. Assess the AF Pilot Activity

■ Relevance

Question	Achievement	Comment
To what extent have the objectives of the AF training plot indicated in the AF implementation plan achieved? <Objectives> 4. To obtain long, medium, and short-term benefits **5. To reduce workload through AF practice** **6. To produce timber without putting pressure on natural forest** 7. To create shade by planting trees for crops and human being 8. To protect crops from strong wind **9. To learn organized ways of crop and tree cultivation and management including record keeping** 10. To learn what kind of crops are suitable for shaded area under trees **11. To examine how much AF contributes to soil improvement**		
To what extent may AF contribute to the realization of SFRM?		

<Achievement> A: High, B: Intermediate, C: Low

2. Assess the AF Pilot Activity
■ Relevance

Question	Achievement	Comment
To what extent have the objectives of the AF training plot indicated in the AF implementation plan achieved? \<Objectives\> 4. To obtain long, medium, and short-term benefits	B (Medium)	Short-term : Yes Long-term: No Medium-term: Not yet, but potential in near future
7. To create shade by planting trees for crops and human being	A	Planting trees have already created shade for crops and human being
8. To protect crops from strong wind - AF Plot 2: Mahogany trees break wind, but the wind come to the crops. - AF Plot 1: Trees grew not enough high for breaking wind. But, fruit trees already provided function of windbreak.	A	-Trees grew not enough high - Fruit trees function as wind-break
10. To learn what kind of crops are suitable for shaded area under trees	A	North-yam, kava, Cocoa, vanilla, cassava, ginger
11. To examine how much AF contributes to soil improvement - AF Plot 1: Top black soil is still fertile for 2 years, which was realized when weeding, comparing with slush-and-burn. In case of slush-and-burn, top soil become dry and fragile within 2 years.	A	Top black soil is still good comparing with slush-and-burn. In case of s-a-b soil becomes dry and fragile within 2 years.

\<Achievement\> A: High, B: Intermediate, C: Low

---

2. Assess the AF Pilot Activity
■ Relevance

Question	Achievement	Comment
To what extent have the objectives of the AF training plot indicated in the AF implementation plan achieved? \<Objectives\> **5. To reduce workload through AF practice**	A	(Women's group) • It is better and easy to do the work without slush and burn (because) consist of all the three planting materials (short, medium, and long-term). • Save time, hence provide chance for other family or community activity. ⇒AFは一箇所で短中長期の作物を植えているので維持管理が容易で時間が節約できる。これにより節約できた時間で他の家族やコミュニティの活動を行うことができる）（※ポジティブ・インパクト！？）
6. To produce timber, firewood, NTRFP, and other forest products, without putting pressure on natural forest **Note: Through the evaluation, the community members realized and agreed to add "firewood, NTFP, and other forest products" in the objective.**	A	(Youth group) • AF Plot 1: valuable species – firewood • AF Plot 2: thinning – firewood, bedding (for northern-yam) • Potential to achieve less pressure on the natural forests • Less landmass used instead of slush & burn method saving our natural forest ※AF plot1は植林した樹木がまだ収穫時期になっていないが、ポテンシャルを認識したということから達成度「A」に決定された。
9 To learn organized ways of crop and tree cultivation and management including record keeping	A	(Men's group) • Yes. Men's group members and other community members learned organized way of crop and tree cultivation and management including record keeping.

■ Effectiveness

Question	Achievement	Comment
Comparing with garden/tree plantation, what kind of strengthen and weakness does AF have in terms of land use, variety of product, productivity, pest problems, etc.? - Do you have impression that the AF plot has much pest, diseases, and animal attack?		**<Strengthen/Advantage>** • A community member had positive impression of producing variety of crops. **<Weakness/Disadvantage>**

<Achievement> A: High, B: Intermediate, C: Low

■ Effectiveness e.g. Sustainable land use, Variety of products, Productivity, Pest & animal damage, Saving time, etc.

Question	Strength/Advantage	Weakness/Disadvantage
Agroforestry	<Women's Group> • Easy to manage (一箇所で短中長期作物を同時に管理できるということ) • Reduce workload • More income (short-term, medium-term) <Men's Group> • Plot design • Generate income throughout the year • Food security (一つの作物がダメでも他の作物がある) • Balance diet(いろいろな作物を植えることでバランスのよい食事ができる) • Less time use/high benefit • Record keeping for improvement & benefit sharing • Easy to manage/pest and disease control <Youth Group> • Less landmass used • Variety of crops • Continuous harvesting • Less labour & time	<Women's Group> • Lack of participation • If spacing is not addressed, then the plant experience nutrient competition. • No proper understanding of the aim & objectives of agroforestry. <Men's Group> • Pest easily spread one crop to another (e.g. pumpkinについたpestがkavaにも移る。現場で経験済みとのこと) • High illiterate rate (recording) <Youth Group> • Susceptibility to pest intrusion • Site selection (e.g. Plot 1 partly rocky & water logged)（←AFに限ったことではないはずだが） • Theft to all crops at once

■ Effectiveness

e.g. Sustainable land use, Variety of products, Productivity,Pest & animal damage, Saving time, etc.

Question	Strength/Advantage	Weakness/Disadvantage
Garden (Slush-and-Burn)	<Women's Group> • High production in plant crops. • Burning the bush is easy & fast. • Fire ashes acts as fertilizer. <Men's Group> • High production of crops in first rotation (But, second rotation以降は生産性が落ちるとのこと） • Easy to develop without formal education background • Mono cropping <Youth Group> • High production in terms of quality & quantity • Concentrate one particular crop	<Women's Group> • No fallowing period provided, therefore soil fertility reduces. • Heavy workload. • Mono-cropping e.g. garden taro • Need more time • No new idea <Men's Group> • No record for improvement • Invite variety of weeds • Not plot design • Soil dry up • Fallowing period (is) long time • Low production after first rotation • No long term crops benefit • No medium term crop benefits <Youth Group> • Reduce soil fertility • More land use for only 1 crop • Encourage more damage to our natural forests

---

■ Effectiveness

e.g. Sustainable land use, Variety of products, Productivity,Pest & animal damage, Saving time, etc.

Question	Strength/Advantage	Weakness/Disadvantage
Tree plantation	<Women's Group> • Extract timber for building houses • Source of income • Firewood <Men's Group> • Long-term investiment • Contribute to soil enrichment • Home for wildlife (e.g. birds) • Oxygeon <Youth Group> • Individual ownership to planted trees compared to the natural forest • Income generation for families for domestic use (- furniture, - home building, - school fee) • Commercial use	<Women's Group> • Trees occupy lands for garden. <Men's Group> • Areas not use for short and medium-term crops • Supress another valuable species（チークやマホガニーを植えると他の価値がある樹木が育たない） <Youth Group> • Occupies more fertile land • More time consumption • More labour & cost

■ Efficiency

Question	Achievement	Comment
Does input and output balance in terms of cost, time, and labor?	A	• Input is less than output. Output includes know how. Know how is big value.
Comparing with garden/tree plantation, does AF require much input or less input in terms of cost, time, and labor?		※この質問はeffectivenessと重複するので、この質問とeffectivenessの質問を統合して「Strength/Advantage & Weakness/Disadvantage of AF, Garden, Tree Plantation」にした。

<Achievement> A: High, B: Intermediate, C: Low

■ Impact

※Impactのachievementは、positiveがnegativeより多ければA、少なければC、同程度ならBとすることにした。

Question	Achv	Comment
Positive impact does AF have?	A	<Women's Group> • It gives new ideas and skills for each individuals will apply it. • It help us to plan for generate income. • Make good use of our time. • It makes for us creative to have more ideas. • Highly achieve objectives. <Youth Group> • Spacing between crops, Selection of variety of crops, mix croppingの考えを個人のガーデンにも適用するようになった。 <Men's Group> • Individuals started practicing AF. • Backyard gardening implemented using AF know how by households. • Individual practice XXXXX and practicing new ideas of planting crops. • All participants in AF practice appreciate and comment AF practice is best. • See importance of waste/rubbish（家畜の糞を堆肥として使うことを通じて廃棄物が重要だということに気が付いた） • See importance of site selection.
Negative impact does AF have?		<Women's Group> • Jelousy (AF Plotsがうまくいってことを妬む人がいる） <Youth Group> • Competition between trees and crops. （←これはAFのdisadvantageまたはmechanismであり、negative impactではないことを説明） • Need more crop to plant in plot.- Lack of nutrients because different type of crop grow in one plot. <Men's Group> • Traditional agriculture practice (slush-and-burn) gradually removed out.（持続的な土地利用方法という意味ではAFの方がslush-and-burnより優れていても、文化的にみれば彼らの伝統的農法が失われるのは

■ Sustainability

Question	Achievement	Comment
Do you want to continue the AF plots? **-** Why?	A	• Yes.
Do you want to develop a new AF plot? - Why did the community decide to establish AF Plot3?	A	• Falake community has an idea of developing the third plot. (According to the AF Sub-committee chairman, the third plot was decided on his garden area next to the piggery house. It is easy to bring manure to the plot.)
Do you have any plan to apply AF practice on your own garden or tree plantation? - Why?	A	• 22 people (out of around 30 participants in the meeting on 22nd July)（※今考えると「すでに実施している」と回答している人と重複していたような気がする）
Have you applied AF practice on your own garden or tree plantation? - Are there any other members who created an AF plot? - Why?	B	• Mr. Philip Saele'a created his own AF plot at his home. • 11 (Constantine, jocken, jone, Fedy, Phillipne, Don Bosca, Bress, Sindi, Shera, Hilda,Sally, Rolencia) (out of around 30 participants in the meeting on 22nd July))

---

3 Updated Cost & Benefit (Form-4) Period: Dec.2020 – **Oct 2021**

Date	Details	Unit Price	QTY	Cash In	Cash Out	Remarks
25/12/2020	Corn	2,3,4		102.00		
	S/Cabbage	10.00	5 prcl	50.00		
26/12/2021	S/Cabbage	10.00	5 prcl	50		
24/03/2021	Taro	10.00	10 heap	100.00		
09/06/2021	Corn	10.00	10 heap	100.00		
	Mix Petrol				30.00	
02/07/2021	Banana	10.00	3 heap	30.00		
		5.00	5 heap	25.00		
27/07/2021	Banana	10.00	3 heap	30.00		
11/09/2021	Banana	10.00	2 heap	20.00		
		10.00	1 bunch	10.00		
02/10/2021	S/Cabbage	10.00	10 prcl	100.00		1.4kg/prcl
	Bean	10.00	1 prcl	10.00		1.4kg/prcl
	Buy peanut	10.00	5 prcl		50.00	for planting
17/10/2021	Bean	10.00	1 prcl	10.00		
18/10/2021	S/Cabbage	10.00	2 prcl	20.00		
2020/10/21	Taro	10.00	12 heap	120.00		
	Ginger	15.00	2 heap	30.00		
	Lunch				49.00	
26/10/2021	S/Cabbage	10.00	3 prcl	30.00		
	Bean	10.00	2 prcl	20.00		
	Total			**857.00**	**129.00**	
	Balance			**728.00**		

Cash In Summary

Crop	Cash In
Corn	202.00
S/Cabbage	250.00
Taro	220.00
Banana	115.00
Bean	40.00
Ginger	30
Total	**857.00**

Cash Out Summary

Item	Cash Out
Petrol	30
Peanut	50
Lunch	49
Total	**129**

3 Updated Cost & Benefit (Form-4) (rev.)

Period: Dec.2020 – **May 2022**

Date	Details	Unit Price	QTY	Cash In	Cash Out	Remarks
25/12/2020	Corn	2,3,4		102.00		
	S/Cabbage	10.00	5 prcl	50.00		
26/12/2021	S/Cabbage	10.00	5 prcl	50		
24/03/2021	Taro	10.00	10 heap	100.00		
24/03/2021	Taro	10.00	4 heap		40	shared among women who did work
09/06/2021	Corn	10.00	10 heap	100.00		
09/06/29021	Mix Petrol	30.00	2 litre		60.00	Chainsaw for thinning mahogany in Plot 2
02/07/2021	Banana	10.00	3 heap	30.00		
25/08/2021	Banana	5.00	5 heap	25.00		
29/07/2021	Banana	10.00	3 heap	30.00		
11/09/2021	Cassava	10.00	2 heap	20.00		
11/09/2021	Banana	10.00	1 bunch	10.00		
02/10/2021	S/Cabbage	10.00	10 prcl	100.00		1.4kg/prcl
	Bean	10.00	1 prcl	10.00		1.4kg/prcl
08/10/2021	Buy peanut	10.00	5 prcl		50.00	for planting
17/10/2021	Bean	10.00	1 prcl	10.00		
18/10/2021	S/Cabbage	10.00	2 prcl	20.00		
20/10/2021	Taro	10.00	12 heap	120.00		
20/10/2021	Ginger	15.00	2 heap	30.00		

3 Updated Cost & Benefit (Form-4) (rev.)

Continued from the previous slide.

Period: Dec.2020 – **May 2022**

Date	Details	Unit Price	QTY	Cash In	Cash Out	Remarks
20/10/2021	Taro	10.00	1 heap		10.00	domestic ?
21/10/2021	Banana	10.00	1 bunch	10.00		
21/10/2021	Lunch				49.00	Ration for workers
26/10/2021	S/Cabbage	10.00	3 prcl	30.00		
26/10/2021	Bean	10.00	1 prcl	10.00		harvesting in Plot 2
15/02/202	Ginger	10.00	2 heap	20.00		1 heap@3.3kg, 1 heap@1.1kg
23/03/2022	Peanut	5.00	4 heap	20.00		
23/03/2022	Cassava		6 heap		60.00	Cooked for workers. It was recorded in "Cash in", but it should be "Cash out".
06/04/2022	Hongkong taro	10.00	2 heap	20.00		
06/04/2022	Cassava	10.00	3 heap	30.00		
08/04/2022	Cassava	10.00	6 heap	60.00		
08/04/2022	Hongkong taro	10.00	4 heap	40.00		
08/04/2022	Cassava or Taro		3 heap		30.00	Cooked for workers
08/04/2022	Buy Peanut	5.00	4 heap		20.00	Buy at Fosiny market
10/05/2022	Potato?	10.00	7heap	70.00		
	Total			1,117.00	179.00	Cash out excludes cassava on 23/03/2022 cooked for workers and cassava or taro on 08/04/2022 cooked for workers.
	Balance			938.00		

3 Updated Cost & Benefit (Form-4)

◼ Summary

Period: Dec.2020 – May 2022

Cash In

Crop	Cash In
Corn	202.00
S/Cabbage	250.00
Taro	280.00
Banana	105.00
Bean	30.00
Ginger	50.00
Peanut	20.00
Cassava	110.00
Potato?	70.00
Total	**1,117.00**

Cash Out

(A) Exclude the value of crops cooked for workers

Item	Cash Out
Petrol	60.00
Peanut	70.00
Lunch	49.00
Total	**179.00**

- Cash in hand is the same as the balance.

(B) Include the value of crops cooked for workers

Item	Cash Out
Petrol	60.00
Peanut	70.00
Lunch	189.00
Total	**319.00**

- The value of crops cooked for workers and shared among workers is included in "Lunch".
- The labour cost is reflected on the cost for AF management.
- But, cash in hand is different from the balance.

8/4/2022   MOFR/JICA   23

◼ Materials & Domestic Use (Material input & output)

Item	Description	Remarks
Materials		
Harvest for domestic use	• 4 heaps of taro, which was equivalent to $40, were shared among women who participated in AF activities on 24/03/2021. • 6 heaps of cassava, which were equivalent to $60, were cooked for workers on 23/03/2022. • 3 heaps of cassava/taro, which were equivalent to $30, were cooked for workers on 08/04/2022.	

4. Comments (Impression, Recommendation, etc.)

- Pull all household together for implementation of AF plots.
- Combine and discuss freely among the community members. This is the first experience.
- Hope to maintain binding among community members. So, young generation will follow and consider the environment.

⇒ Through the implementation of the AF pilot activity, the community has had experience that all households freely discussed and worked together (combine, unity, 目的に向かって一丸となる）. This is the first experience for the community members.

Tagio Tumas!

Evaluation Results of Agroforestry Pilot Activity

TSC
28 July, 2022
Hiromi Yamauchi

MOFR/JICA

Programme

1. Review the purposes and criteria of AF evaluation

2. Results of Evaluation

    2.1 Komuniboli

    2.2 Falake

    2.3 Summary

3. Conclusion

4. Discussion

1. Review the purposes and criteria of AF evaluation

■ Purpose

- To what extent the objectives of AF pilot activities has been achieved.

- To assess what extent AF may contribute to sustainable forest resource management.

- To verify the efficiency of AF in terms of time, cost, and energy in comparison with garden and tree plantation.

- To diagnose strengthen and weakness of AF in terms of land use, product, productivity, labor intensiveness, pest management, etc.

- To identify positive and negative impact on the community

- To make provisions for continuation of AF practices

■ Evaluation Question

Criteria	Evaluation Question
Relevance	• To what extent have the objectives of the AF training plot indicated in the AF implementation plan achieved? • To what extent may AF contribute to realization of SFRM?
Efficiency	• Does input and output balance in terms of cost, time, and labor? • Comparing with garden/tree plantation, does AF require much input in terms of cost, time, and labor?
Effectiveness	• Comparing with garden/tree plantation, what kind of strengthen and weakness does AF have in terms of land use, variety of product, productivity, pest problems, etc.?
Impact	• What kind of positive impact has the AF practice brought? • What kind of negative impact has the AF practice brought?
Sustainability	• Do you want to continue the AF plots? • Do you want to develop a new AF plot? • Do you have any plan to apply AF practice on your own garden or tree plantation? • Have you applied AF practice on your own garden or tree plantation?

2. Results of AF Evaluation
2.1 Komuniboli

- AF evaluation was conducted on 26 May and 25-26 July, 2022.

Explanation by MoFR officer

Community members listening to the explanation

Youth group presentation

Women's group discussion

Final evaluation

Men's group presentation

■ Relevance <Results>

Question		Achiev.	Comment
To what extent have the objectives of the AF training plot indicated in the AF implementation plan achieved?			
Object ives	1. To generate income	A	<Men> A: - Because we sold products. Produce short, medium, and long-term crops. - Less expenses. <Women> A: - In the past, each household needed to contribute itself. But, now crops harvested AF plot can be used for offering (for religious events/community event). - Income generated from AF plot formed the canteen, which is very helpful for community members, since they don't need to move around from shop to shop to find necessary items. <Youth> A: - Store sacks from AF plot 1 crops.

■ Relevance <Results>

Question		Achiev.	Comment
To what extent have the objectives of the AF training plot indicated in the AF implementation plan achieved?			
Object ives	2. To improve food security	B	<Men> B: - 50% of food consumption. - AF sub-committee need to formulate rules and regulation on the canteen. <Women> A: - During work, we don't need to pay for food because food is already there. - At the time when we faced food shortage in each household, AF Plot responded to them. (AF Plot address to that issue/AF Plot provided food to households.) <Youth> B: - Not enough benefit from crops during AF Plot 1 activities

Note: After discussion, women's group agreed that the level of achievement was "B".

■ Relevance <Results>

Question		Achiev.	Comment
To what extent have the objectives of the AF training plot indicated in the AF implementation plan achieved?			
Object ives	3. To improve knowledge and skills on AF	A	<Men> A: - Improve knowledge on planning to plant crops, fruit trees, and trees on one particular field. <Women> A: - We improved knowledge and skills on management. - Improve technique, skills, and knowledge. Those were applied to individual gardens. <Youth> A: - Gain new ideas how to organize a garden.

<Achievement> A: High, B: Intermediate, C: Low

■ Relevance <Results>

Question	Achiev.	Comment
To what extent have the objectives of the AF training plot indicated in the AF implementation plan achieved?		
Object ives 4. To learn and practice effective land use to maximum benefit	A	<Men> A: - Preserve land and forest from unnecessary clearing. - Time management (can save time for moving one garden to other or tree plantation). <Women> - Maximize land use rather than to use large areas. Like AF plot, there 3 different plants on one plot. Start from short, medium, and long-term (In AF plot, short, medium, and long-term plants were planted on one plot). <Youth>A: - Through AF Plot 1 we get an idea how to organize garden and practice in AF Plot 2. (The idea got through AF Plot 1 will be practiced in AF Plot 2.)

<Achievement> A: High, B: Intermediate, C: Low

■ Efficiency & Effectiveness

	Strength/Advantage	Weakness/Disadvantage
Agroforestry	<Women's Group> • Meet food security (The same as "provide food for family" in Garden) • Create income now we form canteen. • Improve plan growth • Not occupy time rather to go one place to the another • Gain knowledge and skills <Men's Group> • Less time • Less cost • Land management • Recording system • High yield production • Design plan • Pest and disease control (is easier than garden) (Frequency of occurring pest and diseases it the same as garden) <Youth Group> • 3 types of plants (short, medium, and long-term) in one garden.	<Women's Group> • GAS infestation • Pig damage • No water availability • Lack of tools (Note: the above points are not really disadvantage of AF.) <Men's Group> • No wind break for long term plant at early stage <Youth Group> • It need more training • It takes more time to achieve aims objectives

■ Efficiency & Effectiveness

	Strength/Advantage	Weakness/Disadvantage
Garden	<Women's Group> • One plant one plot, so can harvest all crop at one time. • Provide food for family • Market for own family for school fee and etc. <Youth Group> • Separate crops in different garden for traditional purpose based on season. <Men's Group> • Mono cropping / big quantity • Literacy & illiterate (can do)	<Women's Group> • During market when the plant more at the central market we cannot get more money • Time consuming especially weeding • No proper record <Youth Group> • Spend more time in one or two crops in one garden. <Men's Group> • No written design plan • No recording system
Tree Plantation	<Women's Group> • Wind break • Can do felling at any time bacause of no crop • Fast growth because of any tree a planted • Provide timber for house and money <Youth Group> • Selected tree can be planted in one plot • Plant demanded trees in one plot • Easy to fell & mill <Men's Group> • Future benefit • Big quantity • Less nutrient competition • Design plan	<Women's Group> • Sometime the trees fell by themselves and died. And the community members do not realize because no visit like AF. • No proper management • Long time benefit not like AF. <Youth Group> • Labour cost • Consume (spent) more time in one particular area • Take up land area <Men's Group> • No short and medium term benefit of plant • Wasting of time • Wasting land space • Long time to receive benefit

---

■ Efficiency

Question	Achievement	Comment
Does input and output balance in terms of cost, time, and labor? Are you satisfy with benefits obtained through AF pilot activity comparing with your time and energy spent for it?	A	• Satisfy • New type of practice/new idea, food security • Canteen • New idea of management • Harvesting crops for domestic use and selling • Training on crop management • Satisfy

<Achievement> A: High, B: Intermediate, C: Low

■ Impact

Question	Achievement	Comment
What kind of positive impact does AF have?	A	<Women's Group> • (Abraham) women and men worked together as a whole community in the field and planning stage. Canteen • Saving • Benefit sharing • Promote creativity • Record keeping <Men's Group> • Canteen • Knowledge & skills on AF • Benefit (short, medium, and long-term) • Foreign experts as our trainers Innovative <Youth Group> • Implementing new idea and skills of gardening • Record keeping • Monitoring • Canteen service • Different plant and crops in one area • Working together • Planning, training

<Achievement> A: Positive impacts are more than negative ones
B: The number of positive impacts is nearly the same as that of negative ones
C: Negative impacts are more than positive ones

■ Impact

Question	Achievement	Comment
What kind of negative impact does AF have?	A	<Women's Group> • Competition (Some members want to practice AF, but the others want to continue traditional agriculture system. But, in future, it is expected to harmonize between the two groups.) <Men's Group> • Objectives unclear • Food supply not consistent/inadequate <Youth Group> • Time management (Punctuality, laziness) • Food security（crops were not shared well in the community members)

<Achievement> A: Positive impacts are more than negative ones
B: The number of positive impacts is nearly the same as that of negative ones
C: Negative impacts are more than positive ones

■ Sustainability

Question	Achievement	Comment
Do you want to continue the AF plots? Why?	A	• Benefit • Minimum land use •
Do you want to develop a new AF plot? - Why did the community decide to establish AF Plot 2?	A	• Komuniboli community has began to develop the second plot. • The first plot managed by the community. The second and following plots will be managed by interesting households. Every households will learn how to manage AF. • More practice opportunity for interesting households.

<Achievement> A: High, B: Intermediate, C: Low

■ Sustainability

Question	Achievement	Comment
Have you applied AF practice on your own garden or tree plantation? - Why?	B	• Yes. Beans and pepper to maximize the land space. • Put effort and get output by himself. • Planting trees, pencil cedar, akwa in between short-term crops like potato and medium term crops pineapple. • Under Coconut trees existed, cacao, bettlenut, cassava, and pineapple were planted. • About 10 households have already applied ideas of AF.
Do you have any plan to apply AF practice on your own garden or tree plantation? - Why?	B	• At least 11 households have an idea of applying AF. • Make a design and still need to practice by individual after plot2. • Put effort and get output by himself. • All HHs want to practice AF. But, some HHs have problems of lands. But, the AF site identified by the land use plan, it can be used for AF. So, HHs will apply AF in the AF site.

2.2 Falake

● AF Evaluation was conducted on 31 May and 20 - 21 July, 2022.

Explanation by MOFR officer

Outcome of men's group discussion

Men's group discussion

Women's group discussion

Youth group presentation

Youth group discussion

■ Relevance

Question	Achievement	Comment
To what extent have the objectives of the AF training plot indicated in the AF implementation plan achieved? <Objectives> 1. To try alternative approach to slush and burn 2. To try new practice of planting trees and crops on the same land 3. To generate income throughout the year 4. To obtain long, medium, and short-term benefits 5. To reduce workload through AF practice 6. To produce timber without putting pressure on natural forest 7. To create shade by planting trees for crops and human being 8. To protect crops from strong wind 9. To learn organized ways of crop and tree cultivation and management including record keeping 10. To learn what kind of crops are suitable for shaded area under trees 11. To examine how much AF contributes to soil improvement		
To what extent may AF contribute to the realization of SFRM?		

<Achievement> A: High, B: Intermediate, C: Low

■ Relevance

Question	Achievement	Comment
To what extent have the objectives of the AF training plot indicated in the AF implementation plan achieved? <Objectives> 1. To try alternative approach to slush and burn	A	<Men's Group> <table><tr><td>AF Plot</td><td>Slush & Burn</td></tr><tr><td>1. Side selection 2. Plot measurement 3. Plot design measurement for long/medium & short term plants 4. Land clearance (no burning) 5. Crop measurement 6. Crop selection 7. Planting/beating up 8. AF maintenance 9. Harvesting/Selling/Domestic use/Recording/Replanting</td><td>1. Site selection 2. Blush & Burn 3. Planting 4. Maintenance 5. Harvesting 6. Marketing/Consumption 7. Benefit sharing 8. Repeat the process to other site</td></tr></table>

<Achievement> A: High, B: Intermediate, C: Low

■ Relevance

Question	Achievement	Comment
<Objectives> 2. To try new practice of planting trees and crops on the same land	A	<Youth Group> - Because we learn how to properly organize crops in rows - Time - Cost (money) effective - Management - Less effort - Less destruction on natural forest and land

<Achievement> A: High, B: Intermediate, C: Low

■ Relevance

Question	Achievement	Comment
<Objectives> 3. To generate income throughout the year	A	<Women's Group> - It was confirmed that they could harvest crops every month. (and crops were sold in the community) - E.g. Last one year - May 2022: Cassava - Apr 2022: Potato - Mar 2022: Ginger - Feb 2022: Taro - Jan 2022: Hongkon taro - Dec 2021: Bean - Nov 2021: S/Cabbage - Oct 2021: Peanut - Sept 2021: Corn - Aug 2021: Banana - Jul 2021: Ginger - Jun 2021: Cassava

<Achievement> A: High, B: Intermediate, C: Low

■ Relevance

Question	Achievement	Comment
4. To obtain long, medium, and short-term benefits	B (Medium)	Short-term :yes Long-term: No Medium-term: not yet, but potential in near future
7. To create shade by planting trees for crops and human being	A	Planting trees have already created shade for crops and human being
8. To protect crops from strong wind	A	AF Plot 1: Trees grew not enough high for breaking wind. But, fruit trees already provided function of windbreak. AF Plot 2: Mahogany trees break wind, but the wind come to the crops.
10. To learn what kind of crops are suitable for shaded area under trees	A	North-yam, kava, Cocoa, vanilla, cassava, ginger
11. To examine how much AF contributes to soil improvement .	A	Top black soil is still good comparing with slush-and-burn. S-a-b soil becomes dry and fragile within 2 years

■ Relevance

Question	Achievement	Comment
5. To reduce workload through AF practice	A	• It is better and easy to do the work without slush and burn (because) consist of all the three planting materials (short, medium, and long-term). • Save time, hence provide chance for other family or community activity.
6. To produce timber, **firewood, NTRFP, and other forest products,** without putting pressure on natural forest	A	• AF Plot 1: valuable species – firewood • AF Plot 2: thinning – firewood, bedding (for northern-yam) • Potential to achieve less pressure on the natural forests • Less landmass used instead of slush & burn method saving our natural forest
9 To learn organized ways of crop and tree cultivation and management including record keeping	A	Yes. Men's group members and other community members learned organized way of crop and tree cultivation and management including record keeping.

■ Effectiveness

Question	Achievement	Comment
Comparing with garden/tree plantation, what kind of strengthen and weakness does AF have in terms of land use, variety of product, productivity, pest problems, etc.? - Do you have impression that the AF plot has much pest, diseases, and animal attack?		

<Achievement> A: High, B: Intermediate, C: Low

■ Effectiveness

Question	Strength/Advantage	Weakness/Disadvantage
Agroforestry	\<Women's Group\> • Easy to manage • Reduce workload • More income (short-term, medium-term) \<Men's Group\> • Plot design • Generate income throughout the year • Food security • Balance diet • Less time use/high benefit • Record keeping for improvement & benefit sharing • Easy to manage/pest and disease control \<Youth Group\> • Less landmass used • Variety of crops • Continuous harvesting • Less labour & time	\<Women's Group\> • Lack of participation • If spacing is not addressed, then the plant experience nutrient competition. • No proper understanding of the aim & objectives of agroforestry. \<Men's Group\> • Pest easily spread one crop to another • High illiterate rate (recording) \<Youth Group\> • Susceptibility to pest intrusion • Site selection (e.g. Plot 1 partly rocky & water logged) • Theft to all crops at once

---

■ Effectiveness

Question	Strength/Advantage	Weakness/Disadvantage
Garden (Slush-and-Burn)	\<Women's Group\> • High production in plant crops. • Burning the bush is easy & fast. • Fire ashes acts as fertilizer. \<Men's Group\> • High production of crops in first rotation • Easy to develop without formal education background • Mono cropping \<Youth Group\> • High production in terms of quality & quantity • Concentrate one particular crop	\<Women's Group\> • No fallowing period provided, therefore soil fertility reduces. • Heavy workload. • Mono-cropping e.g. garden taro • Need more time • No new idea \<Men's Group\> • No record for improvement • Invite variety of weeds • Not plot design • Soil dry up • Fallowing period (is) long time • Low production after first rotation • No long term crops benefit • No medium term crop benefits \<Youth Group\> • Reduce soil fertility • More land use for only 1 crop • Encourage more damage to our natural forests

■ Effectiveness

Question	Strength/Advantage	Weakness/Disadvantage
Tree plantation	<Women's Group> • Extract timber for building houses • Source of income • Firewood <Men's Group> • Long-term investment • Contribute to soil enrichment • Home for wildlife (e.g. birds) • Oxygen <Youth Group> • Individual ownership to planted trees compared to the natural forest • Income generation for families for domestic use (- furniture, - home building, - school fee) • Commercial use	<Women's Group> • Trees occupy lands for garden. <Men's Group> • Areas not use for short and medium-term crops • Suppress another valuable species <Youth Group> • Occupies more fertile land • More time consumption • More labour & cost

---

■ Impact

Question	Achievement	Comment
Positive impact does AF have?	A	<Women's Group> • It gives new ideas and skills for each individuals will apply it. • It help us to plan for generate income. • Make good use of our time. • It makes for us creative to have more ideas. • Highly achieve objectives. <Youth Group> • Spacing between crops, Selection of variety of crops, mix cropping were applied to individual gardens. <Men's Group> • Individuals started practicing AF. • Backyard gardening implemented using AF know how by households. • Individual practice and practicing new ideas of planting crops. • All participants in AF practice appreciate and comment AF practice is best. • See importance of waste/rubbish • See importance of site selection.
Negative impact does AF have?		<Women's Group> • Jealousy <Youth Group> • Competition between trees and crops. • Need more crop to plant in plot.- Lack of nutrients because different type of crop grow in one plot. <Men's Group> • Traditional agriculture practice (slush-and-burn) gradually removed out.

Note: Achievement of Impact: positive impact more than negative one: A, the same : B, positive impacts less than negative one: C

■ Efficiency

Question	Achievement	Comment
Does input and output balance in terms of cost, time, and labor?	A	• Input is less than output. Output includes know how. Know how is big value.

<Achievement> A: High, B: Intermediate, C: Low

■ Sustainability

Question	Achievement	Comment
Do you want to continue the AF plots?	A	• Yes.
Do you want to develop a new AF plot?	A	• Falake community has an idea of developing the third plot.
Do you have any plan to apply AF practice on your own garden or tree plantation?	A	• 22 people out of around 30 participants in the meeting on 22nd July have a plan to apply AF practice.
Have you applied AF practice on your own garden or tree plantation?	B	• 11 people out of around 30 participants in the meeting on 22nd July have already applied.

Summary of AF Evaluation

■ Relevance

Question	Achievement	Description
To that extent were the AF objectives achieved?	High	• In Komuniboli, 3 objectives (income generation, improvement of knowledge and skills on AF, learn and practice of effective land use method to maximize benefit) out of 4 were highly achieved. The objective of improvement of food security has been achieved at medium level. • In Falake, out of 11 objectives, 10 objectives were highly achieved and 1 was medium.
To what extent may AF contribute to realization of SFRM and sustainable land use?	High	• In contrast to slush and burn, AF could produce crops at the same land without moving from place to place. This means that AF could reduce pressure on natural forests. • Valuable timber tree species, such as akwa and baula, could be produced in AF by using wild seedlings.

■ Efficiency

Question	Achievement	Description
In contrast to garden or tree plantation, was AF efficient in terms of time, labour and cost?	High	• Both communities emphasized AF could save time since they could maintain trees and crops at the same time without moving from place to place. • Since the AF pilot activities were conducted as collective work, it was difficult to compare with garden managed by individuals. • Records on yields, income, and expenditure of AF were not kept well. On the other hand, there was no such records on garden or tree plantation. Thus, it was difficult to compare AF with garden and tree plantation in terms of efficiency.
Does input and output balance in terms of cost, time, and labor, and skills?	High	• Both communities were satisfied with the output, including obtaining new knowledge and skills, comparing with inputs.

■ Effectiveness

Question	Achievement	Description
What kind of advantages and disadvantages did AF provide in contrast to garden and tree plantation?	Medium	<Advantage> • In case of slush and burn, the land became degraded and unproductive for several years after harvesting crops. In contrast, the same land could be used for crop production continuously in AF system. • In case of slush-and-burn, top soil becomes dry and fragile. But, in AF, top black soil has been kept even two years later. • Easy to manage • Generate income throughout the year • Variety of crops • Contribute to food security and balance diet <Disadvantage> • If spacing is not adequate, nutrient competition occurs among the plants. • Pest easily spread one crop to another. • Production of the first rotation of garden is higher than that of AF.

■ Impact

Question	Achievement	Description
What kind of positive and negative impacts did AF provide?	High	• In Komuniboli, a canteen was opened by using some money generated through the sales of AF crops. It improved convenience of community members to purchase commodities. • Komuniboli community members could obtain food from AF plot while their gardens along a river could not be used due to flood. • Through the implementation of the AF plot activities, the communities improved their capability of planning, implementing collective work, and keeping records to promote community activities. • AF save time, so the community and family can use the time for other activities. • In Falake, individual backyard gardens were created by using knowledge acquired through the implementation of AF activities and manure generated from piggery.

■ Sustainability

Question	Achievement	Description
- Do you want to continue the AF plots? - Do you want to develop a new AF plot? - Do you have any plan to apply AF practice on your own garden or tree plantation? - Have you applied AF practice on your own garden or tree plantation?	High	• Both communities began to establish a new plot. • In Falake, a community member established his own AF plots. At least 11 members applied ideas of AF on their own gardens. Furthermore, at least 22 community members had intentions to apply AF on their own land. • In Komuniboli, around 10 households have applied ideas of AF on their own garden. Moreover, at least 11 households have a plan to apply AF on their own land. • The sustainability is quite high since the communities established and managed AF plots by their own efforts with little financial and material support from the Project. • Komuniboli community obtained material support from Guadalcanal Provincial government. This implied that the community had capacity of obtaining support from outside agencies.

3. Conclusion

- Both communities highly appreciated the AF pilot activity by the most criteria.
- Falake community assessed the AF was the best practice of sustainable land use although its productivity was less than that in the first rotation of slush-and-burn.
- Several advantages of AF, such as saving time, variety of crops, and income generation throughout the year, were realized.
- Through the implementation of AF pilot activity, the communities developed their capacity for not only agricultural skills, but also planning, implementing collective work by men and women, and record keeping.
- Eleven community members in Falake and around 10 households in Komuniboli have already applied ideas of AF on their own gardens or tree plantation. This clearly shows the impact of the AF pilot activity since no households implemented AF at the beginning of the pilot activity according to the baseline.
- Both communities began to establish a new AF plot.
- The criteria for AF evaluation should be modified to more practical ones like "Benefits of AF", "contribution to SFRM/Sustainable Land Use", "Food security", "Improvement of livelihoods", and "Community capacity development".

4. Discussion

Tagio Tumas!

Results of Monitoring and Review, Lessens Learnt and Recommendations on Other Livelihood Improvement Activities

6 July 2022

MOFR/JICA

CONTENTS

1. Introduction
   - Definitions of monitoring, review and evaluation

2. Monitoring (pig farming and chicken farming)
   - Monitoring items
   - Results

3. Review (pig farming)
   - Method
   - Results

4. Wealth ranking
   - Method
   - Results

5. Lessons learnt and recommendations

1 Introduction

Monitoring:

A systematic and <u>continuous</u> assessment of the progress of a piece of work over time.

Review:

A *review* is usually defined as an assessment <u>at one point</u> in time of the <u>progress</u> of a piece of work

Evaluation:

An *evaluation* is an assessment <u>at one point</u> in time of the <u>impact</u> of a piece of work.

Note: The 'piece of work' here means an activity such as a piece of research or programme development, which does not fall into the category of *project* or *programme*.

---

2 Monitoring
2.1 Monitoring items (pig farming)

Item	Data	Mean/Tool	Remarks
No. of pigs	• Current number • Numbers that changed by reason (gain, eat, give, sale, death, missing)	• Observation • Interview	Monitoring Form-2.
Growth conditions	• Body size (length) • Body size (heart girth)	• Measurement	• The data of each pig shall be recorded on the Monitoring Form-1. • The averaged data shall be recorded on the Monitoring Form-2. • The data are used to estimate the body weight
Utilisation	• Amount of meat (consumed, given to others, sold) (kg) • Income gained by sale	• Interview	Monitoring Form-2.
Cost	• Feed • Medication • Others	• Interview	Monitoring Form-2.
Problems / challenges	• Problems • Challenges • Remarks	• Interview • Discussion	Monitoring Form-2.

Monitoring Form for Pig Farming - 1

Community: _____ Purpose: _Fattening / Breeding_

Pig No.	Aug 21		Sep 21		Oct 21		Nov 21		Dec 21		Jan 22		Feb 22		Mar 22	
	Length (cm)	Heart girth (cm)	Length (cm)	Heart girth (cm)	Length (cm)	Heart girth (cm)	Length (cm)	Heart girth (cm)	Length (cm)	Heart girth (cm)	Length (cm)	Heart girth (cm)	Length (cm)	Heart girth (cm)	Length (cm)	Heart girth (cm)
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
Ave.																
Ave. weight																

Monitoring Form for Pig Farming - 2

Community: _____ Purpose: _Fattening / Breeding_

Date	No. of pigs							Body weight (Ave.) (kg)	Use				Cost (SBD)			Problems / challenges & Remarks
	Current	Gain	Eat	Give	Sale	Death	Missing		Home consumption (kg)	Give (kg)	Sale (kg)	Income (SBD) (in case of sale)	Feed	Medication	Others	
Total																

● Monitoring results

	Komuniboli	Falake
No. of pigs procured	11	12
No. of pigs died	1	6
No. of pigs sold	3	2
No. of pigs currently pregnant	4	2
Income	SBD 9,842	
Expenditure	SBD 4,753	
Balance (current)	SBD 5,089	SBD 5,000
Balance (expected in Dec 2020)	SBD 20,390	SBD 28,400

Note: The expenditure does not include initial input (pig pen construction materials, feed, etc.) provided by the SFRM Project.

---

3 Review
3.1 Method

Six Criteria

1) Objectives
2) Relevance
3) Performance
4) Effectiveness
5) Cost-effectiveness
6) External factors

Criterion for assessment		Question	Level			Description/ Explanation
			A	B	C	
1	Objectives	What were the original/ primary objectives of this activity?		NA		
		Are the primary objectives still appropriate? Are there other objectives?				
		What do you expect by participating in this activity?		NA		
		What should the future objectives be?				
2	Relevance	Is the activity appropriate to achieve the objectives?				
		If not, what are the alternative options?		NA		
3	Performance	Are the time allocation and schedule for the activity efficient?				
		Are the methods (tools, approaches, etc.) applied for implementation of the activity appropriate?				
		Is the activity carried out according to principles of good practices (equity, culture, gender, etc.) in the community?				
		To what extent have the information sharing/ exchanges been made amongst the local participants, and between the IG members and other villagers?				
		What problems/ constraints have arisen?		NA		
		How were the problems/ constraints dealt with/ overcome?		NA		
		What improvements should be made to the performance of the activity in the future?		NA		
4	Effectiveness	To what extent have expected outputs been achieved? If there is no output achieved, what are the reasons?				
		How satisfactory was the training for the stakeholders?				
		Is there any more training necessary for the participants to make the activity more effective? If yes, what kind of training areas?		NA		
5	Cost-effectiveness	Was the cost of the activity reasonable for what it achieved?				
		Would it be possible to achieve the same outputs at less cost? If yes, what should be done?		NA		
		How realistic would it be to replicate the work, incorporate it in government projects/ programs or make it self-financing?		NA		
6	External factors	Are there government/ or policy changes?		NA		
		Are there economic and social changes?		NA		
		Are there changes in the policy and practice of the donor (JICA)?		NA		

3 Review

3.1 Results

See another file of 'MS-Word'

---

3 Review

3.2 Results (Summary)

1) Objectives:
- The IG members had got **more and different objectives** at the initial stage than expected.
- The IG members tended to have more objectives during the course of implementation.

2) Relevance:
- The activity (pig farming) is still appropriate to achieve the objectives.

3) Performance:
- **In terms of time allocation, overlap of other activities (household, community participation to schools, religion, other project activities) has taken place.**
- The IG members appreciated that the activity are carried out according to principles of good practices (equity, culture, gender, etc.) in the community.

3) Performance: (contnd.)

- The IG members have **faced a number of problems and constraints; e.g. water, participation, sale on credit (Komuniboli), death of pigs, etc. and been trying to resolve them with best efforts.**

4) Effectiveness:

- **At least 2 or 3 years of time is needed to achieve the objectives.**

5) Cost-effectiveness

- It was difficult to implement the activity due to price increase of feeds, hardware materials, stocks, etc. but could be achieved with community participation and contribution

6) External factors

- **Covid-19 has affected** scheduling of training and other activities necessary for the pig farming production as well as marketing.

---

4 Wealth ranking
4.1 Method

Komuniboli Community

Criteria	Indicators		
	Rich / Wealthy	Fair	Below average (Poor)
1) Machinery/ Equipment	Have		None
2) Cash/ Saving	Meet necessary needs in time	Borrow money but repay later	Have debt, always postpone repayment
3) Housing	- Permanent - Large - with water tank	- Semi-permanent	- Bush materials - Small
4) Transport business	Have		None
5) Plantation	> 1 plot	1 plot	None
6) Poultry	Broiler and local variety	Local variety	None
7) Pigs	> 10 locals	< 10 locals	None
8) Education	Literate		Illiterate
9) Schooling of children	Tertiary school	Secondary school	Primary / None
10) Furniture	Mattress		

Falake Community

Criteria	Indicators		
	Rich / Wealthy	Fair	Below average (Poor)
1) Housing (size)	Large	Medium	Small / simple
2) Kinds of crops cultivated	Long-/medium-/short-term	Medium-/short-term	Short-term
3) Skills/ knowledge/ formal education	Sufficient		Insufficient
4) Loan	Never	Sometimes and repay right time	Never repay or postpone repay
5) Livestock	Cattle, pig, goat	Chicken, duck	None
6) Sanitation (toilet)	Proper (flushing)	Toilet stool only	Poor (just pits)
7) Cash income	> SBD 1,000/month	SBD 500 – 1,000/month	< SBD 500
8) Schooling of children	Tertiary school	Secondary school	Primary / None
9) Purchasing power	High	Medium	Low/ none
10) Communication device	Have		None

---

4 Wealth ranking
4.2 Results

1) Komuniboli

		Wealthy	Average	Below average	Sub-total
Baseline (Feb 2020)	Total	1	11	12	24
	Ratio	4	46	50	100
Endline (July 2022)	Total	2	16	6	24
	Ratio	8	67	25	100

2) Falake

		Wealthy	Average	Below average	Sub-total
Baseline (Feb 2020)	Total	3	18	17	38
	Ratio	8	47	45	100
Endline (June 2022)	Total	2	9	12	23
	Ratio	9	39	52	100

5 Lessons learnt and recommendations
5.1 Lesson learnt

- **Integrated approach** of forest management and livelihood improvement activities
- Enhancement through assistance in establishing community's organisational structure
- Priority in activity selection: **capacity development** related
- Potential of collective activity

5.2 Recommendations

- **Extension of SFRM pilot activity model**
- **Dissemination of livelihood improvement activities** as a measure for community's organizational capacity development
- **Collaboration with other institutions** for promoting SFRM pilot activity model
- Approach shift **from charity to capacity development**

The Project on Capacity Development for Sustainable Forest Resource Management

Gender Training Program

Why does gender matter sustainable forest resource management?

Day 1: 8 June 2022 @ The MOFR

Atsuko Nonoguchi, Gender Expert

10:00〜

Opening Remarks by Dr. Nishikawa

Outline of the Program (1)

1. Contents

◆Consisting 3 parts: 1) lectures; 2) workshop/group exercise; and 3) field work

2. Main Objectives

◆Understand the <u>basic concept of 'gender'</u> and the <u>structural causes of unequal power relations by gender</u> and other factors

◆Understand the importance of identifying context-specific gender differences and <u>incorporating gender perspectives into the planning and implementation</u> of a program/project

◆Learn how to use PRA/Gender Analysis tools and conduct PRA & gender analysis <u>for a gender-responsive planning and implementation</u>

Outline of the Program (2)

- Day 1 (8 June) – lectures on the basic concept of gender

Time	Contents
10:00 – 10:10	Opening Remarks by Dr. Nishikawa
10:10 – 10:15	Outline of the Program
10:15 – 10:30	Self-introduction
10:30 – 12:00	◆ Differences between sex and gender ◆ Characteristics of gender gaps and gender inequality and root causes for those in key sectors in Solomon Islands ◆ Key findings on gender differences form the field survey ◆ Important concepts for identifying and understanding context-specific gender roles and gender relations
12:00 – 13:00	Lunch
13:00 – 14:30	◆ International Initiatives for Gender Equality and the response of the SI government to those initiatives ◆ Concept and purposes of 'gender mainstreaming'

Outline of the Program (3)

- Day 2 (9 June) – Exercise for PRA & Gender Analysis

Time	Contents
10:00 – 10:15	Review of Day 1
10:15 – 11:00	Share of Field Work Experiences, Including PRA & Gender Analysis Discussion on What We Need to Know in Komuniboli & Falake
11:00 – 12:00	PRA Tools, including 'Resource Mapping', 'Access & Control', 'Activity Profile', 'Problem, Causes, & Opportunities', 'Ranking of Problems/Needs', 'Focus Groups Discussion', etc.
12:00 – 13:00	Lunch
13:00 – 14:00	Role Play & Group Work on PRA
14:00 – 15:00	Designing & planning for field work

Outline of the Program (4)

- Field Work in Komuniboli & Falake – Week of 13 June

Length of Activity	Contents of PRA Tool/Activity
15 min.	Greetings, self-introduction, the explanation of the purpose of the visit and how to conduct PRA, etc.
30 min.	'Transect Walk'
30 min.	'Resource Mapping' and 'Access & Control'
45 to 60 min.	'Activity Profile'('Daily Activity'/'Annual Calendar') 'Access & Control'
45 to 60 min.	'Problems, Cause, and Opportunities'/'Ranking of Problems/Needs'
60 min.	'Focus Groups Discussion'
15 to 30 min	Wrap-up and Summary of Key Findings

Self-introduction

- Name

- Position, Department

- Educational or Technical Background

- Why you attended this program or What you expect from this program

Rationale for Gender Analysis & Gender-responsive Planning (1)

- Community development projects do not necessarily benefit all community members in an equal way.

Why?

What do we need to do for addressing the equitable distribution of benefits?

Rationale for Gender Analysis & Gender-responsive Planning(2)

- **Social hierarchies** exist in every society and favor some people and disadvantage others.
- The social hierarchies are structured by gender, age, ethnicity, race, class, caste, religion, and other social factors.

  Source: Thomas-Slayter, B. et al. 1995. *A Manual for Socioeconomic and Gender Analysis*.

- Development projects may reinforce the existing unequal power relations if no attention is paid to these and no action is taken for transforming these to more equal ones within the project.
- Therefore, it is necessary to identify context-specific power relations - information on who does what, who has what and who does not have, and who needs what, based on which a development project should be designed.

Concept of Gender (1)

- What is **gender**?

- What are critical differences between **sex** and **gender**?

Concept of Gender (2)

Definitions

◆**Sex**:

A biologically determined set of differences between women and men

◆**Gender**:

The social position and relations of women and men constructed by society. In many societies around the world, women are systematically placed in an inferior position both inside and outside the household and deprived, compared to men.

Source: Thomas-Slayter, B. et al. 1995. *A Manual for Socioeconomic and Gender Analysis*.

Concept of Gender (3)

- How is gender constructed and reinforced in the society of Solomon Island?

- What determines women's inferior position in the society of Solomon Islands?

→**Who has what & Who does not have - "Control over land and other resources"**

→**"Who does what"** tends to shape **"who can have what"** and **"who cannot have it"**

Concept of Gender (4)

Who has what & Who does not have

Having land rights and decision-making power over land can determine a person's superior/inferior position within the household/community →

'control over land' and 'decision-making power over land'

Society	Sex	Primary Rights	Secondary Rights	Control over & Decision-making
Matrilineal Society	Women	Yes	Yes	No/△
	Men	No	Yes	Yes
Patrilineal Society	Women	No	Yes	No
	Men	Yes	No	Yes

Concept of Gender (5)

• **Who does what?**

Gender Norms and Stereotypes (Gender Bias)

Are there any gender norms and stereotypes (gender bias) specific to each Island/ matrilineal or patrilineal society, or common to the whole country of Solomon Islands?

◆"Politics is men's field."

◆"Decision-making and taking leadership are men's roles."

◆"Men can understand things better than women. Men can speak better than women."

◆"Women should not take part in land issue discussions."

◆"Women should not speak up in a public place."

Concept of Gender (6)

◆<u>Why</u> are those gender norms and stereotypes <u>problematic</u>?

◆For <u>whose favor</u> are those gender norms and stereotypes <u>constructed</u>?

◆How do **gender division of labor/role** and **gender division of sphere/space** affect women and men's social, economic, and political position in society?

> **gender division of labor/role:**
>
> productive work by men and reproductive work for women
>
> **gender division of sphere/space:**
>
> public space for men and private space for women

Concept of Gender (7)

The Structure of Gender Discrimination & Inequality

◆Who has what and who does not have?

> → who can have **decision-making power** and **control over land**

◆Who does what? / Gender division of labor/role

> → who can have **access to cash income** and **decision-making power over the use of cash income**

◆Who does what and where? / Gender division of sphere/space

> → who can have **access to information** and **decision-making processes in public places**

Gender Gaps/Inequality in Key Sectors of Solomon Islands (1)

- **Education**
- ◆NER in primary education(2008-12): B – 87.7%; G – 87.3%
- ◆NER in secondary education (2008-12): B – 43.8%; G – 41.5%
- ◆Gender Parity Index (GPI) in the enrollment ratio in primary, lower and upper secondary education (2019): 0.91; 1.00; and 0.94
- **Health**
- ◆Maternal Mortality Rate (per 100,000 births): 107 (2017)
- ◆85% of delivery takes place at hospital with technicians (2015)
- ◆30% of rural women and 17% of urban women need to get permission from their husbands to go to hospital (2006)
- **Economic Activity/Employment**
- ◆Labor force participation rate (2009): M – 63.5%; F – 62.2%
- ◆Paid work engagement (2009): M – 50.7%; F- 26%
- ◆Who decides how to use wife's income: wife 14.2%; husband 29.1%; together 55.2% (2015)

Source of all data are referred to The SFRM Project. 2021. *Gender Analysis: Solomon Islands*

Gender Gaps/Inequality in Key Sectors of Solomon Islands (2)

- **Political Participation**
- ◆ 2 out of 50 PM seats are taken by women (since 2019)
- ◆Only 4 women have been elected since the independence

- **Violence against Women (VAW)/Gender-based Violence (GBV)**
- ◆ 64% of women aged 15 to 49 ever experienced physical and/or sexual violence by their intimidate partner (2009)
- ◆Out of those women, 42% experienced such violence by intimidate partner within the past 12 months (2009)
- ◆ 58% of women aged 15 to 49 were controlled their mobility by their partners/husbands (2009)

Source of all data are referred to The SFRM Project. 2021. *Gender Analysis: Solomon Islands*

Gender Differences/Inequality in Roles & Control over Rural Livelihoods (1)

A Field Survey for Gender Analysis conducted

Survey Sites	Komuniboli & Falake
Survey Period	February and April 2021
Objective	Identify context-specific gender differences which should be incorporated into the planning and implementation of the project
Methodology	Qualitative research methods, such as key-informant, focus groups, and in-depth interviews
Information collected on	• community's socio-economic condition • community decision-making system • men & women's access to & control over resources • gender division of labor/role in productive & reproductive work • men & women's daily-based activity profile & annual crop calendar • changes in the availability of natural resources over time • decision-making power inside & outside the household • the way of the project staff's community mobilization and facilitation

Gender Differences/Inequality in Roles & Control over Rural Livelihoods (2)

1) Access to & Control over Common Land

Komniboli

- Matrilineal Society
- 3 clans: Chaobata/Lunga – land-holding clan
- Women of Chaobata are entitled to primary land rights, but actual decision-making power exercised by their uncles/sons
- Women usually leave Komuniboli at their marriage due to bride price
- Men of Chaobata have only secondary land rights, as well as women & men of other 2 clans

Falake

- Patrilineal Society
- 4 clans – all men share primary land rights together
- Women of those 4 clans have no primary land rights, but secondary ones
- Women leave Falake at their marriage due to bride price.

Gender Differences/Inequality in Roles & Control over Rural Livelihoods (3)

2) Old & New Community Decision-making System

Komuniboli	*Falake*

Komuniboli

Before the Project

- Elderly men of Chaobata used to exclusively dominate decision-making processes

Committees

- Only one woman selected as chairperson

- 13 women selected as members out of 31

- Some women hesitated due to a lack of self-confidence

Falake

Before the Project

- Male representatives of 4 clans used to get together, discuss, and made decisions

Committees

- Only one women selected as chairperson

- 13 women selected as members out of 32

- A few women refused due to a lack of time

Gender Differences/Inequality in Roles & Control over Rural Livelihoods (4)

3) Gender division of labor/role

in shifting cultivation

1) Komuniboli

	Cutting trees & grasses	Cleaning	Burning	Plowing & land prep.	Sowing & Planting seedlings	Weeding	Harvesting	Market-ing
Men	✓	✓		✓				
Women		✓	✓	✓	✓	✓	✓	✓

2) Falake

	Cutting trees & grasses	Cleaning	Burning	Plowing & land prep.	Sowing & Planting seedlings	Weeding	Harvesting	Market-ing
Men	✓	✓	✓	✓	✓			
Women		✓	✓	✓	✓	✓	✓	✓

3) Gender Division of Labor/Role

in Forest Resource Management

1)   Komuniboli

	Planning for Forest Resource Managem't	Cutting Grasses & Ground leveling	Planting Seedlings	Forestry (Taking care of seedlings)	Pruning & Weeding	Patrol of wildfire & illegal logging	Cutting & marketing
Men	✓	✓			✓	✓	✓
Women	(✓)		✓	✓	✓		

2) Falake

	Planning for Forest Resource Managem't	Cutting Grasses & Ground leveling	Planting Seedlings	Forestry (Taking care of seedlings)	Pruning & Weeding	Patrol of wildfire & illegal logging	Cutting & marketing
Men	✓	✓	✓		✓	✓	✓
Women	(✓)	✓	✓				

23

3) Gender Division of Labor

in Reproductive Work - household chores &care work – unpaid work

Similar Findings in Komuniboli & Falake

	Collecting Firewood	Fetching Water	Cooking	Washing Clothes	Child-care	Livestock
Men	(✓)	(✓)		(✓)		✓
Women	✓	✓	✓	✓	✓	✓

Women's time-poverty

• The time spent for reproductive work by women is 2 to 3 hours more than by men in both Komuniboli and Falake

24

Gender Differences/Inequality in Roles & Control over Rural Livelihoods (7)

4) Who has access to cash income earned by selling crops and animals and who has control over the income

Who has direct access to cash income		from Vegetable	from Fruits Vetel numts	from Cacao, coconuts, kava	from Pig fish
Komniboli	Women	✓	✓ (mainly)	depends on the household	Together?
	Men				
Falake	Women	✓	✓ (banana & betel nuts)		depends on household
	Men		✓ (betel nuts)	✓ (mainly)	

- Who has decision-making power over HH expenditure

	Daily shopping	School expenses	Medical expenses	Big shopping	Starting a business
Komuniboli	Women	Both	Both	Women	Men
Falake	Women	Both	Both	Women	Both

Critical Gender Perspectives (1)

For gender-responsive planning & implementation:
- What we have to take into account: Risk & Opportunities

Existing decision-making system

Can women participate in decision-making and speak up?

Context-specific gender division of labor/role

Can women not hesitate, but participate in forest resource management planning /agroforestry/income generating activities?

Available/free time & time-constraint during a day/year

Can women manage time to participate in decision-making processes & activities?

Decision-making/power relations over profits

Can women have decision-making power over and share the profit of forest resource management/agroforestry/income generation activities?

Critical Gender Perspectives(2)

- Analysis of Risks & Opportunities and Gender Action Plan

Actual Situation	Risk	Opportunities	What Action/ to be Taken
Land-holding clan's elderly men used to dominate decision-making processes for land distribution/ forest & community development issues.	Women and the youth might be excluded from decision-making processes.	Women and youth might participate in decision-making and their voice/needs might be heard.	Facilitate people to develop a new democratic decision-making system Mobilize community people, especially women
Women are busy doing both productive & reproductive work	Women might not participate in activities & training and as a result they might not benefit	Women might participate in activities & training and improve their capacity/livelihood	Sensitize both men & women and let men help women doing reproductive work, so that women can participate
Women do not have decision-making power over income	Women might end up being exploited their labor only, but no money with them	Women might be distributed some profits earned	Facilitate people to distribute profit on a individual basis, not household basis

27

International Initiatives for Gender Equality

- Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1979
- The Gov. of Solomon Islands ratified CEDAW in 2002
- Pacific Platform for Action on the Advancement of Women and Gender Equality (PPA) adopted in 1994, reviewed in 2004 – 4 priority areas
- Pacific Platform for Action for Gender Equality and Women's Human Rights (2018-2030)
- Pacific Leaders' Gender Equality Declaration (PLGED)
- SDGs – Goal 5: Gender Equality
- UNFCCC/COP – Rima Working Plan on Gender Equality
- GCF – the preparation and submission of Gender Assessment & Gender Action Plan is compulsory

28

Gender Mainstreaming (1)

- What is "**gender mainstreaming**"?

Gender Mainstreaming (2)

Gender Mainstreaming:

Fully incorporating gender perspectives into laws, policies, plans, and programs/projects, as well as organizational structure and institutions

Legislation/Policy-making

◆Laws: Constitutions, Penal Code, Family/inheritance Law, Land Law, Forest Law, etc.

◆Policies: NDS (2016-2035); NGEWDP (2016-2020); NFP (2020)

◆Plans: MTDP

Gender Mainstreaming (3)

Organizational Structure

◆Establishment of national machinery for promoting gender equality: MWYCFA

◆Appointment of gender focal points within relevant ministries/agencies and collaboration with MWYCFA

Institutional Correction

◆Promotion of female officers in decision-making/leading position in the ministry/offices

◆Provision of equal opportunities for recruitment, promotion, training, and type of work, as well as equal salary

◆Protection of workers from a risk of violence at working place

Gender Mainstreaming (4)

• What extent to which has 'gender mainstreaming' been proceeded within the MOFR?

◆National Forestry Policy (2020)

Gender concerns and perspectives are limited to the strategy of 'capacity development' or 'Goal 6', not fully incorporated into this policy

◆Gender focal points

GFPs have been appointed in the MOFR, but they are not functional and there is no collaboration between MOFR and MWYCFA

◆A system for collecting and updating gender-disaggregated data – not yet

◆# of female officers working for MOFA: ?

◆# of female officers at decision-making/leading position: ?

◆Equal opportunities for recruitment; promotion; training; type of work, as well as equal salary: ?

Review of the Day

- Is there anything different from what you have 'known' about gender?

- Is there anything you have newly realized?

- Is there anything in which you got interested?

References:

MOFR & JICA SFRM Project. 2022. *Factsheet Gender Analysis.* Vol. 12. available at: https://www.mofr.gov.sb/en/component/edocman/jica-factsheet/factsheet-vol-12-ga

Thomas-Slyater, B. et al. 1995. *A Manual for Socio-economic and Gender Analysis: Responding to Development Challenges*. available at: https://pdf.usaid.gov/pdf_docs/PNABX222.pdf

If any questions, please feel free to send an e-mail at **atsuko_nonoguchi@kk-grp.jp**

Thank you!

The Project on Capacity Development for Sustainable Forest Resource Management JiCA

Gender Training Program

Why does gender matter sustainable forest resource management?

Day2: 9 June 2022 @ The MOFR

Atsuko Nonoguchi, Gender Expert

Content of Today's Activity

- Day 2 (9 June) – Exercise for PRA & Gender Analysis

Time	Contents
10:00 – 10:30	Review of Day 1
10:30 – 11:00	Share of Field Work Experiences, Including PRA & Gender Analysis Discussion on What We Need to Know in Komuniboli & Falake
11:00 – 12:00	PRA Tools, including 'Resource Mapping', 'Access & Control', 'Activity Profile', 'Problem, Causes, & Opportunities', 'Focus Groups Discussion', etc.
12:00 – 13:00	Lunch
13:00 – 14:00	Role Play & Group Work on PRA
14:00 – 15:00	Designing & planning for field work

Content of Field Work

- Field Work in Komuniboli & Falake – Week of 13 June

Length of Activity	Contents of PRA Tool/Activity
15 min.	Greetings, self-introduction, the explanation of the purpose of the visit and how to conduct PRA, etc.
30 min.	'Village Walk'
30 min.	'Resource Mapping'
60 to 75 min.	'Activity Profile' 'Access & Control'
45 to 60 min.	'Problems, Cause, and Opportunities'
60 min.	'Focus Groups Discussion'
15 to 30 min	Wrap-up and Summary of Key Findings

Review of Day 1 (1)

- Why do we need to undertake gender analysis & gender-responsive planning & implementation?

- Why gender matters forest resource management?

- What is a critical difference between sex and gender?

- What do we need to focus on in order to identify context-specific gender differences?

Review of Day 1 (2)

- Social hierarchies exist in every society and favor some people and disadvantage others. These unequal social hierarchies are structured by gender and other factors. If no action is taken for transforming such existing unequal power relations within the projects, development projects might reinforce them.

- Although women also play an important role in agriculture and forest resource management, they are often excluded from decision-making processes and do not benefit from development projects. So it is important to involve women from a right-basis perspective and effectiveness.

- Sex is a set of biological differences between men and women, while gender is the social relation of men and women structured by society. Women are usually put in an inferior position.

- Gender analysis should focus on who does what, who has what/who does not what, and who needs what.

Review of Day 1 (3)

Gender differences to be identified:

- Who does what and Where

    gender division of labor/role &

    gender division of sphere/space

- Who has what/ Who does not have what

    access to & control over land & other resources

    decision-making power over land/resource & cash income

- Who needs what

    analysis of risk & opportunities

PRA for Gender Analysis (1)

Participatory Rapid Appraisal (PRA) is a participatory & interactive learning process/ research methodology, consisting of 40 tools & strategies

◆PRA methodology can facilitate participants to learn from each other, build consensus among participants, and stimulate their initiatives.

◆Some tools of PRA methodology are useful for identifying the power dynamics/hierarchical structure of a target community, especially context-specific gender differences in roles, relations (power relationship).

PRA for Gender Analysis (2)

Key principle of PRA: **People's participation**

- Avoid dominance and manipulation by certain local authorities/ leaders

- Avoid the outside party's (researchers') initiative and manipulation

- Promote/facilitate participants' active participation, self-reliance, and initiative

PRA Tools for Gender Analysis (1)

1. Village Walk & Resource Mapping

- **Objective**: to confirm among participants about what resources are available and where in a target village

- **Items to be visualize in a map**:

◆ Infrastructure, such as roads, houses, education/health/religious facilities, etc.

◆ Forest – agro-forestry plots

◆ Agricultural land (short-term, mid-term, and long-term/plantation crops)

◆ Rivers/watershed

◆ Pig & Poultry House

Reference: SEGA Manual pp. 100 - 103

9

PRA Tools for Gender Analysis (2)

2. Access & Control Profile

- **Objective**: to identify who has access to & control over resources

- Resources/Assets/Skill-Technology/Income to be focused on

1) Komuniboli – Matrilineal Society

	Who has 'Access'		Who has 'Control'	
	Men	Women	Men	Women
Forest land	✓ ✓ ✓	✓ ✓	✓ ✓ ✓	✓
Agricultural land	✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓
Pigs & Poultry				
Training/ Technology				
Income from short-term crops				
Income from long-term crops				

PRA Tools for Gender Analysis (3)

2) Falake – Patrilineal Society

	Who has 'Access'		Who has 'Control'	
	Men	Women	Men	Women
Forest land	✓ ✓ ✓	✓ ✓	✓ ✓ ✓	none
Agricultural land	✓ ✓	✓ ✓ ✓	✓ ✓ ✓	none
Pigs & Poultry				
Training/ Technology				
Cash Income from short-term crops				
Cash income from long-term crops				

Reference: SEGA Manual pp. 116 - 119

PRA Tools for Gender Analysis (4)

3. Activity Profile – to identify who does what

1) Shifting cultivation

	Men	Women
Making a plan what to plant and when	✓	✓ ✓ ✓
Cutting trees & grasses	✓ ✓ ✓	none
Cleaning	✓ ✓	✓ ✓ ✓
Burning	✓	✓ ✓ ✓
Plowing & Land preparation	✓ ✓ ✓	✓ ✓ ✓
Sowing seeds/ planting seedlings	✓	✓ ✓ ✓
Weeding	none	✓ ✓ ✓
Harvesting	none	✓ ✓ ✓
Marketing	✓	✓ ✓ ✓

PRA Tools for Gender Analysis (5)

2) Forest Resource Management

	Men	Women
Planning for forest resource management	✓ ✓ ✓	✓
Cutting grasses & ground leveling	✓ ✓ ✓	✓
Planting Seedlings	✓ ✓ ✓	✓
Forestry (Taking care of seedlings)	none	✓ ✓
Pruning & Weeding	✓ ✓ ✓	✓ ✓
Patrol of wildfire & illegal logging	✓ ✓ ✓	none
Cutting & Marketing	✓ ✓ ✓	none

PRA Tools for Gender Analysis (6)

3) Reproductive work – household chores & care work

	Men	Women
Collecting firewood		
Fetching water		
Cooking & washing dishes		
Washing clothes		
Cleaning house		
Child-care		
Taking care of livestock		

PRA Tools for Gender Analysis (7)

4. Daily Activity

Objective: to identify who does what and when is busy & free during a day

Men		Women	
Time	Activities	Time	Activities
	Get up		Get up
	Go to bed		Go to bed

PRA Tools for Gender Analysis (8)

5. Annual Calendar

Objective: to identify who does what for crop cultivation throughout a year

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Veg.	M F												
Fruits	M F												
Cocoa/ Kava	M F												
Pig	M F												
Poultry	M F												

Reference: SEGA Manual pp. 107 - 110

PRA Tools for Gender Analysis (9)

6. Analysis of Problems, Causes, and Opportunities

Objective: to identify and analyze critical problems, their causes, and opportunities to solve the problems

Problems	Causes	Opportunities
Women hesitate to participate in decision-making and take leadership	Lack of self-confidence	
Women cannot afford to actively participate in activities	Too busy doing a lot of duties	
Productivity of crops declines drastically	Soil illusion Giant African Snail	
Book-keeping/Record-keeping is not properly done		

Reference: SEGA Manual pp. 141 - 143

PRA Tools for Gender Analysis (10)

7. Interviews - Focus Groups Discussion

Objective: Researchers can collect ideas/thoughts from the diverse group of people during a limited time

Procedures & considerations

- Set up the main objective of the discussion
- Develop a semi-structured questionnaire to address the objective
- Form a group of 5 to 7 women only/men only/mix with diverse socio-economic/similar background
- Facilitate/encourage all participants to express their ideas, thought, and experiences and prevent particular persons from dominating the discussion

PRA Tools for Gender Analysis (11)

Main objective for Focus Groups of Discussion

To address the question: **How has the SFRM Project impacted women in terms of their empowerment?**

Self-reliance & Empowerment: a person can make a choice, make a decision, and act on her/his own

The example of a Semi-structured questionnaire

- Did women involve in decision-making before the SFRM started?
- If not, why?
- How were women's ideas and thoughts about their participation in community's decision-making process when the SFRM staff first encouraged them to do so?
- Why?
- Are there any changes in their ideas and thoughts?
- Why?
- To what extent have women participated in decision-making, forest resource management, agro-forestry, or other income generating activities?
- Why do you think so?
- If women's participation is not active or constrained, what are main reasons?
- Did you try any measures to solve such problems/constraints?
- Why (or why not)?
- How do you evaluate women's changes in terms of their attitude/self-reliance and capacity?
- Why do you think so?
- What do you think promoted/contributed to their changes?
- What else do you think women need to improve their livelihoods?
- Why do you think so?
- What do you think women need to involve more in decision-making and take leadership?
- Why do you think so?

Designing & Planning for PRA (1)

- Who go to Komuniboli and Falake for field work?
  Komuniboli on Monday, 13 June by car
  Falake from 15 to 17 June by air and car
- What is your main objective for PRA/Gender Analysis?
- What tools will you use for addressing your main objective?
- How much time is necessary for collecting information by using each tool?
- How and for what purpose will you use the results of PRA?

Designing & Planning for PRA (2)

		Komniboli	Falake
1	Who goes		
2	Main objectives		
3	Tools		
4	Time schedule		
5	How to use findings		21

References:

MOFR & JICA SFRM Project. 2022. *Factsheet Gender Analysis.* Vol. 12. available at:
https://www.mofr.gov.sb/en/component/edocman/jica-factsheet/factsheet-vol-12-ga

Thomas-Slyater, B. et al. 1995. *A Manual for Socio-economic and Gender Analysis (SEGA): Responding to Development Challenges*. available at:
https://pdf.usaid.gov/pdf_docs/PNABX222.pdf

If any questions, please feel free to send an e-mail at **atsuko_nonoguchi@kk-grp.jp**

Thank you!

The Project on Capacity Development for Sustainable Forest Resource Management

Gender Training Program

Why does gender matter sustainable forest resource management?

Field Work @ Komuniboli on 13 June 2022

Atsuko Nonoguchi, Gender Expert

Today's Activity

PRA & Gender Analysis Workshop

Length of Activity	PRA Tools/Activities
30 min	'Village Walk'
30 min.	'Resource Mapping'
30 min.	'Activity Profile' and 'Access & Control'
30 min.	'Daily Activity' and 'Annual Calendar'
30 min.	'Problems, Cause, and Opportunities'
60 min.	'Focus Groups Discussion'
10 min	Review of the Day

Today's Goal

- Share the thoughts and experiences of participants and learn from each other

- Identify who does what and who has what/who does not have what

- Think about your problems and what action you need to take

1. Resource Mapping

Drawing a Village Map

- ☐ Roads
- ☐ Forest land & Agro-forestry Plots
- ☐ Agricultural land
- ☐ Rivers, springs, and ponds
- ☐ Social facilities (school, health post, community center, church, etc.)
- ☐ houses

2. Activity Profile (1)

to identify who does what

1) **Shifting Cultivation**: Short-term Crop Production

	Steps/Activities	Men	Women
1	Making a plan what to plant & when		
2	Cutting trees & grasses		
3	Clearing		
4	Burning		
5	Making a nursery for seedlings		
6	Plowing & Land preparation		
7	Sowing seeds/ planting seedlings		
8	Weeding		
9	Harvesting		
10	Marketing		

2. Activity Profile (2)

2) **Forest Resource Management:** long-term forest tree species (Timber)

	Steps/Activities	Men	Women
1	Planning, including selection of site and species, layout of plantation, etc.		
2	Cutting grasses & ground leveling		
3	Developing a nursery		
4	Seed preparation, sowing seeds, preparing for seedlings		
5	Planting Seedlings		
6	Tending		
7	Weeding, Mulching, Shading, etc.		
8	Patrol of wildfire & illegal logging		
9	Cutting & Milling		
10	Marketing		

2. Activity Profile (3)

3) Household chores & care work

	Activities	Men/ Boys	Women/ Girls
1	Collecting firewood		
2	Fetching water		
3	Cooking		
4	Washing dishes		
5	Washing clothes		
6	Cleaning house		
7	Child-care		
8	Taking care of livestock		

3. Access & Control Profile

to identify **who has access & control and decision-making power**

	Who has 'Access'		Who has 'Control'	
	Men & Boys	Women & Boys	Men & Boys	Women & Girls
Forest land				
Agricultural land				
Pigs				
Chickens				
Fish				
Employment & Salary				
Short-term crops & Income				
Long-term crops & Income				

4. Daily Activity

to identify who does what and when are women & men free during a day

Men		Women	
Time	Activities	Time	Activities
AM	Get up		Get up
PM			
	Go to bed		Go to bed

5. Annual Crop Calendar

to identify who does what for each crop cultivation throughout a year

Crop	M/F	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Cabbage	M F												
Potatoes	M F												
Pineapple													
Cacao	M F												
Pig	M F												
Poultry	M F												

6. Problems, causes, & Opportunities

to identify and analyze critical problems, causes, and opportunities to solve the problems

Problems	Causes	Opportunities

7. Focus Groups Discussion

How do you evaluate the impact of the Project on your empowerment?

Changes in women's attitude and capacity

◆Women and men's attitude towards women's involvement in decision-making processes

◆Women's access to information, technology, and financial resources

◆Women's capacity to solve problems by themselves

◆Women's capacity to negotiate with men and other relevant people

◆Women's initiatives & leadership to take an action on their own

◆Problems & challenges faced by women and reasons

8. Review of the Day

- How was today's workshop?
- Did you notice anything you have never known?
- Did you find anything interesting?

Thank you!

Atsuko Nonoguchi

Gender Expert, the SFRM Project

Atsuko_nonoguchi@kk-grp.jp

7241221

The Project on Capacity Development for Sustainable Forest Resource Management

Gender Training Program
Why does gender matter sustainable forest resource management?

Field Work @ Farake on 16 & 17 June 2022
Atsuko Nonoguchi, Gender Expert

Today's Activity

PRA & Gender Analysis Workshop

Length of Activity	PRA Tools/Activities
30 min	'Transect Walk'
30 min.	'Resource Mapping'
30 min.	'Activity Profile' and 'Access & Control'
30 min.	'Annual Crop Calendar'
30 min.	'Problems, Cause, and Opportunities'
60 min.	'Focus Groups Discussion'
10 min	Review of the Day

Today's Goal

- Share the thoughts and experiences of participants and learn from each other

- Identify who does what and who has what/who does not have what

- Think about your problems and what action you need to take

1. Resource Mapping

Drawing a Village Map

- ☐ Roads
- ☐ Forest land & Agro-forestry Plots
- ☐ Agricultural land
- ☐ Rivers, springs, and ponds
- ☐ Social facilities (school, health post, community center, church, etc.)
- ☐ houses
- ☐ Piggery house/ Poultry house

2. Activity Profile (1)

To identify who does what

1) Shifting Cultivation: Short-term Crop Production

	Steps/Activities	Men	Women
1	Making a plan what to plant & when		
2	Cutting trees & grasses		
3	Clearing		
4	Burning		
5	Making a nursery for seedlings		
6	Plowing & Land preparation		
7	Sowing seeds/ planting seedlings		
8	Weeding		
9	Harvesting		
10	Marketing		

2. Activity Profile (2)

2) Forest Resource Management: long-term forest tree species (Timber)

	Steps/Activities	Men	Women
1	Planning, including selection of site and species, layout of plantation, etc.		
2	Cutting grasses & ground leveling		
3	Developing a nursery, including seed preparation, sowing seeds, preparing for seedlings		
4	Going to buy seedlings		
5	Planting seedlings		
6	Tending, weeding, mulching, etc.		
7	Cutting & milling		
8	Marketing		

2. Activity Profile (3)

3) Piggery

	Activities	Men/ Boys	Women/ Girls
1	Designing a pig house		
2	Buying necessary materials for constructing a pig house		
3	Constructing a pig house		
4	Going to buy piglets		
5	Going to buy feeds		
6	Feeding (twice)		
7	Clearing manure and washing the pig house (once)		
8	Mating/Breeding		
9	Slaughtering a pig		
10	Selling meat		

2. Activity Profile (4)

4) Household chores & care work

	Activities	Men/ Boys	Women/ Girls
1	Collecting firewood		
2	Fetching water		
3	Cooking		
4	Washing dishes		
5	Washing clothes		
6	Cleaning house		
7	Child-care		
8	Taking care of livestock		

3. Access & Control Profile

To identify who has access & control and decision-making power

	Who has 'Access'		Who has 'Control'	
	Men & Boys	Women & Boys	Men & Boys	Women & Girls
Forest & Agricultural land				
Employment & Salary				
Timber				
NTFRs				
Pigs				
Chickens				
Short-term crops & Income				
Long-term crops & Income				

4. Daily Activity

to identify who does what and when are women & men free during a day

Men		Women	
Time	Activities	Time	Activities
AM	Get up		Get up
PM			
	Go to bed		Go to bed

10

5. Annual Crop Calendar

to identify who does what for each crop cultivation throughout a year

Crop	M/F	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Cabbage	M F												
Potatoes	M F												
Pineapple													
Cacao	M F												
Pig	M F												
Poultry	M F												

6. Problems, causes, & Opportunities

to identify and analyze critical problems, causes, and opportunities to solve the problems

Problems	Causes	Opportunities

7. Focus Groups Discussion

How do you evaluate the impact of the Project on your empowerment?

Changes in women's attitude and capacity

◆Women and men's attitude towards women's involvement in decision-making processes

◆Women's access to information, technology, and financial resources

◆Women's capacity to solve problems by themselves

◆Women's capacity to negotiate with men and other relevant people

◆Women's initiatives & leadership to take an action on their own

◆Problems & challenges faced by women and reasons

13

8. Review of the Day

- How was today's workshop?

- Did you notice anything you have never known?

- Did you find anything interesting?

Thank you!

Atsuko Nonoguchi

Gender Expert, the SFRM Project

Atsuko_nonoguchi@kk-grp.jp

7241221

MOFR WEBSITE

Customization & Administration training

CONTENT

Introduction	Content Management System	Benefit of CMS	Various CMS	What is Joomla?
Why use Joomla	Tools for Webmaster	Sitemap	Site Structure	Getting into MOFR Website
Control Panel	Updating the Website	Content and Menu	Document and Files	Category and Article

Introduction

- Today websites have become a major part of our lives.
- Through a blog or a wiki or a webpage, everyone these days is present on the web, one way or the other.
- So, does that mean everyone who wants to be on the web has to be a geek? No.

All you need is a Content Management System
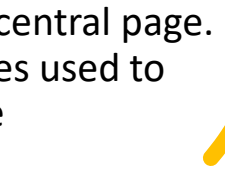
- Well, not any CMS would do. What you need is Joomla!.

JOOMLA IS YOUR FRIEND

Content Management System

In simple words, content management system is a system that manages content.

- What is Content? – Content is any type or unit of digital information. It can be text, images, graphics, video, sound, documents, records, etc or anything that we would like to manage in an electronic format.

- What is the CM System ? – A CMS is a tool that enables us to create, edit, delete and finally publish in a varying format a variety of content as well as site maintenance from a central page. It provides a collection of procedures used to manage workflow in a collaborative environment.

Benefit of CMS

- Consistent website design.
- Website is easy to update.
- Site can be updated from anywhere.
- No need to pay someone to keep our Site Updated.
- Availability of site modules and templates.
- An open source community (for support).
- Design changes are easy.
- Content and structure can easily be adapted.
- Content is well organized and searchable.
- You can assign different webmasters to administer the content.
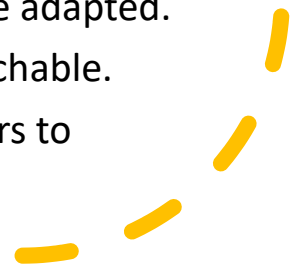
Various CMS product

PhpNuke (www.phpnuke.org)

Plone (www.plone.org)

Drupal (www.drupal.org)

Mambo (www.source.mambo-foundation.org)

Moodle(www.moodle.org)

Wordpress(www.wordpress.org)

Joomla (www.joomla.org)

What is Joomla?

- The name Joomla is derived from the Swahili(East African Language) word "Jumla", which means "all together" or "as a whole".

- Joomla! is one of the most powerful Open Source Content Management Systems. It is used all over the world for everything from simple websites to complex corporate applications.

- Joomla! is easy to install, simple to manage, and reliable.

- It is a modular CMS.

- 2.7 percent of the Web is running on Joomla.

- It enables you to build websites and powerful online applications.

- With the minimal amount of instructions.

- It is highly extensible, and thousands of extensions(Most for free) are available.

- Joomla runs on PHP/MySql.

Why to use Joomla?

- Its FREE!
- Fully supported as number 1 preferred CMS by ICTSU for all SIG ministries
- Cross Platform for client: LINUX and Windows for hosting
- Pro-Active Support – Joomla! Teams and Community members.
- Simplicity – Intuitive Graphical Web User Interface (WebUI)
- Flexibility – Highly configurable and tailorable
- Robust – Extremely stable core infrastructure
- Extensible – 3rd Party Extension and Plug-In capabilities
- Dynamic Content – MySQL database driven

Why Joomla is Better Than Other CMS

JOOMLA	OTHER CMS
It is designed to work perfectly in basic shared web hosting environments, a package that is least expensive and most common. Installer is simple and just like any other common desktop software.	The installation process is a bit complicated.
It is supported by several extensions, add-on, and plug in. They are written in PHP, which is most widely used, general purpose scripting language and best suited for web development.	Add-ons, Plug-ins, although deeply integrated, but are less powerful compared to Joomla.
Joomla probably has a pre built module to transform it in a social bookmarking website.	It is not known to support it.
Joomla's greatest advantage is availability of a large number of extensions that you can use to Plug-in extra features into your website and transform your website into anything you like.	Very Limited extensibility

---

Website Webmaster and Administrator system requirement

The following are the minimum system recommendations for the web master:

- Computers or mobile devices that support recommended internet browsers.

- Web browsers: Firefox 70+, Chrome 78+, Internet explorer 8+.

Tools for Webmaster and Administrator

It is important to update and keep the website content fresh and adapted for the Internet. To ensure Web master is well equipped for this task. The following tools or applications are necessary.

- Photoshop or related software

- Notepad++

MOFR SITEMAP

- Home
  - About Us
  - Minister's Welcome
  - History
  - Mission & Vision
  - Organization
  - What we do
    - Corporate service division
    - Forest Development & Reforestation Division
    - Forest Resources Management & Technical service division
    - Forest Industries Division
    - National Herbarium & Botanical Garden Division
    - Timber Utilization Division
  - Sitemap
- Forest Policy
  - Policy Statement
  - Strategic Actions
  - Institutional Framework
  - Legislation & Regulation
- News & Resources
  - News Releases
  - Photo Gallery
  - Information Resources
    - Annual Reports
    - Work plans
    - Publications
    - Fact Sheets
    - Field Manuals
    - Other
- Forest Information
  - Forest & Forestry
    - Forest Resources
    - Biodiversity
    - Forestry Industries
  - Forest Statistics
    - Forest area
    - Forest Ownership
    - Growing stock
    - Wood removal
    - Reforestation
    - Felling & Milling License
    - Log/Timber Export
  - Inventory Reports
  - Forest Maps

SITE STRUCTURE

GETTING INTO MOFR WEBSITE

- URL for MOFR site (Frontend) is **http://www.mofr.gov.sb**

- URL for CMS (Backend) is **http://www.mofr.gov.sb/Administrator**

LOGIN IN THE BACKEND (CMS)

CONTROL PANEL

- The CONTROL PANEL on the Home page contains quick links to site and component management tools, and an Activity panel showing statistics for most-used administrative activities.
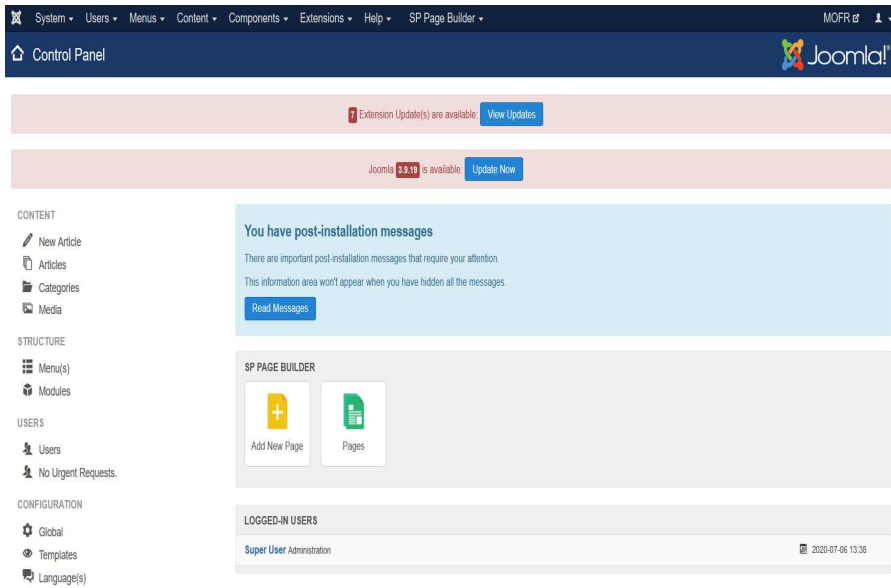
- Top Level Menus
- File Path (where you are)
- Quick Link Icons
- Quick Link Tabs
- Activity Panel Tabs showing admin activity statistics – for example, Users who are currently logged in, most updated items, and most recently created items. Also allows an Administrator to log users out.

EXCITING THE CONTROL PANEL

- To exit the system, the following image displays the steps to successfully exit or log out from the system. It is always important to log out after every session or update and you must ensure that your browser does not store your login username and password.

Recognizing different elements of MOFR site and how they relate to the CMS

All websites are different, based on their design and business function requirements. A Joomla! site will give you a wide range of flexibility in design and functionality from very simple to extremely elaborate; but whatever the degree of complexity, you will always be in control. Each element of your website is managed by a different function within the Content Management System.

A TEMPLATE is created to a specified design – this will dictate what type of font is used, where different menus appear, where modules (such as a newsflash) will appear.

UPDATING THE WEBSITE

In order to properly update the website, it is important to discuss first how the main menu or navigation of the front end is set up. This is very important because the content of the website is categorized mainly under each menu item and, in order to view specific content, the user will need to know the site menu in order to navigate and find information easily.

CONTENT AND MENU

MAIN MENU

The menu of the website is categorized in the following items: (Refer to 1.4 SITE MAP)

1. Home
2. Forest Policy
3. News & Resources
4. Forest Information

The menu is organized into a 3 level hierarchy. This ensures that users will not click more than 3 times to find information on the site. Reducing the number of clicks on the menu is a way of achieving a clean and simple navigation system. Having a simple menu means less problem solving for the user or visitor, thus giving them the freedom to freely navigate the site and easily get to main content pages.

THE MENU MANAGER

Toolbar Buttons: **Publish, Unpublished, Move, Copy, Trash, Edit, and New** are available. The following information is displayed:

MENU MANAGER DETAIL OPTION

- **Details/Options**
- **Menu Item**: This is the name given to the menu item and is displayed on the menu on the Front-end
- **Published**: This indicates whether the menu item is published, or not published. Clicking on the button will switch the state of that menu item between Published and Unpublished.
- **Reorder**: You can use the drag and drop to alter the order in which the menu items are displayed.
- **Order**: You can enter the order in which you want the menu items displayed. Use the Save button to save the changes.
- **Access**: This indicates what type of user has access to the menu item. By clicking on the title, you can toggle between, Public, Registered, and Special.
- **Itemid**: This shows the ID (identification code) for this specific Menu Item used in the database.
- **Type**: This indicates the type of link used for this menu item. If it is a Link Content Item, or a Link Static Content, you may directly edit the content by clicking the type of menu item.
- **CID**: This shows the Component ID of this specific Menu Item in the database. Other functions available on this screen include
- **Max Levels**: This drop down allows you to select the maximum levels of menu displayed. Useful if you have a long and complex hierarchical menu.
- **Display #**: This drop down allows you to select the maximum number of menu items displayed per page. Note the << Start < Previous [page number] Next > End >>navigation to move between pages

Cont. (MENU)

To create a new menu item, click on the New button. This displays the New Menu Item screen.
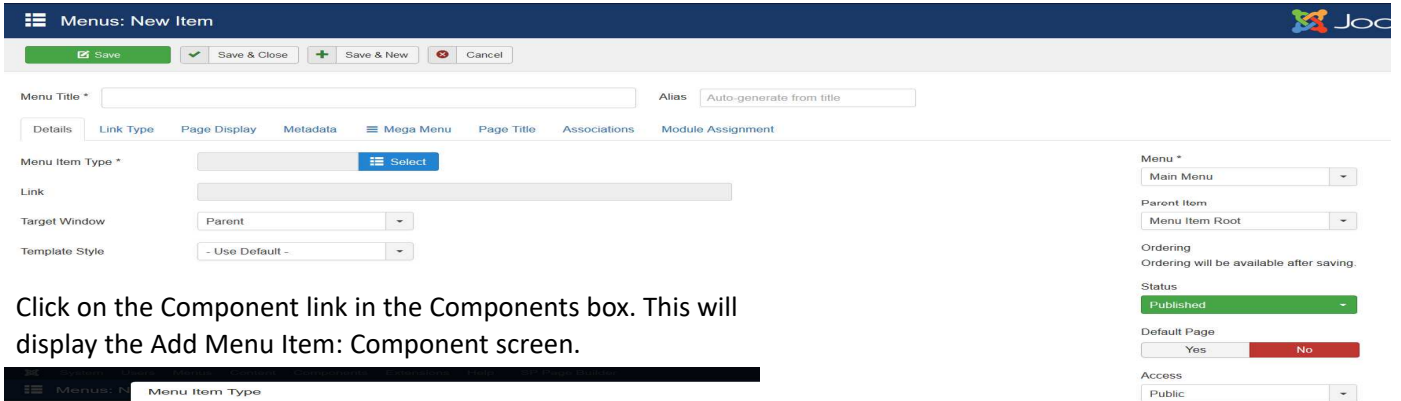
Click on the Component link in the Components box. This will display the Add Menu Item: Component screen.
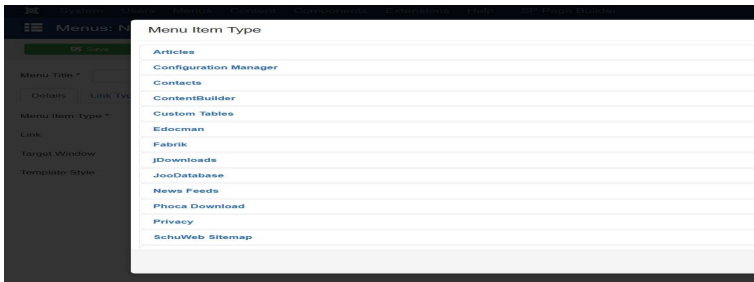
MOVE A MENU ITEMS

To move a menu item between menus, change the parent item to a menu you wish to move it to.
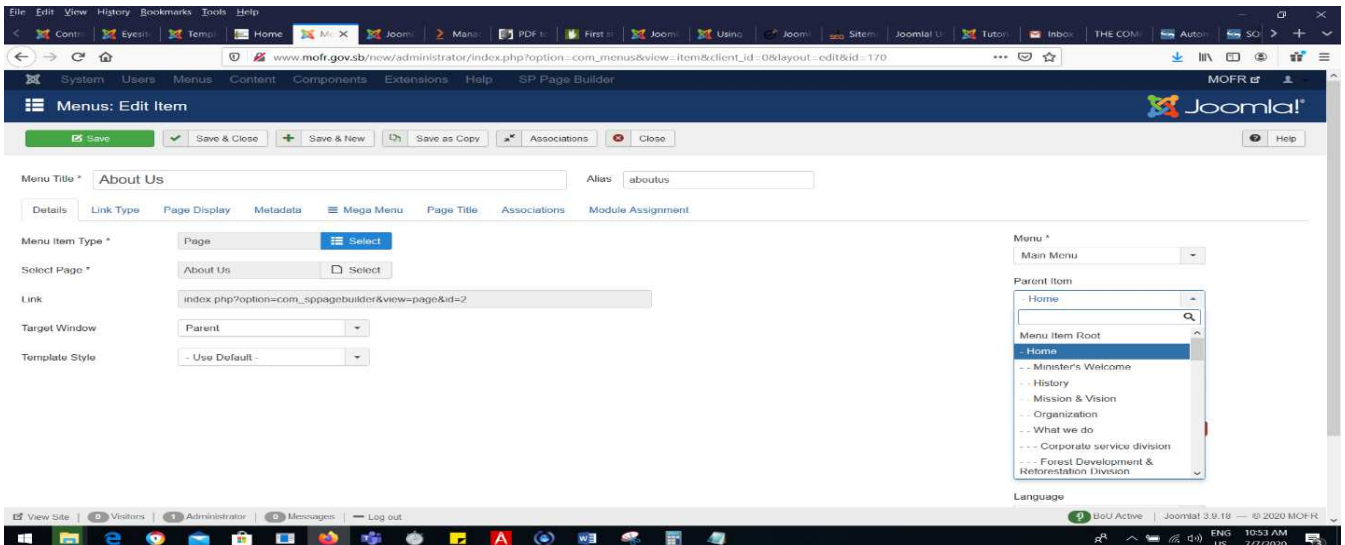
DELETE A MENU

- *Delete a Menu Item*

- Toolbar Buttons: Trash

- This function allows you to delete menu item(s).

- In the Menu Manager, select the menu item(s) you wish to delete by checking the check box to the left side of the item(s).

- Click the Trash button.

CUSTOMISATION (MENU CONTENT)

HOMEPAGE

The Home Page is made up of the following components and to make updates to each individual component the following steps are followed:

Login to the control panel (Backend). Go to SP Builder and click Pages. Refer to screenshot below.
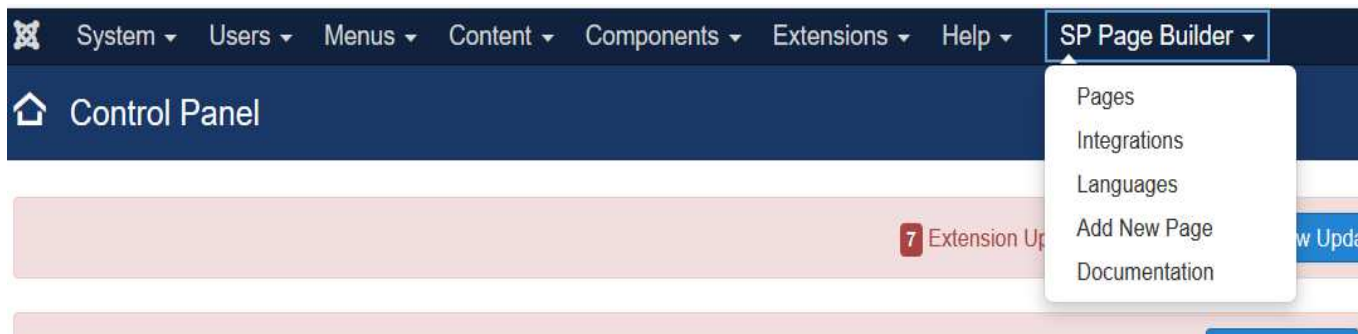
Cont. HOMEPAGE
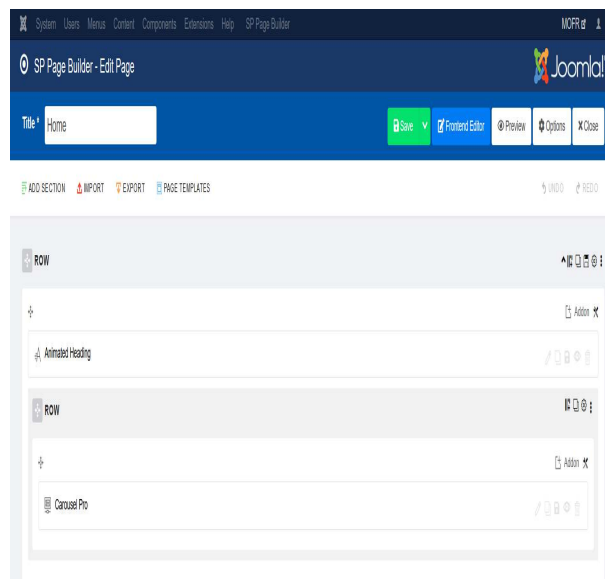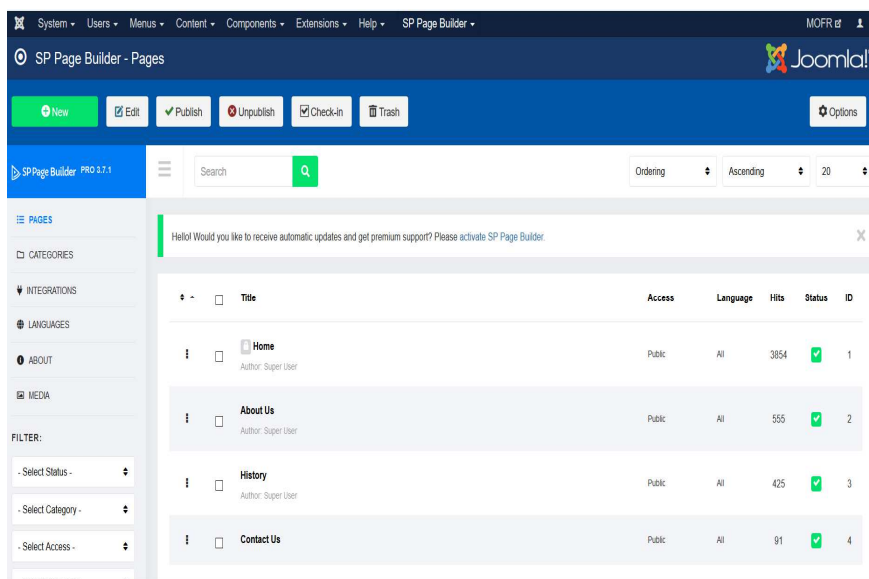
.Cont HOMEPAGE
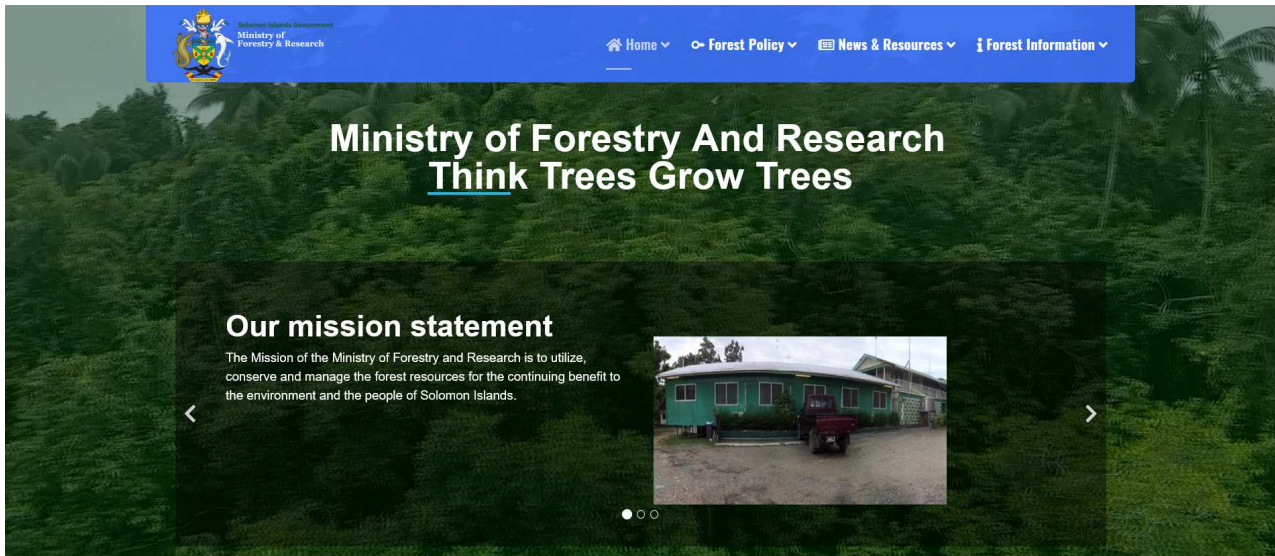
Cont. HOMEPAGE

- **Home Page – Content section**
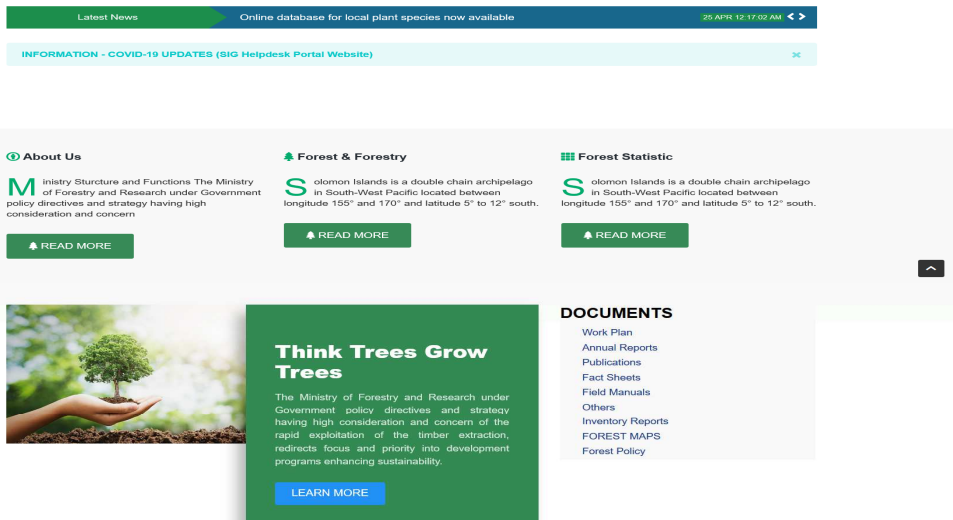
Cont. HOMEPAGE

For content section go to Home and make changes to the row as per below screenshot (More will be covered during the training).
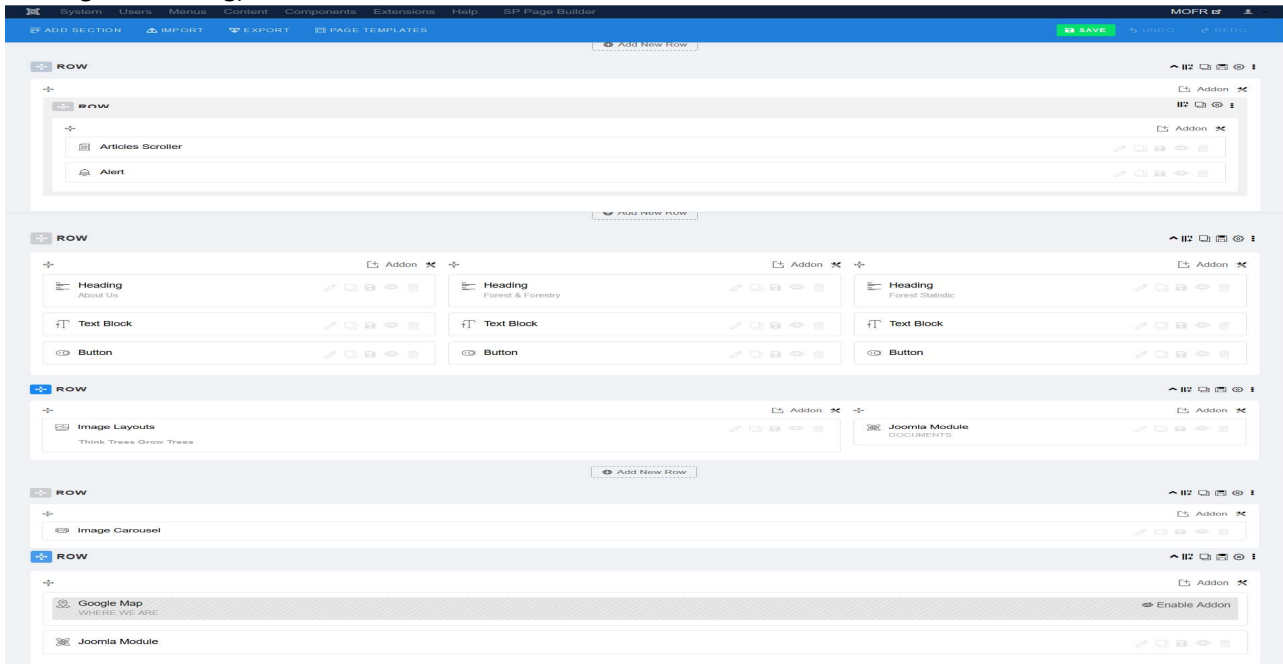
MENU -> CORRESPONDING SPBUILDER ITEM

MENU ITEM	SPBUILDER ITEM
ABOUT US	About us
MINISTER'S WELCOME	Welcome
HISTORY	History
MISSION & VISION	Mission & Vision
ORGANIZATION	Organization
WHAT WE DO	What we do
CORPORATE SERVICE DIVISION	Corporate service division
FOREST DEVELOPMENT & REFORESTATION DIVISION	Forest Development & Reforestation Division
FOREST RESOURCES MANAGEMENT & TECHNICAL SERVICE DIVISION	Forest Resources Management & Technical service division
FOREST INDUSTRIES DIVISION	Forest Industries Division
NATIONAL HERBARIUM & BOTANICAL GARDEN DIVISION	National Herbarium & Botanical Garden Division
TIMBER UTILIZATION DIVISION	Timber Utilization Division

FOREST POLICY MENU
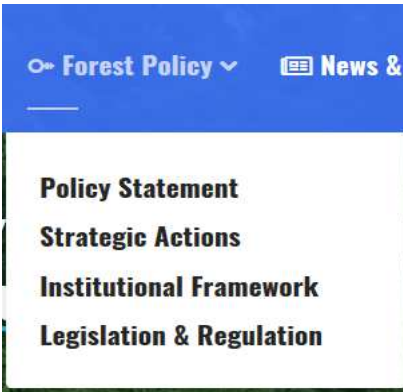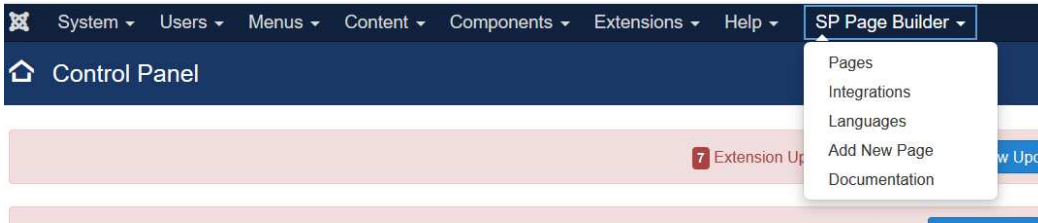
MENU ITEM	SPBUILDER ITEM
POLICY STATEMENT	Policy Statement
STRATEGIC ACTIONS	Strategic actions
INSTITUTIONAL FRAMEWORK	Institutional Framework
LEGISLATION & REGULATION	N/A

For **LEGISLATION & REGULATION** its using EDOCMAN component. To make changes - follow the instruction below.

Component - > EDOCMAN

LEGISLATION AND REGULATION

For **LEGISLATION & REGULATION** its using EDOCMAN component. To make changes - follow the instruction below.

Component - > EDOCMAN
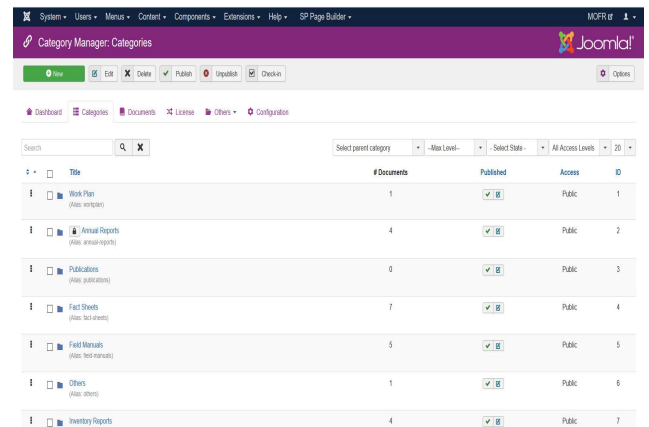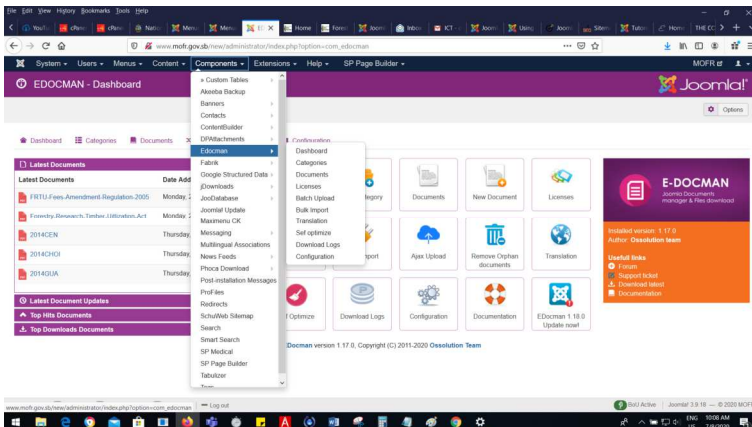
Cont. LEGISLATION AND REGULATION
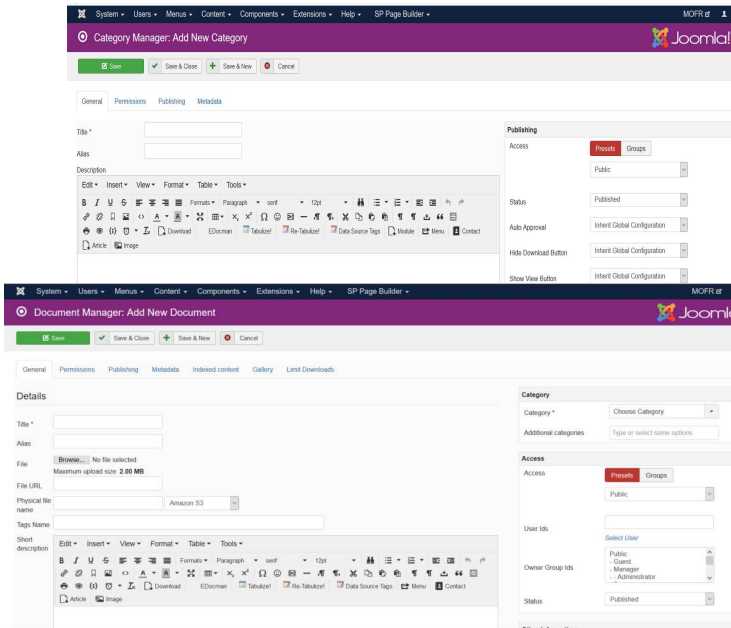
Input name and change publishing option to suite your preferences.

Secondly go to EDOCMAN document and add new to attach the document file you wish to have appear on your page or if you wish to replace an existing file. Delete the existing file and upload a new one.
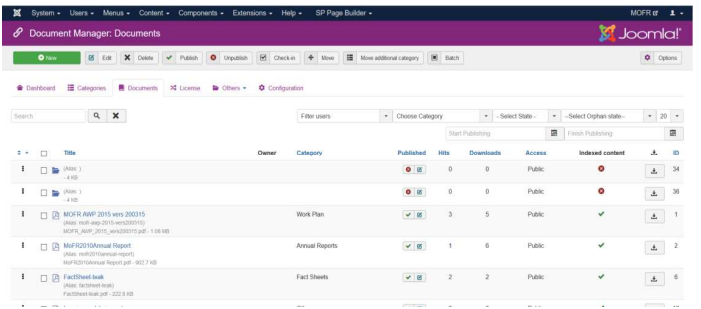
Input a name and set Category to the one you just created earlier. Set access to registered if you wish to make available the document to registered users and public to public view.

NEWS AND RESOURCE MENU
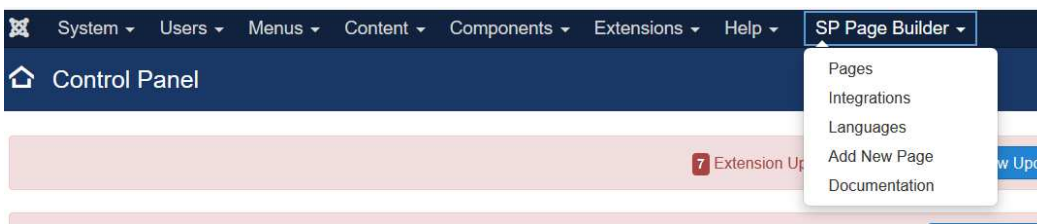
NEWS & RESOURCES SUB MENUS
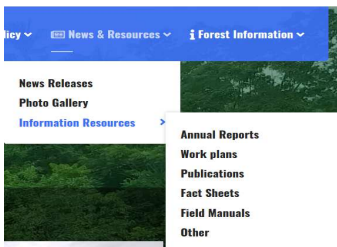
See table below for all corresponding items under the SPBuilder;

MENU ITEM	SPBUILDER ITEM
NEWS RELEASES	News / Announcement
PHOTO GALLERY	Photo Gallery
ANNUAL REPORTS	Annual Reports

The following menus are links to **EDOCMAN** component.

ANNUAL REPORTS
WORK PLANS
PUBLICATIONS
FACT SHEETS
FIELD MANUALS
OTHER

FOREST INFORMATION MENU

To make changes to the Forest Information and its child menu on the frontend and in the backend follow the steps below.

SPBuilder - > Make changes to the following items as per screenshot below.
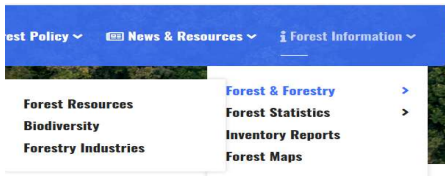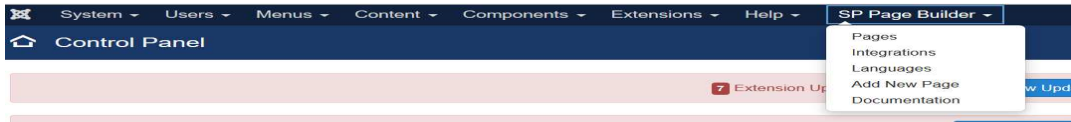
See table below for all corresponding items under the SPBuilder;

MENU ITEM	SPBUILDER ITEM
FOREST RESOURCES	State of Forest resources
BIODIVERSITY	Biodiversity and Ecosystem
FOREST AREA	Forest Area
FOREST OWNERSHIP	Forest Ownership
GROWING STOCK	Growing stock
WOOD REMOVAL	Wood removal
REFORESTATION	Reforestation
FELLING & MILLING LICENSE	Felling & Milling License
LOG/TIMBER EXPORT	Log/Timber Export
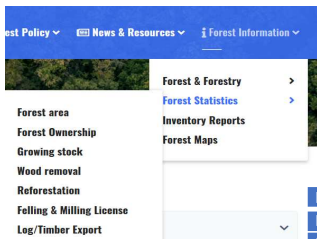
The following menus are links to EDOCMAN component.

INVENTORY REPORT
FOREST MAPS
FIELD MANUALS

DOCUMENT AND FILES

Document management is handled and manage through Joomla component called "**Docman**".

Instruction:

Components -> Docman -> Documents -> Documents & Files

Refer to DOCMAN user manual for full detail instruction on how to use this module. Docman is attached with this manual.
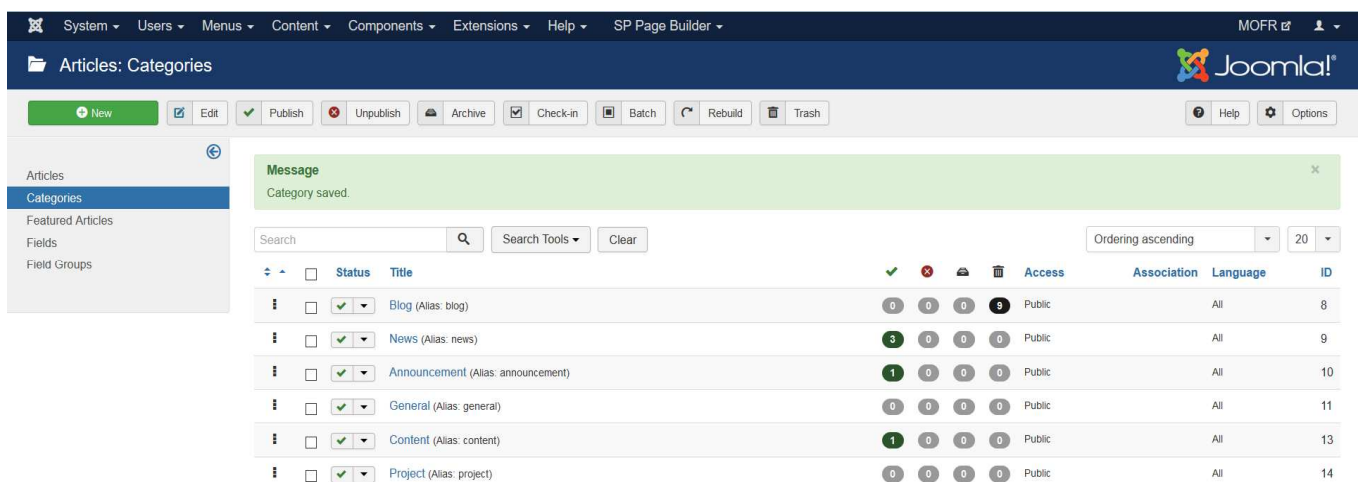
CATEGORY AND ARTICLE

CATEGORY

To create a category, the following steps are followed:

Steps: Content -> Categories

Cont. CATEGORY

ARTICLE

An article is created using the following steps:

Steps: Content -> Articles

Cont. Article

PUBLISHING AND DELETING ARTICLE

For the article to be available to the public it has to be set to Published. At times an article is out of date or no longer regarded as useful content for the site, you will need to hide them from public access, thus you will need to know how an article is Unpublished in the Articles list page.

To do so the following steps should be followed:

UPDATES FOR EXISTING ARTICLE

To make changes to existing article the following is required:

Steps: **Content -> Articles**

The Project on Capacity Development for Sustainable Forest Resource Management in Solomon Islands

MINISTRY OF FORESTRY AND RESEARCH (MOFR/JICA)

OR SolGeoFIMS Customization

Japhliet Rouhanna
Rouhanna22@gmail.com or jrouhanna@yahoo.com
KOKUSAI KOGYYO ICT LOCAL Consultant

Contents

- Geonode System Components
- Geonode Migration Overview
- Django Architecture or Overview
- Basic Geonode Configuration
- URL Configuration and Change
- Web Customization
- Server-side Administration Tools & commands

Geonode Migration Overview

Oracle VirtualBox

Geonode Application
Ubuntu OS

Window 10

Geonode Application
Ubuntu OS

Changes

VMWare Sphere

ESX Server

VMWare Sphere

Non-Dedicated Server Hardware

Dedicated Server Hardware
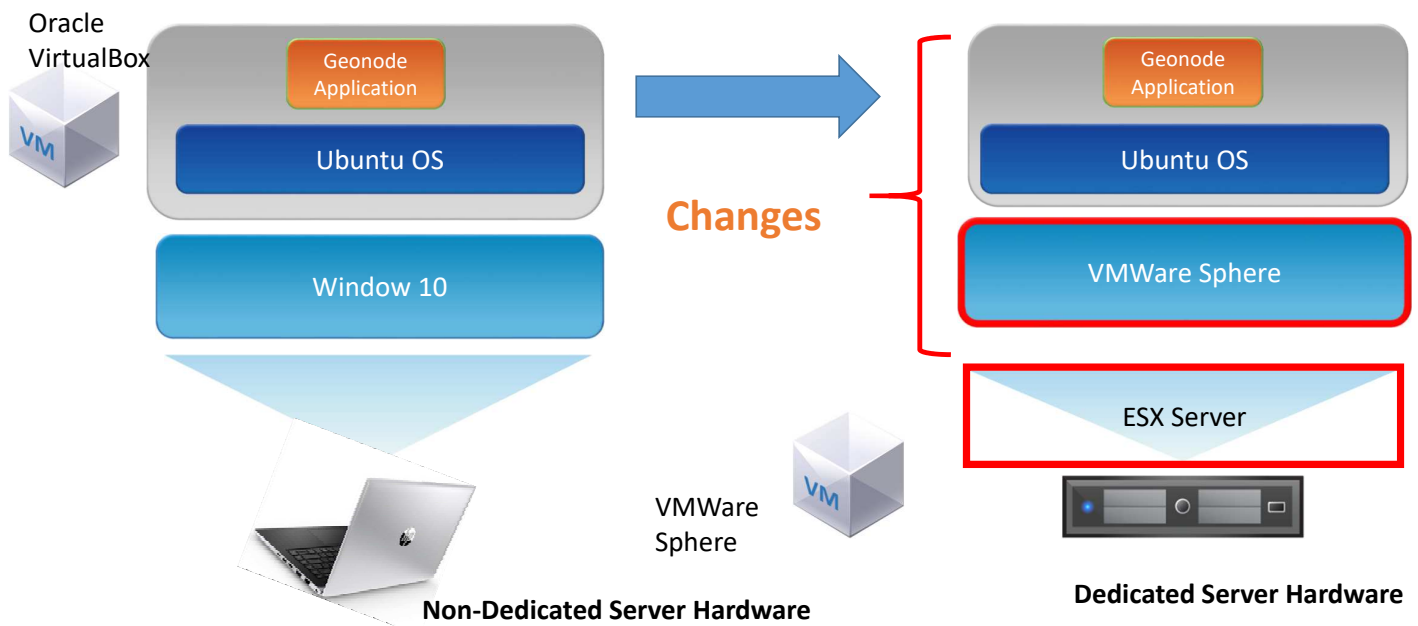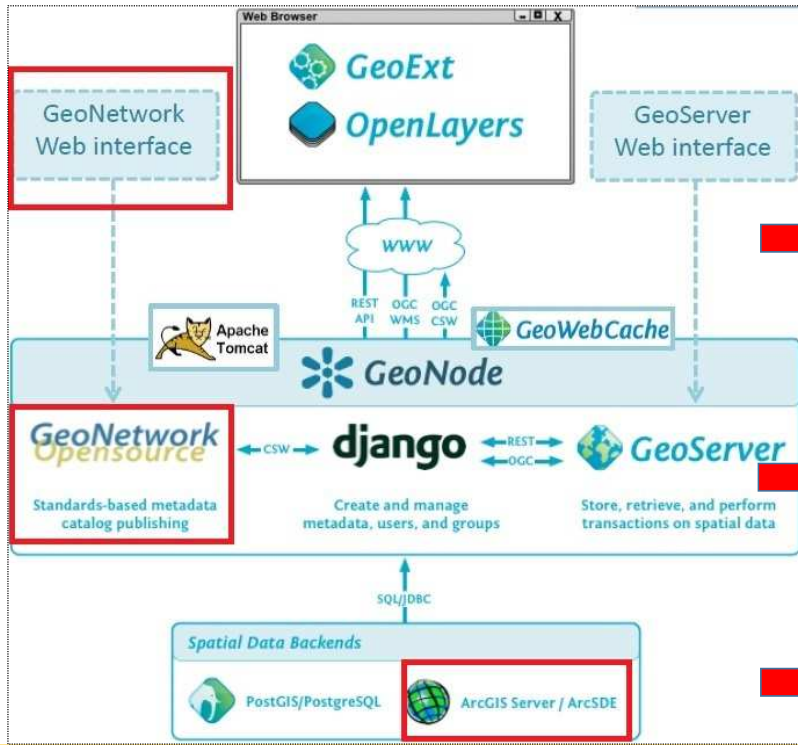
Geonode Stack

Application Layer
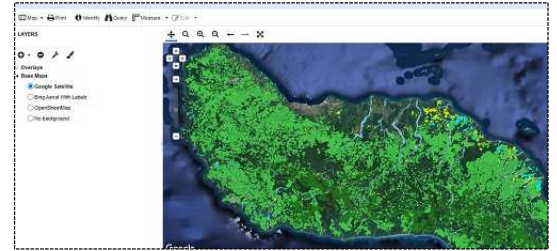
Service Layer

Data Layer — PostgreSQL & PostGIS:

Geonode Stack-PostGIS
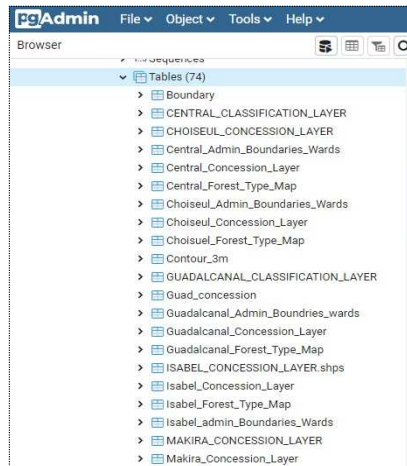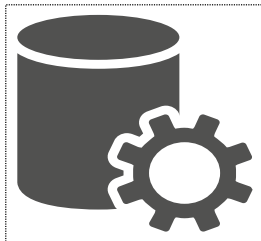
- PostgreSQL & PostGIS : Spatial Database

The database component manage data and configuration information for Geonode/Django and Geoserver.
All of these tables and data are stored within the geonode database on PostgreSQL.

We will use the pgAdmin4 & Putty application to Manage the PostGIS database directly. Note: pgAdmin4 & Putty are third party tools therefore it is not installed by default.

SSH Tunnel Access to Geonode Database-http://127.0.0.1:8272/browser/

Geonode Stack-Geoserver
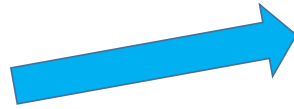
Type	Title
	komuniboli_Boundary
	Builtup areas
	CENTRAL_CLASSIFICATION_LAYER
	CHOISEUL_CONCESSION_LAYER
	Central_Admin_Boundaries_Wards
	Central_Concession_Layer
	Central_Forest_Type_Map
	Choiseul_Admin_Boundaries_Wards
	Choiseul_Concession_Layer
	Choisuel_Forest_Type_Map
	Komuniboli_Contour_3m
	GUADALCANAL_CLASSIFICATION_LAYER
	Guad_concession
	Guadalcanal_Admin_Boundries_wards
	Guadalcanal_Concession_Layer
	Guadalcanal_Forest_Type_Map
	Hillshading
	ISABEL_CONCESSION_LAYER_shps
	Isabel_Concession_Layer
	Isabel_Forest_Type_Map
	Isabel_admin_Boundaries_Wards

- GeoServer: GeoSpatial Data Manager

GeoServer is a Java-based server with an OGC-compatible data store that can provide WMS, WFS, WCS and other services in common formats like GML, GeoJSON, KML and GeoTiff.

It is connected with Geonode therefore data added to geoserver can be fetched directly in to geonode and vice versa.
GeoServer has a Web front-end to handle data storage, styling and Web service configuration directly,
but this should be avoided in the context of GeoNode.

http://solgeofims.mofr.gov.sb/geoserver/

Geonode Stack-Django
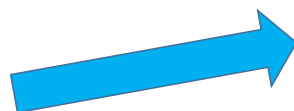
Django administration
Site administration
ACCOUNTS
Email addresses · + Add · Change
ACTSTREAM
Actions · + Add · Change
Follows · + Add · Change
ANNOUNCEMENTS
Announcements · + Add · Change
Dismissals · + Add · Change
AUTHENTICATION AND AUTHORIZATION
Groups · + Add · Change
AVATAR
Avatars · + Add · Change
BASE

- Django: The GeoNode front-end Manager

Django is a high-level *Python Web framework* that encourages rapid development and clean, pragmatic design.
It allows the user to easily tweak the content and look and feel and to extend GeoNode to build customized GeoPortals.
It includes tools to handle user registration and accounts, avatars, and helper libraries to interact with GeoServer and GeoNetwork.
There is a wide range of third party apps that can be plugged into a GeoNode-based site.

http://solgeofims.mofr.gov.sb/en/admin/

Geonode Stack- GeoExt & OpenLayer

- GeoExplore: The Mapping Components

The main map interface for MOFR GeoNode front-end is the Map Composer / Editor. It is built on top of GeoExt and uses OpenLayers, GXP.
It Communicates to the other components via HTTP and JSON as well as standard OGC services.

Django Architecture or Overview

MTV or MVT
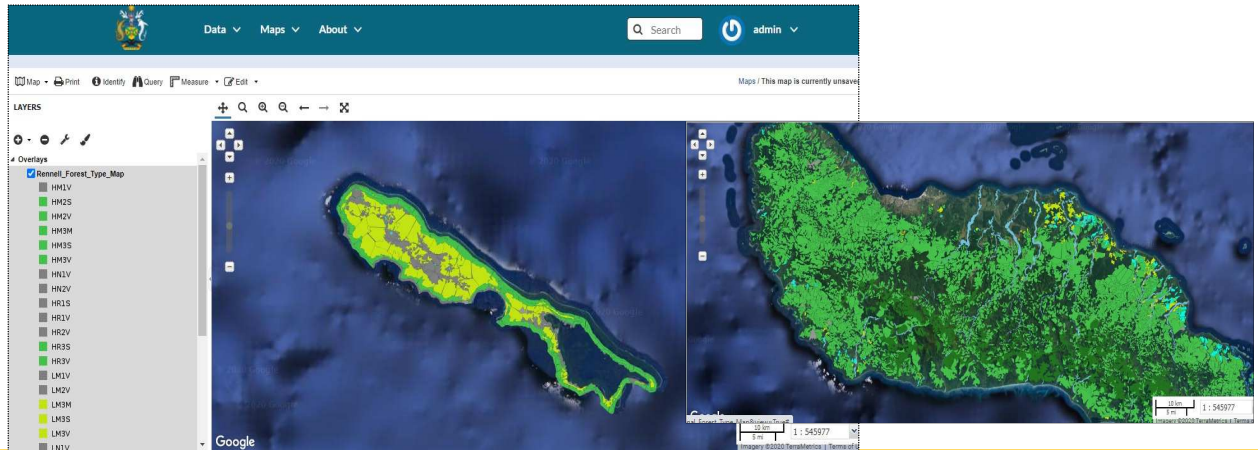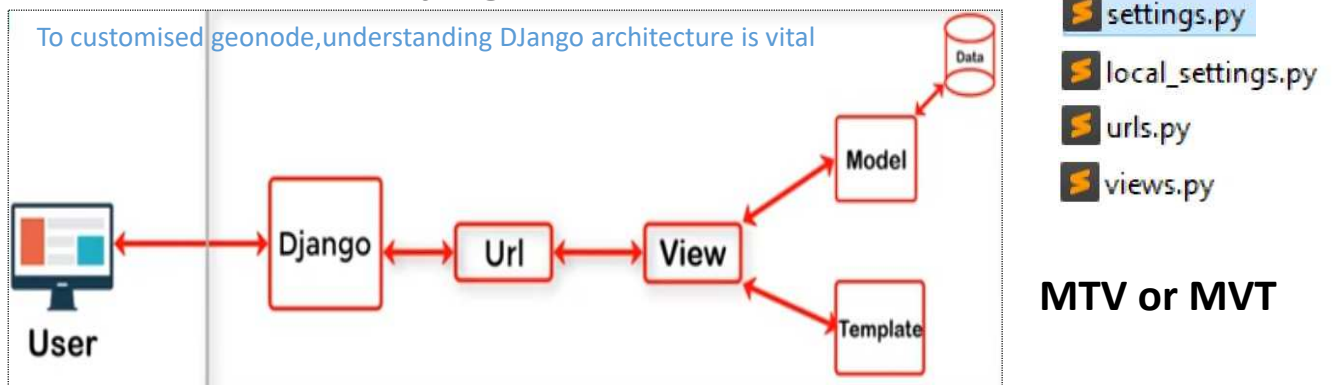
- This section introduces some basic concepts of DJango, the Python based web framework on top of which GeoNode has been developed.
- The main objective of Django is to facilitate the creation of complex sites oriented databases. Django emphasizes reusability and "pluggability" of components, rapid development, and the principle of not repeating yourself. Python is used everywhere, even for settings, files, and data models.
- Django also provides an administrative interface to create, read, update and delete models that is dynamically generated by introspection and configured through the Administrative Templates.

```
In [ ]: /
        |-- geonode
        |-- manage.py
        |-- geonode
        |   |-- __init__.py
        |   |-- settings.py
        |   |-- local_settings.py
        |   |-- static
        |   |   |-- css
        |   |   |   |-- site_base.css
        |   |   |-- img
        |   |   |
        |   |   |-- js
        |   |
        |   |-- static_root
        |   |   |--geonode
        |   |   |--lib
        |   |   |-- static
        |   |       |--Geoexplorer
        |   |
        |   |-- templates
        |   |   |-- site_base.html
        |   |   |-- index.html
        |   |-- urls.py
        |   |-- wsgi.py
        |-- setup.py
```
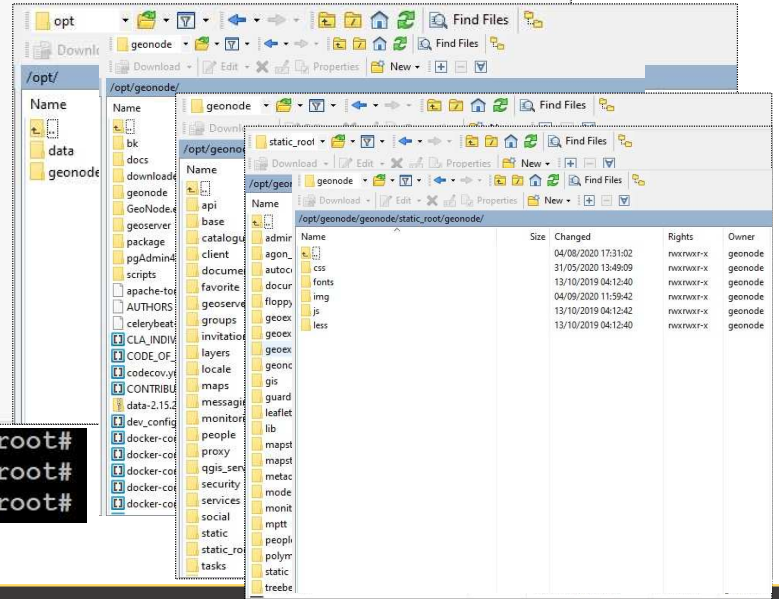
```
root@sig-pdgeonode:/opt/geonode/geonode/static_root#
root@sig-pdgeonode:/opt/geonode/geonode/static_root#
root@sig-pdgeonode:/opt/geonode/geonode/static_root#
```


Geonode Basic Configuration- Add geonode App & GeoExplore App
INSTALLED_APPS

```
# Now edit settings.py & add geonode app to INSTALLED_APP
```

```
In [ ]: INSTALLED_APPS = (

            # Apps bundled with Django
            'django.contrib.sessions',
            'django.contrib.sites',
            'django.contrib.admin',
            'django.contrib.sitemaps',
            'django.contrib.staticfiles',
            'django.contrib.messages',
            'django.contrib.humanize',
            'django.contrib.gis',

            # Utility
            'dj_pagination',
            'taggit',
            'treebeard',
            'leaflet',
            'bootstrap3_datetime',
            'django_filters',
            'floppyforms',
            'geoexplorer',
            # Theme
            'django_forms_bootstrap',

            # GeoNode
            'geonode',
        ) + GEONODE_APPS
```

 settings.py

Geonode Basic Configuration- Check Static & Static_ROOT Files Binds to Project_Root Directory

```
In [ ]:  # Absolute path to the directory that holds static files

In [ ]:  STATIC_ROOT = os.getenv('STATIC_ROOT',
                                os.path.join(PROJECT_ROOT, "static_root")
                                )

In [2]:  # URL that handles the static files

In [ ]:  STATIC_URL = os.getenv('STATIC_URL', '%s/static/' % FORCE_SCRIPT_NAME)

In [ ]:  # Additional directories which hold static files

In [ ]:  _DEFAULT_STATICFILES_DIRS = [
             os.path.join(PROJECT_ROOT, "static"),
         ]

         STATICFILES_DIRS = os.getenv('STATICFILES_DIRS', _DEFAULT_STATICFILES_DIRS)
```

```
In [ ]:  # List of finder classes that know how to find static files in
         # various locations.
         STATICFILES_FINDERS = (
             'django.contrib.staticfiles.finders.FileSystemFinder',
             'django.contrib.staticfiles.finders.AppDirectoriesFinder',
             #    'django.contrib.staticfiles.finders.DefaultStorageFinder',
         )
```

Geonode Basic Configuration- templates

- Check that that templates folder bind to Project_root directory as well.

```
In [ ]:  # Django automatically includes the "templates" dir in all the INSTALLED_APPS.

In [ ]:  TEMPLATES = [
             {
                 'NAME': 'GeoNode Project Templates',
                 'BACKEND': 'django.template.backends.django.DjangoTemplates',
                 'DIRS': [os.path.join(PROJECT_ROOT, "templates")],
                 'APP_DIRS': True,
                 'OPTIONS': {
                     'context_processors': [
                         'django.template.context_processors.debug',
                         'django.template.context_processors.i18n',
                         'django.template.context_processors.tz',
                         'django.template.context_processors.request',
                         'django.template.context_processors.media',
                         'django.template.context_processors.static',
                         'django.contrib.auth.context_processors.auth',
                         'django.contrib.messages.context_processors.messages',
                         'django.contrib.auth.context_processors.auth',
                         'geonode.context_processors.resource_urls',
                         'geonode.geoserver.context_processors.geoserver_urls',
                         'geonode.themes.context_processors.custom_theme'
                     ],
```

settings.py

Configure NGINX-Webserver to Serve the STATIC_ROOT FOLDER


```
root@sig-pdgeonode: /etc/nginx/sites-available
root@sig-pdgeonode:/etc/nginx/sites-available#
```

```
location / {
    etag off;
    uwsgi_pass 192.168.5.50:8000;
    uwsgi_read_timeout 600s;
    include uwsgi_params;
    #include proxy_params;

}

location /static/ {
    alias /opt/geonode/geonode/static_root/;
}

location /uploaded/ {
    alias /opt/geonode/geonode/uploaded/;
}

location /geoserver {
    proxy_pass http://geoserver_proxy;
    include proxy_params;
}
```

```
[uwsgi]
socket = 0.0.0.0:8000
uid = geonode
gid = www-data

plugins = python
virtualenv = /home/geonode/.virtualenvs/geonode
env = DEBUG=False
env = DJANGO_SETTINGS_MODULE=geonode.local_settings
env = SECRET_KEY='RanD0m%3cr3tK3y'
env = SITE_HOST_NAME=solgeofims.mofr.gov.sb
env = SITEURL=http://solgeofims.mofr.gov.sb/
env = LOCKDOWN_GEONODE=False
env = SESSION_EXPIRED_CONTROL_ENABLED=True
env = FORCE_SCRIPT_NAME=
env = EMAIL_ENABLE=False
env = DJANGO_EMAIL_HOST_USER=
env = DJANGO_EMAIL_HOST_PASSWORD=
env = DJANGO_EMAIL_HOST=localhost
env = DJANGO_EMAIL_PORT=25
env = DJANGO_EMAIL_USE_TLS=False
env = DEFAULT_FROM_EMAIL=GeoNode <no-reply@localhost>
env = MONITORING_ENABLED=True
env = GEOSERVER_PUBLIC_HOST=solgeofims.mofr.gov.sb
env = GEOSERVER_PUBLIC_PORT=
env = GEOSERVER_ADMIN_PASSWORD=geoserver
env = GEOSERVER_LOCATION=http://solgeofims.mofr.gov.sb/geoserver/
env = GEOSERVER_PUBLIC_LOCATION=http://solgeofims.mofr.gov.sb/geoserver/
env = GEOSERVER_WEB_UI_LOCATION=http://solgeofims.mofr.gov.sb/geoserver/
env = RESOURCE_PUBLISHING=False
env = ADMIN_MODERATE_UPLOADS=False
env = GROUP_PRIVATE_RESOURCES=False
env = GROUP_MANDATORY_RESOURCES=False
env = OGC_REQUEST_TIMEOUT=60
env = OGC_REQUEST_MAX_RETRIES=3
env = OGC_REQUEST_POOL_MAXSIZE=100
```

$geonode/static → STATICFILES_DIRS → Static_root

NGINX → STATIC_URL → Static_root
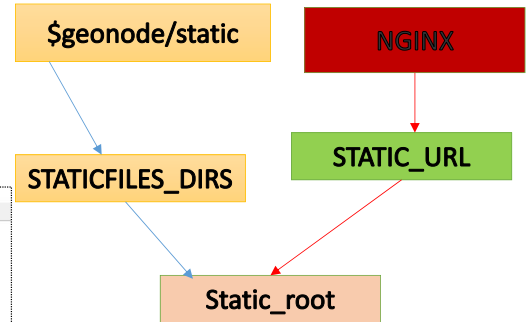
Geonode URL Configuration

- Before the Migration Geonode is accessible throughout the Network using IP Address
- Now the IP Address 192.168.5.50 is bind with Solgeofims.mofr.gov.sb,hence either the IP Address or domain name is accessible throughout the SIGNET Network.
- The host files is configured to resolve locally
- Thanks to DNS Service


```
127.0.0.1        localhost
127.0.1.1        user-VirtualBox

# The following lines are desirable for IPv6 capable hosts
::1       ip6-localhost ip6-loopback
fe00::0 ip6-localnet
ff00::0 ip6-mcastprefix
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters
192.168.5.50     solgeofims.mofr.gov.sb
127.0.0.1        solgeofims.mofr.gov.sb
```

http://192.168.5.50/
http://solgeofims.mofr.gov.sb/

95 Layers found

ForestGain_2000_2012
Service is online
Forest gain during the period 2000–2012, defined as the inverse of loss, or a non-forest to forest change entirely within the study period. Encoded as either 1 (gain) or 0 (no gain). This global dataset contain unsigned 8-bit values and have a spatial resolution of 1 arc-second per pixel, or approxi...
admin   10 Sep 2020   0   0   0   Create a Map

ForestCover_lossyear
Service is online

Web Customization-Theming of Solgeofims.gov.sb

- There are a range of options available to you if you want to change the default look and feel of your GeoNode project.
- Since GeoNode's style is based on Bootstrap you will be able to make use of all that Bootstrap has to offer in terms of theme customization.
- You should consult Bootstrap's documentation as your primary guide once you are familiar with how GeoNode implements Bootstrap and how you can override GeoNode's theme and templates in your own project.

  Let's walk through!! : To change default logo.

  1.Change to the geonode static_root directory and drop your logo.png image in to image folder
  $ cd /opt/geonode/geonode/static_root/geonode/img.

  2.Change to the css directory
  $ cd /opt/geonode/geonode/static_root/geonode/css.

  4.Override the CSS that displays the logo by editing **site_base.css**
   $ sudo vi site_base.css


```
/opt/geonode/geonode/static_root/geonode/css/site_base.css - user@192.168.5.50 - Editor - WinSCP

.navbar-brand {
    width: 350px;
    height: 70px;
    background-size: 300px 70px;
    background-position-y: center;
    background-color:rgba(0,0,0,0.3);
    background: transparent url("../img/logo.png") no-repeat scroll 15px 0px;
}
```

- Note ..Adding Many CSS Rules to the **site_base.css** you can customized various parts of the geonode


```
site_base.css - Notepad
File Edit Format View Help
.navbar-brand {
    width: 350px;
    height: 70px;
    background-size: 300px 70px;
    background-position-y: center;
    background-color:rgba(0,0,0,0.3);
    background: transparent url("../img/logo.png") no-repeat scroll 15px 0px;
}
.content-wrap
{
  margin: 75px 75px;

}
#wrap {
    background-color:rgba(0,0,0,0.3);
    margin-top: 100px !important;
    padding-top: 0px;

}
#showcase
{
  background:transparent url("../img/pic2.jpg") no-repeat;
  background-attachment: fixed;
  background-size:cover;
  color:#fff;
  font-weight:bold;
}
.btn
{
```

Logo image

Background image

- Now let's check either **base.css** serve is through the browser.

Web Customization-Inspecting CSS Overrides in Chrome Browser
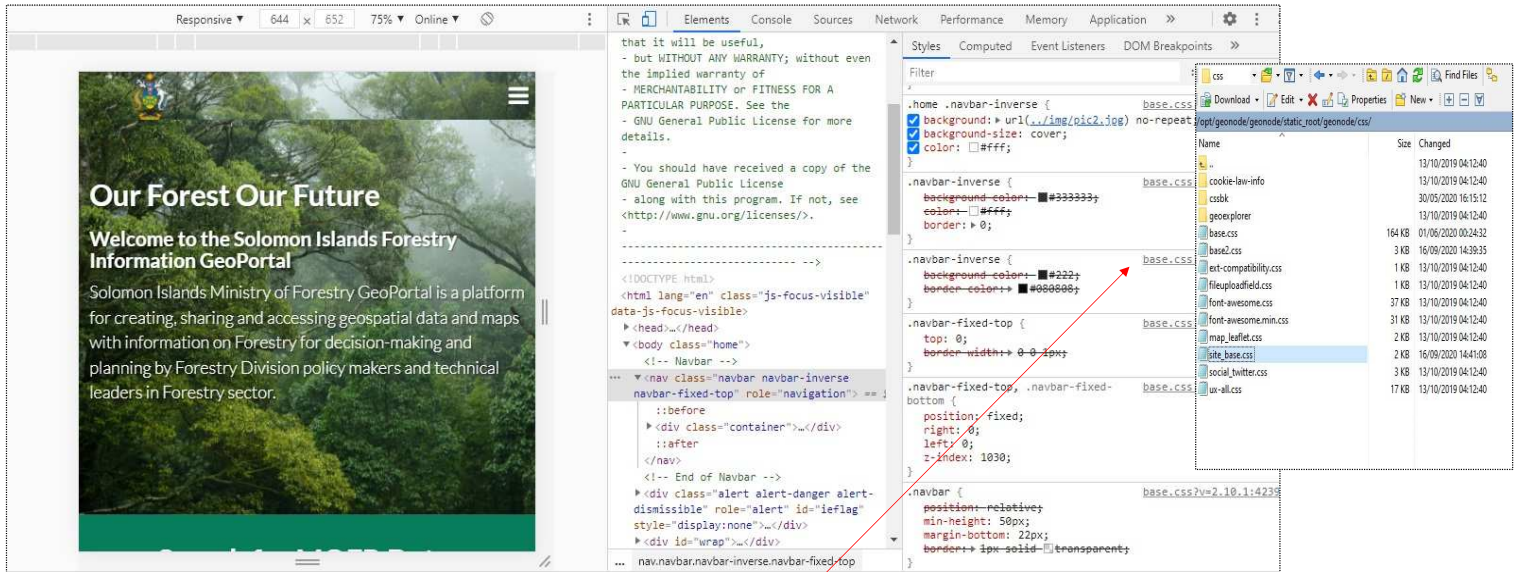
Base.css serve to browser

Web Customization-Update templates & static pages

- Next update the content of the Home page
- Geonode projects includes two basic template
  {site_base.html & site_index.html}
- Lets Override the default setting.
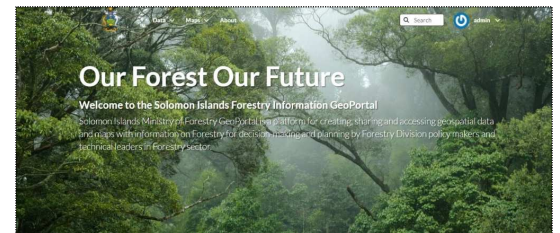
Change to the geonode templates directory and edit **site_base.htm**
$ cd /opt/geonode/geonode/templates.
NOTE: It extends from **geonode_base.html** and loads from staticfiles

```
{% extends "geonode_base.html" %}
{% load i18n %}
{% load static from staticfiles %}
{% load base_tags %}
```

Now let's override the **site_index.html** or **index.html** and
make changes to geonode home page.
$ sudo vi index.html

Server Administration-{Ubuntu}

- Server administration is also important role to perform by the admin
- Not sure WHO going to perform this role-{Guess ICT Team}
- Geonode admin need to know Minimal server admin so he/she can diagnosis problem when the application is not function properly {before escalating to IT team}.
- We will cover basic Linux command to perform the roles, e.g dmesg,
- Also we will look at python tool called **glances** that output all system parameter in one window which system admin can use to analysis the health of the system.
- Visit directories for application Logs & system logs for following:
  - geonode {main.log}
  - Geoserver {geoserver.log}
  - Nginx {Ngixn.log}
  - PostgreSQL {main.log}

{Thank you}

{Second Part of Training- Geonode Basic Administration}

The workflow training
How to use the map data on SolGeo-FIMS for the concession workflow

11th Nov, 2021
Nobuhiko Yoshimura
Forest Info Management team

This presentation is based on the report of "Commercial Logging and Reforestation for Forest Resource Management Status & Issues (2021)"

Ministry of
Forestry & Research   JICA

---

1. Licensing Process for Logging Activities at Large and Small Scale

Timber rights acquisition
- Application for timber rights acquisition (Form 1)
- Certificate of Customary Ownership (Determination) (Form 2)
- Standard Logging Agreement (Form 4)
- Certificate of Approval (Form 3)

Felling licence
- Technology and Management Agreement
- Issuance of Felling Licence
- Harvesting Plan (Annual and Coupe Plans)

Development Consent
- Environmental Impact Statement

Milling Licence
- Application (Form A)
- Milling licence (Form B)

Ministry of
Forestry & Research   JICA

2. Timber rights acquisition
2-1. Form1 Application for timber rights acquisition workflow

MOFR

Applicant → Form 1 → Licencing section → Commissioner → Province executive

Mapping section

For Timber Rights Hearing Meeting.

✕
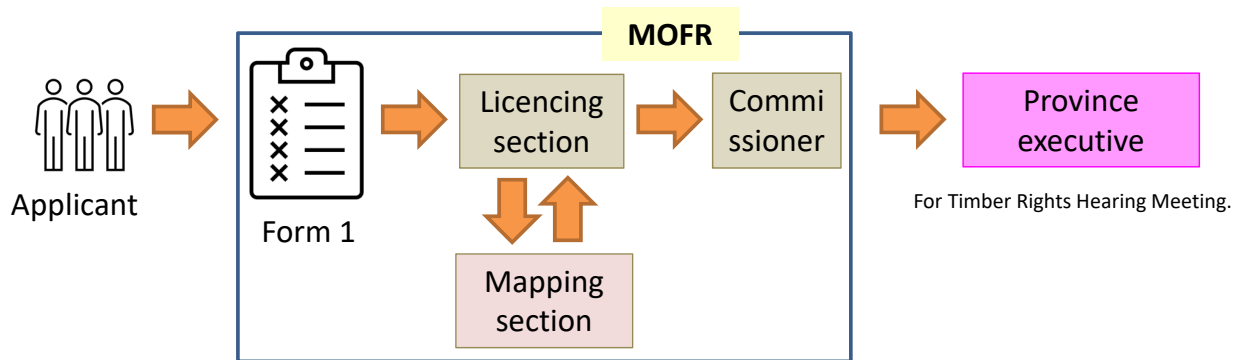
- Overlap of concession area
- Forest condition
  Hight, Volume,
  Previous logging activity

☑

Paper map → Scan → Digitizing by GIS
The basemap is 1:50000 of NGIC

---

2. Timber rights acquisition
2-2. Form1 Application for timber rights acquisition

Applicant submit the form1 with the area to acquire the timber rights
5. Area(s) within which applicant wishes to carry out logging and acquire timber rights
Note: (1) The answer to question 5 must be supported by detailed maps
Showing the areas involved.

SCHEDULE

FORM 1

FOREST RESOURCES AND TIMBER UTILISATION ACT

APPLICATION FOR APPROVAL FOR NEGOTIATION TO
AQUIRE TIMBER RIGHTS
(Section 7)

(To be submitted to the Commissioner of Forest Resources)

1. Name of applicant:

2. Address of Applicant:

3. Present type of Business (if any)

4. Present Location of Sawmill or Timber Exporting Business (if any)

5. Area(s) within which applicant wishes to carry out logging and acquire timber rights

6. Names of persons and/or land owning groups with whom preliminary discussions have been made regarding land ownership, timber rights and development proposals

7. Period for which Timber Rights sought

Details of proposed operations
a) Annual volume (cubic meters) of logs to be extracted

b) Approximate area to be logged annually

c) Proposed location of base camp

d) Proposed location of sawmill and /or export port

Signature of Applicant

Note: (1) The answer to question 5 must be supported by detailed maps
Showing the areas involved.

(2) "TIMBER RIGHT" includes a right to-
(a) inspect, survey, enumerate, mark and map any area or trees;
(b) cut, trim, lop, top and crop any tree;
(c) plant and cultivate any seed, seedling or tree:
(d) take any measure whatever for the healthy growth and protection of trees:
(e) have access to and extract(whether without any agents, servant, workmen animals, vehicles and machines, or all or any of them) any timber or tree;
(f) take any timber into possession or ownership;
(g) for the purpose of any of the things specified in paragraphs (a) to (f), construct and maintain-
   i. any works (including railways ,tramways ,roads water ways, slipways , harbour s, port areas, wharves, jetties, bridges, dams, pipelines, aerodromes, yards and camps);
   ii. any cables, power supplies, lines or other means for the distribution of power, cranes, weighbridges, saw benches, or other things;
(h) for any of the purposes specified herein-
   i. subject to the provision of the River Waters Act, to take and use water; and
   ii. to quarry, extract, move and use any stone, earth or other road- making or building material.

2. Timber rights acquisition
2-3. How we can use the SolGeo-FIMS for form1

You can access to SolGeo-FIMS data from QGIS.

Only for 1-3 min to georeference
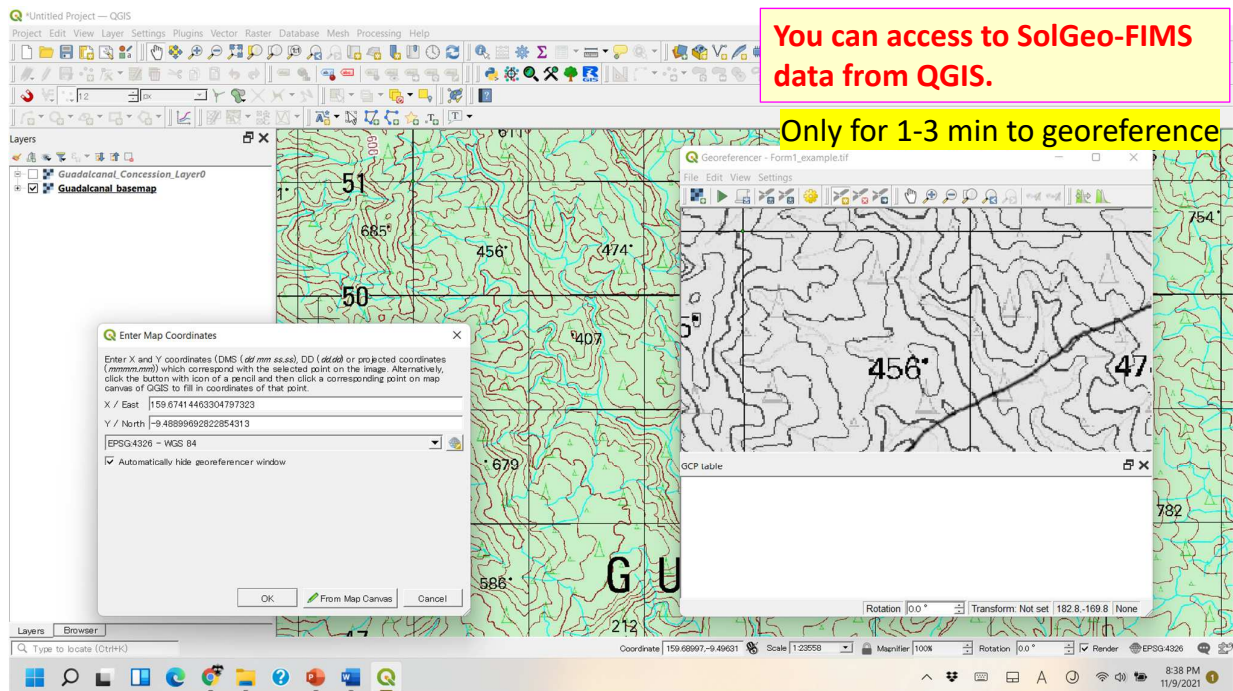
Georeferencing becomes easy and fast and accurate with the same NGIC basemap

---

2. Timber rights acquisition
2-4. How we can use the SolGeo-FIMS form1

Easy to compare the previous concession (overlapping), forest condition, topography by SolGeo-FIMS or QGIS
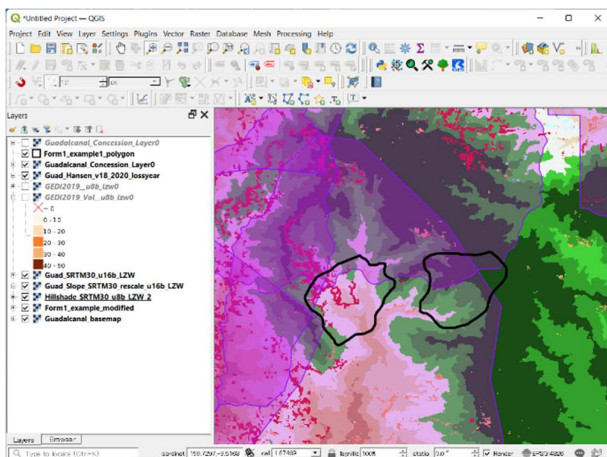
Detail analysis by QGIS
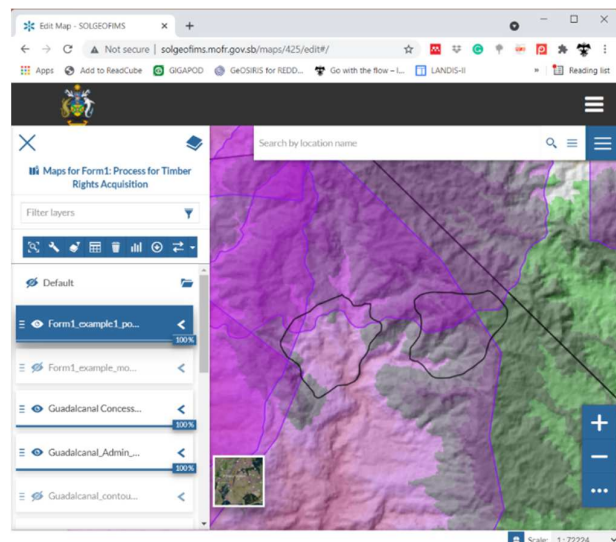
Sharing the application data

Type of connection by GIS software

- **PostGIS**
  You can access the vector data as GIS data
- **WMS: Web Mapping Services**
  You can load the maps and layers on the server with the prefix color as an image.
- **WFS: Web Feature Services**
  You can load the vector layers on the server as GIS data
- **WCS: Web Coverage Service**
  You can load the raster layers on the server as GIS data
- **Geonode**
  to access WMS, WFC, WCS on Geonode

---
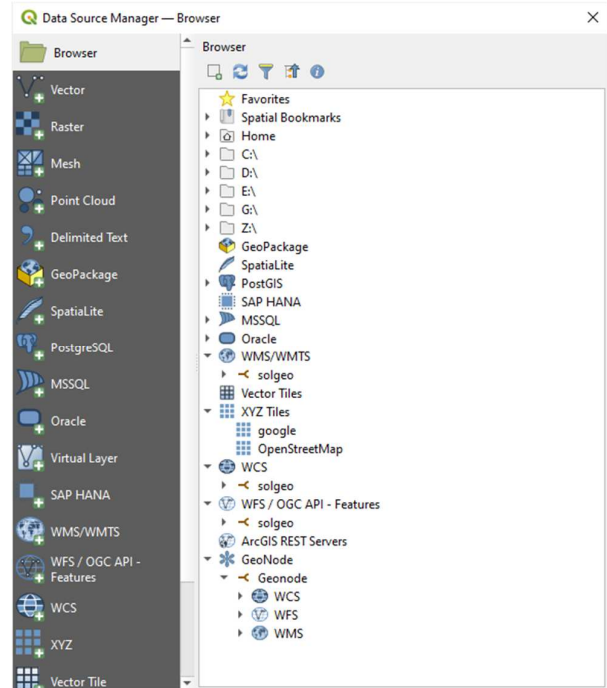
2. Timber rights acquisition
2-5. Form 2 Timber Rights Hearing Meeting

Province executive → Timber Rights Hearing Meeting ↕ PUBLIC NOTICE

Province executive → PUBLIC NOTICE of the Form 2 and its content

A proper map with clear demarcation of the proposed timber rights area must be attached

Licencing section | Commissioner

The Form 2, **map** and **the minutes** of the Timber Rights Meeting are sent to the MOFR Commissioner of Forests

Digitizing ??
Storing the document
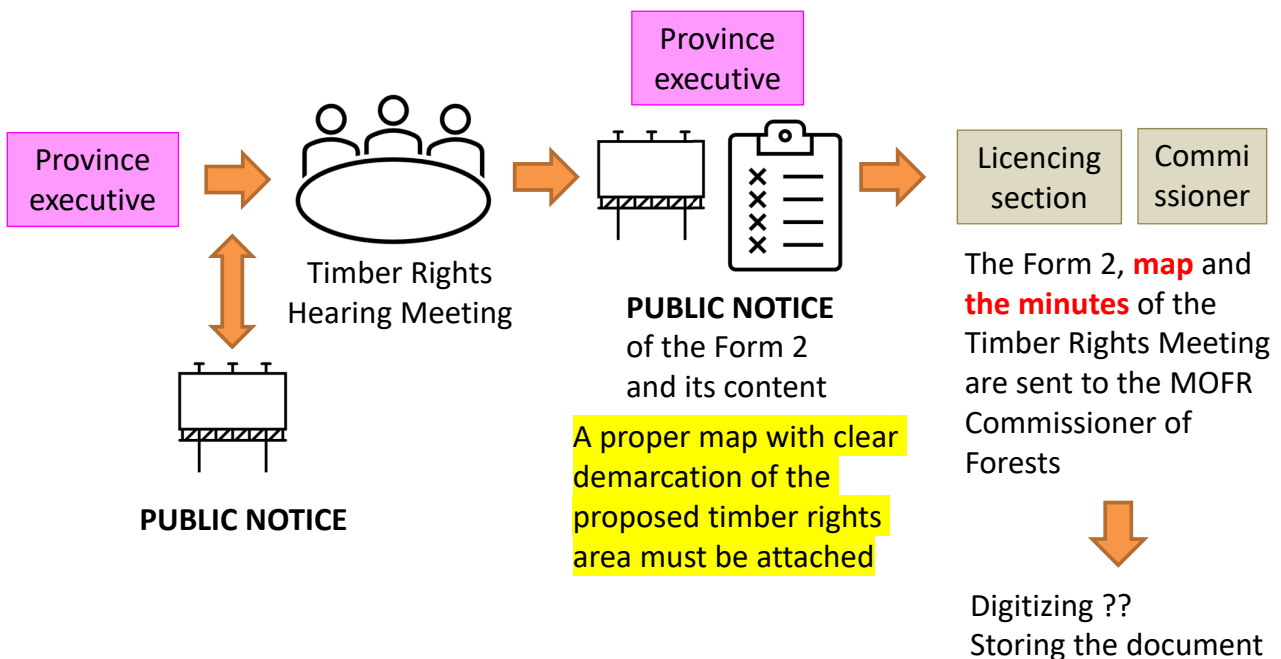
2. Timber rights acquisition
2-6. Document management: Form1, Form2 etc. with SolGeo-FIMS

- You can store the related document linking to maps.
  For example, you can use **cloud storage** with SolGeo-FIMS
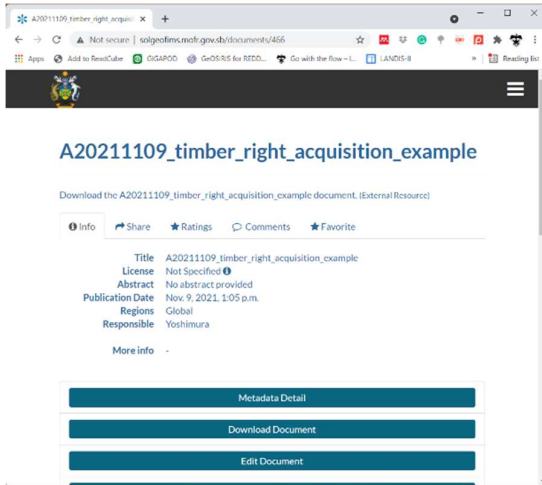
Document on SolGeo-FIMS
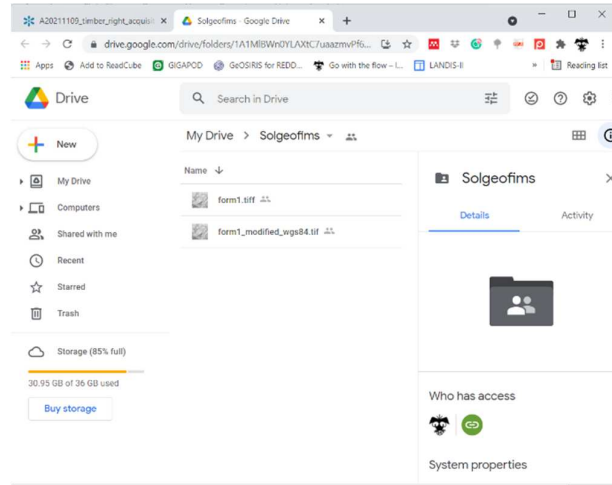
Example to use google drive

---

2. Timber rights acquisition
2-7. Form4 Form of agreement for timber rights workflow

MOFR

Applicant → Form 4 → Licencing section | Commissioner → Province executive

Form3
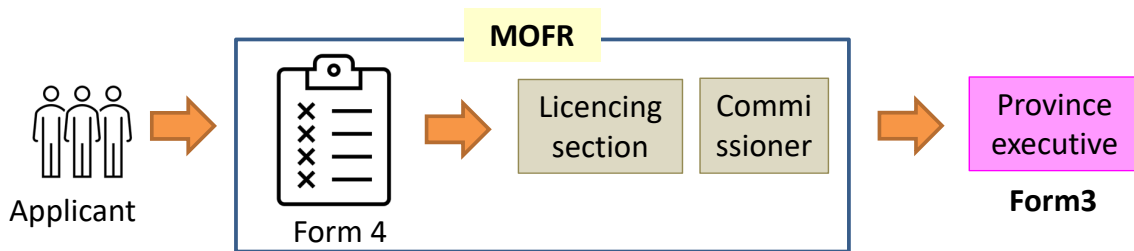
Lists a set of social and environmental criteria
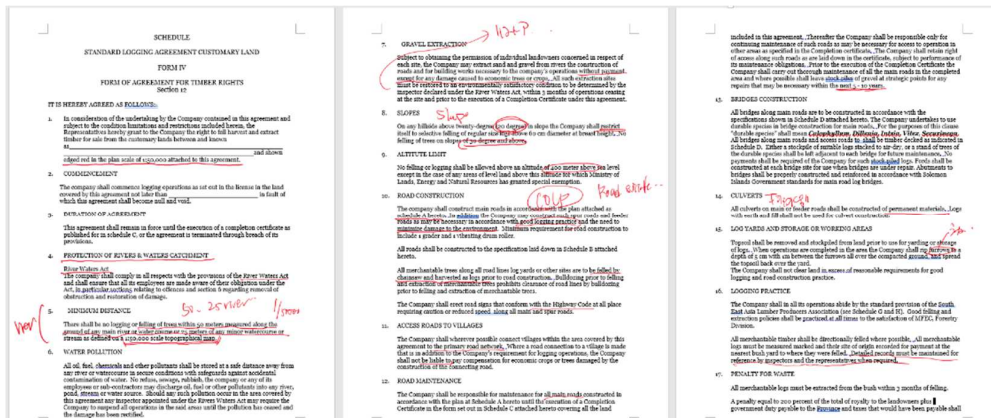
2. Timber rights acquisition
2-8. Form4 Form of agreement for timber rights

- **PROTECTION OF RIVERS & WATERS CATCHMENT**
  No felling of trees within 50 meters measured along the ground of any main river or water course or 25 meters of any minor watercourse or stream as defined on a 1:50,000 scale topographical map

- **SLOPES**
  On any hillside above 20 degree in slope the Company shall restrict itself to selective felling of regular size logs above 60 cm diameter at breast height. No felling of trees on slopes of 30 degree and above

- **PRESERVATION OF VILLAGE SAFETY & ENVIRONMENT**
  No felling, logging or other operations shall take place closer than 100 meters from the edge of any village area with the exception of construction of road access. No road shall be constructed to pass closer than 30 meters from the edge of the carriageway to any existing dwelling house. Should the terrain make it essential to pas closer than 30 meters

- **PRESERVATION OF TAMBU PLACES**

- **ALTITUDE RESTRICTION**
  It shall be a condition of the License that no felling or logging shall take place above 400 meters except on any plateaus or level land for which specific prior approval has been granted in writing by the Commissioner of Forests after his consultation with the landowners.

---

2. Timber rights acquisition
2-9. How we can use the SolGeo-FIMS form4

Maybe. It should be done before.
Easy to compare with environmental data watercourse, topography etc.
And previous concession (overlapping), forest condition, settlement by SolGeo-FIMS or QGIS
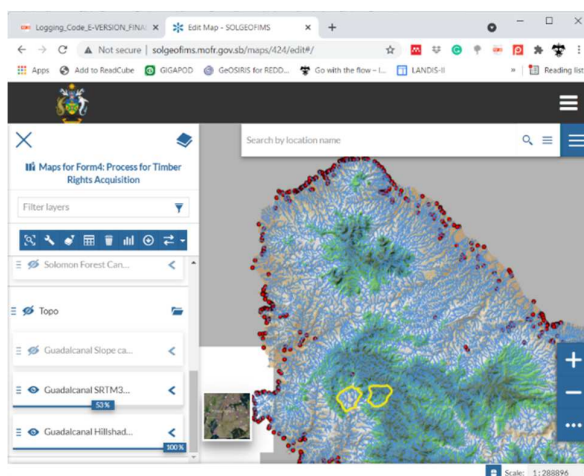
Settlement etc
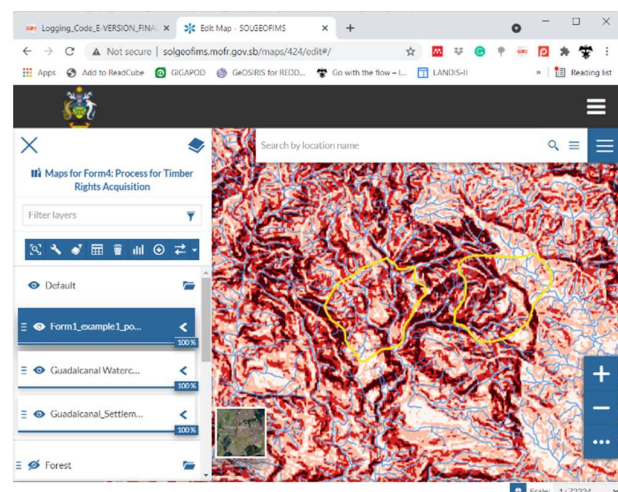
Slope, stream line

3. Licensing Process for Logging Activities at Large and Small Scale

Timber rights acquisition
- Application for timber rights acquisition (Form 1)
- Certificate of Customary Ownership (Determination) (Form 2)
- Standard Logging Agreement (Form 4)
- Certificate of Approval (Form 3)

Felling licence
- Technology and Management Agreement
- Issuance of Felling Licence
- Harvesting Plan (Annual and Coupe Plans)

Development Consent
- Environmental Impact Statement

Milling Licence
- Application (Form A)
- Milling licence (Form B)

---

3. Felling Licenses
3-1. Application for a Felling License workflow

MOFR

Applicant → Form A → Licencing section → Screening Committee → Commissioner → Form B

→ **Operation/Monitoring Section** → **Provincial Executive** → **Applicant**

Operation/Monitoring Section: Receives the Harvesting Plan (Annual Plan), checks if the plan addresses the requirements of the Code of Logging Practice and approves the plan.

Applicant: The applicant shall carry out an environmental impact assessment and submit the Environmental Impact Statement (EIS) to the MECDM.

3. Felling Licenses
3-2. Application for a Felling License

- *A map issued by the Department of Lands and Survey, or a good quality Certified copy of such a map, of a scale of 1:50,000 or larger, on which the boundaries of the land on which the applicant intends to conduct felling operations are marked in red*

- *Landuse plan, logging plan, reforestation plans*

- measures for conserving catchment areas of rivers, preventing soil erosion and preserving environment, tambu places and sites of historical importance

---

3. Felling Licenses
3-3. How we can use the SolGeo-FIMS

Support to check the COLP key standard1 protected excluded area
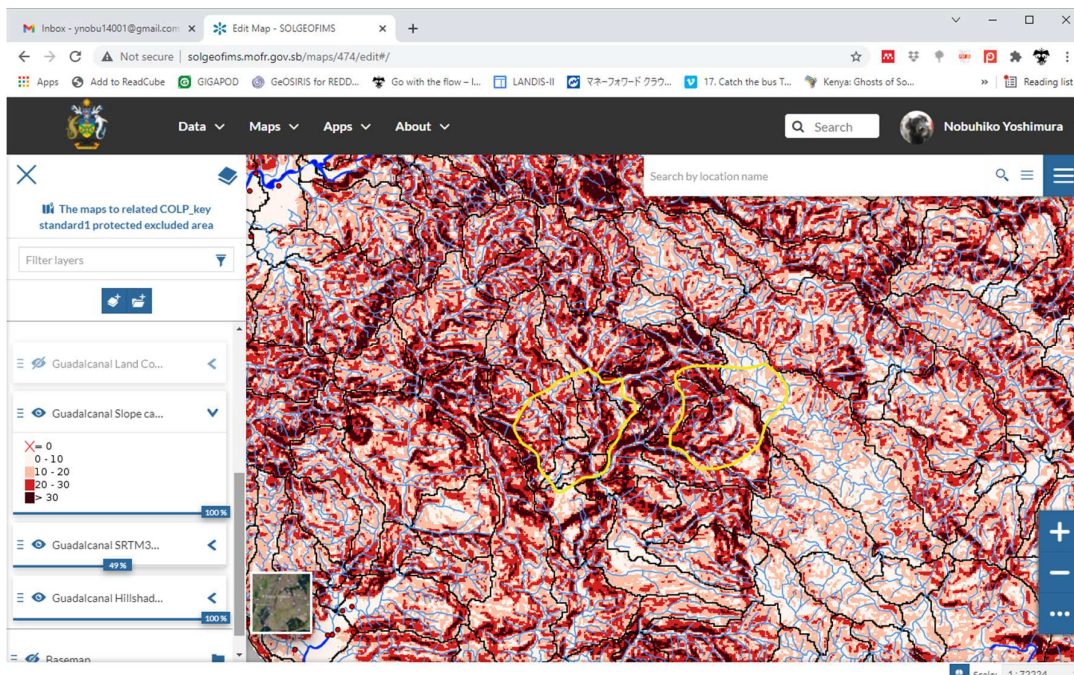
3. Felling Licenses
3-4. Monitoring using remote sensing

Classification in the concession area by google earth engine (NDVI classification or change)
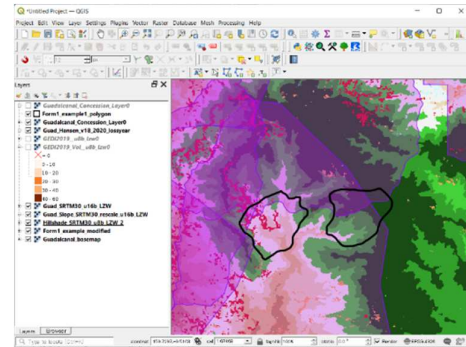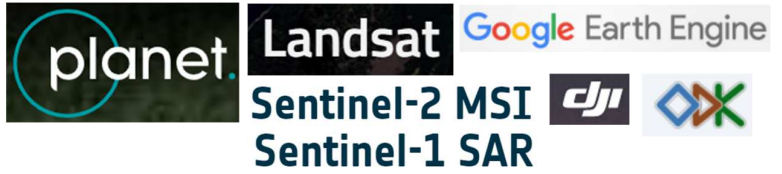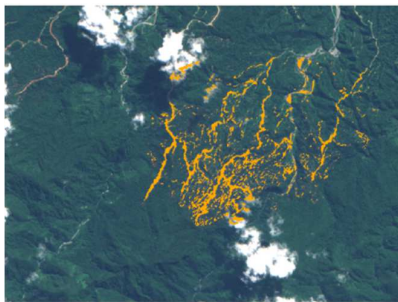
Monitoring using SolGeo-FIMS data according to COLP

---

4. Question and discussion

Forest Monitoring
and
Utilization of Forest Information Tools

11, November, 2021
Hirokazu Takahashi
Kokusai Kogyo Co., Ltd.

MOFR/JICA

Let's check the CoLP

The Revised
Solomon Islands
Code of Logging Practice
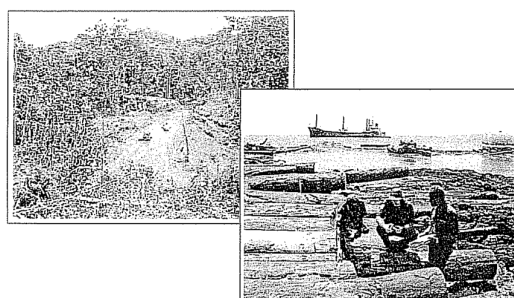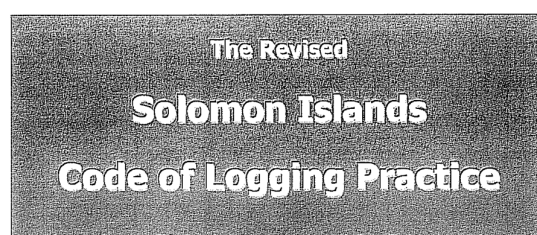
MINISTRY OF
FORESTS, ENVIRONMENT & CONSERVATION

MAY 2002

Let's check the CoLP

See CoLP

The order of activities for a well planned harvest operation
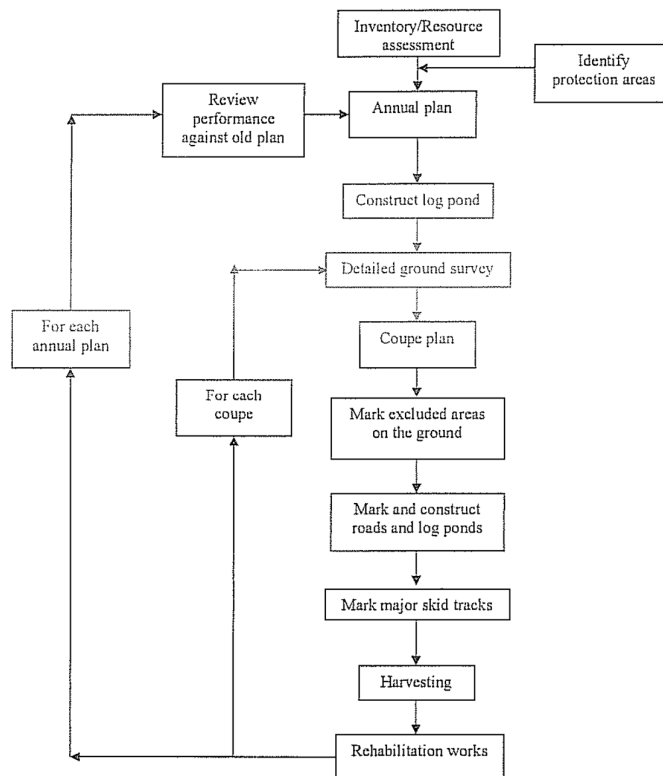
Key Standard

No.	Description
Key Standard No.1	Protected and Exclusion areas
Key Standard No.2	Location of Roads and Landings
Key Standard No.3	Maximum With of Roadline Clearing 40 Meters
Key Standard No.4	The Three Rules of Roading
Key Standard No.5	Landing Size and Number
Key Standard No.6	No Felling or Skidding Within Buffers
Key Standard No.7	Temporary Crossings
Key Standard No.8	Blade Raised when Skidding
Key Standard No.9	Skid Track Width Less than 5.5 Meters
Key Standard No.10	Maximise Log Value and Avoid Wastage of Timber
Key Standard No.11	Weather Restrictions to Logging
Key Standard No.12	Decommisioning Skid Tracks
Key Standard No.13	Decommissioning Landing and Log Ponds

Solomon Islands Government
Ministry of
Forestry & Research

JICA

Key Standard

See CoLP details

Solomon Islands Government
Ministry of
Forestry & Research

JICA

Auditing

Auditing Proforma for inspection of harvesting operations

Monitoring Proforma for inspection of harvesting operations					
Component of Operation Assessed	Marks for compliance	Check 1	Check 2	Check 3	Total score
Log pond – Check one					
Has a 50m buffer to the ocean (strip of vegetation)	2				
Is adequately drained	2				
Oil or other waste products are being safely disposed of	2				
Sub-total					
Roading – Check two lengths of 100m					
Located as shown on the coupe plan	2				
Clearing is 40m or less	2				
Drainage is acceptable (Table drains, turn outs, cross fall, culverts)	2				
Road clearing edge is located more than 40m from any buffer	2				
Sub-total					

Component of Operation Assessed	Marks for compliance	Check 1	Check 2	Check 3	Total score
Buffers – Check two					
Marked in the field as shown on the coupe plan	2				
Correct buffer width	2				
No unauthorised entry to the buffer (ie. trees fallen into buffer/trees fallen in buffer/machine entry)	2				
Sub-total					
Watercourse crossings – Check one					
Located as shown on the coupe plan	2				
Appropriate type of crossing for the situation ie. culvert, ford or bridge	2				
Drainage around the watercourse crossing does not run into the watercourse	2				
Machines have not operated in the watercourse during construction	2				
There has been no unnecessary cutting of trees in and around the watercourse crossing.	2				
Sub-total					
Landings – Check two					
Located as per coupe harvest plan	2				
At least 40m from the edge of any buffer	2				
Is well drained with no skid tracks running downhill onto the landing	2				
is less than 1,600 square meters	2				
Sub-total					
Skid track – Check three lengths of 100m					
Major skid track located as per the harvesting plan	2				
Blade not used if skid track less than 12 degrees. If more than 12 degrees then damage minimised.	2				
Track no wider than 5.5 meters at any point	2				
No damage to any buffer zone	2				
Sub-total					
Falling and wastage – Check 4 stumps and give full marks for every stump that meets the standard					
Trees have been fallen using directional falling principles ie. scarf, back cut.	1				
The choice of felling direction was suitable	1				
Stumps are as low as possible	1				
The point of cross cutting is correct and has not left a merchantable amount of timber behind	1				
Sub-total					
TOTAL ACHIEVED FROM A POSSIBLE 100 POINTS					

Comments

Forest Officer……………………….Company representative…………………………Landowner representative…………………….

Auditing

Auditing Proforma inspection of harvesting operation

	Component of Operation Assessed	Marks for compliance	Check 1	Check 2	Check 3	Check 4
	Log pond - Check one					
1	Has a 50m buffer to the ocean (strip of vegetation)	2				
	Is adequately drained	2				
	Oil or other waste products are being safely disposed of	2				
	Sub-total	6				
	Roading - Check two lengths of 100m					
2	Located as shown on the coup plan	2				
	Clearing is 40m or less	2				
	Draiange is acceptable (Table drains, turn outs cross fall, culverts)	2				
	Road clearing edge is located more than 40m from any buffer	2				
	Sub-total	8				
	Buffers - Check two					
3	Marked in the field as shown on the coupe plan	2				
	Correct buffer width	2				
	No unauthorised entry to the buffer (eg. Trees fallen into buffer/trees fallen in buffer/machine entry)	2				
	Sub-total	6				
	Watercouse crossings - Check one					
4	Located as shown on the coupe plan	2				
	Appropriate type of crossing for the situation (eg. Culvert, ford or bridge)	2				
	Draiange around the watercourse crossing does not run into the watercourse	2				
	Machines have not operated in the watercourse during construction	2				
	There has been no unnecessary cutting of trees in and around the watercourse crossing	2				
	Sub-total	10				
	Landings - Check two					
5	Located as per coupe harvest plan	2				
	At least 40m from the edge of any buffer	2				
	Is well drained with no skid tracks running downhill onto the landing	2				
	Is less than 1,600 square meters	2				
	Sub-total	8				
	Skid track - Check three lengths of 100m					
6	Major skid track located as per the harvesting plan	2				
	Blade not used if skid track less than 12 degrees. If more than 12 degrees then damage minimised	2				
	Track no wider than 5.5 meters at any point	2				
	No damage to any buffer zone	2				
	Sub-total	8				
	Falling and wastage - Check 4 stumps and give full marks for every stump that meets the standard					
7	Trees have been fallen using directional falling principles (eg. Scarf back cut	1				
	The choice of felling direction was suitable	1				
	Stumps are as low as possible	1				
	The point of cross cutting is correct and has not left a merchantable amount of timber behind	1				
	Sub-total	4				
	TOTAL ACHIEVED FROM A POSSIBLE 100 POINTS					

Comments

Auditing

Auditing Proforma inspection of harvesting operation

Component of Operation Assessed	Marks for compliance	Check 1	Check 2	Check 3	Check 4
Log pond - Check one					
1 Has a 50m buffer to the ocean (strip of vegetation)	2				
Is adequately drained	2				
Oil or other waste products are being safely disposed of	2				
Sub-total	6				
Roading - Check two lengths of 100m					
2 Located as shown on the coup plan	2				
Clearing is 40m or less	2				
Draiange is acceptable (Table drains, turn outs cross fall, culverts)	2				
Road clearing edge is located more than 40m from any buffer	2				
Sub-total	8				
Buffers - Check two					
3 Marked in the field as shown on the coupe plan	2				
Correct buffer width	2				
No unauthorised entry to the buffer (eg. Trees fallen into buffer/trees fallen in buffer/machine entry)	2				
Sub-total	6				
Watercouse crossings - Check one					
Located as shown on the coupe plan	2				
Appropriate type of crossing for the situation (eg. Culvert, ford or bridge)	2				

How do we utilize Forest Information Tools ?

Landings - Check two					
5 Located as per coupe harvest plan	2				
At least 40m from the edge of any buffer	2				
Is well drained with no skid tracks running downhill onto the landing	2				
Is less than 1,600 square meters	2				
Sub-total	8				
Skid track - Check three lengths of 100m					
6 Major skid track located as per the harvesting plan	2				
Blade not used if skid track less than 12 degrees. If more than 12 degrees then damage minimised	2				
Track no wider than 5.5 meters at any point	2				
No damage to any buffer zone	2				
Sub-total	8				
Falling and wastage - Check 4 stumps and give full marks for every stump that meets the standard					
7 Trees have been fallen using directional falling principles (eg. Scarf back cut	1				
The choice of felling direction was suitable	1				
Stumps are as low as possible	1				
The point of cross cutting is correct and has not left a merchantable amount of timber behind	1				
Sub-total	4				
TOTAL ACHIEVED FROM A POSSIBLE 100 POINTS					
Comments					

Solomon Islands Government
**Ministry of
Forestry & Research**

JICA

Auditing

See Excel Sheet

Solomon Islands Government
**Ministry of
Forestry & Research**

JICA

Auditing Workflow

Auditing Field Visit

1. Before going into the field
use the coup plan to randomly select one log pond, three lengths of rad, two buffers, one watercourse crossing, three lengths of skid track, two landings and a location that will have fallen trees to inspect.

2. Visit each of these locations with a company and landowner representative and assess against the criteria on the auditing proforma.
For example on the log pond, check that oil and other wastes arc being properly disposed of. Explain the company and landowner representatives the process being undertaken and the results so as to educate them in application of the Code.

Auditing Checklist

3. If the company is meeting with the standard described award full points for that check
4. If the company does not meet the standard described award 0 points.
5. Complete all the required checks and total the score for each section and overall.

See CoLP checklist.

6. With the company representative analyse where the problems where, section by section and determine how they can improve.

Solomon Islands Government
Ministry of Forestry & Research

JICA

Auditing Report and Follow-up Action

7. Report to the relevant supervisors and staff on the staff on the score and discuss it.
For MOFR this will be Honiara headquarters. For the company this will be on-site staff and company management and for the landowners this will be other member of the community.

8. For MOFR Officers if a serious breach is identified, then follow up action is required in writing through headquarters.

9. The Commissioner of Forests will from time to time set a minimums mark that must be achieved for each inspection.
If this mark is not achieved then follow up action must also be taken. Penalty actions are described elsewhere.

Go to No. 2

Solomon Islands Government
Ministry of Forestry & Research

JICA

Auditing

Auditing Proforma inspection of harvesting operation

V.O. : Visual Observation
Table is useful to record inspection with photos
Ortho creation shall be limited to the location where a serious breach is identified.

	Component of Operation Assessed	Marks for compliance	Check 1	Check 2	Check 3	Check 4	TRADITIONAL	GPS	DRONE	SolGeo-FIMS/GIS
	Log pond - Check one								(✔)	Protected area map
1	Has a 50m buffer to the ocean (strip of vegetation)	2					Measure tape			
	Is adequately drained	2					V.O.			
	Oil or other waste products are being safely disposed of	2								
	Sub-total	6								
	Roading - Check two lengths of 100m								(✔)	
2	Located as shown on the coup plan	2						✔		Maps
	Clearing is 40m or less	2					Measure tape			
	Draiange is acceptable (Table drains, turn outs cross fall, culverts)	2					V.O.			
	Road clearing edge is located more than 40m from any buffer	2					Measure tape			
	Sub-total	8								
	Buffers - Check two								(✔)	
3	Marked in the field as shown on the coupe plan	2						✔		Maps
	Correct buffer width	2					Measure tape			
	No unauthorised entry to the buffer (eg. Trees fallen into buffer/trees fallen in buffer/machine entry)	2					V.O.			
	Sub-total	6								
	Watercouse crossings - Check one								(✔)	
4	Located as shown on the coupe plan	2						✔		Maps
	Appropriate type of crossing for the situation (eg. Culvert, ford or bridge)	2					V.O.			
	Draiange around the watercourse crossing does not run into the watercourse	2					V.O.			
	Machines have not operated in the watercourse during construction	2					V.O.			
	There has been no unnecessary cutting of trees in and around the watercourse crossing	2					V.O.			
	Sub-total	10								
	Landings - Check two								(✔)	
5	Located as per coupe harvest plan	2								Maps
	At least 40m from the edge of any buffer	2					Measure tape	✔		
	Is well drained with no skid tracks running downhill onto the landing	2					V.O.			
	Is less than 1,600 square meters	2					Measure tape	✔		
	Sub-total	8								
	Skid track - Check three lengths of 100m								(✔)	
6	Major skid track located as per the harvesting plan	2						✔		Maps
	Blade not used if skid track less than 12 degrees. If more than 12 degrees then damage minimised	2					V.O.			
	Track no wider than 5.5 meters at any point	2					Measure tape			
	No damage to any buffer zone	2					V.O.			
	Sub-total	8								
	Falling and wastage - Check 4 stumps and give full marks for every stump that meets the standard									
7	Trees have been fallen using directional falling principles (eg. Scarf back cut	1					V.O.			
	The choice of felling direction was suitable	1					V.O.			
	Stumps are as low as possible	1					V.O.			
	The point of cross cutting is correct and has not left a merchantable amount of timber behind	1					V.O.			
	Sub-total	4								
	TOTAL ACHIEVED FROM A POSSIBLE 100 POINTS									
	Comments									

Solomon Islands Government
Ministry of
Forestry & Research

JICA

Auditing

Go to tablet

Solomon Islands Government
Ministry of
Forestry & Research

JICA