

Presenter



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Food and Agriculture
Organization of the
United Nations

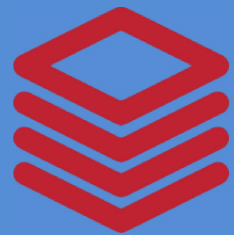


Funded by
the European Union

STREIT



SAPOT LON RURAL
BISNIS, INVESMEN NA
TRED



Baseline

SURVEY REPORT

Report prepared by National Agricultural Research Institute
Bubia, Lae, Morobe Province

31 May 2022



Content of Presentation

1.0 Introduction

- » EU STREIT Program
- » Stakeholders
- » Purpose of Baseline

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- » Sampling Technique
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- » Recruitment and Training of Enumerators
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- » Vanilla Value Chain
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- » Information Communication Technology
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- » Gender Involvement

4.0 STREIT PNG Program Indicators



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- » EU STREIT Program
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2.0 Methodology

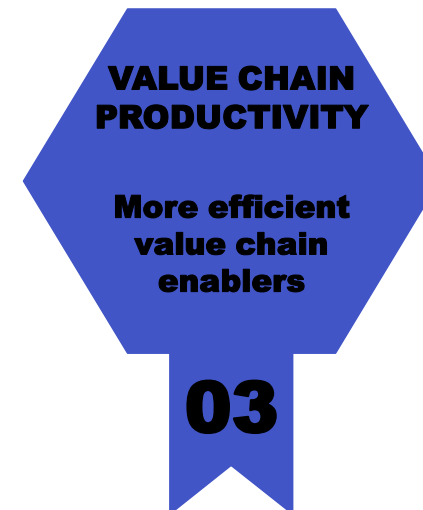
3.0 Key Findings

4.0 STREIT PNG Program Indicators



» EU STREIT Program

- The **agriculture sector is the 2nd largest contributor to PNG's economic growth (17% of GDP)**
- The EU-STREIT PNG Program is a partnership program between GoPNG, UNJP and EU that **supports the government's broader objectives on strengthening agricultural value chains.** The program is implemented by the FAO as the lead implementing agency in cooperation with the UNDP, UNCDF, ILO and ITU.
- The five-year Program (2020-2024) will be implemented in the East and West Sepik provinces **with the overall objective to increase sustainable and inclusive economic development and growth of the rural areas.** The program focuses on the cocoa, vanilla, and fishery (coastal, riverine and aquaculture) value chains with the specific objectives to:





» Stakeholders





» Stakeholders from GoPNG



NATIONAL FISHERIES AUTHORITY
Papua New Guinea



Department of National
Planning & Monitoring



East Sepik Provincial
Government



West Sepik Provincial
Government



DEPARTMENT OF
AGRICULTURE AND LIVESTOCK





» Study Objectives

To assess the status of the social demographic profile, the current performance of **cocoa, vanilla and fisheries value chains**, and other **socio-economic indicators** in ESP & WSP. Relevant baseline data collected will be used to;

- a) **inform the program design towards sustainable production and inclusive development of the program value chains**
- b) **provide a basis for M&E of progress and final outcomes.**



» Specific Study Objectives



Determine the household and livelihood characteristics of cocoa and vanilla farmers, and (inland and coastal) fishers



Identify the roles and level of involvement of women and youths in cocoa, vanilla, and fisheries sub-sectors



Provide in-depth description of cocoa, vanilla, and fisheries production practices



» Study Objectives



Assess the economic and technical performance of the cocoa, vanilla and fisheries sectors



Determine the contributions of cocoa, vanilla, and fisheries production to the local, and national economy



Identify gaps in the information flow along the value chains of the cocoa, vanilla, and fisheries sectors



» Study Objectives



Identify the constraints and opportunities for the sustainable development of the cocoa, vanilla, and fisheries sectors



Identify key stakeholders and potential public and private sector operators that could contribute to the successful implementation of the EU-STREIT PNG Program



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» Target Respondents

- A total of **9 districts** were selected for data collection – 6 (ESP) & 3 (WSP)
- A total of **1,394 HH** were interviewed. From these households, **65% of the respondents** were from the **ESP** and **35% from the WSP** respectively.

Province	District
East Sepik	Ambunti-Drekikier
	Angoram
	Maprik
	Wewak
	Wosera-Gawi
	Yangoru-Saussia
West Sepik	Aitape-Lumi
	Nuku
	Vanimo-Green



» Tools development

- The total sample size of households targeted for the survey was 1,501, while 1,440 households had been interviewed.
- Data was collected for the past 12 months, from January to December 2020.
- Of the total households interviewed, only 1,394 households completed the questionnaires, and the incomplete were rejected while others not eligible were not considered in the interviews.



» Sample Technique

- The sampling techniques - mixture of both **stratified and simple random selection** among interviewees under cocoa, vanilla, and fisheries value chains.
- The **primary stratification used is based on provinces, districts, and LLG areas**. Districts were also identified and categorized based on the type of agricultural and fishing activities including cocoa, vanilla, and fisheries.
- Based on the stratifications, **a work plan was developed to target the household sample size** set by the FAO and NARI team for each district and target value chain.

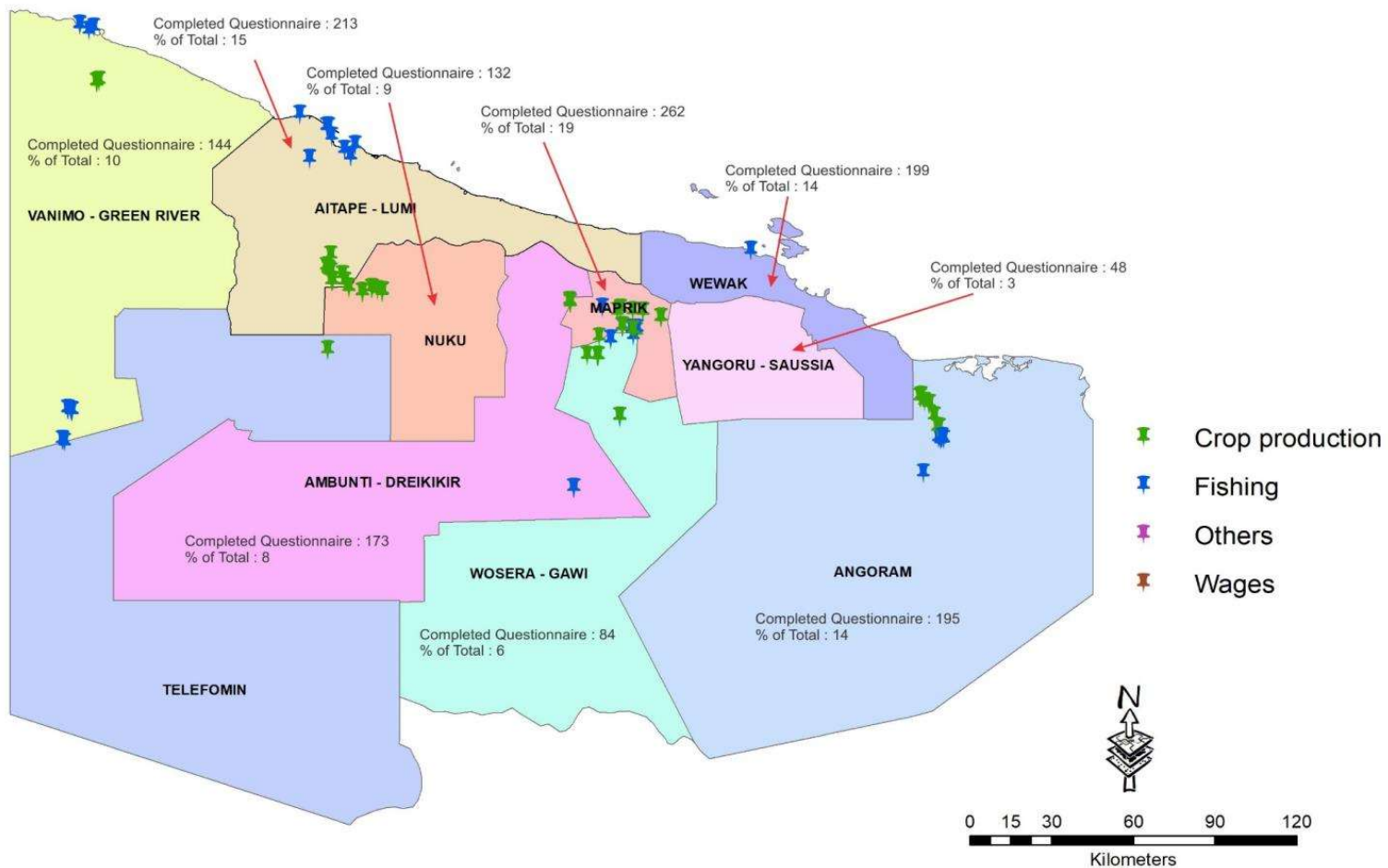


» Survey Questionnaire Development

- The questionnaires were developed by both **NARI and the EU-STREIT PNG team**
- The **Questionnaires were then added to a CAPI format and were pilot tested** before the actual implementation survey. During the development of the questionnaires, questions were trialed to improve the relevance and quality of data to be collected.
- A total of **29 enumerators were recruited from the targeted districts**. These enumerators were trained and dispatched to administer questionnaires in the selected districts, LLGs and wards.



Map of the program districts in the East & West Sepik Province where data was collected



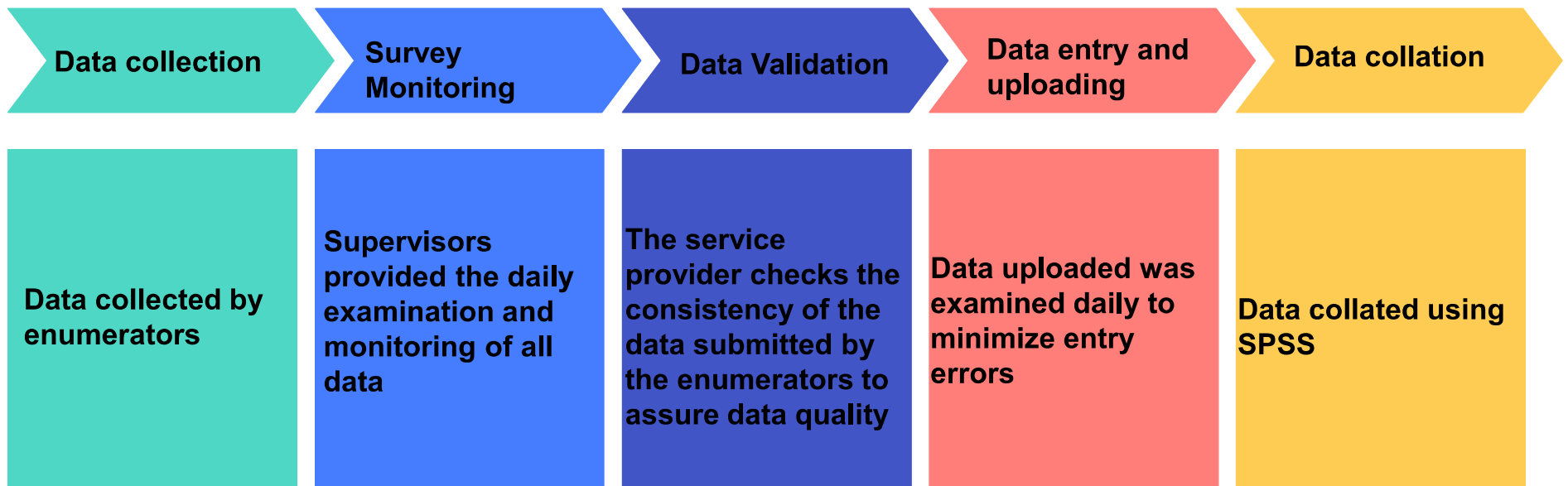


» CAPI Pilot Test Locations

- Part of the training was to pilot test the questionnaires and the CAPI tablets in two of the nearby villages, Saure No. 2, and Hawain Ward in the Wewak District.
- The surveys took up to two (2) hours for each session.
- The enumerators worked in pairs and successfully completed twenty-one (21) questionnaires with farming and fishing households
- Following the pilot-test, further improvements were done to the questionnaires.



» Data Collection & Processing





» Limitations of the Baseline Study

The limitations of the baseline study can be viewed in three main areas:

01

LOGISTICAL ARRANGEMENTS

Remoteness of districts, poor communication & network coverage. This was particularly noted in Nuku, Ambunti-Dreikikier, Aitape-Lumi and Wosera-Gawi District

02

WEATHER CONDITIONS

E.g in WSP, travels by boat were not possible when the Green River flooded, leading to further delays

03

PROJECT COORDINATION

Discontinuity of project coordination due to various factors such as Covid-19, Sick etc



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3.1 Demographics & Socio-Economic Status

4.0 STREIT PNG Program Indicators



3.1 Demographics & Socio-Economic Status

General distribution of households (HH) by;

1

Gender and Location

2

Average HH size

3

Type of agricultural prodn activities HH are engaged in

4

The average HH expenditure

The main sources of income

5

The agricultural focus of each district

6

The education level by gender in each HH

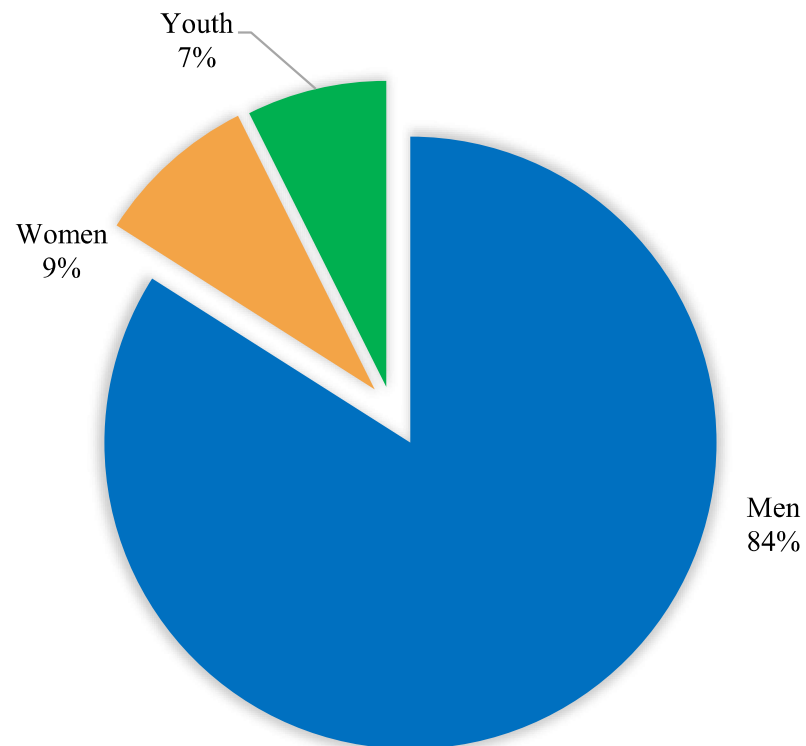
7

The average agricultural prodn area by each HH

8

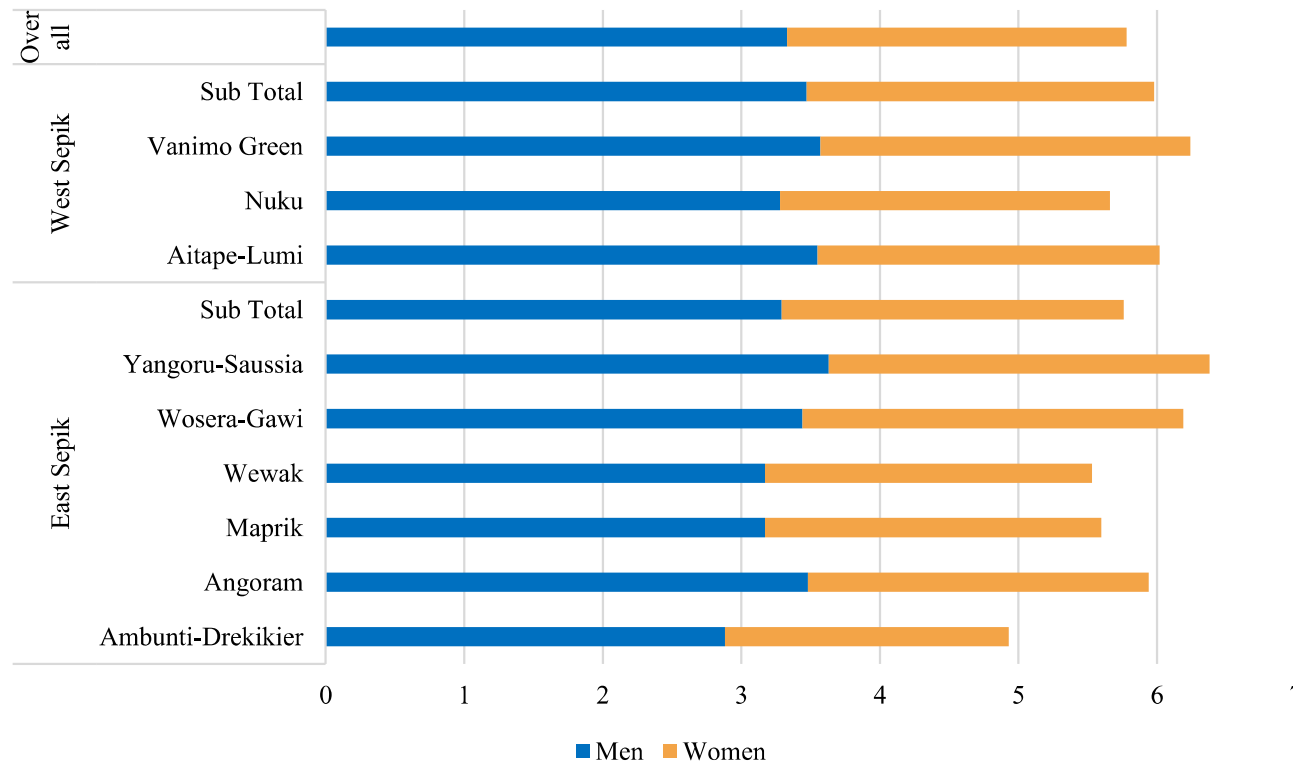


» Distribution of number of HH heads by gender (adults) and youths



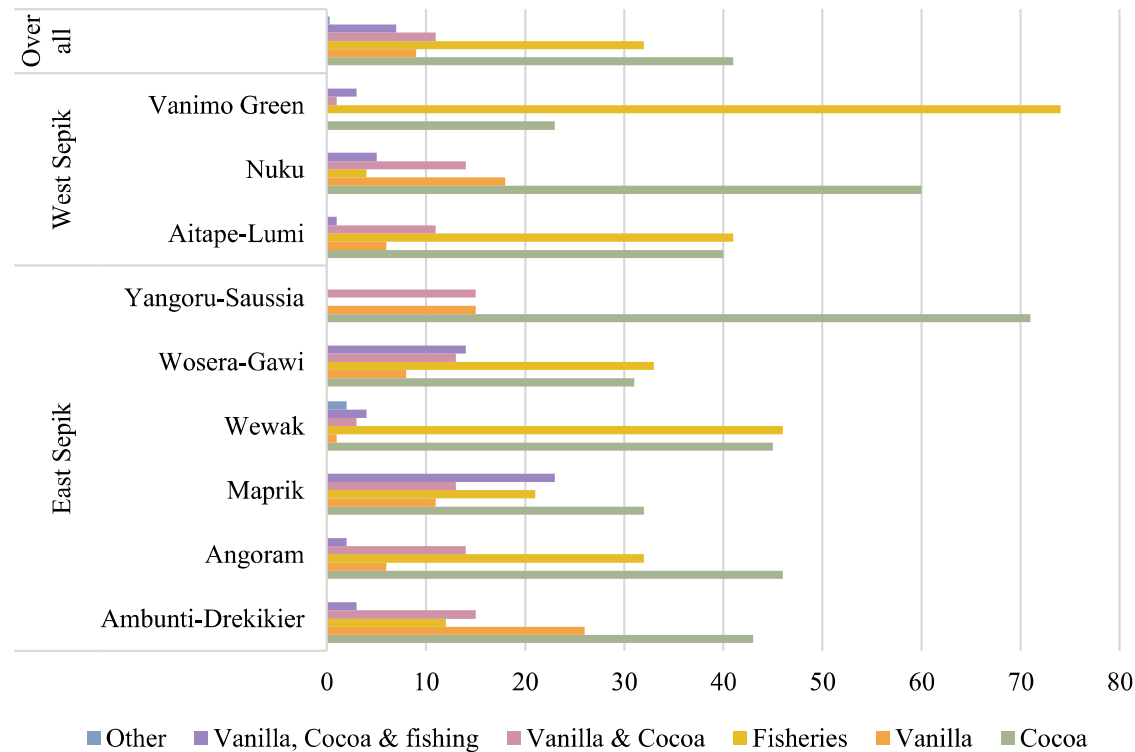


» Average target HH size by district & gender of HH head



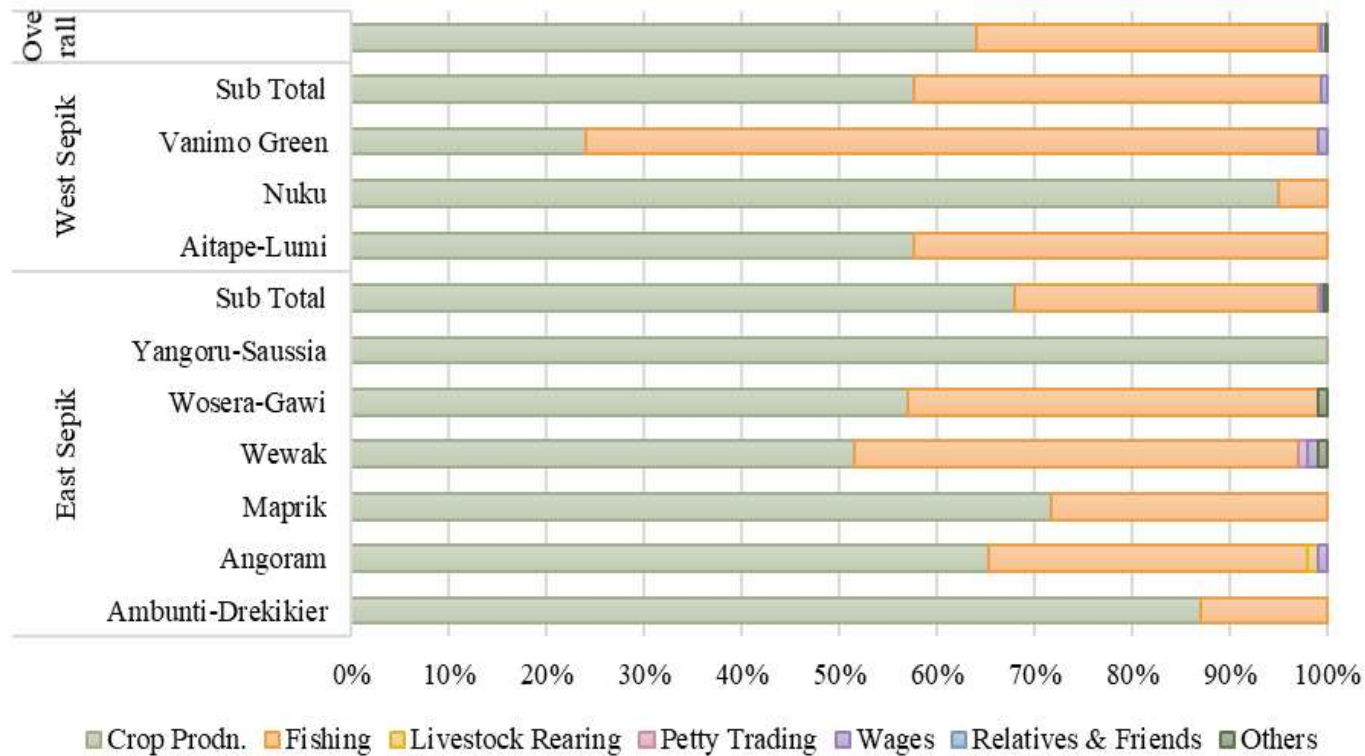


» District agricultural production activity by targeted HH (%)



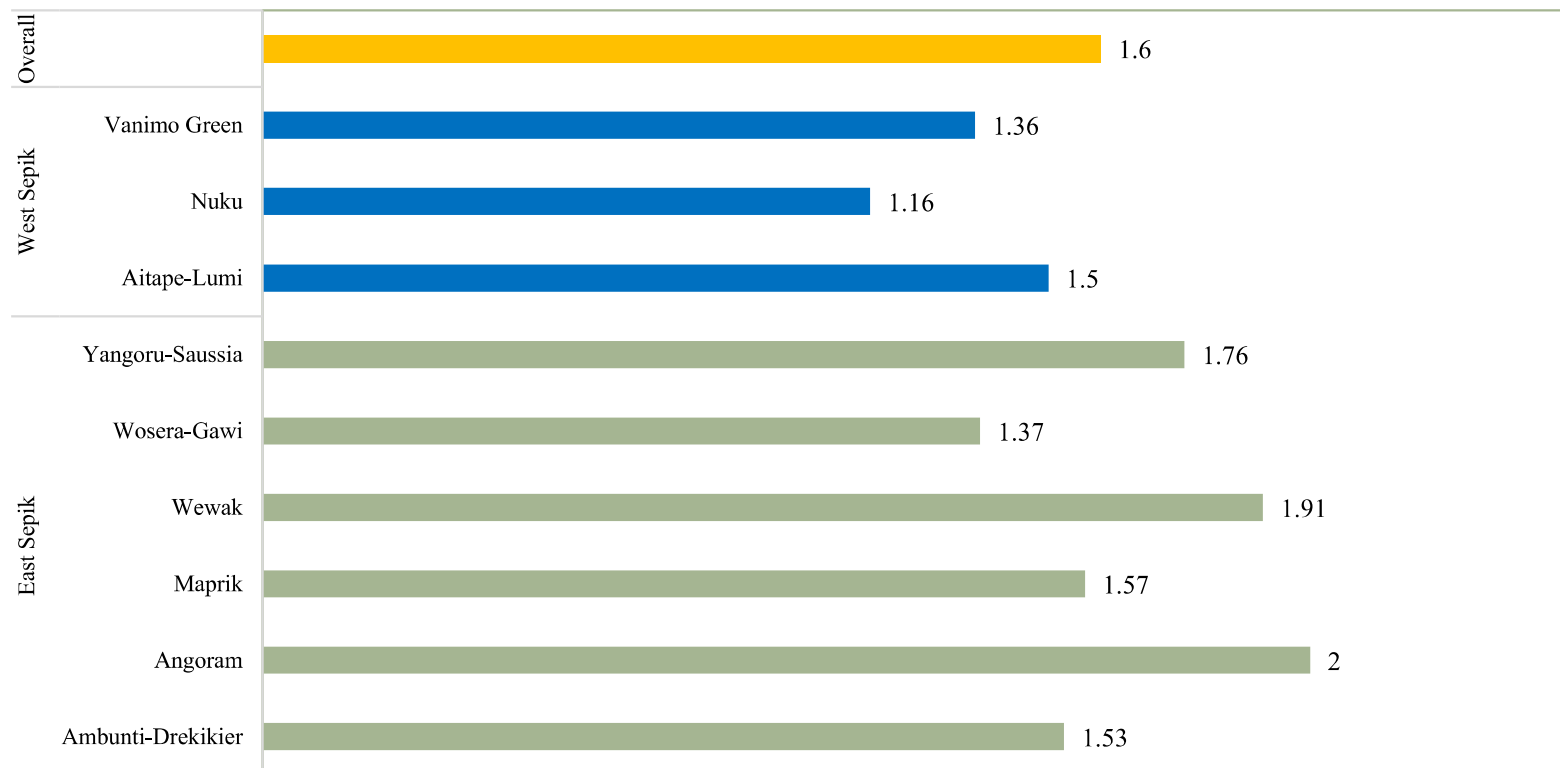


» Main source of income of surveyed households



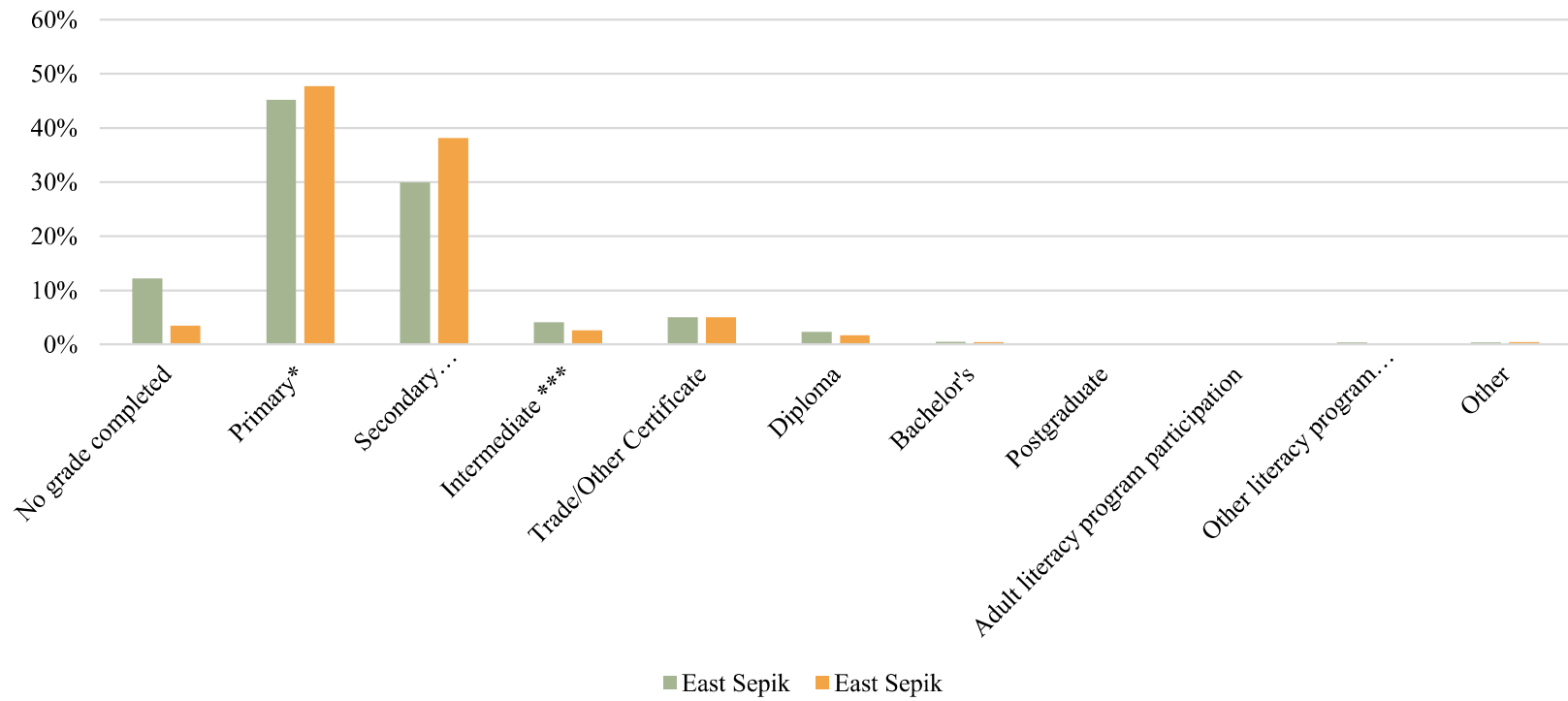


» Average area used for agricultural activities per HH (ha, Jan-Dec 2020)



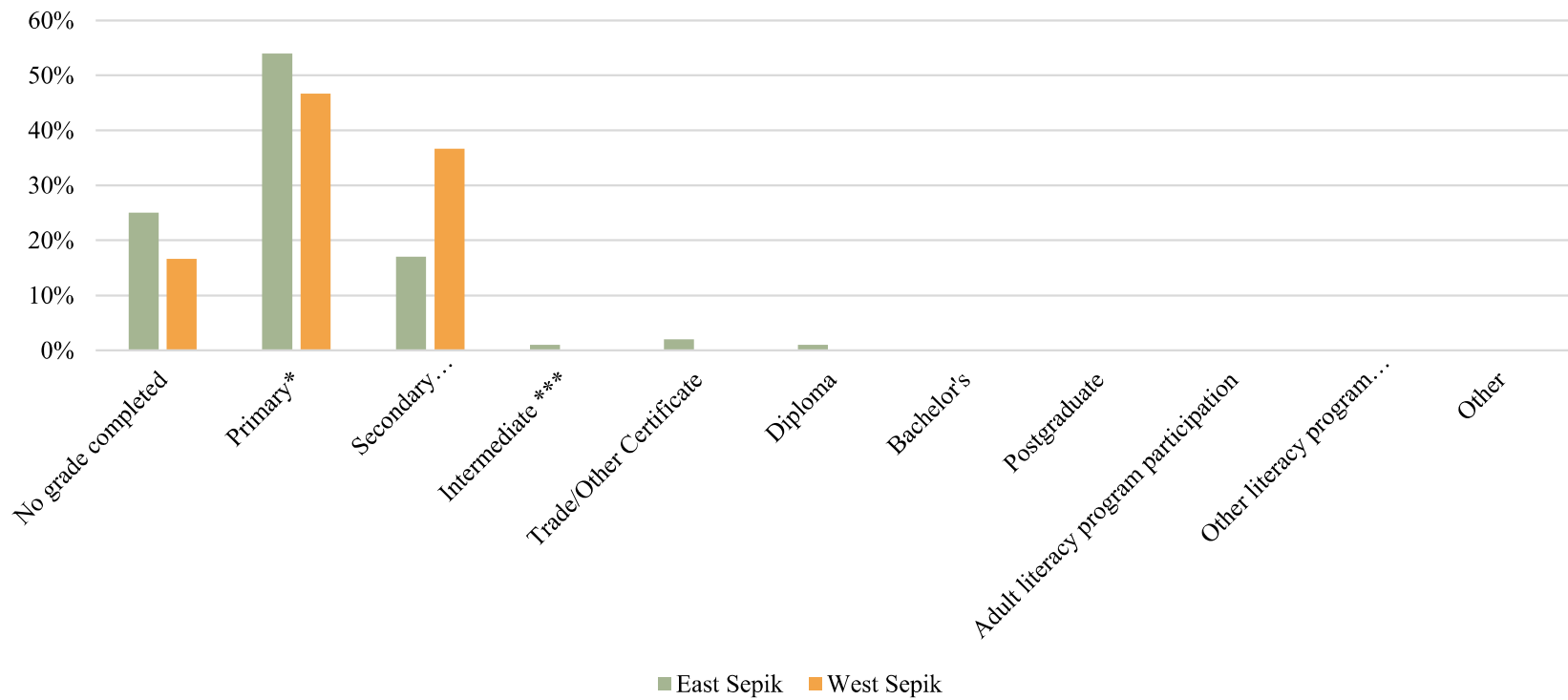


» Education Level of Male HH Head by Location (%)



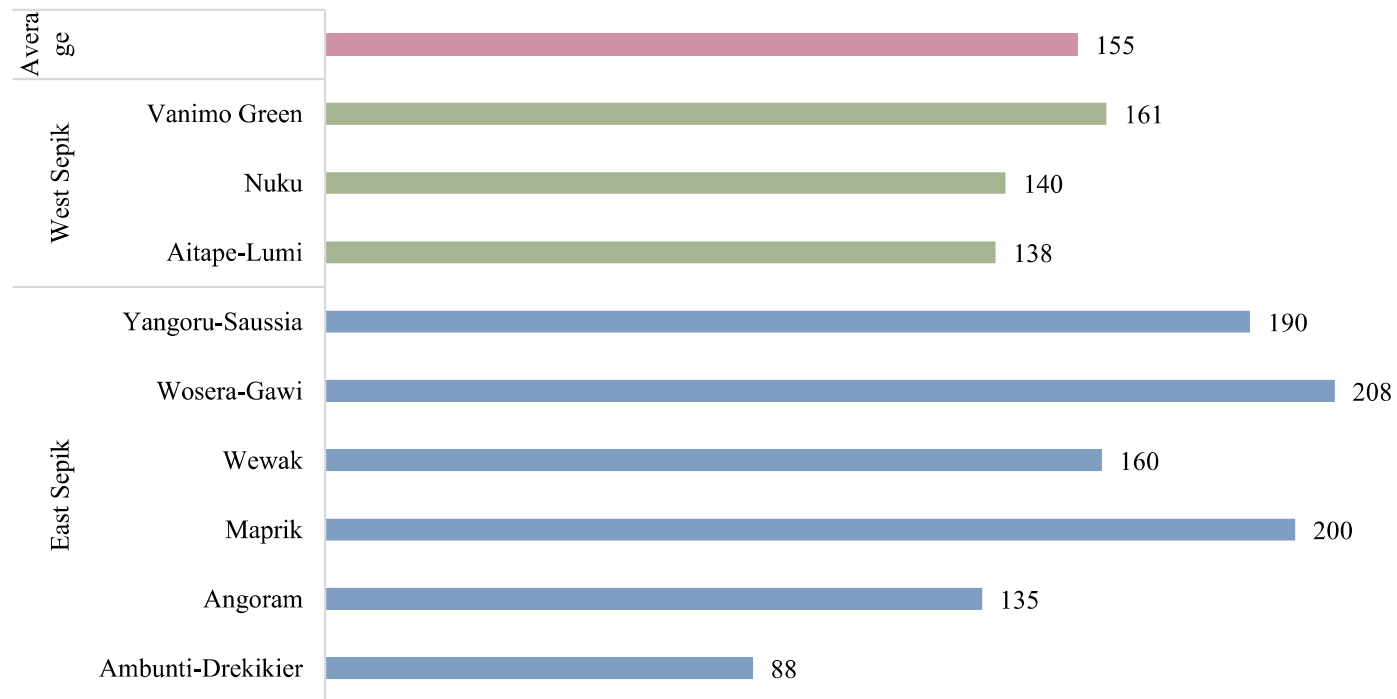


» Education level of Female HH Head by Location (%)





» Average HH expenditure (Kina) in the past one week





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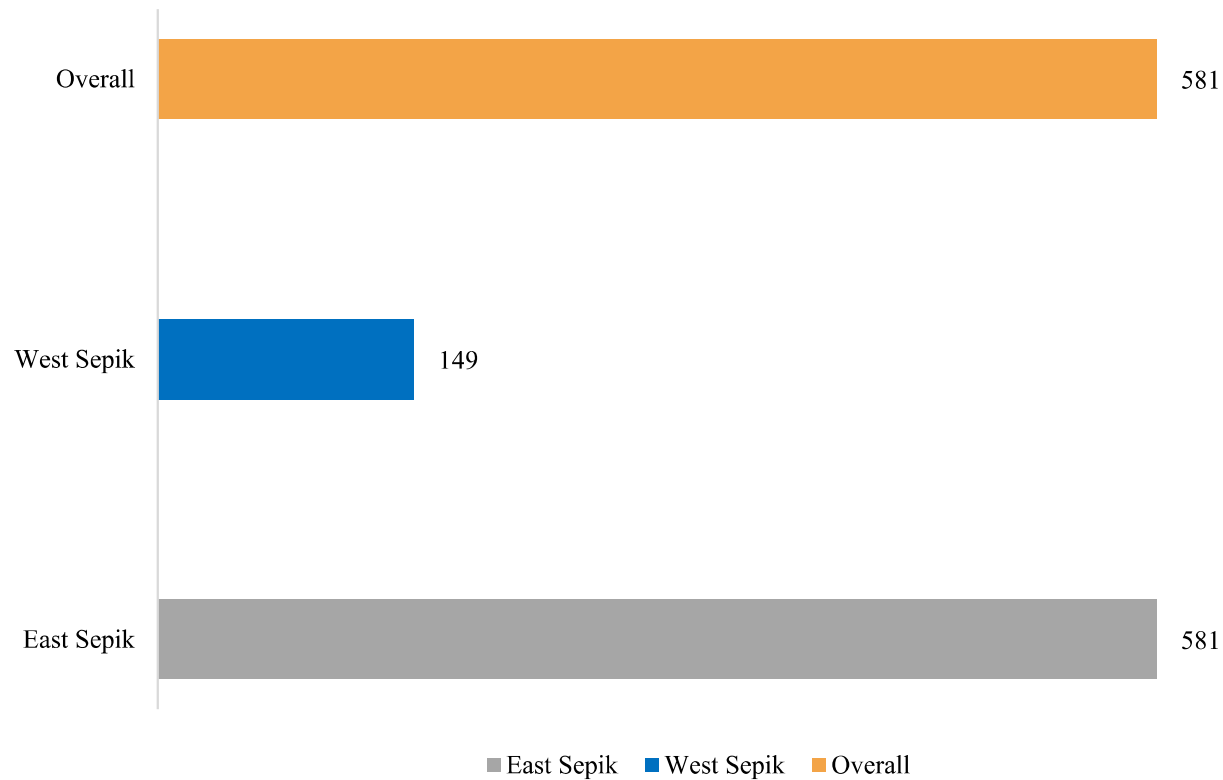
3.0 Key Findings

3.2 Household Income

4.0 STREIT PNG Program Indicators

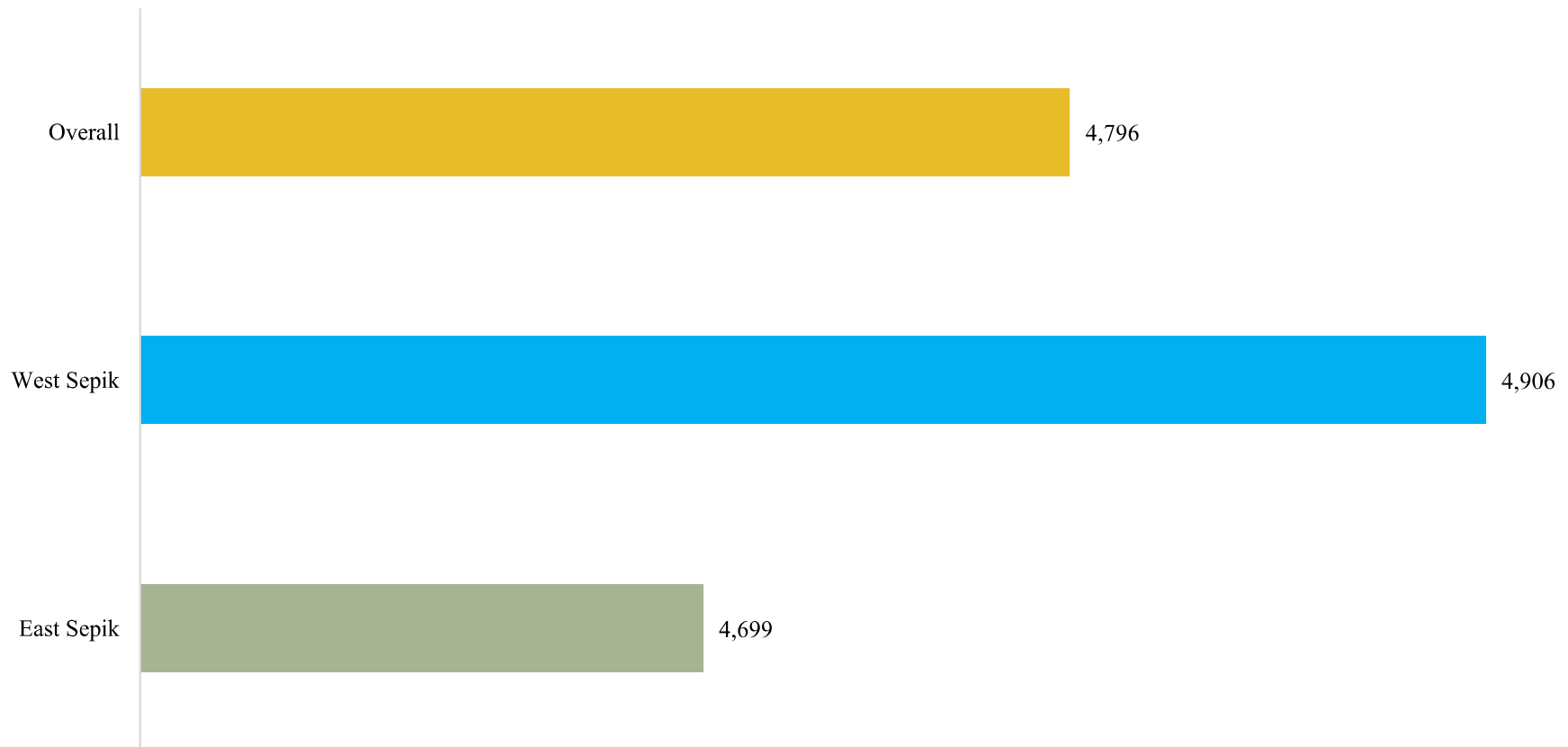


» Average income per HH from Cocoa prod. (Kina, Jan-Dec 2020)



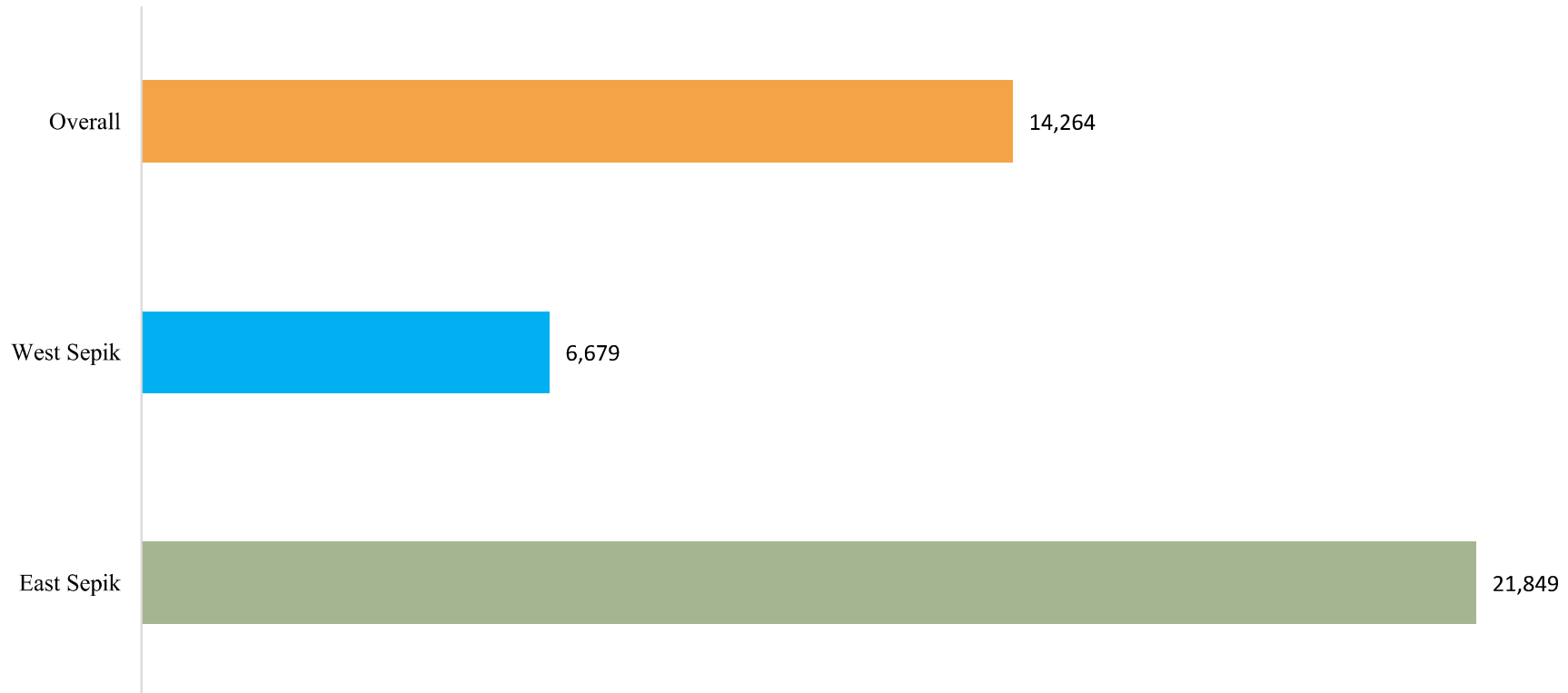


» Average income per HH from Vanilla prod. (Kina, Jan-Dec 2020)



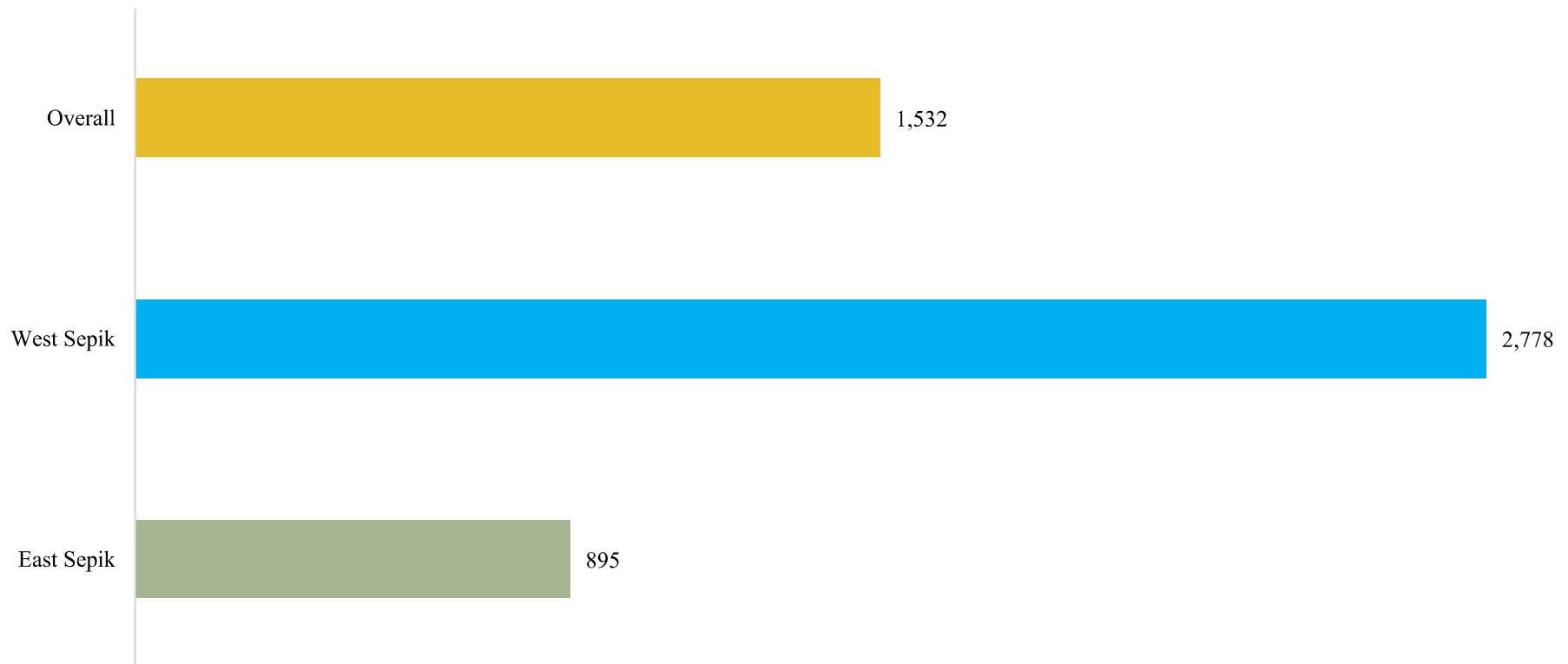


» Average income per HH from Coastal fisheries (Kina, Jan-Dec 2020)



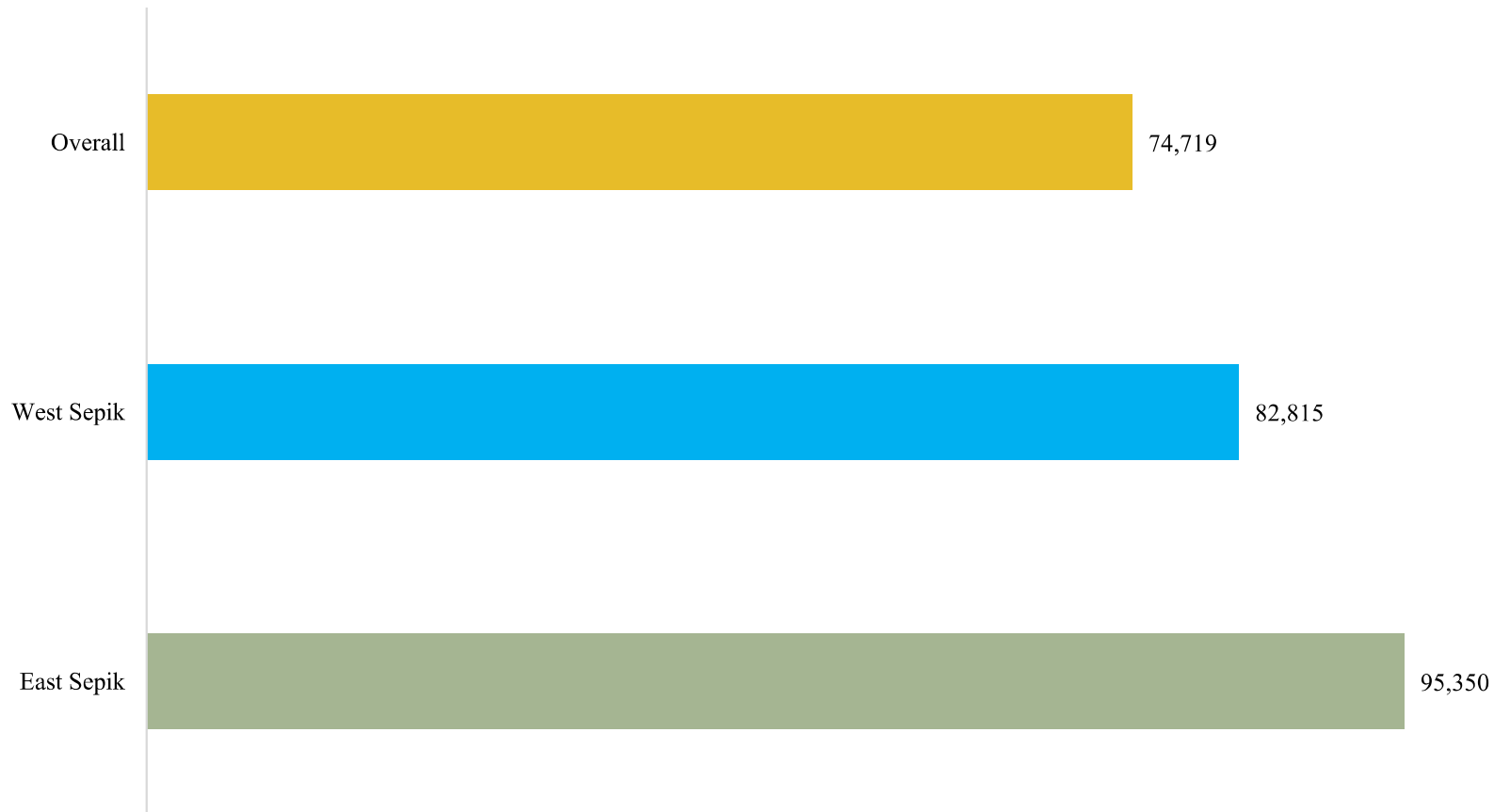


» Average income per HH from Aquaculture (Kina, Jan-Dec 2020)





» Average income per HH from Riverine fishing (Kina, Jan-Dec 2020)





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3.3 Vanilla Value Chain

4.0 STREIT PNG Program Indicators



» **Vanilla Planting Methodology (percentages ha, m)**

Province	District	Method of Planting (%)			No. of vines/ha	No. of vines per household	Plant spacing	
		Mono-cropping	Inter-cropping	Mixed cropping			Length (m)	Width (m)
East Sepik	Ambunti-Drekikier	41	22	37	1493	345	3.3	3.4
	Angoram	35	35	30	1189	350	3.0	3.0
	Maprik	41	30	30	1461	348	3.3	3.3
	Wewak	50	50	0	339	211	2.4	2.4
	Wosera-Gawi	33	33	33	1473	361	3.2	3.2
	Yangoru-Saussia	31	50	19	1307	376	2.7	2.7
	Average	39	32	29	1335	343	3.1	3.1
West Sepik	Aitape-Lumi	71	12	17	240	183	2.6	2.6
	Nuku	52	15	33	1198	367	2.8	2.8
	Vanimo-Green	0	0	0	0	0	0.0	0.0
	Average	61	13	26	662	281	2.7	2.7
Overall Average		47	25	28	1078	321	3.0	3.0



» Average area of vanilla planted per Household (ha)

Province	District	Area of Vanilla per Household	Area planted of productive vines	Area planted of non-productive vines
East Sepik	Ambunti-Drekikier	0.43	0.12	0.31
	Angoram	0.34	0.06	0.28
	Maprik	0.42	0.14	0.28
	Wewak	0.16	0.1	0.06
	Wosera-Gawi	0.41	0.2	0.21
	Yangoru-Saussia	0.35	0.08	0.27
	Average	0.35	0.12	0.24
West Sepik	Aitape-Lumi	0.13	0.07	0.06
	Nuku	0.33	0.07	0.26
	Average	0.23	0.07	0.16
Overall Average		0.32	0.11	0.22



» Average income and expenditure per household from vanilla (Kina, Jan-Dec, 2020)

Province	District	Sales	Transport Cost	Fertilizer Cost	Tools Cost	Labour Cost	Net Income
East Sepik	Ambunti-Drekikier	7,290	121	-	99	14	7,056
	Angoram	3,851	97	20	85	14	3,635
	Maprik	10,840	64	8	113	19	10,637
	Wewak	1,118	6	13	90	-	1,009
	Wosera-Gawi	1,613	46	3	128	45	1,391
	Yangoru-Saussia	4,917	93	31	148	27	4,618
	Average	4,938	83	13	124	19	4,699
West Sepik	Aitape-Lumi	4,454	70	10	89	25	4,261
	Nuku	5,724	52	0	102	18	5,551
	Average	5,089	60	5	97	21	4,906
Overall Average		5,014	75	11	113	20	4,796



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3.4 Renewable Energy

4.0 STREIT PNG Program Indicators



» **Summary of key findings**

- **Between 60% to 70% of the household respondents in both the East and West Sepik Provinces used a source of renewable energy.** Less than 3% of the household respondents in both provinces have access to electricity supplied by PPL.
- **Wewak District in East Sepik Province is shown to have a wider coverage of households with access to renewable energy source** comprising of about 85.43% of households. This is followed by Yangoru-Saussia (77.08%), Maprik (73.28%), Wosera-Gawi (69.05%), Ambunti-Dreikikier (62.39%), and Angoram (62.05%).
- **Renewable energy is commonly used for household lighting and power supply for SMEs or trade stores.**



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**3.5 Information, Communication
Technology**

4.0 STREIT PNG Program Indicators



» Summary of key findings

01

More than 60% of the household respondents indicated having no access to any ICT service

02

99% of the household respondents in both East and West Sepik Provinces do not have access to any television services

03

Internet usage in both provinces can be categorized as significantly low

04

A majority of the HHs that owned or used ICT devices were mainly for sending messages such as emails and SMS



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3.6 Transport Infrastructure

4.0 STREIT PNG Program Indicators



» Summary of key findings

01

Half of the HH respondents from both provinces sold their produces (cocoa, vanilla and fish) outside of the community of residence

02

More than 70% of the HH do not participate in any road maintenance or rehabilitation works in the village or LLG in the past 12 months

03

Btwn 60% to 70% of the HH respondents indicated that improved road access would lead to more consumer goods and traders (buy and sell) available in the villages

04

In the past two years (2019-2020) most of the labour for any road works in both provinces was sourced locally from the communities



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3.7 Financial Services

4.0 STREIT PNG Program Indicators



» **Summary of key findings**

- From the 9% of mobile financial service users, **80% of the respondents used the services to receive and send money.**
- Between **30% and 40% of the household respondents have bank accounts.**
- Most of the household respondents showed to have bank accounts with **BSP (80%), followed by NDB (11%),** People MicroBank (7%), and Westpac and MiBank (6%). Less than 3% of the household's bank with Kina Bank, Women's MicroBank, and the Savings and Loans Society.



» **Summary of key findings**

- 58% of HHs in East and West Sepik Province that owned bank accounts made between **1 to 10 transactions** in the last month
- More than 90% of HH respondents **do not save money on a regular basis.**
- A large percentage of households (~73%) **keep their moneys at home.**
- **Agricultural development banks, and money lenders are the second largest source of credits** for households besides commercial banks



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3.8 Gender Involvement

4.0 STREIT PNG Program Indicators



» Summary of key findings

- More than **70% of HH decisions are jointly done** by men and women.
- Most decisions regarding purchases of inputs for holdings are **jointly done by men and women.**



» Summary of key findings

- More than 60% household decisions regarding marketing of produce for holdings are **jointly made by men and women.**
- Decisions regarding how money earned by youths is used is **mostly jointly done by youth with either parent**



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4.0 STREIT PNG Program Indicators

4.1 List of Program Indicators for STREIT Program



	SC 1.2: Vanilla Value Chain		
	Outcome 1.2: Increased sustainable production and inclusiveness of the vanilla value chain		
17	O1.2.1 Number and proportion of family farmers producing vanilla using sustainable and/or climate-smart management practices supported by the project, disaggregated by sex and age groups.	Baseline Survey	0
18	O1.2.2 Area under vanilla where sustainable and/or climate-smart management practices are applied in proportion to total areas under vanilla in the implementation area.	Baseline Survey	East Sepik = 32% West Sepik = 13%
19	O1.2.3 Profitability of vanilla of family farmers producing vanilla using sustainable and/or climate-smart management practices supported by the programme, disaggregated by sex and age groups.	Baseline Survey	0
20	O1.2.4 Proportion of women involved in decision making process and with increased income from vanilla value chain activities.	VC study/Programme M&E	0



	SC 2.3: Renewable Energy		
	Outcome 2.3: Increased production of, and access to renewable energy systems		
32	O2.3.1 Proportion of rural population, MSMEs, agripreneurs, households (especially women and youths) with access to programme supported renewable energy in East and West Sepik Province (except biomass).	VC study & Programme M&E	0
33	O2.3.2 Annual amount of electricity [in Kw] generated from renewable energy sources established with programme support in the programme area.	VC study & Programme M&E	0



	SC 2.4: Transport Infrastructure		
	Outcome 2.4: Improved and climate-proof rural transport infrastructure		
34	O2.4.1 Number and length of rural roads and other access ways rehabilitated under the project where climate change projections have been integrated in the project.	ILO & Programme M&E	0
35	O2.4.2 Number and total length of rural roads maintained under community-based management agreements in the programme area.	ILO & Programme M&E	0



Thank you

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