

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

**SURINAME**

**SUPPORT TO THE AIR TRANSPORT SECTOR IN SURINAME**

**(SU-L1071)**

**OEL#5 – SURINAME'S DOMESTIC AIR TRAVEL MARKET**



## Consulting study for Suriname's domestic air travel market

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*Report for:*  
*Inter-American Development Bank*

September 11<sup>th</sup>, 2024

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# Introduction

- Suriname's geographical territory spans across 168 thousand square kilometers, however most of its inhabitants (93%) are concentrated on just 20% of this area along the coastline. This leaves isolated communities with scarce means of access to essential services of medical, social and economic nature.
  - For multiple locations in the rural areas, air travel is the only mode of transportation into the coastal area and capital. Indigenous and Maroon villages in the south-west are therefore vulnerable for isolation as they solely rely on the available flight connections. The purposes of air travel to the rural areas in the interior varies from health, tourism, business, mining activities, community to infrastructure developments.
  - Most of the connections into the rural areas find their point of origin at the Paramaribo city airport, Zorg en Hoop. The main operators for scheduled and chartered flights are the privately-owned Gum Air and Blue Wing Airlines, and the NGO, MAF Suriname. In addition to these main three air travel providers there are also other smaller, privately owned companies.
- In this context, the IDB is developing a loan program with the objective of improving the accessibility of the inhabitants of the remote areas of the Amazon in Suriname to social and essential economic services of regional markets.
  - A study has already been conducted to identify the required maintenance and repair actions for the rural grasshopper airstrips, but for a more comprehensive selection process of critical airstrips the need arises to better understand the air traveler profile and behavior (including travel patterns, travel motivations, length of stay, decision process, etc.).

# Passengers Survey

1. Research methodology
2. Social & economic profile of passengers
3. Travel planning
4. Travel behavior
5. Travel motivation
6. Customer's travel perception



# Research Methodology

## Passengers Survey



**Research objective:** Gaining a deep understanding of the Suriname domestic air travel market, specifically capturing the perspective of the customers.

**Method:** Quantitative research, using a structured survey.

**Data collection method:** Conducting face- to- face surveys at the Zorg en Hoop Airport. The respondents were mainly departing passengers from Paramaribo.

**Sampling method:** A select ordinary random sample.

**Population:** The total number of arrivals via the Ports Zorg & Hoop and Albina =  $N = 3,343$  (General Bureaus of Statistics Suriname, 2021)

**Sample size:** Based on a 5% margin of error, 90-95% confidence interval and 50% population proportion, the minimum sample size ( $n$ )= 345

**Number of recorded samples:  $n = 352$**

**Period of data collection:**

15<sup>th</sup> of May – 24<sup>th</sup> of May ,2024

# Social & Economic Profile of Passengers

- Gender, Age & Level of education
- Ethnicity & Nationality
- Residence
- Income



# Gender, Age & Education

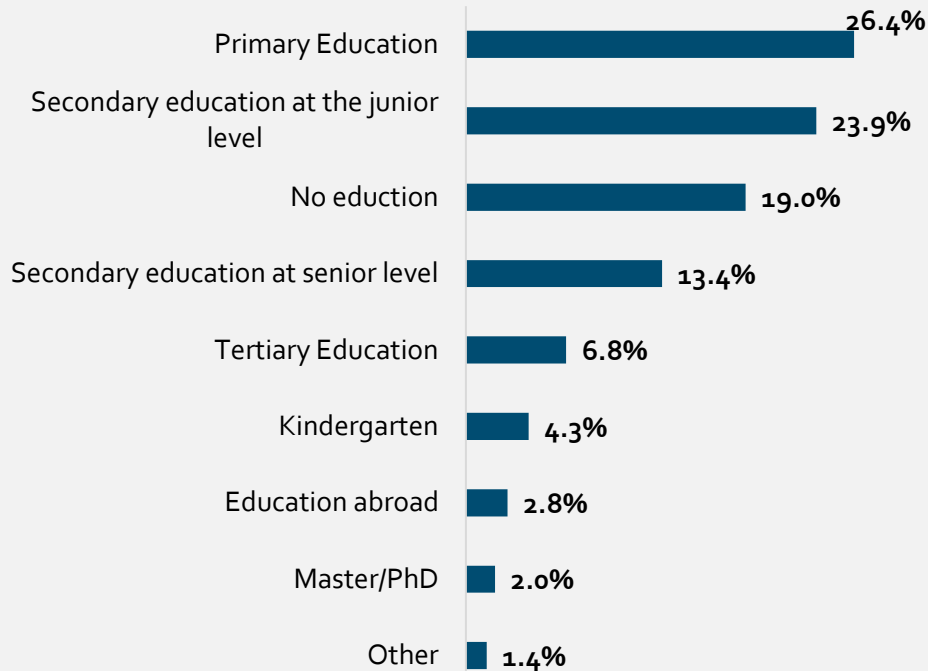


67% Males &  
33% Females

Age group	Percent
< 18 years	1.1%
<b>18-24 years</b>	<b>12.8%</b>
25-30 years	18.5%
<b>31-40 years</b>	<b>29.5%</b>
41-50 years	18.2%
<b>51-60 years</b>	<b>16.5%</b>
61-65 years	2.8%
> 65 years	0.6%

## Highest completed level of education

n= 352



The sample consists of 352 respondents, 67% of whom are male and 33% female.

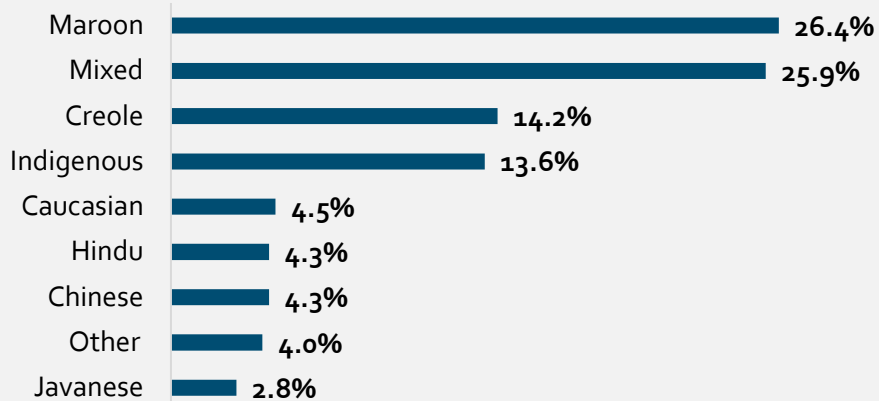
Most passengers (29.5%) are in the 31-40 age category.

Almost 70% of the passengers have lower than secondary education or no education at all.



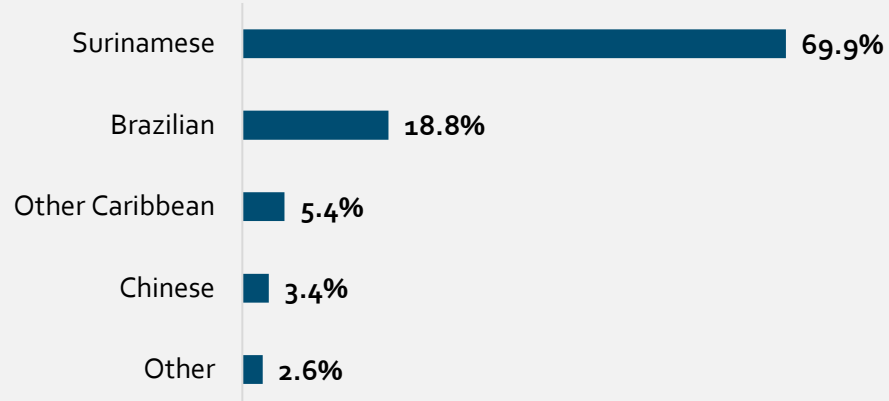
## Ethnicity

n= 352



## Nationality

n= 352

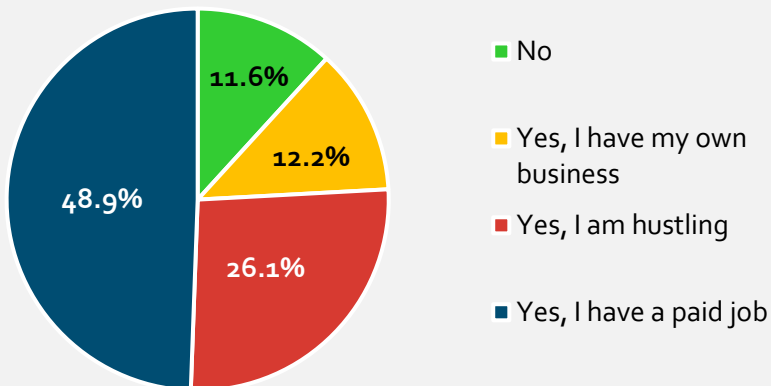


The majority of the respondents were Maroon (26.4%), Mixed (25.9%) Creole (14.2%) and Indigenous (13.6%).  
Most of the respondents have the Surinamese nationality, making up nearly 70% of the total sample.



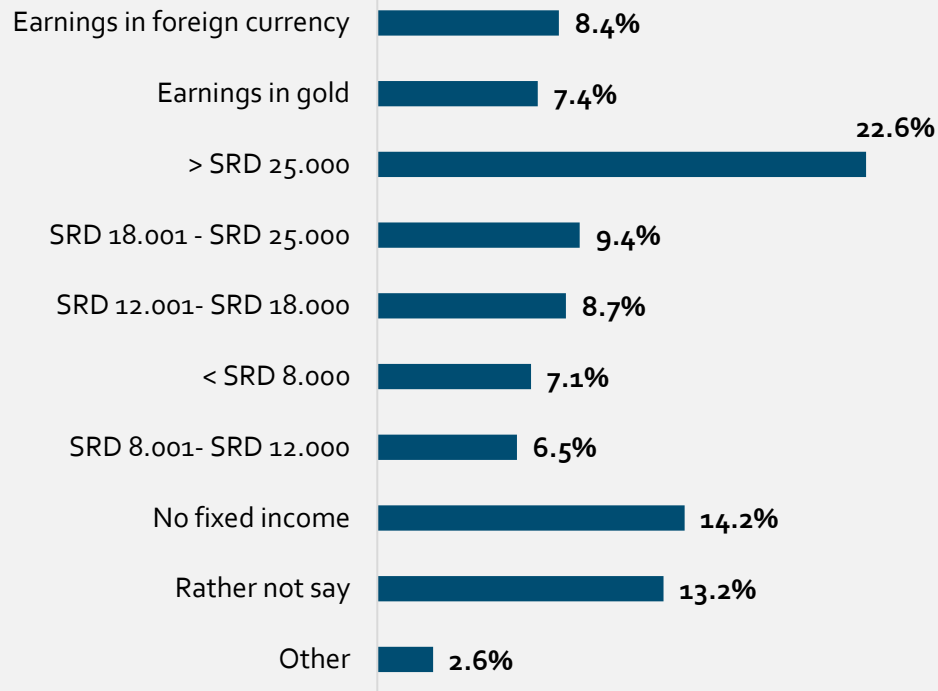
## Passengers' income

n= 352



**49%** of the respondents have a paid job, 26% 'hustle' and 12% have their own business. The monthly net income of these 3 groups is more than SRD25.000. The data shows that 8.4% earns in foreign currency and 7.4% earn in gold. In both cases the income is more than SRD 25.000.

## Monthly Net income

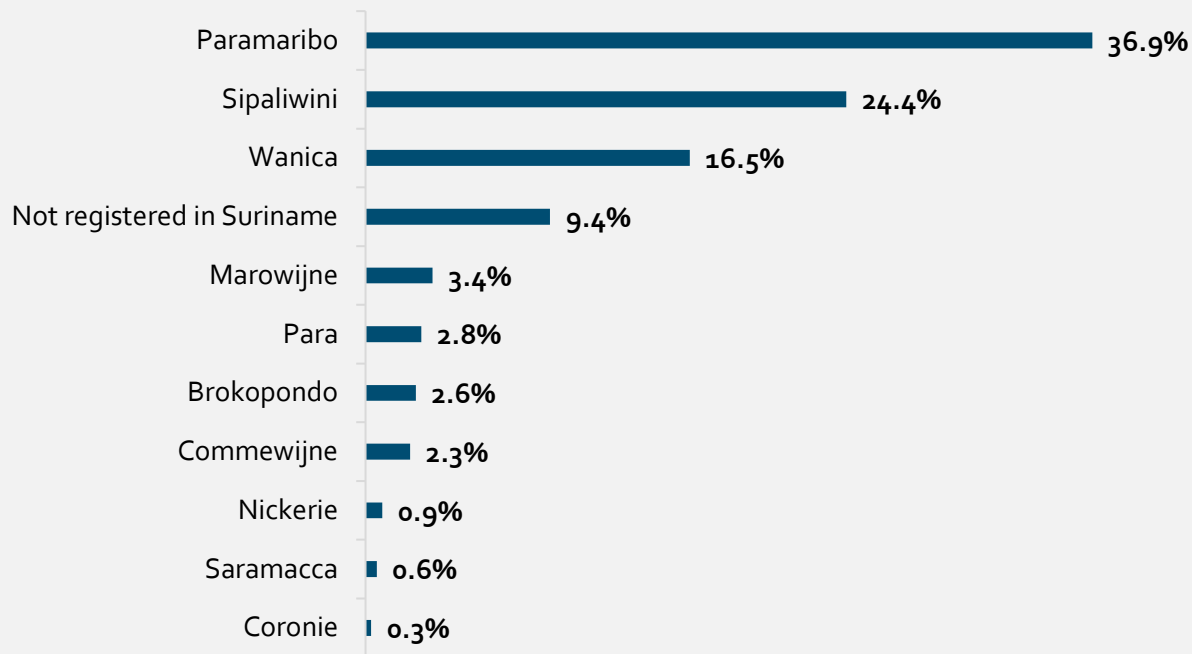


# Residence of Passengers



## Residential district

n= 352



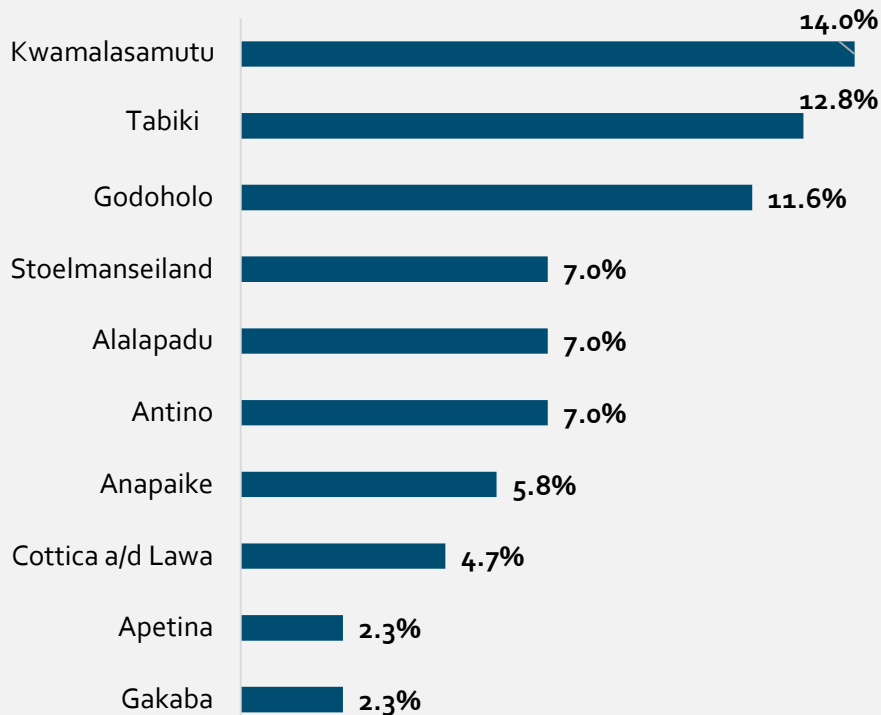
**36.9%** of the passengers live in the capital Paramaribo, followed by **24.4%** living in the district Sipaliwini and **16.5%** in Wanica.

**9.4%** of the passengers are not registered in Suriname.



## Residence in Sipaliwini

n=86



Other villages that were mentioned in lesser extent:

- Langatabiki
- Abenaston
- Apoera
- Mooitakie
- Nw Aurora
- Goejaba
- Poeketie
- Palumeu
- Mainsi
- Kajana
- Jawas
- Grantabai
- Granslee
- Drietabiki
- Donderskamp
- Corneliskondre

The top 3 villages where respondents live in Sipaliwini are:

1. Lawa-villages (25.6%) (Tabiki, Antino & Anapaike)
2. Kwamalasamutu (14.0%)
3. Godoholo (11.6%)

# SURINAME



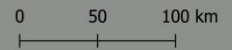
Atlantische Oceaan



GUYANA



BRAZILIË



# Most traveled to areas in Sipaliwini



## Legend

- Tabiki, Antino & Anapaike (Lawa Villages)
- Kwamalasamutu
- Godoholo
- Stoelmanseiland
- Alalapadu

# Map of Tribal Communities in Suriname

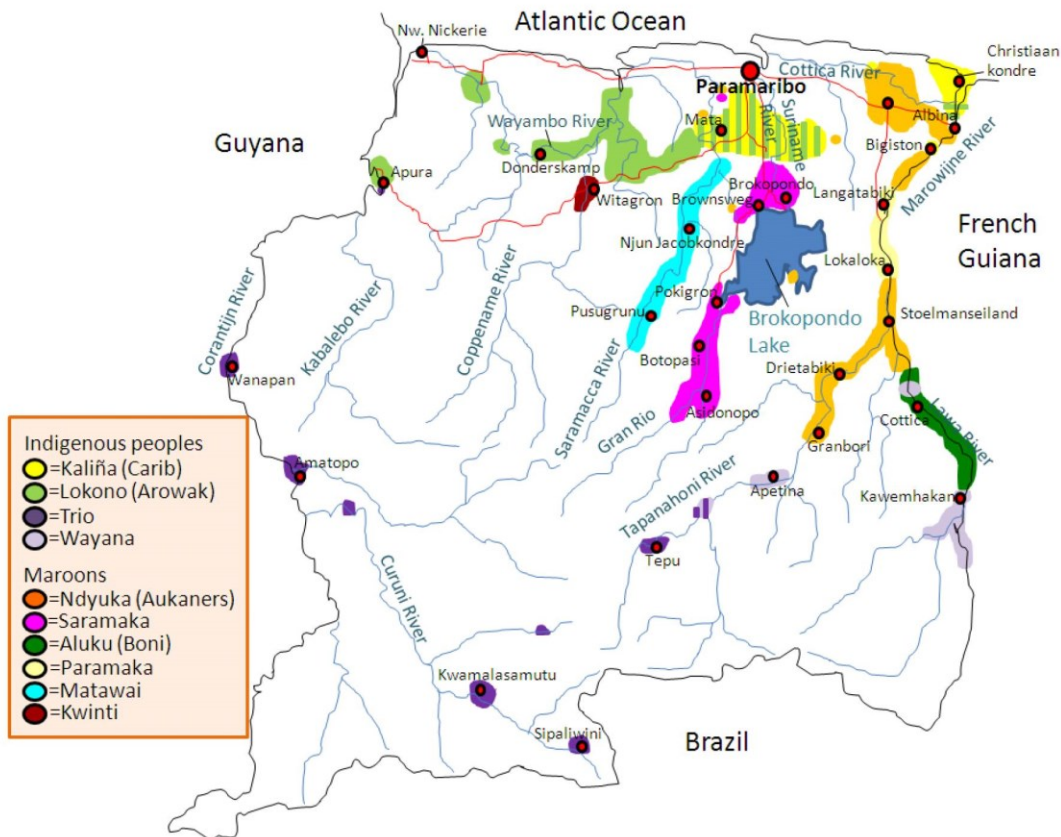


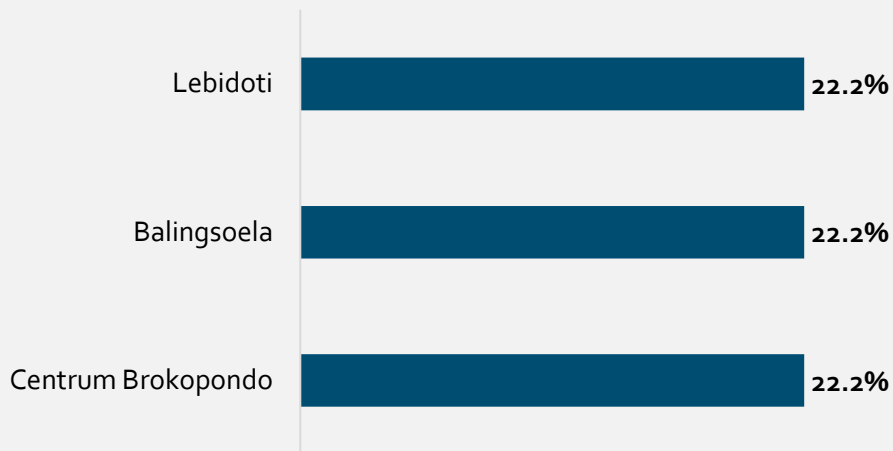
Figure 1: Tribal communities living within the territory of Suriname

# Residence in Brokopondo & Marowijne



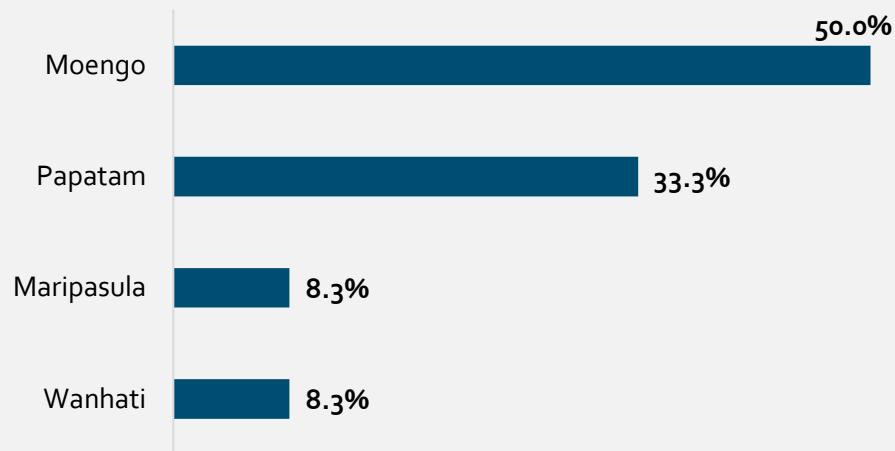
## Residence in Brokopondo

n=9



## Residence in Marowijne

n=12



Other mentioned villages in Brokopondo are Victoria, Lombe and Klaaskreek.

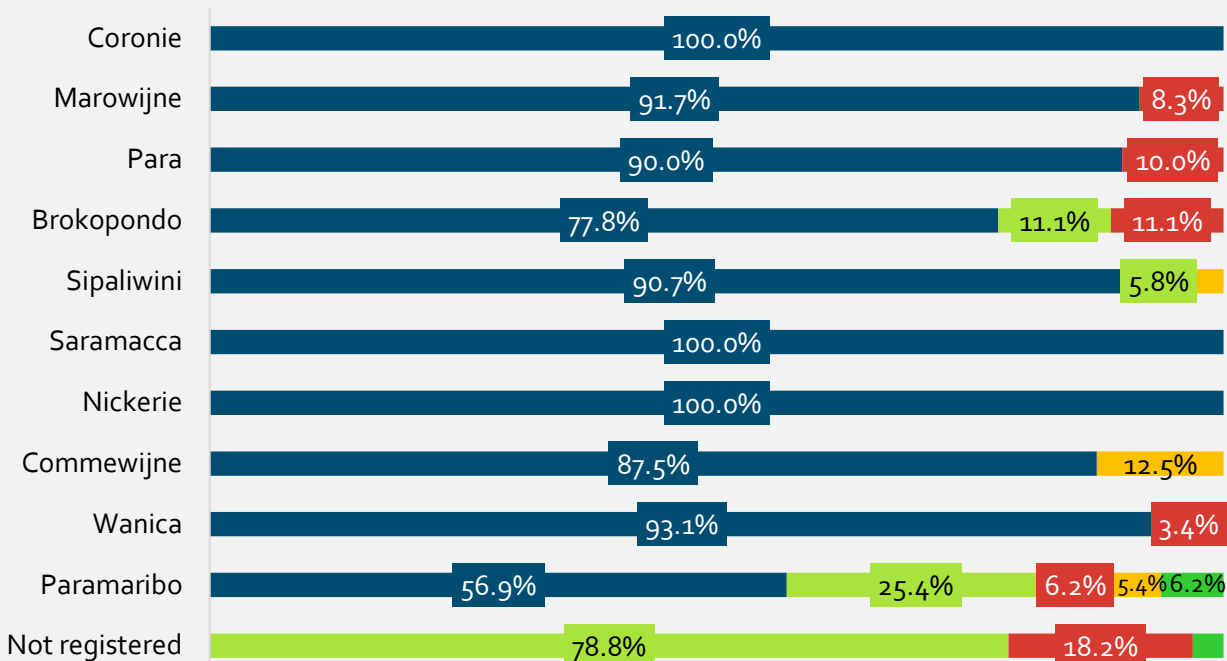
# Residential District per nationality



## Residential district per nationality

n= 352

■ Surinamese ■ Brazilian ■ Other Caribbean ■ Chinese ■ Other



The study shows that passengers take residency across all districts in Suriname and majority have the Surinamese nationality.

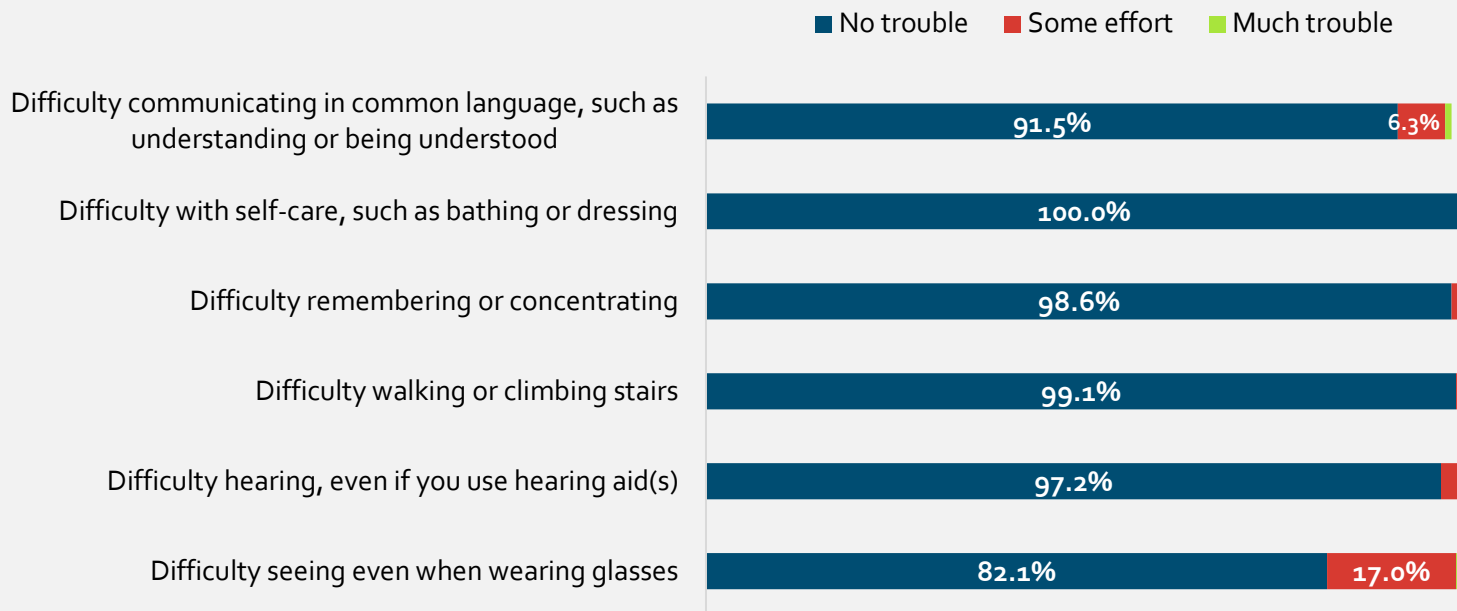
Of the unregistered passengers, majority are Brazilian (78.8%), followed by other Caribbean nationalities (Cuban, Dominican, French- Guiana, Columbian etc.) and other nationalities (3.0%) such as Canadian, Dutch & Indian.





## Passenger profile regarding functional difficulties

n= 352

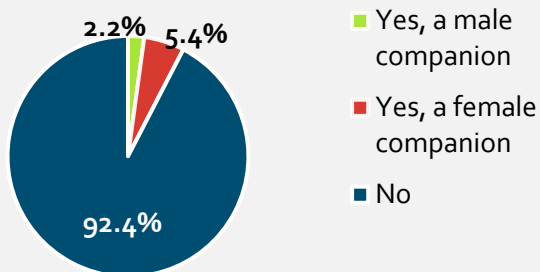


Most passengers mentioned not having any disabilities. The only activity where a significant number of passengers encounter some difficulty is "seeing, even when wearing glasses" (17%) and "communicating in common language" (6.3%).



## Passengers traveling with companion due to mentioned difficulties

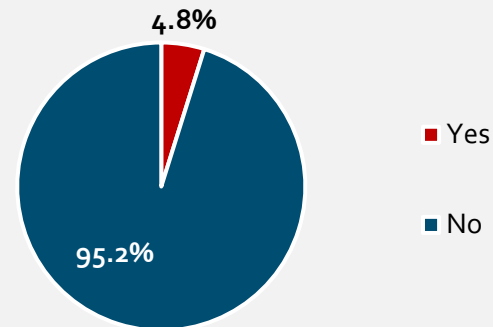
n= 352



The majority of passengers (**92%**) do not travel with a companion despite having mentioned difficulties. A small percentage travel with a companion, with **5%** accompanied by a female companion and **2%** by a male companion.

## Passengers traveling as a companion with someone with difficulties

n= 352



The majority of passengers (**95%**) do not travel as a companion with someone with difficulties, while a small percentage (**5%**) do.

# Travel Planning

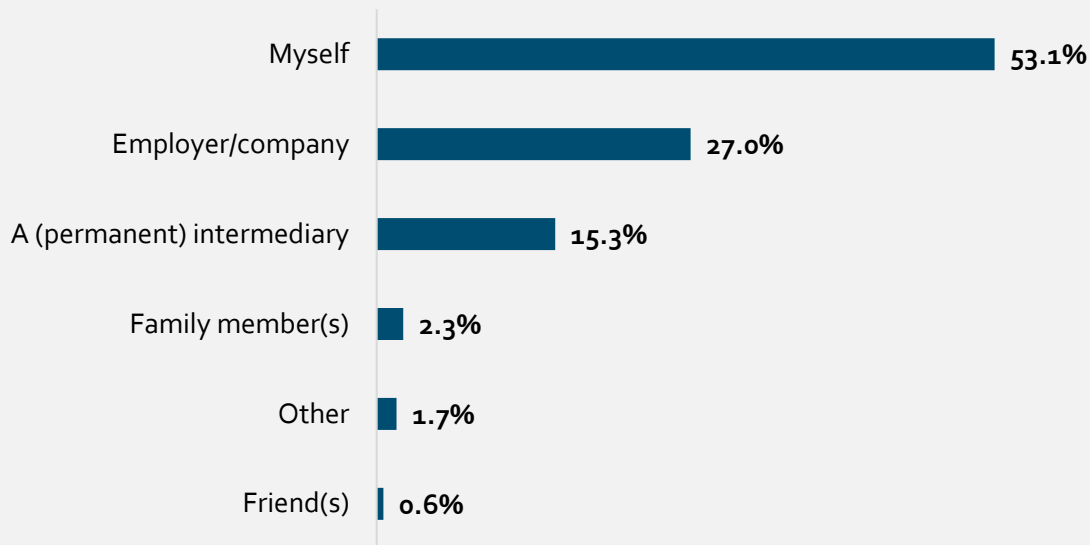
- Ticket Booking process
- Ticket purchasing





## Who primarily books your domestic air travel?

n= 352



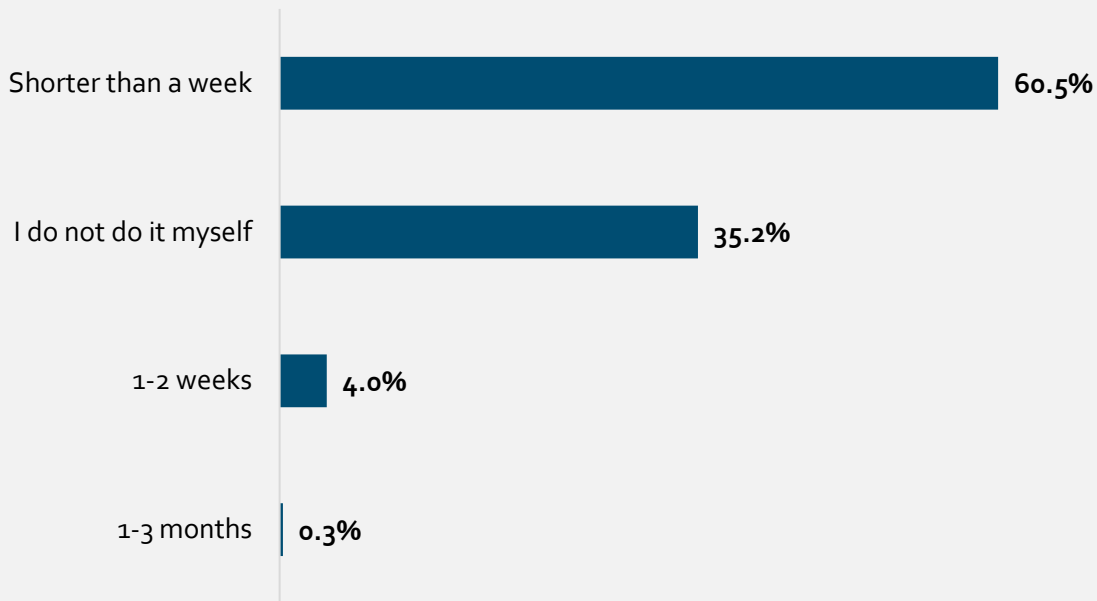
The majority of people (**53%**) book their own ticket. **27%** have their ticket booked by their employer or company, **15%** use a permanent intermediary.

# Booking time in advance of travel



How long before your domestic trip do you book your flight?

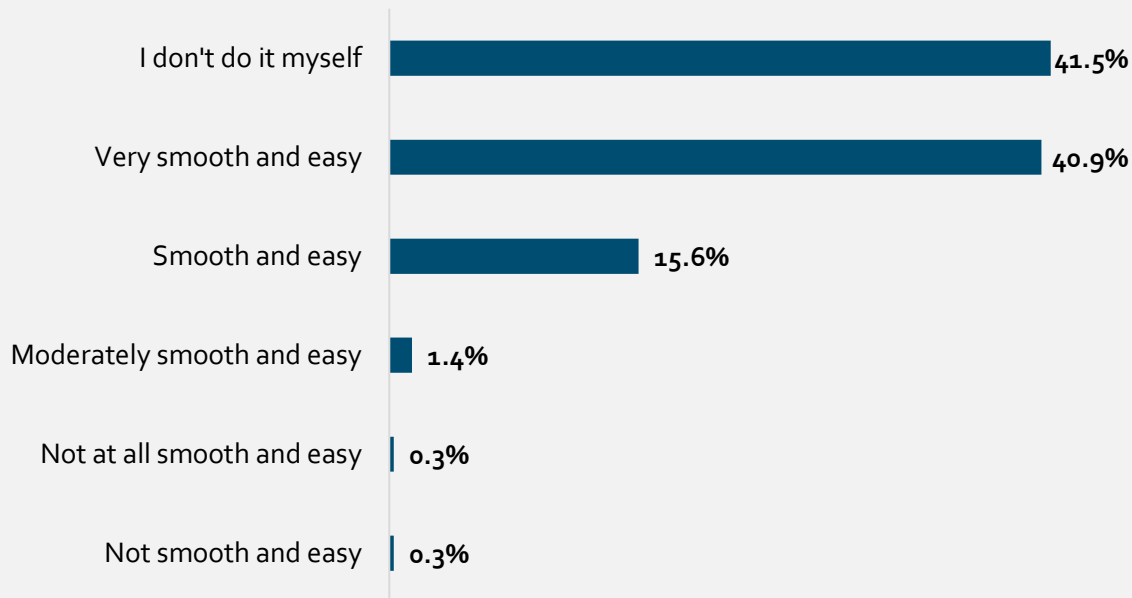
n= 352



61% of people book their domestic flights less than a week before their trip, 35% do not book the flights themselves, and 4% book 1-2 weeks in advance

## How smooth and easy do you find the booking process of domestic flights?

n=352

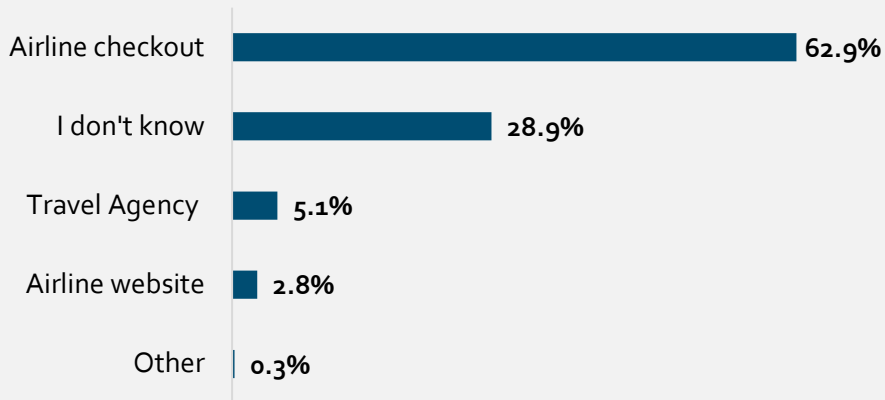


**41%** of the respondents find the booking process for domestic flights very smooth and easy, while another **42%** do not book the flights themselves and **16%** find the process moderately smooth and easy.



## Where are the tickets purchased?

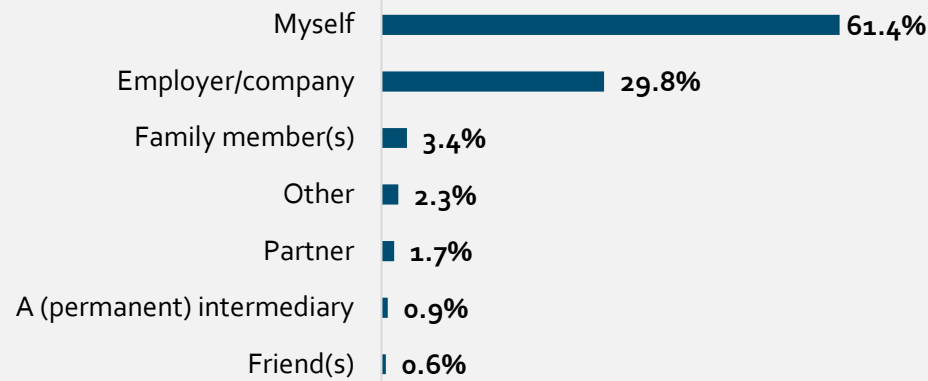
n= 352



**63%** of passengers buy their tickets at the airline counter, followed by **29%** who do not know where the tickets are purchased.

## Who pays for the ticket(s)?

n=352



**61%** of passengers pay for their ticket themselves, while for **30%** of passengers the ticket is paid for by their employer.

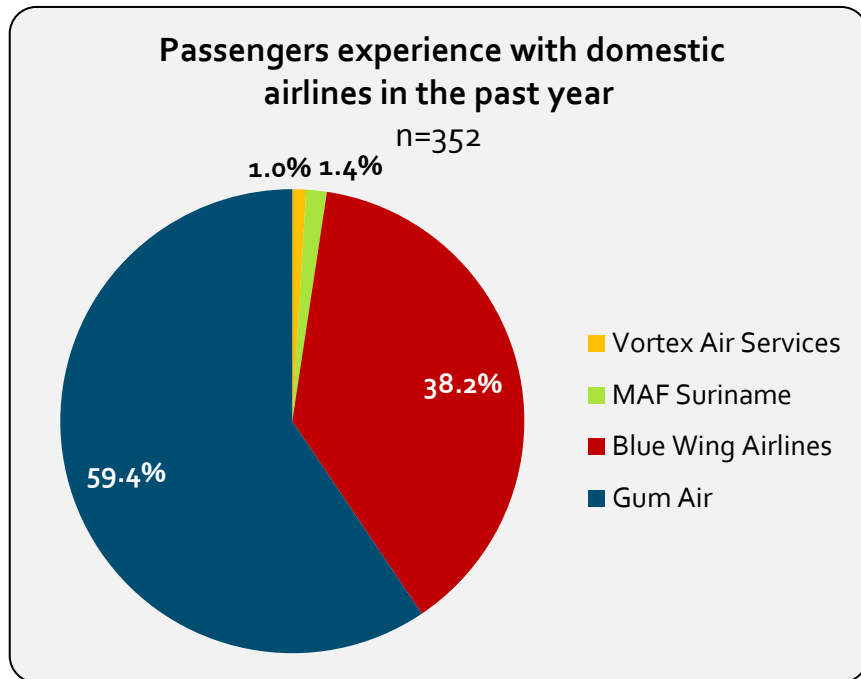
# Travel Behavior

- Most recent trip with airlines
- Reasons for domestic air travel
- Travel destinations
- Travel frequency
- Length of stay
- Alternative modes of transportation





# Experience with domestic airlines



Most of the respondents travel with **Gum Air (59.4%)** and **Blue Wing Airlines (38.2%)**. A small group with Vortex and MAF.



## Passengers most recent trip with Gum Air in the past year

n=249



**33%** of passengers had their recent experience within a month, followed by **23%** between 1 and 3 months and **20%** on the day of the interview.

# Most recent trip with Blue Wing Airlines



## Passengers most recent trip with Blue Wing Airlines in the past year

n= 160



**Blue Wing** AIRLINES  
We Fly Ala Soy Ala Day

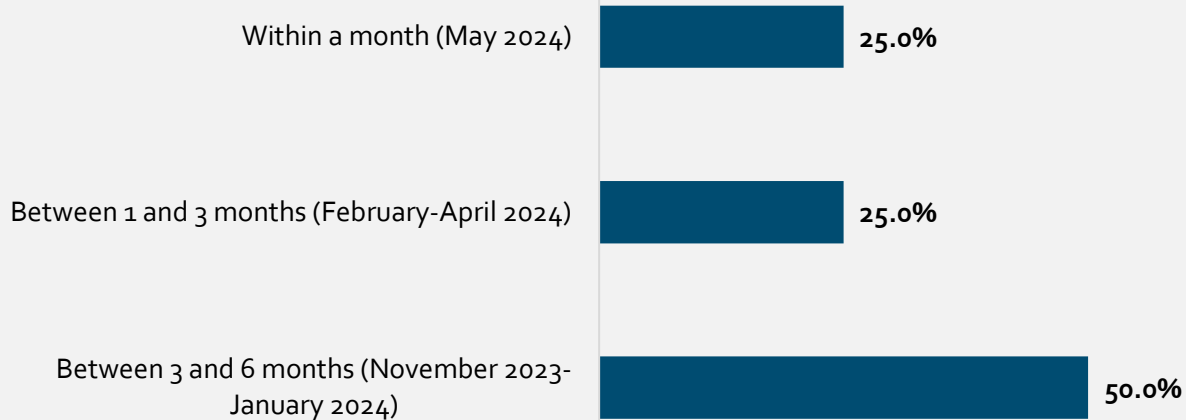
50% of passengers had their recent experience on the day of the interview, followed by 24% within a month and 14% between 1 and 3 months.

# Most recent trip with Vortex Air Services



## Passengers most recent trip with Vortex Air Services in the past year

n= 4



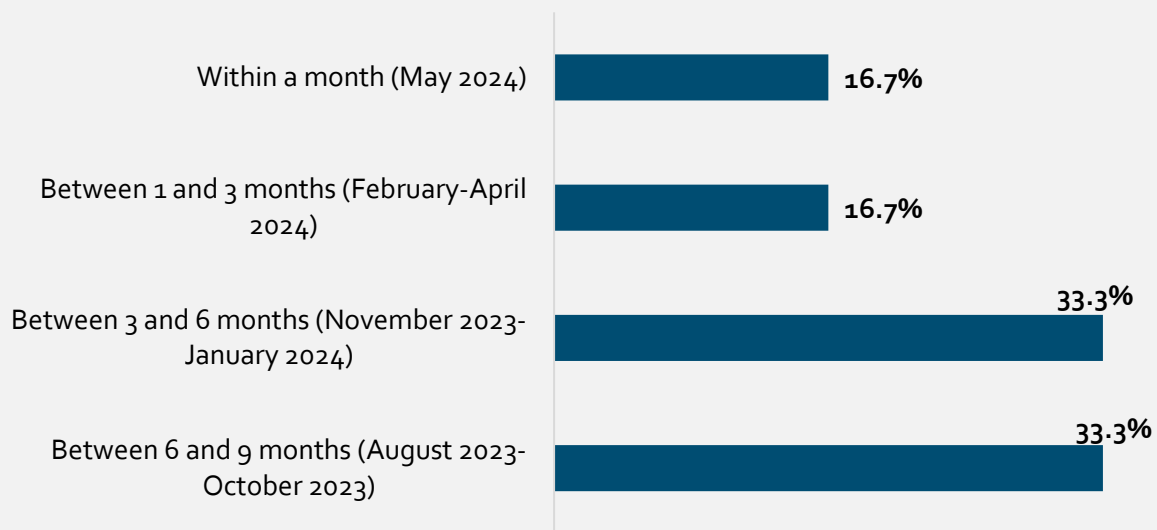
**50%** of passengers had their recent experience with Vortex between 3 and 6 months, followed by **25%** between 1 and 3 months and **25%** within a month.

# Most recent trip with MAF Suriname



## Passengers most recent trip with MAF Suriname in the past

year  
n=6



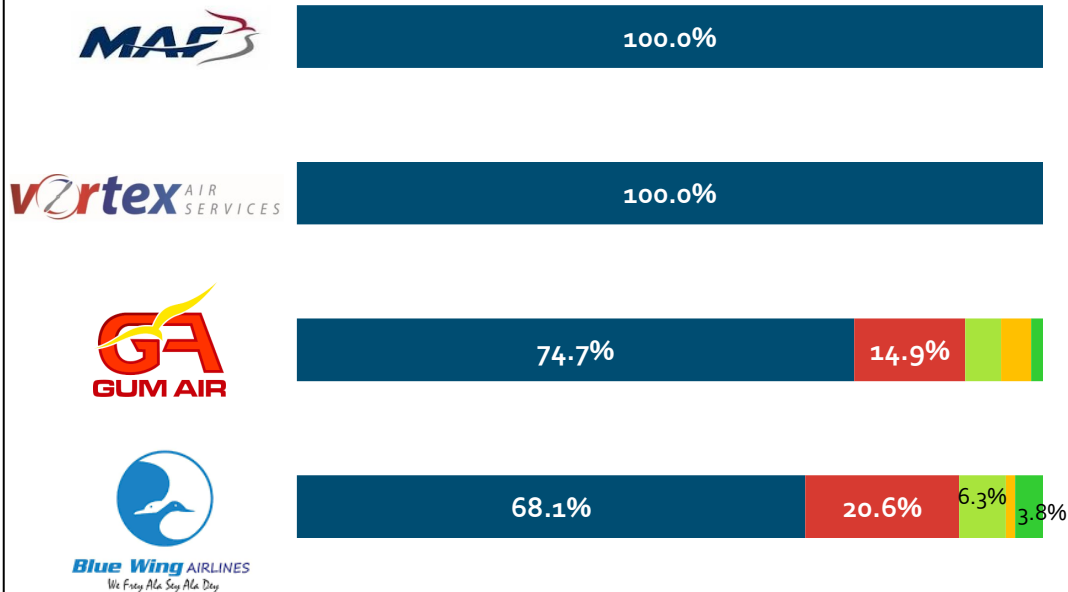
33% of passengers had their recent experience with MAF Suriname between 6 and 9 months, followed by 33% between 3 and 6 months, 17% between 1 and 3 months and 17% withing a month.



## Airline usage by nationality

n= 352

■ Surinamese ■ Brazilian ■ Other Caribbean ■ Chinese ■ Other



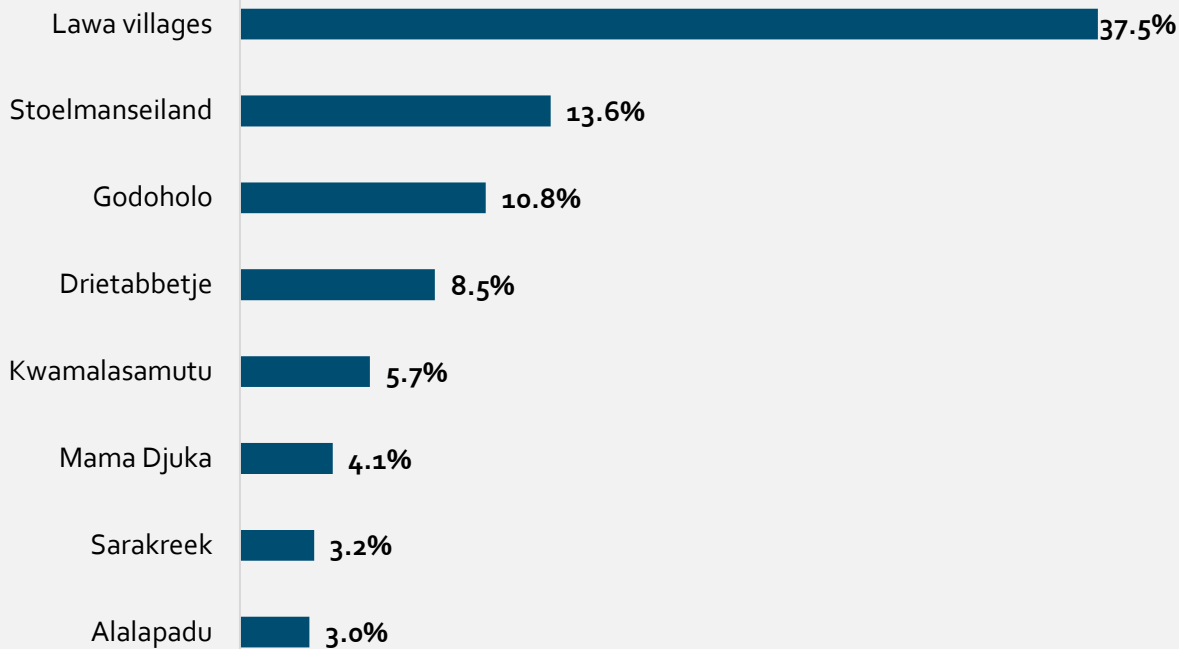
The passengers with non-Surinamese nationalities travel mostly with Gum Air and/or Blue Wing Airlines.



## Most mentioned destinations traveled to/from in the past

year

n=493



Other mentioned destinations traveled to/from in the past year:

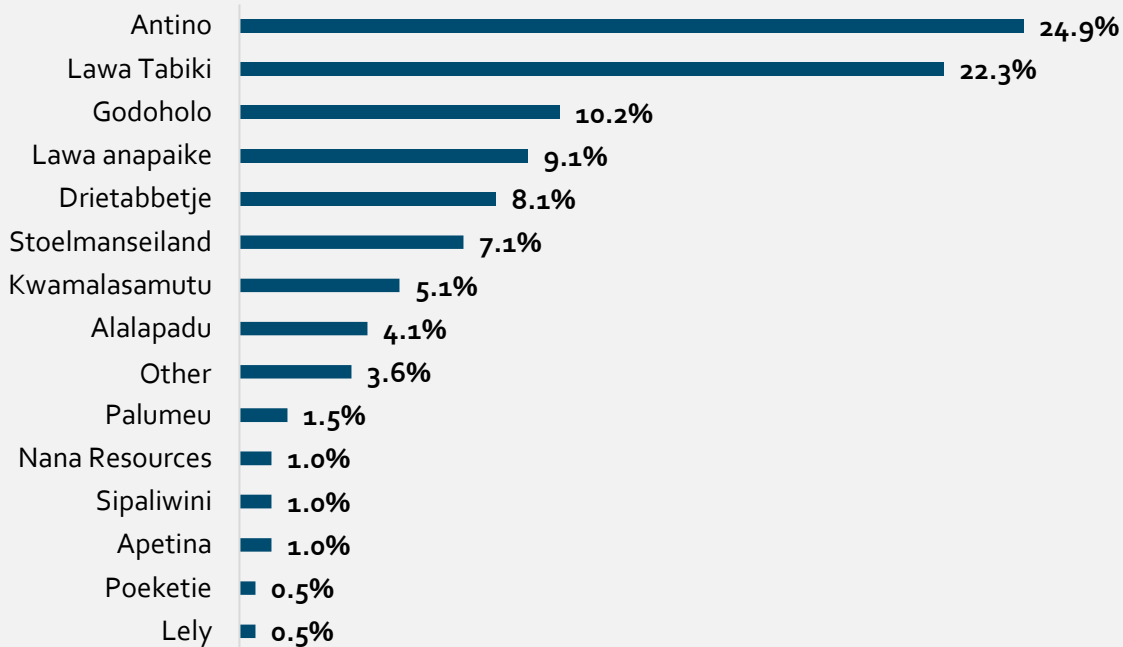
- Lely
- Poeketi
- Amatopo
- Apetina
- Coeroeni
- Palumeu
- Maripasoela
- Gakaba
- Cottica
- Benzdorp
- Eupasi
- Mooitakie
- Awaradam
- Gransanti

# Travel destinations with Blue Wing Airlines



## Locations traveled to/from with Blue Wing Airlines in the past year

n= 160



The top 5 **places** traveled to/from with Blue Wings Airlines in the past year are:

1. Antino ( 25% )
2. Lawa Tabiki ( 22% )
3. Godo Holo ( 10% )
4. Lawa Anapaiké ( 9% )
5. Drietabbetje ( 8% )

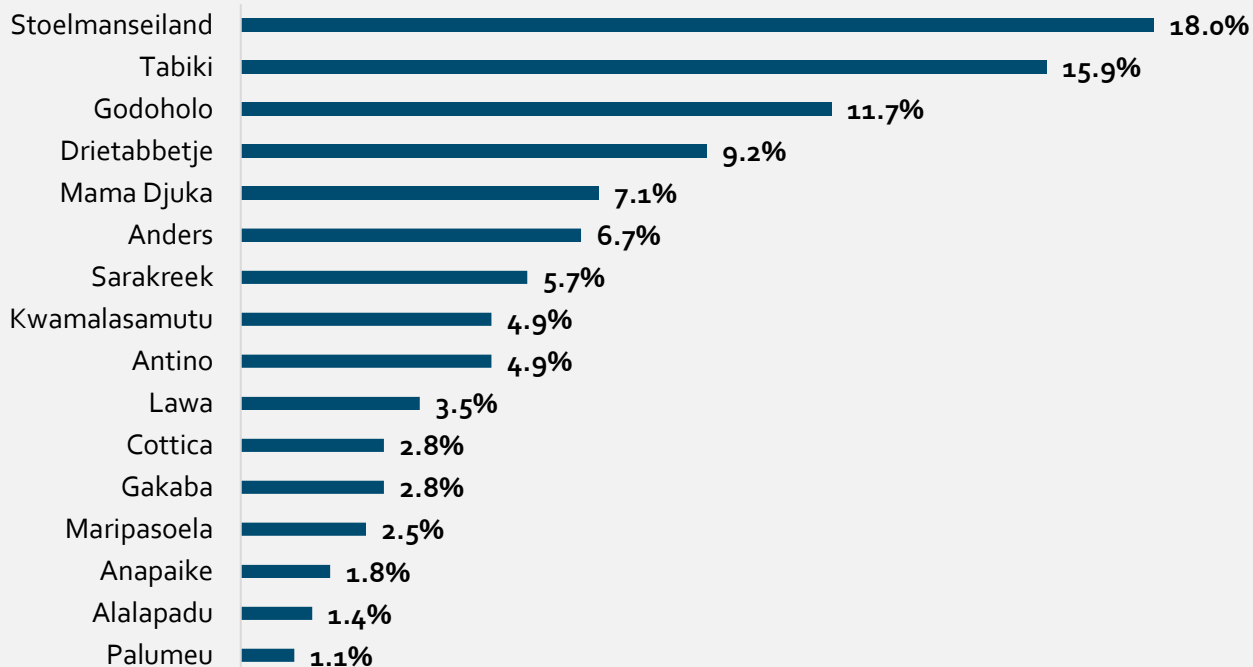


# Travel destinations with Gum Air



## Locations traveled to/from with Gum Air in the past year

n= 249



The top 5 **places** traveled to/from with Gum Air in the past year are:

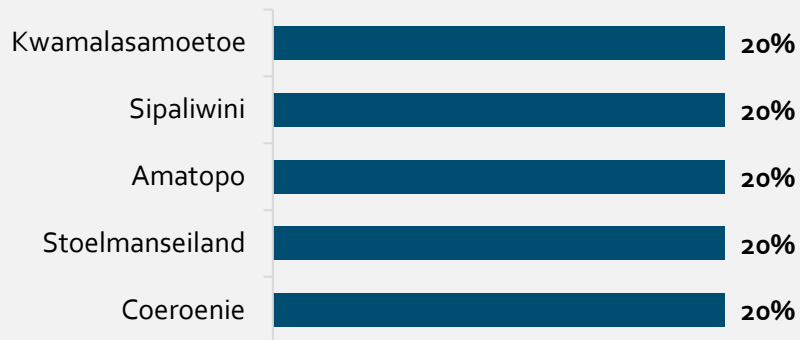
1. Stoelmanseiland (**18%**)
2. Tabiki (**16%**)
3. Godoholo (**12%**)
4. Drietabbetje (**9%**)
5. Mama Djuka (**7%**)

# Travel destinations with Vortex Air Services & MAF



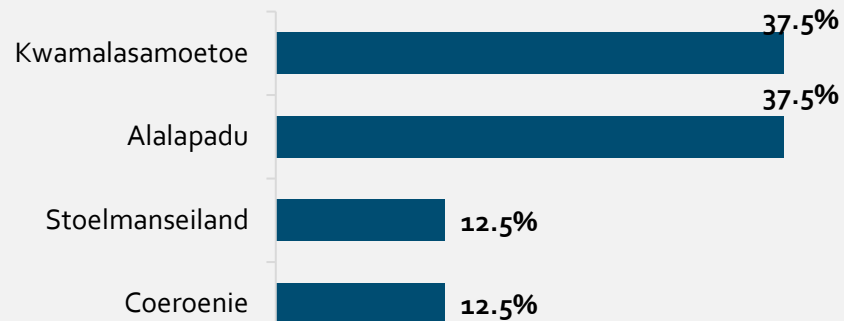
## Locations traveled to/from with Vortex Air Services in the past year

n= 4



## Locations traveled to/from with MAF in the past year

n= 6



# Destinations per nationality



	Alalapadu	Apetina	Kwamalasamutu	Lely	Palumeu	Poeketie	Sipaliwini	Cottica	Coeroeni	Amatopo
Surinamese	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

	Lawa villages	Drietabbetje	Godoholo	Stoelmanseiland	Other	Mama Djuka	Sarakreek	Gakaba	Maripasoela
Surinamese	66.8%	54.8%	83.0%	62.7%	86.2%	45.0%	50.0%	62.5%	71.4%
Brazillian	23.0%	31.0%	9.4%	29.9%	3.4%	35.0%	18.8%	12.5%	14.3%
Other Caribbean	5.3%	9.5%	3.8%	7.5%		15.0%	12.5%		
Chinese	1.1%	4.8%	1.9%		3.4%	5.0%	12.5%	25.0%	14.3%
Other	3.7%		1.9%		6.9%		6.3%		

In the sample, there were 10 villages which were being visited by only Surinamese passengers, while there are more villages being visited by other nationalities as well.

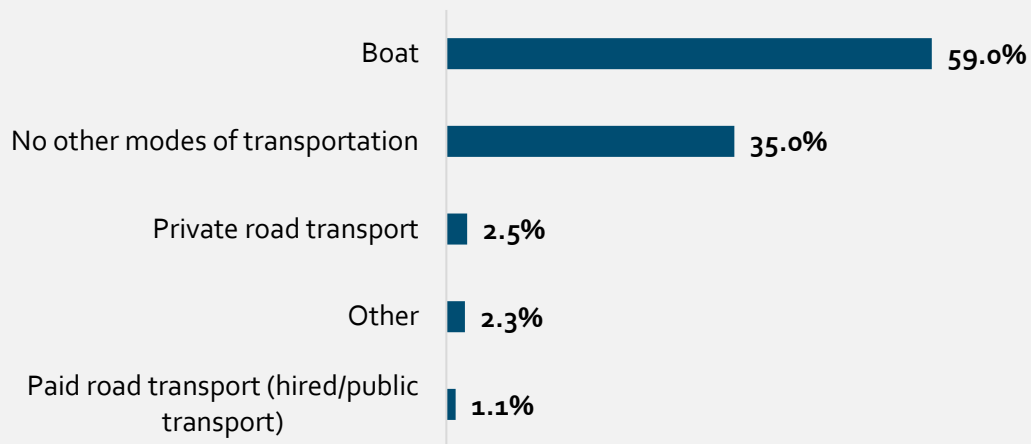
The villages which are getting very diverse passengers in terms of nationalities are the Lawa-villages, Godo Holo & Sarakreek.

The destinations with most non-Surinamese passengers are Mama Djuka (55%), Sarakreek (50%) and Drietabbetje (46%).



## Other possible modes of transportation used besides air travel to reach the desired destination(s)

n= 352



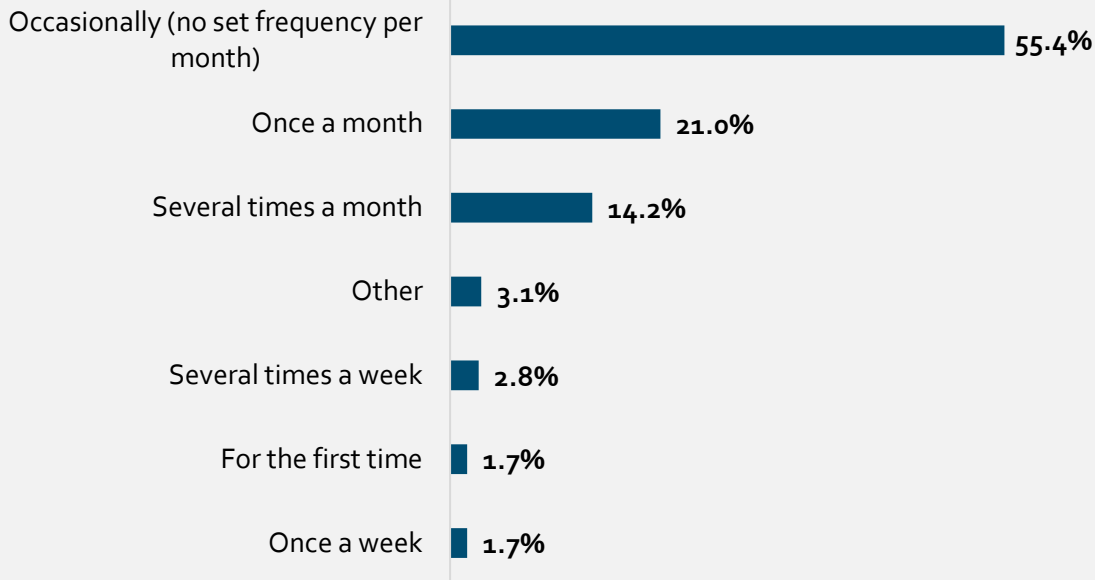
The most common mode of transportation besides air travel to reach the desired destination(s) is by boat (59%).

While there are many villages which are only accessible by air travel (35%).



## On average, how often do you fly inland?

n=352

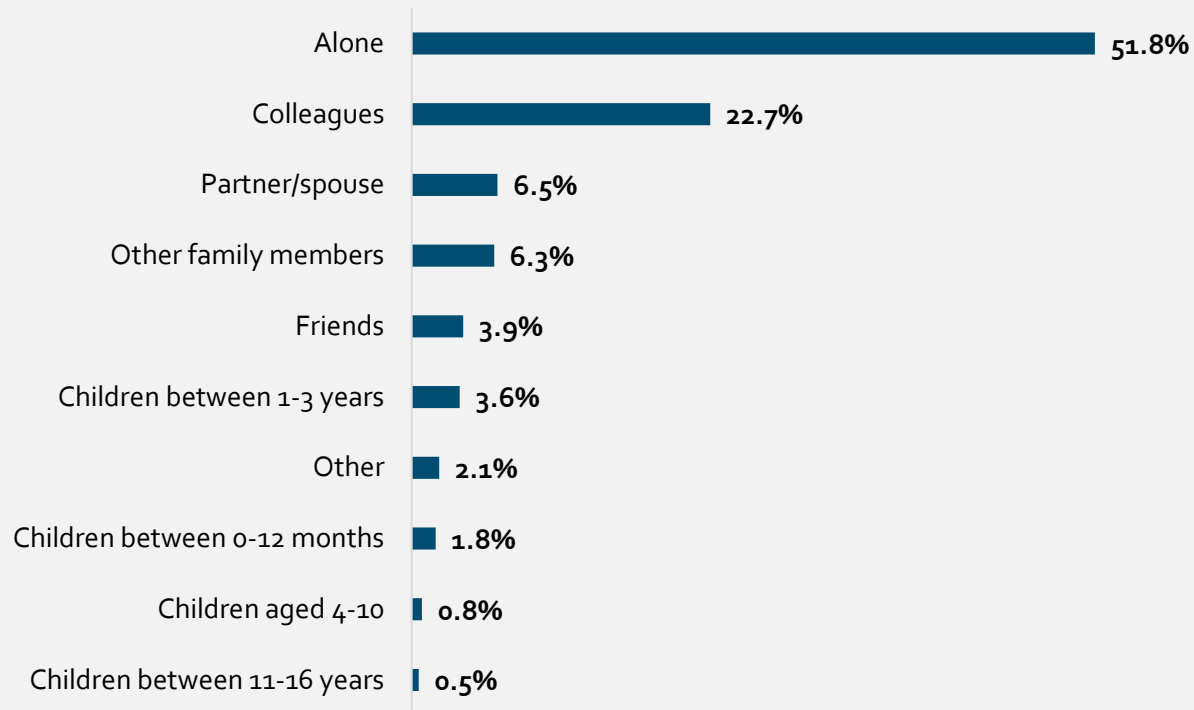


**55%** of passengers fly inland occasionally, they have no set frequency of travel per month, followed by **21%** who travel once a month and **14%** several times a month.



## General travel companions

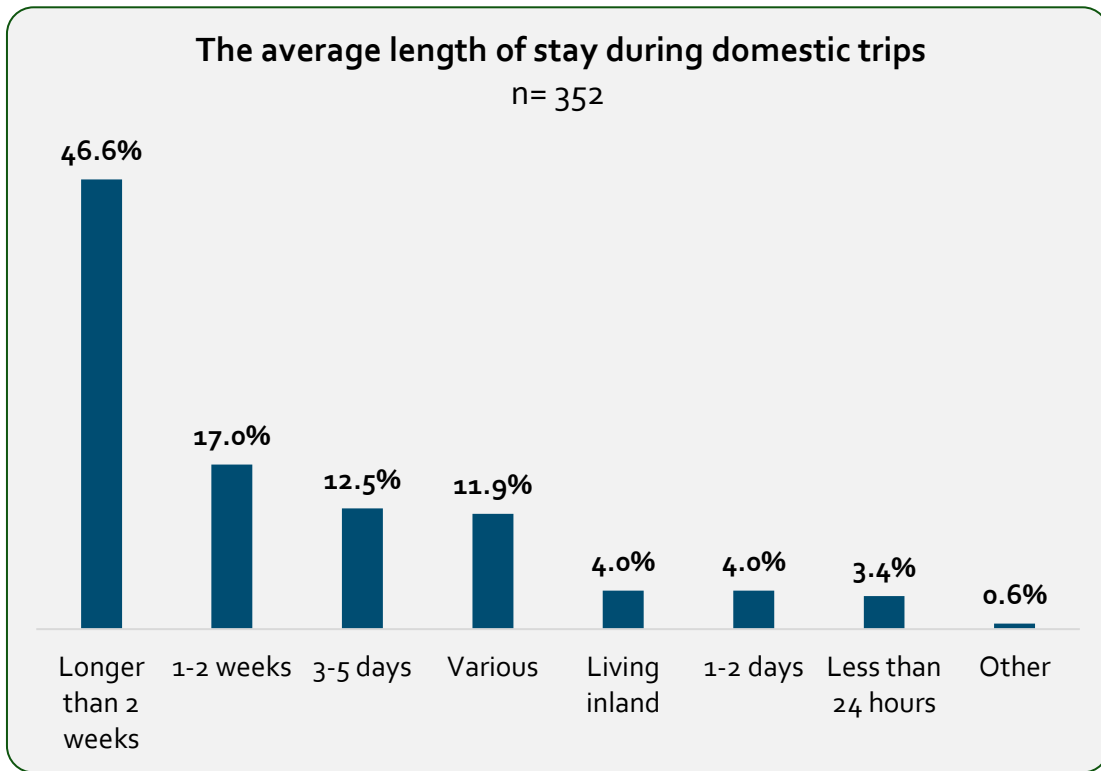
n=384



**52%** of passengers travel alone and **23%** of the passengers travel with colleagues.

**6.5%** travel with children (< 16 years).

# Length of Stay



47% of the passengers stay longer than 2 weeks during their domestic trips.

# Travel Motivation

- Reasons for traveling
- Nature of work-related travels

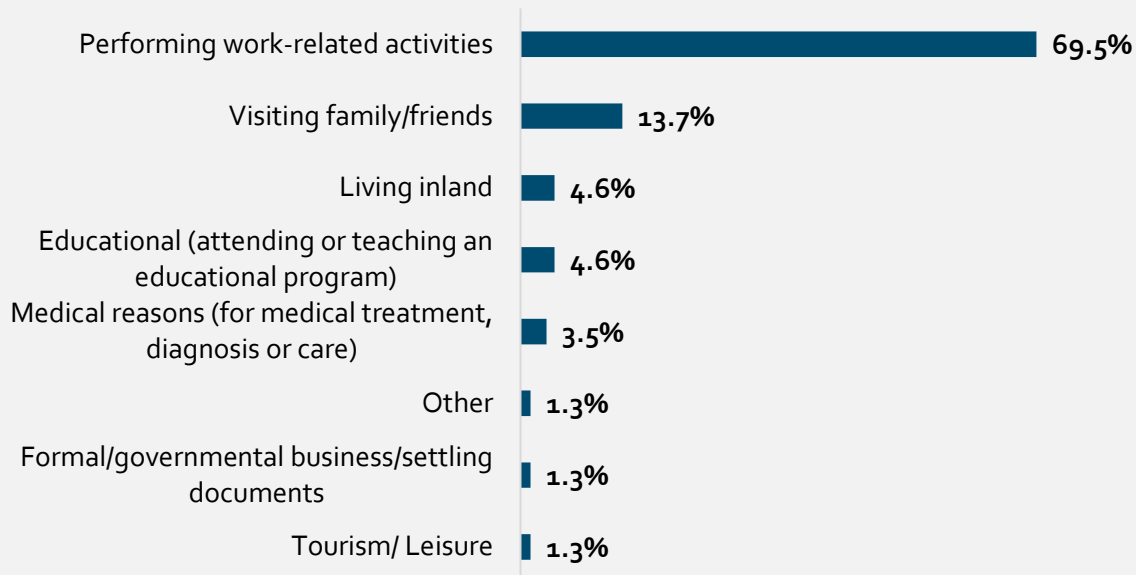






## The main reason for domestic air travel

n=352



The main reasons for traveling inland is to do work-related activities (**70%**), followed by visiting family and friends (**14%**).

Note: this can mainly be concluded for the passengers who participated in this study and who mainly fly with Gum Air and/or Blue Wing Airlines.

# Reason for travel per destination



The top 3 flown to destinations for **Performing work-related activities** are:

n=356

Lawa villages (39.6%)  
Stoelmanseiland (15.2%)  
Godo Holo (11.0%)

The top 3 flown to destinations for **Visiting family/friends** are:

n=72

Lawa villages (37.5%)  
Godo Holo (15.3%)  
Drietabbetje (11.1%)

The top 3 flown to destinations for **Formal/governmental business/settling documents**

are:

n=5

Lawa villages (60.0%)  
Godo Holo (20.0%)  
Kwamalasamutu (20.0%)

The top 3 flown to destinations for **Other activities** (such as church conference, funeral) are:

n=10

Lawa villages (50.0%)  
Stoelmanseiland (20.0%)  
Cottica (20.0%)

The top 3 flown to destinations for **Medical reasons (for medical treatment, diagnosis or care)** are:

n=31

Alalapadu (38.7%)  
Lawa villages (29.0%)  
Kwamalasamutu (9.7%)

The top 3 flown to destinations for **Educational (attending or teaching an educational program)** are:

n=15

Kwamalasamutu (33.3%)  
Palumeu (13.3%)  
Stoelmanseiland (13.3%)

The top 3 flown to destinations for **Living inland** are:

n=21

Kwamalasamutu (38.1%)  
Lawa villages (23.8%)  
Drietabbetje (9.5%)

The top 3 flown to destinations for **Tourism/ Leisure** are:

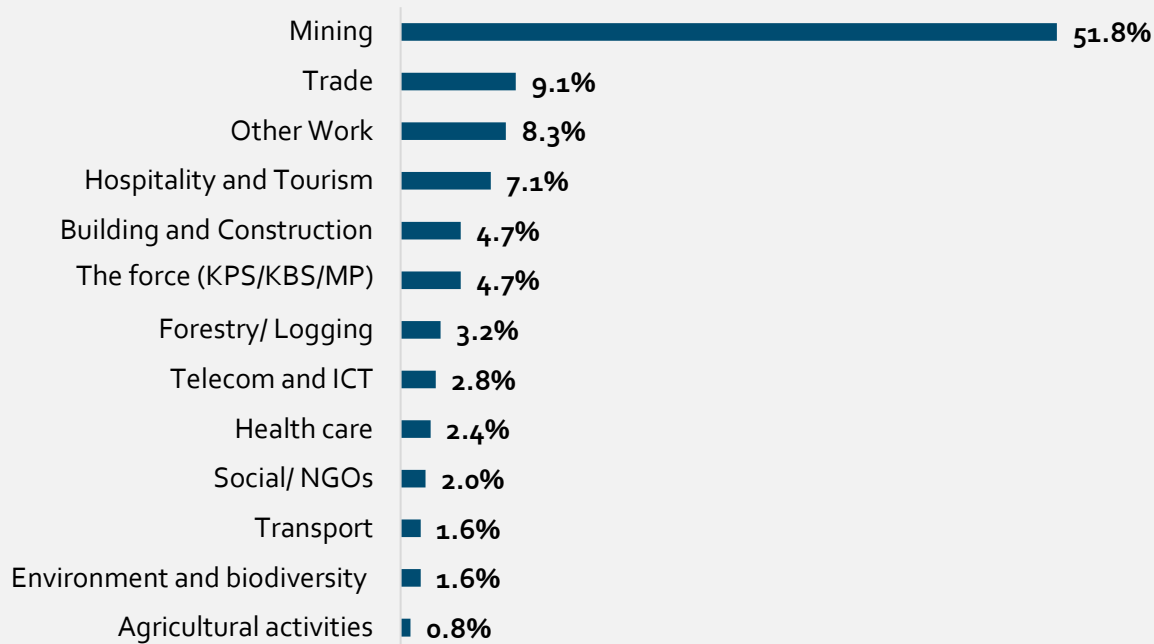
n=9

Lawa villages (33.3%)  
Godo Holo (11.1%)  
Palumeu (11.1%)



## The nature of work-related trips

n= 258



The nature of the work-related trips (**70%** of the sample) is mainly in mining industry (**52%**).

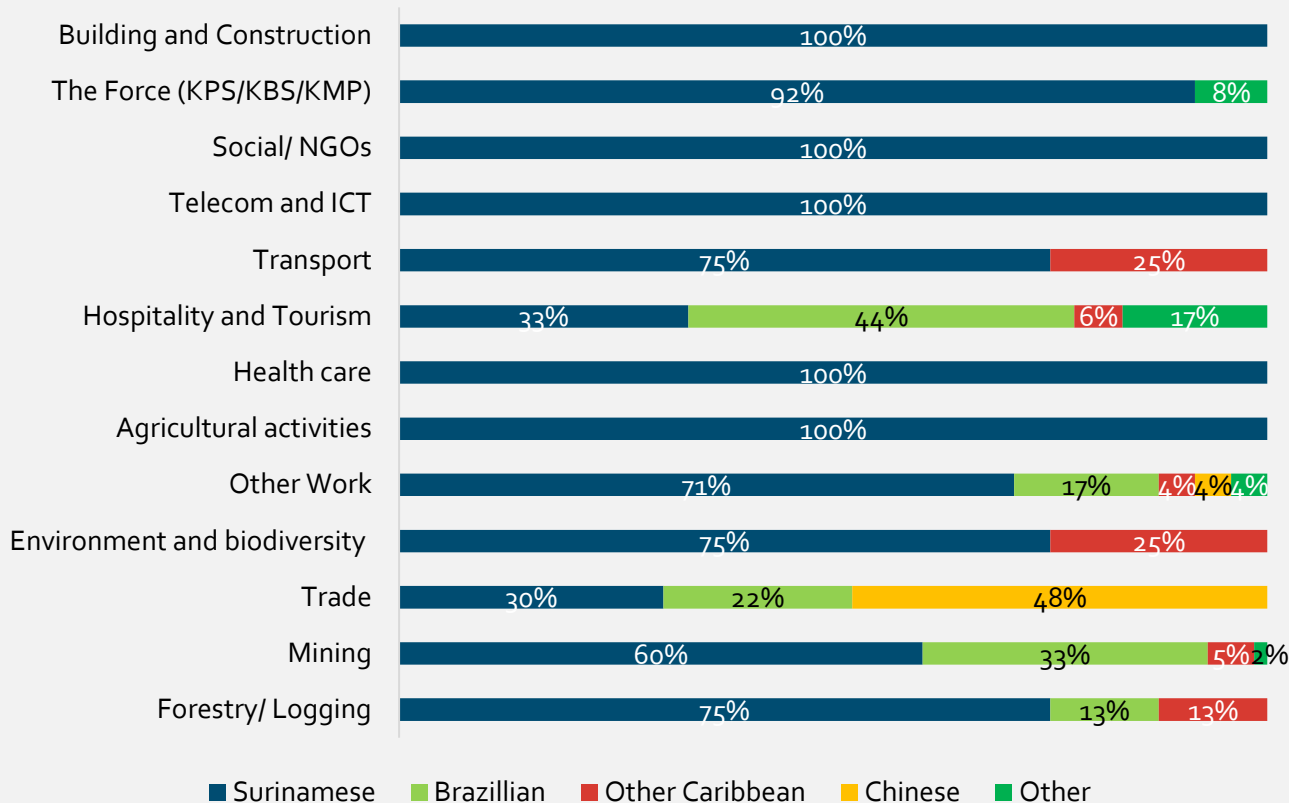
The top 3 flown to destinations for Performing work-related activities are:

- Lawa villages (39.6%)
- Stoelmanseiland (15.2%)
- Godo Holo (11.0%)

# Nature of work-related Trips per Nationality



## Nature of work-related activities per nationality



**Surinamese nationals** dominate most sectors, particularly in Building and Construction, Social/NGOs, Telecom and ICT, Health care, and Agricultural activities (all 100%).

**Brazilians** are significantly involved in Hospitality and Tourism (44%), Mining (33%).

**Chinese nationals** have a significant presence in Trade (48%).

# Customer Satisfaction

- Regarding airstrips
- Regarding airlines
- Passenger suggestions & quotes

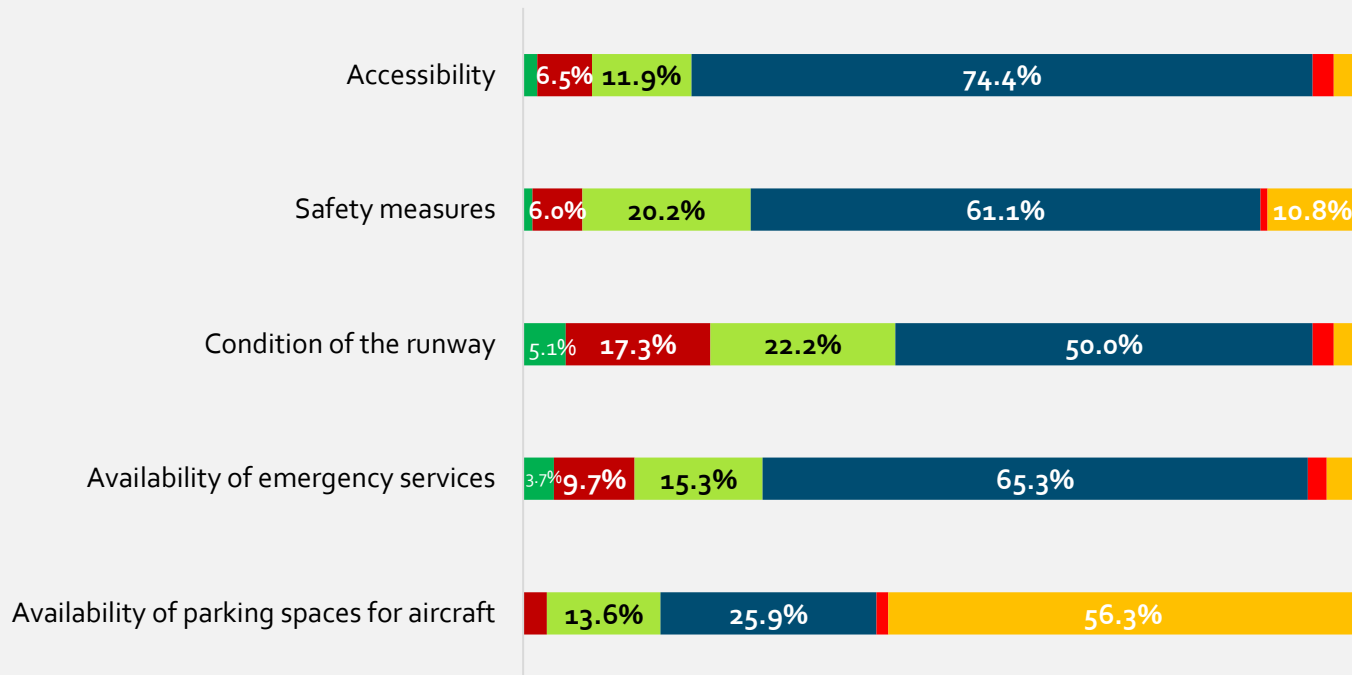




## Overall customer satisfaction for all airstrips

n=352

■ Very Dissatisfied 
 ■ Dissatisfied 
 ■ Neutral 
 ■ Satisfied 
 ■ Very Satisfied 
 ■ Don't know



Overall, the passengers are quite satisfied with the airstrips considering the given circumstances.

- They're **most satisfied** with the **accessibility** (74.4%).
- Passengers are **least satisfied** with the **condition of the airstrips** (22.1%).

"The runways are not always accessible, especially during thunderstorms. No safety measures are taken. Roughly speaking, it is not considered a runway, but more of a football field. There is not enough parking space for the aircraft."

"The runways are terribly bad. They need to be paved. You pray every day for a safe landing. There is no emergency personnel, ambulance, etc., in case of an emergency."

## Suggestions by passengers regarding the improvement of the Airstrips:

- The runways should be better maintained. There is very often grass on the runway and lots of potholes, causing the runways to flood during rains.
- Emergency services should be available on runways, such as fire, medical and security aspects. There are no safety attributes such as fire extinguishers and first aid kits on the runways.
- Lighting should be placed on the runways so that flights can be conducted in the evenings. The runways should be widened so that aircraft can be parked properly.

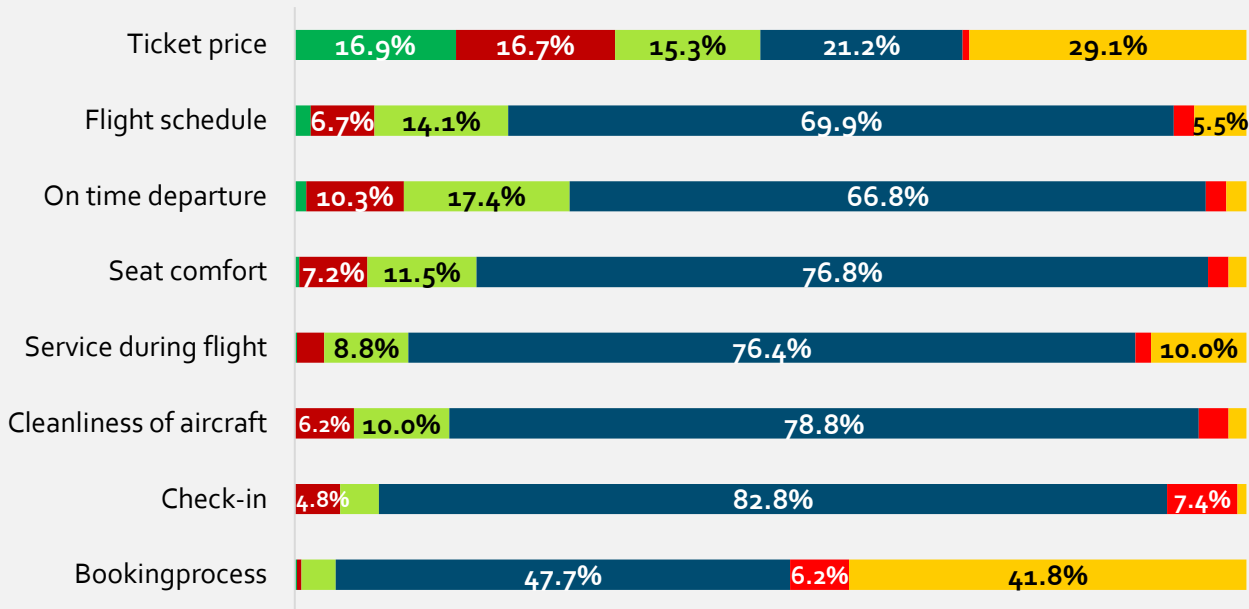
"The runway is not paved, there is no lighting, no emergency services available, and not enough parking spaces for the aircraft."



## Overall customer satisfaction for all airlines

n= 419

■ Very Dissatisfied 
 ■ Dissatisfied 
 ■ Neutral 
 ■ Satisfied 
 ■ Very Satisfied 
 ■ Don't know



In general, passengers are quite satisfied with the services of the domestic airlines.

- They're **most satisfied** with the **check-in procedure (90.2%)**.
- Passengers are **least satisfied** with the **ticket prices (33.6%)**.



"The ticket prices are terribly expensive, so something definitely needs to be done about it."

"Maintenance needs to be taken into account. No consideration is given to tall people. The seats are short and narrow."

## Suggestions by passengers regarding the improvement of the airlines:

- On time departure. The departure is not always on schedule.
- More comfortable seats. It has been said that the chair backs are too short, and the chairs need to be renewed.
- Affordable Ticket prices. They are too high and not affordable.
- There should be extra flights, especially on the Sundays.
- The aircrafts should be better maintained.

"The wait to depart is too long and something should be done about the departure times. The airline should keep to the schedule."

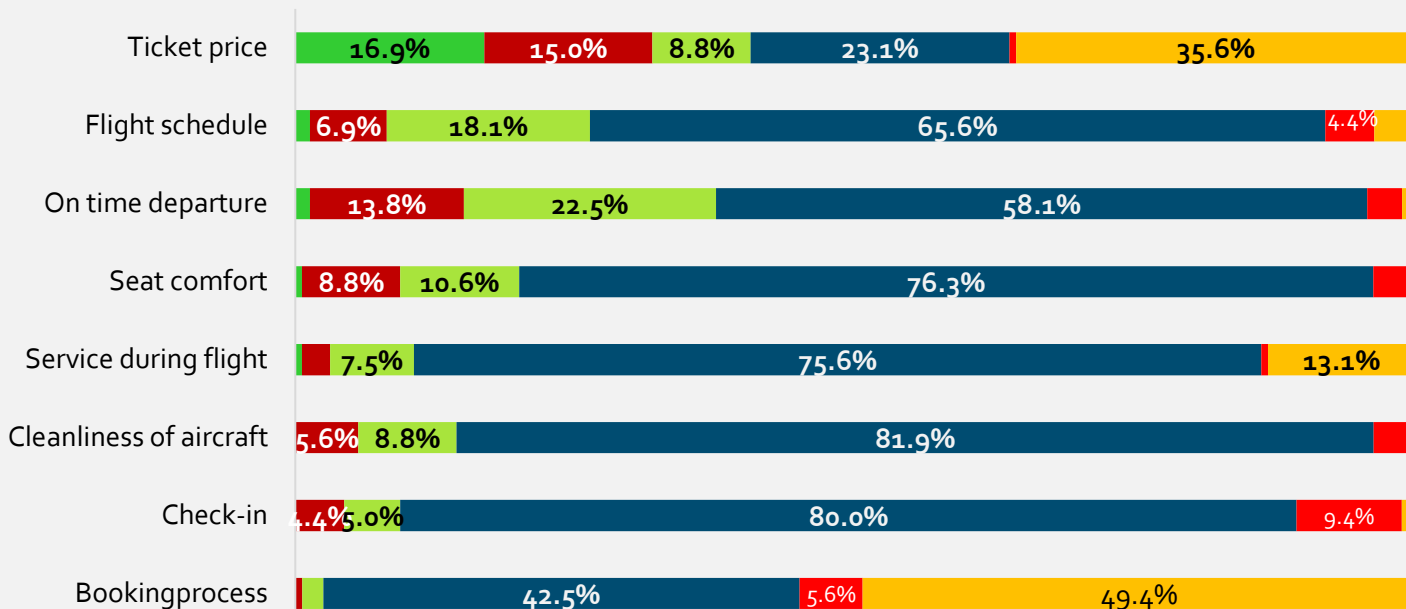
# Customer satisfaction – Blue Wing Airlines



## Customer Satisfaction with Blue Wing Airlines

n= 160

■ Very Dissatisfied 
 ■ Dissatisfied 
 ■ Neutral 
 ■ Satisfied 
 ■ Very Satisfied 
 ■ Don't know



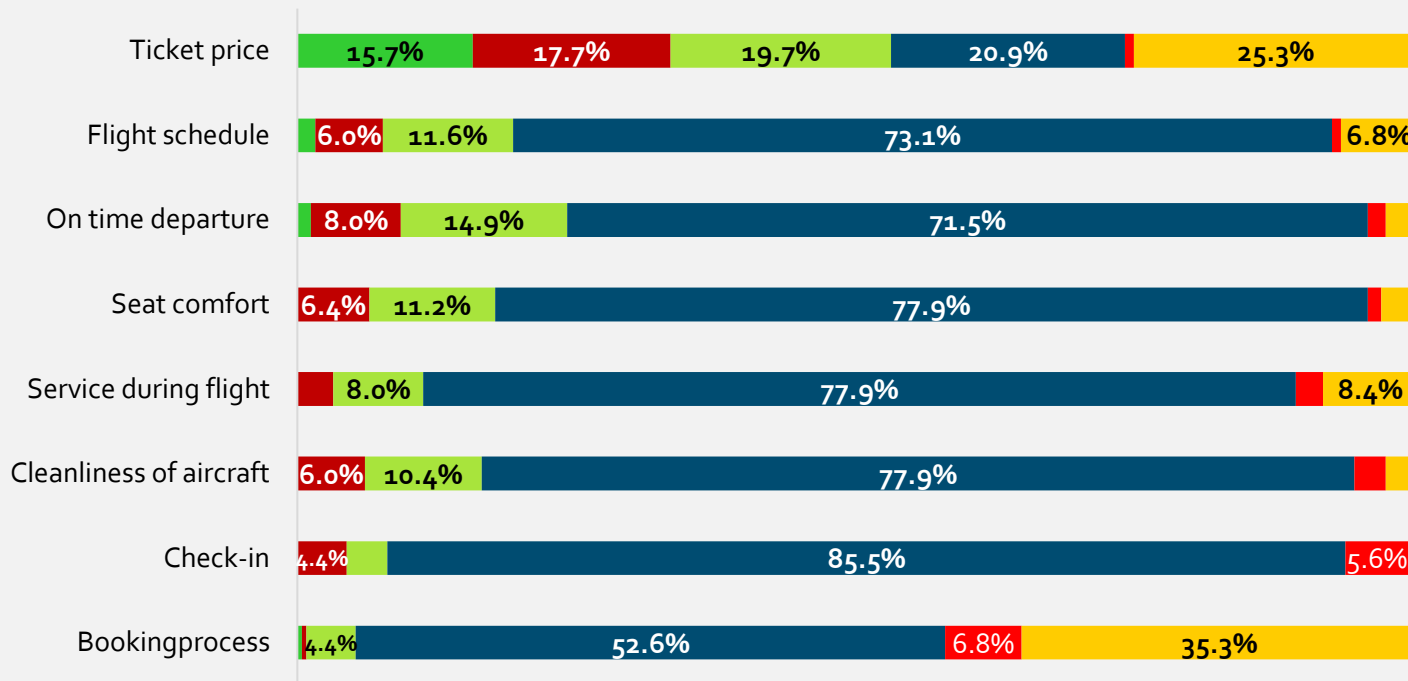
# Customer satisfaction – Gum Air



## Customer satisfaction with Gum Air

n= 249

■ Very Dissatisfied 
 ■ Dissatisfied 
 ■ Neutral 
 ■ Satisfied 
 ■ Very Satisfied 
 ■ Don't know

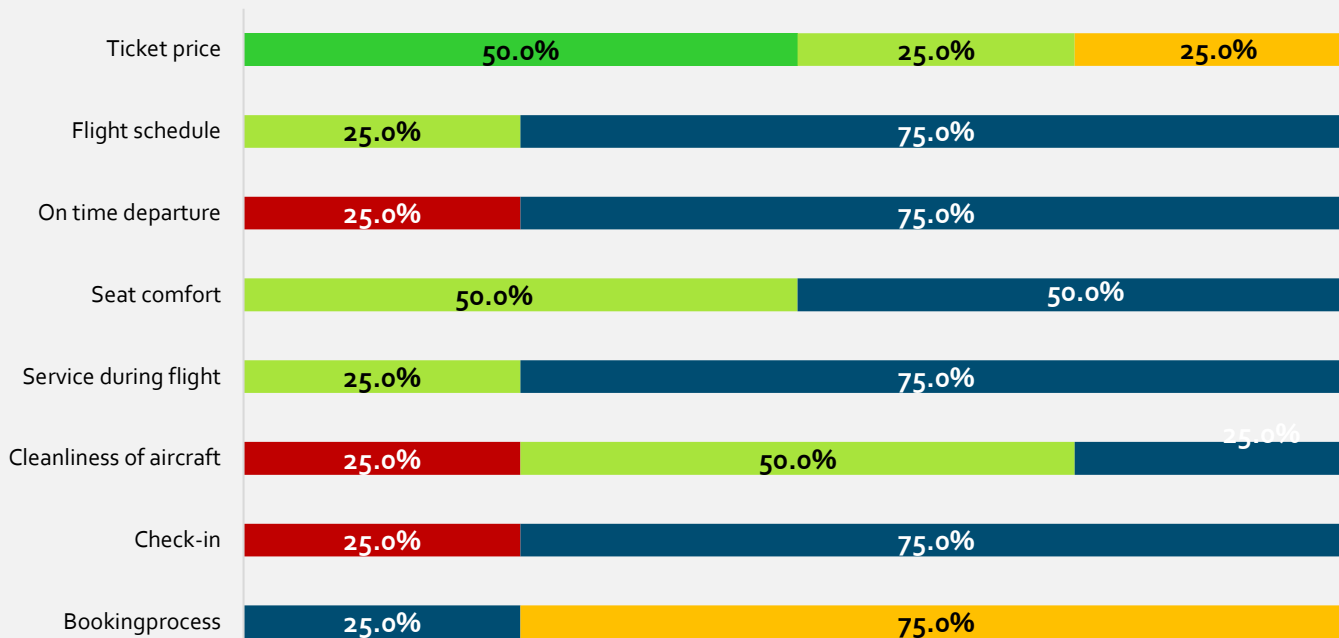




## Customer satisfaction with Vortex Air Services

n=4

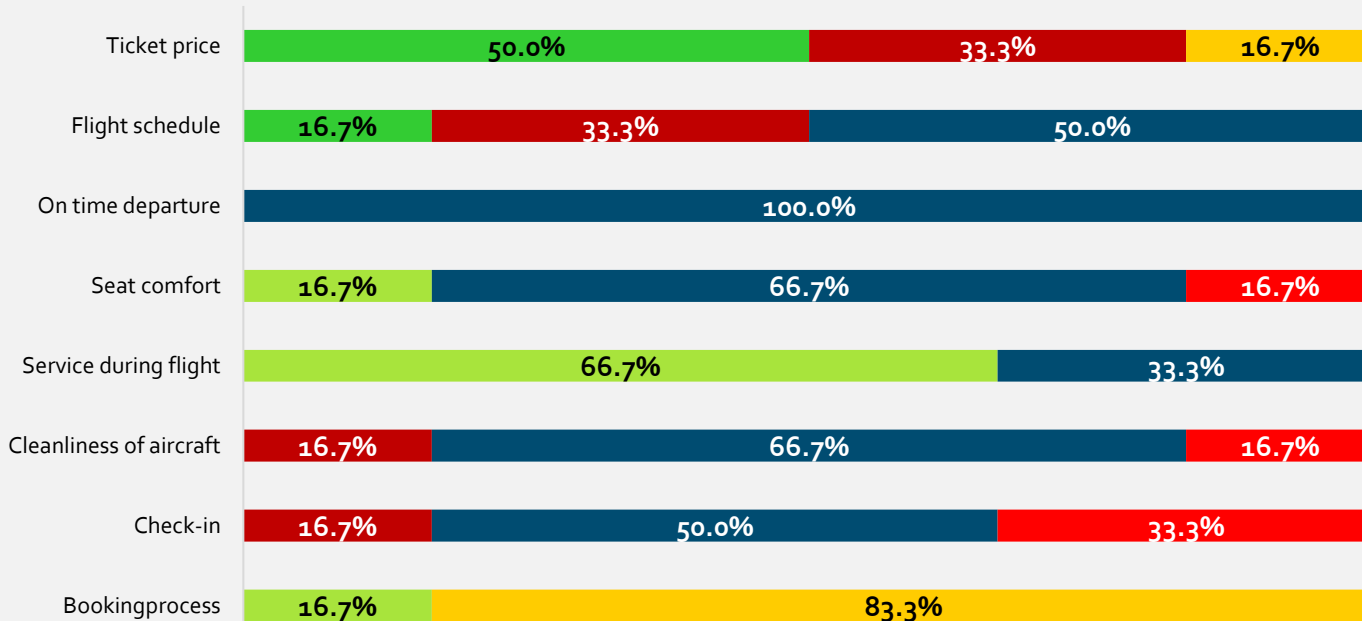
■ Very Dissatisfied 
 ■ Dissatisfied 
 ■ Neutral 
 ■ Satisfied 
 ■ Don't know



## Customer Satisfaction with MAF Suriname

n=6

■ Very Dissatisfied 
 ■ Dissatisfied 
 ■ Neutral 
 ■ Satisfied 
 ■ Very Satisfied 
 ■ Don't know



# Non-mining related data

- Gender, Age & Education
- Ethnicity & Nationality
- Income
- Residence
- Nature of work-related Trips per Nationality, Residential District, Residential Village, Destination



# Gender, Age & Education

## Passengers related to mining activities excluded

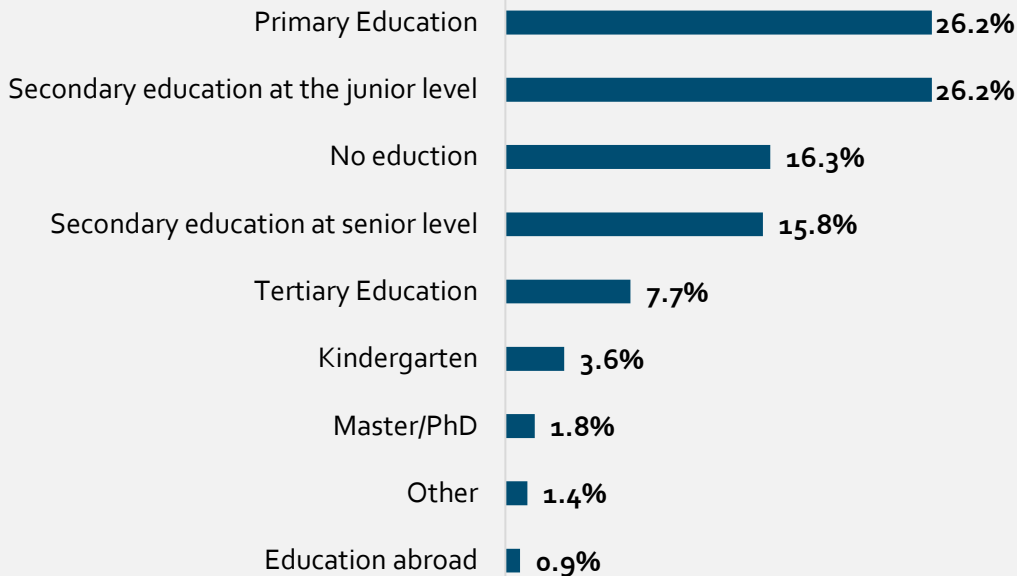


41% Females &  
59% Males

Age group	Percent
< 18 years	1.8%
18-24 years	12.2%
25-30 years	16.3%
31-40 years	27.6%
41-50 years	20.4%
51-60 years	17.6%
61-65 years	3.2%
> 65 years	0.9%

### Highest completed level of education

n=221



Out of 221 respondents working in other sectors other than mining, 41% are females & 59% are males.

Most passengers (27.5%) are in the 31-40 age category.

Majority of people have lower than secondary education or no education at all.

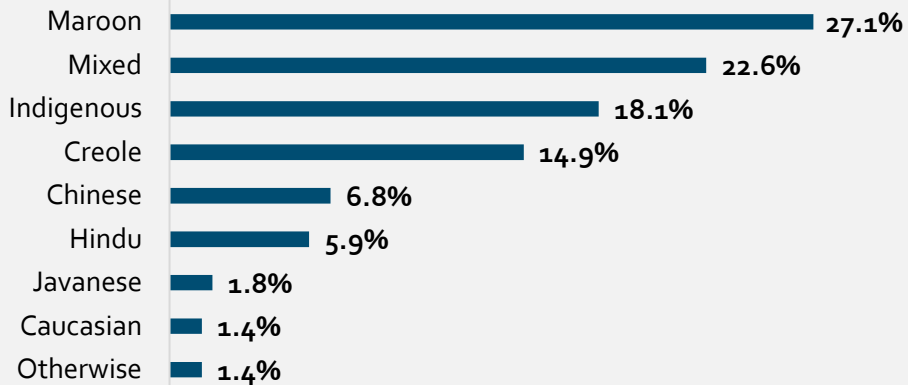
# Ethnicity & Nationality



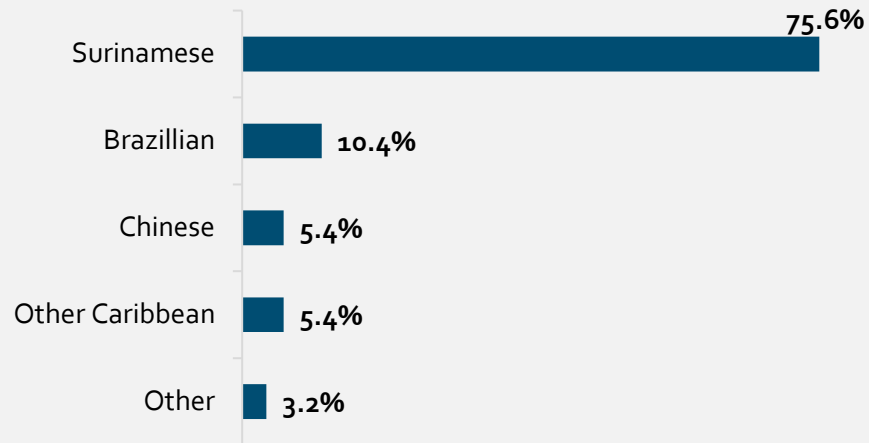
## Passengers related to mining activities excluded

### Ethnicity

n=221



### Nationality



The majority of the respondents were Maroon (27.1%), Mixed (22.6%) and Indigenous (18.1%).

Most of the respondents have the Surinamese nationality, making up nearly 75.6% of the total sample.

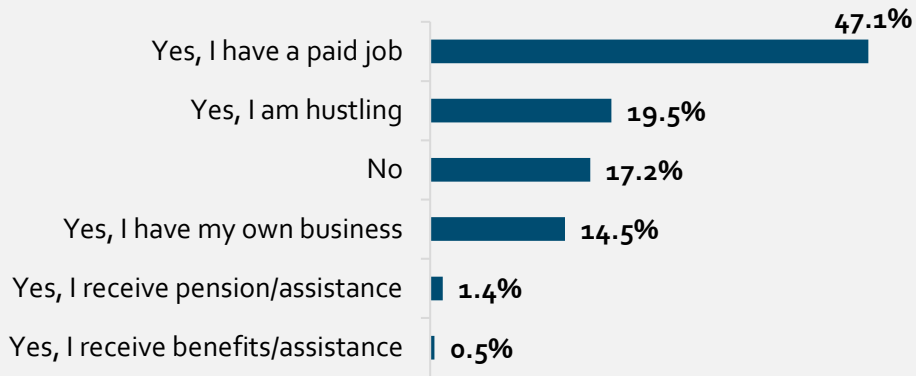




## Passengers related to mining activities excluded

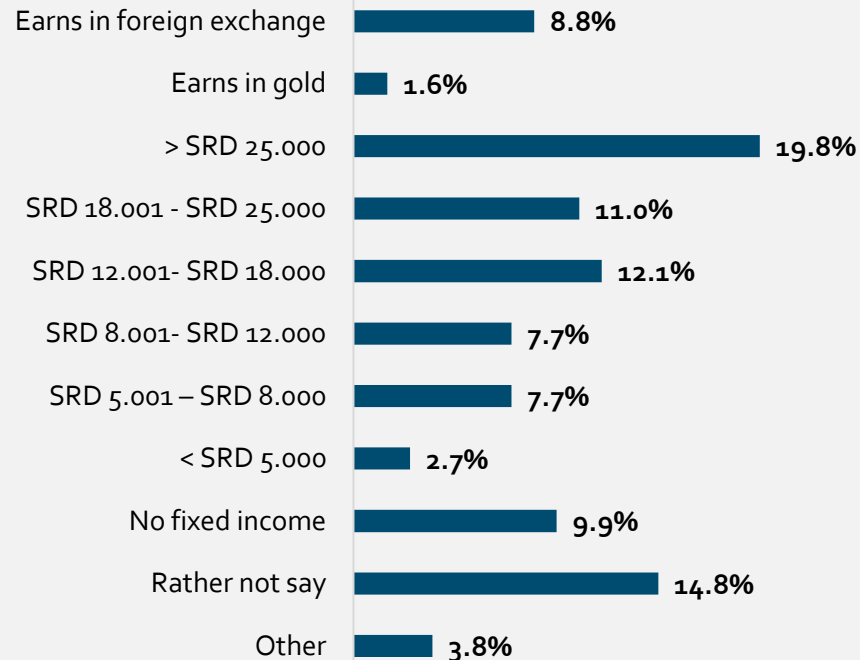
### Passenger's Income

n=221



47.1% of the respondents have a paid job, 19.5% hustle and 14.5% have their own business. The monthly net income of these 3 groups is more than SRD 25.000. The data shows that 8.8% earns in foreign currency and 1.6% earn in gold. In both cases the income is more than SRD 25.000.

### Monthly Net Income



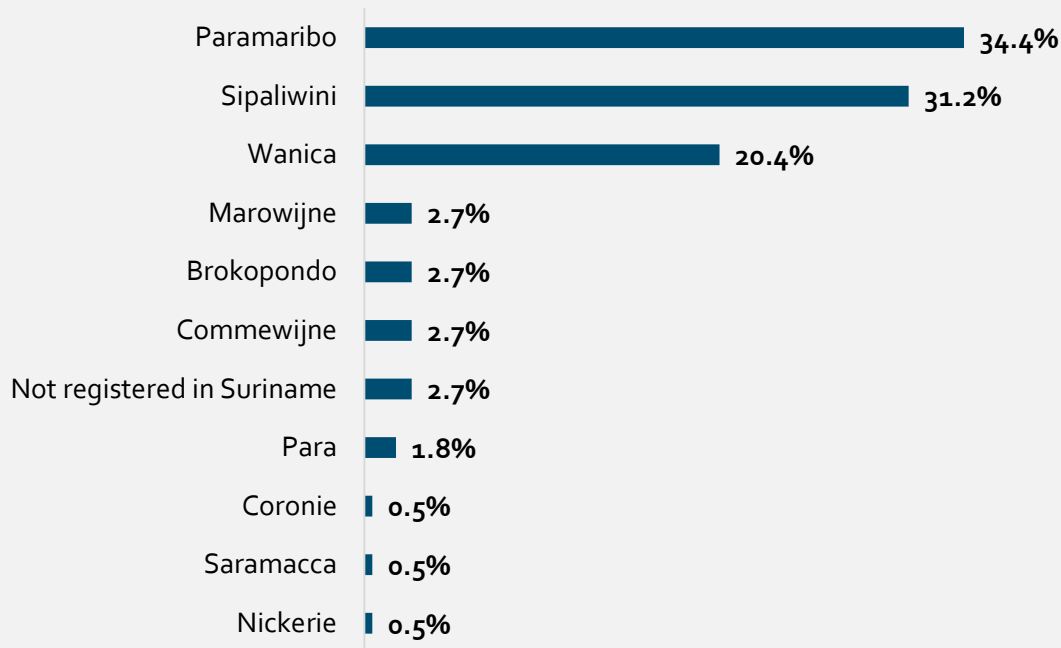
# Residence



## Passengers related to mining activities excluded

### Residential district

n=221



**34.4%** of the passengers live in the capital Paramaribo, followed by **31.2%** living in the district Sipaliwini and **20.4%** in Wanica.

**2.7%** of the passengers are not registered in Suriname.

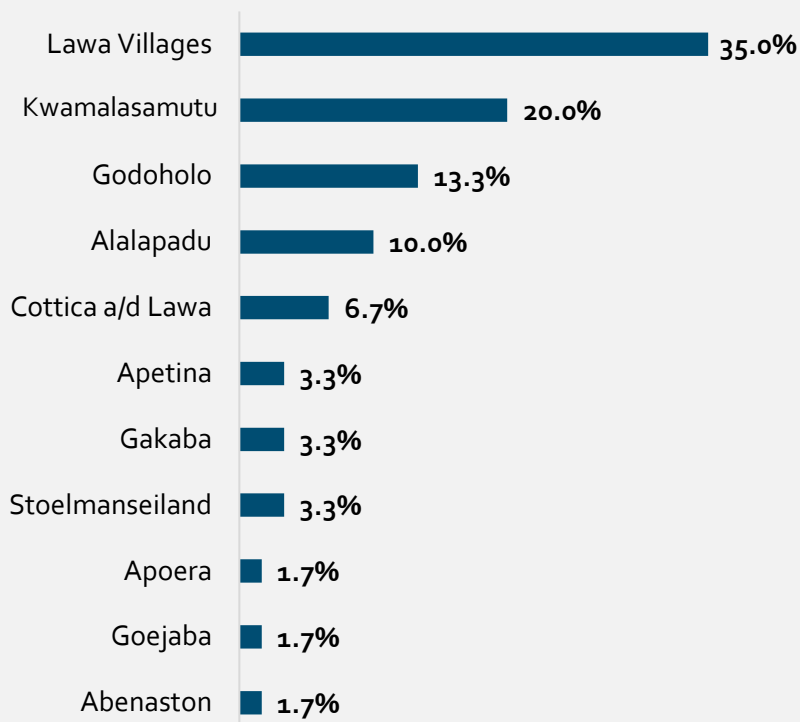
# Residential villages in Sipaliwini

Passengers related to mining activities excluded



## Residence in Sipaliwini

n=69



Other villages that were mentioned in lesser extent:

Palumeu

Mainsi

Kajana

Jawas

Grantatai

Drietabbetje

Donderskamp

Betikampu

The top 3 villages where respondents live in Sipaliwini are:

1. Lawa Villages ( Antino, Anapaike & Tabiki) 35%
2. Kwamalasamutu (20%)
3. Godoholo ( 13.3%)

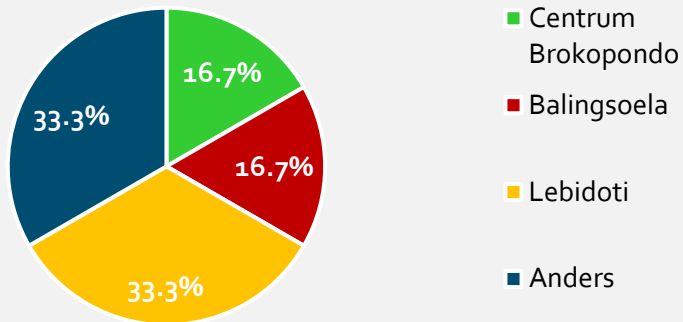
# Residential villages in Brokopondo & Marowijne

Passengers related to mining activities excluded



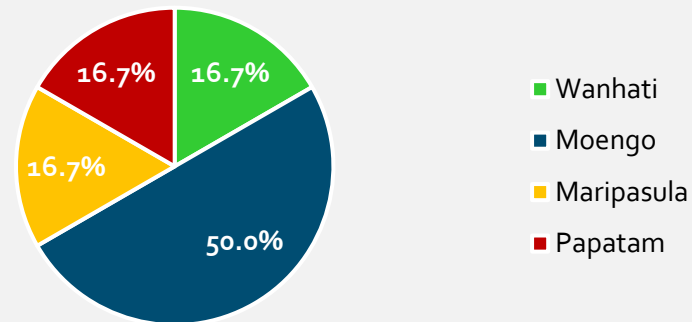
## Residential village in Brokopondo

n=6



## Residential village in Marowijne

n=6



The respondents who live in Brokopondo live mainly in the village Lebidoti and in Marowijne in Moengo.

Other mentioned villages in Brokopondo:

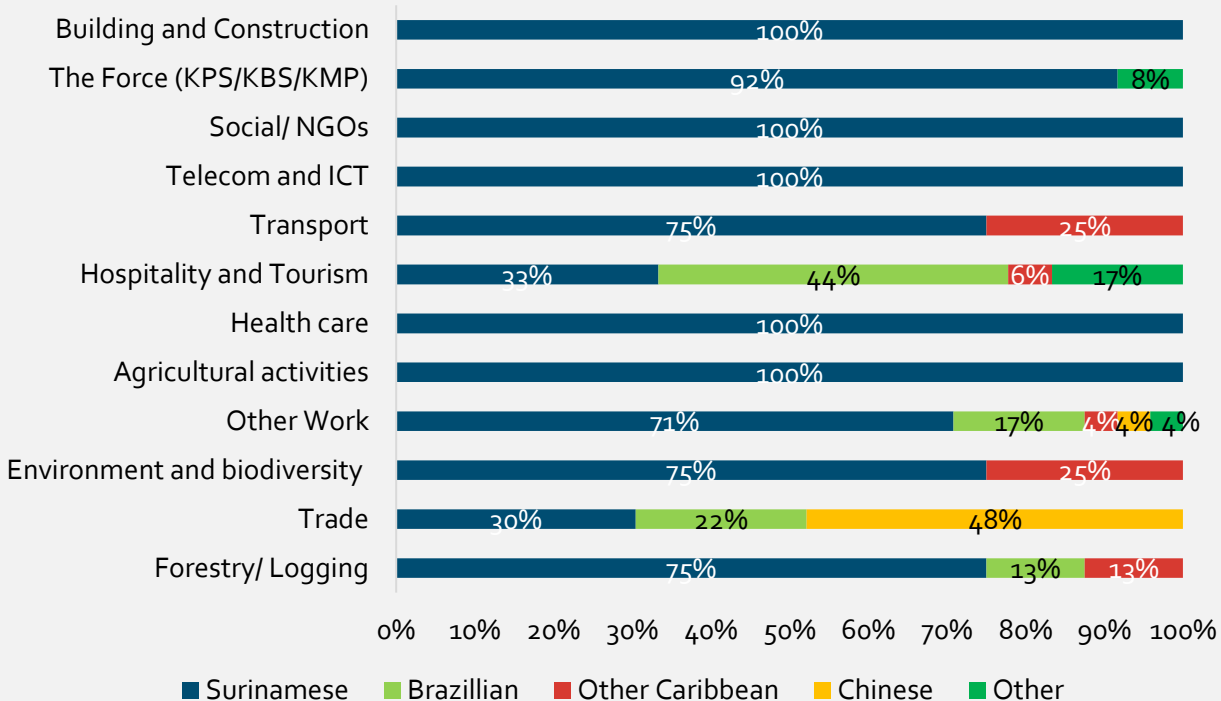
- Victoria
- Lombe
- Klaaskreek

# Nature of work-related Trips per Nationality

Passengers related to mining activities excluded



Nature of work-related activities per nationality



**Surinamese nationals** dominate most sectors, particularly in Building and Construction, Social/NGOs, Telecom and ICT, Health care, and Agricultural activities (all 100%).

**Brazilians** are significantly involved in Hospitality and Tourism (44%).

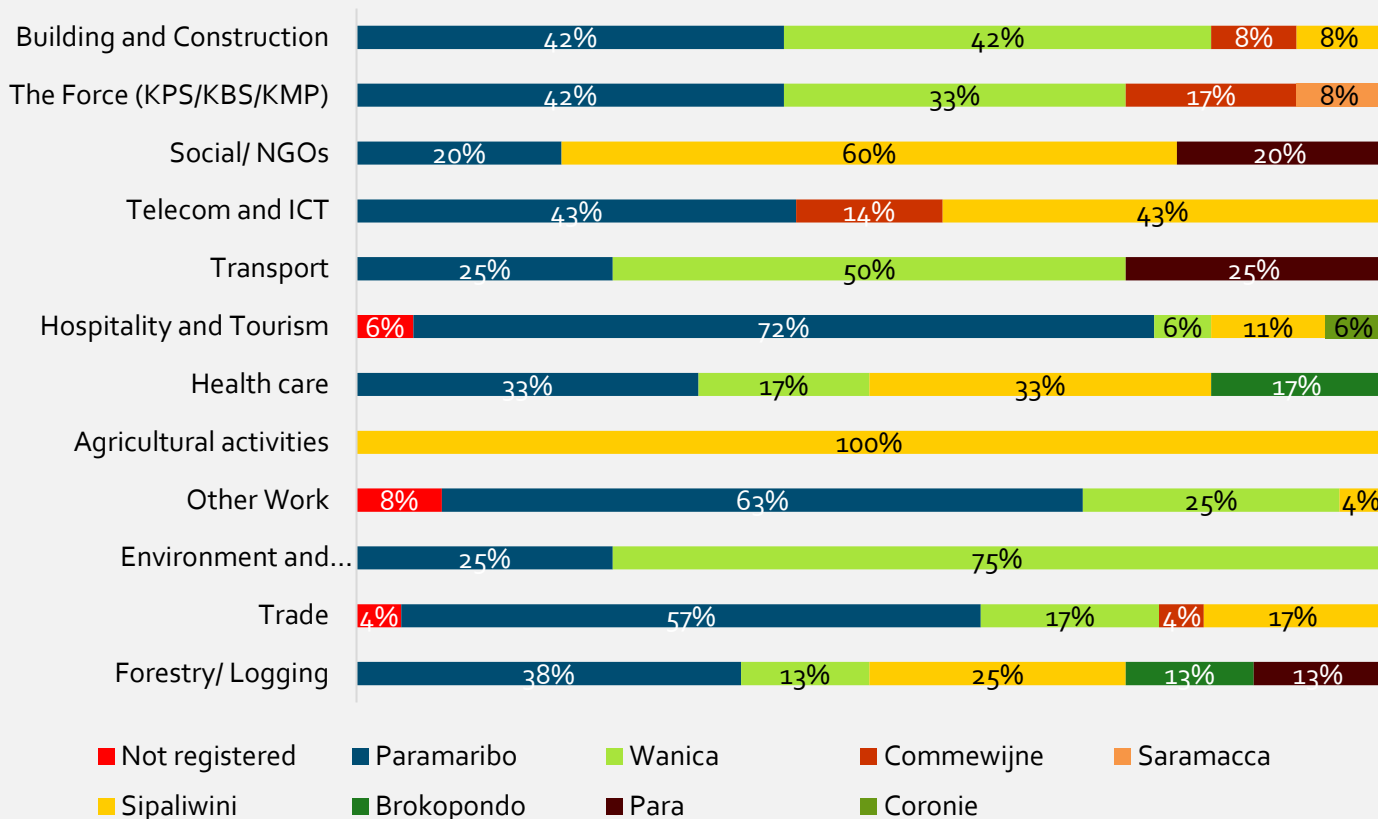
**Chinese nationals** have a significant presence in Trade (48%).

# Nature of work-related Trips per Residential District

Passengers related to mining activities excluded



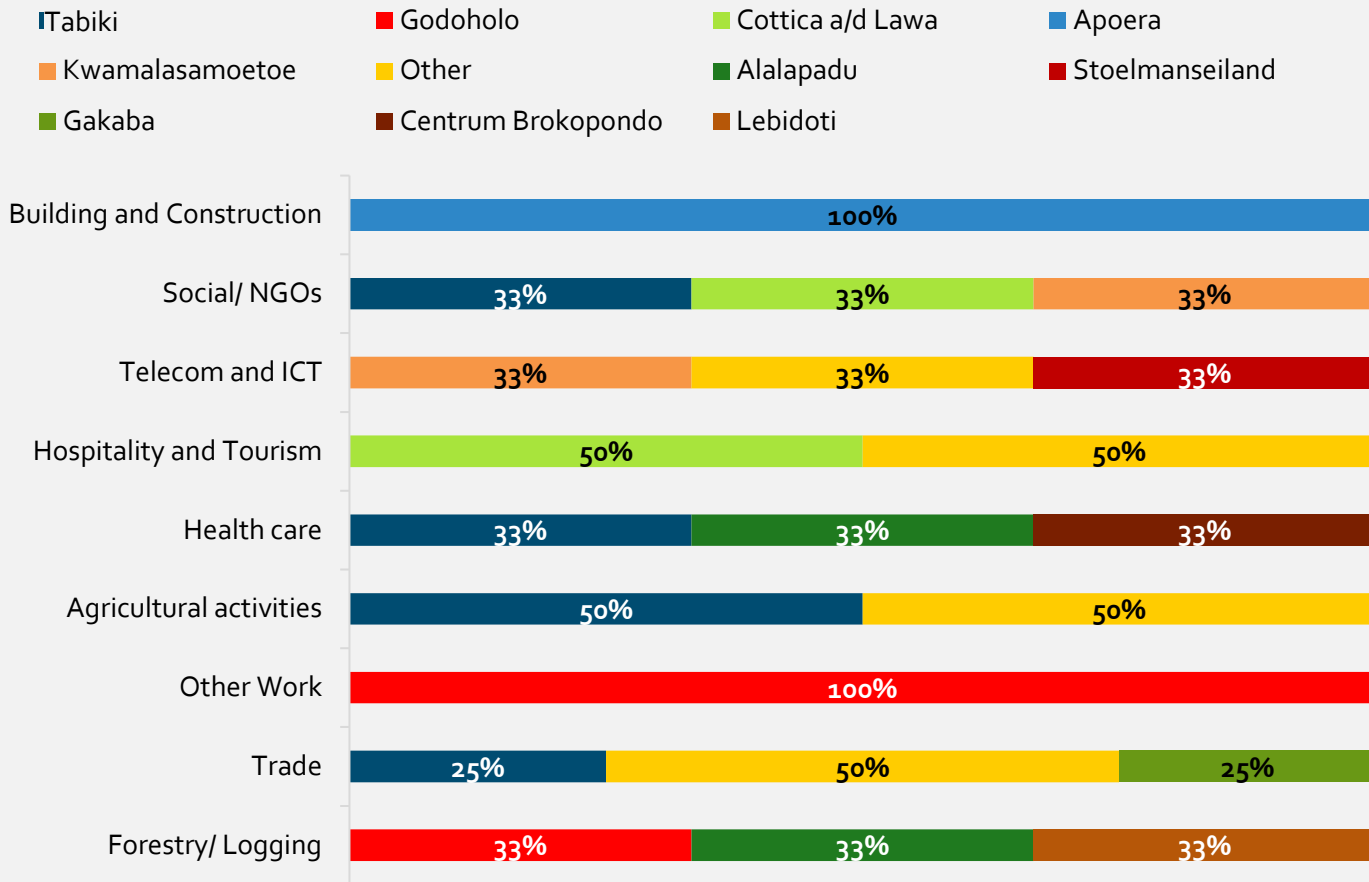
Nature for work-related Trips per Residential District



- The passengers from Paramaribo mostly work in sectors such as Building and Construction (42%), Armed Forces (42%), Telecom and ICT (43%), Hospitality and Tourism (72%), Other Work (63%), and Trade (57%).
- Passengers from Sipaliwini mostly work in Social/NGOs (60%), Telecom and ICT (43%), and Agricultural activities (100%).
- The people from Wanica significantly work in Building and Construction (42%), The Force (33%), Transport (50%), and Environment and Biodiversity (75%)

# Nature of work-related Trips per Residential Village

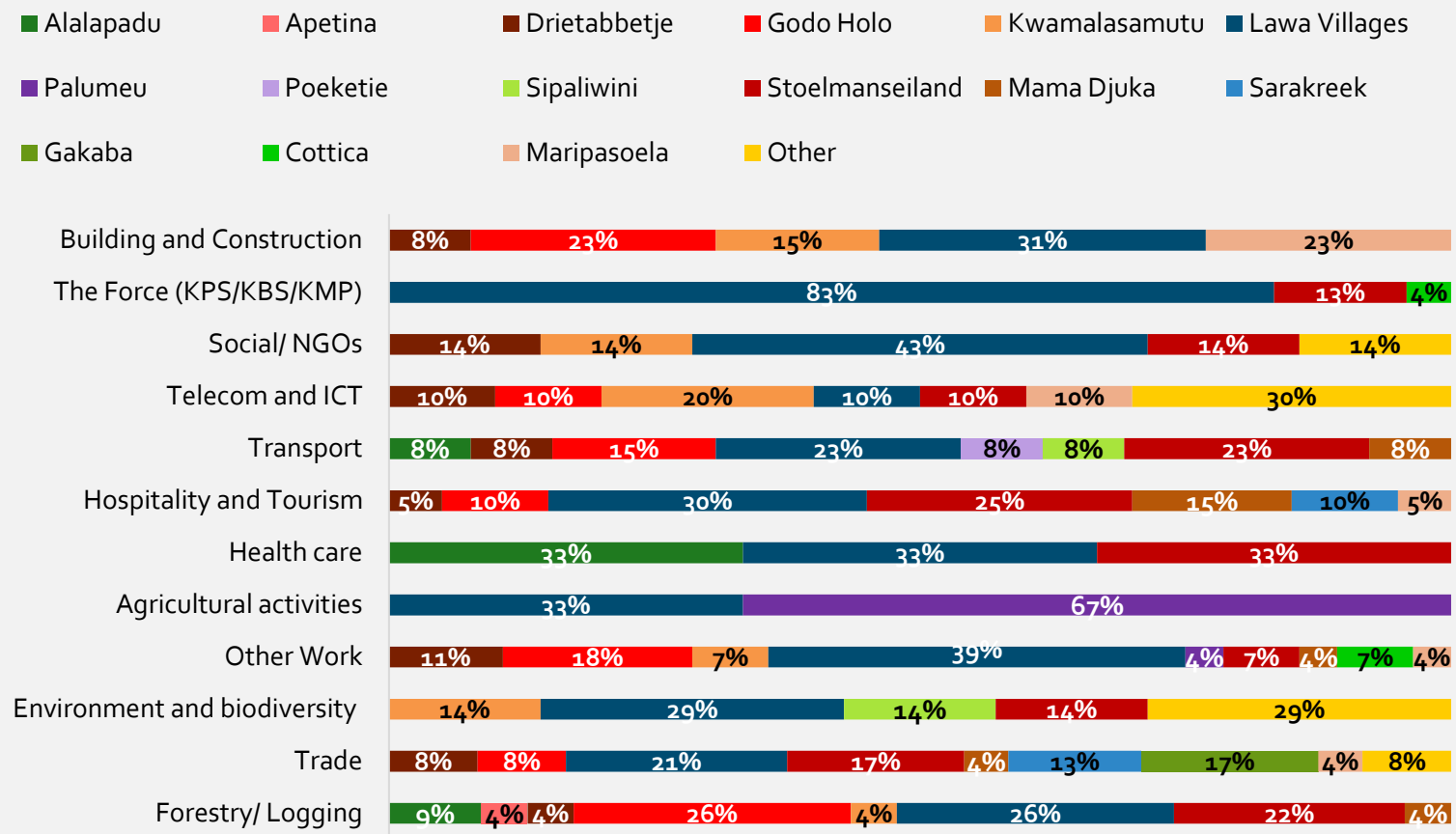
Passengers related to mining activities excluded



- The passengers from Apoera are solely involved in Building and Construction (100%).
- The passengers who travel for other type of work are solely from Godo Holo (100%); other type of work are nail stylist, music artist, machine operator, hairdresser, technician, electrician.
- The people working in the Hospitality and Tourism sector are mostly from Cottica (50%).
- The people working in the Agriculture sector are mostly from Tabiki (50%).

# Nature of work-related Trips per Destination

Passengers related to mining activities excluded



In the Lawa Villages, work-related activities are mainly done within the building and Construction sector (31%), The Force (83%) and Social/NGO's (43%).

In Palumeu, work-related activities are mainly done within the Agriculture sector (67%).



# Mining related data

- Residence of the Miners
- Travel destinations of the Miners
- Data on mining

# General mining data



Gold prices on July 3 <sup>rd</sup> , 2024, based on the Central Bank of Suriname	
Weight	SRD
5 gram	23.196,43
10 gram	46.392,86
50 gram	231.964,28
100 gram	463.928.55
500 gram	2.319.642,76
1000 gram	4.639.285,51

The main reasons (based on desk research) for visiting these areas by miners are:

- **Rich gold deposits:** abundant gold reserves attract local and international miners.
- **Accessibility:** locations alongside major rivers facilitate mining operations.
- **Economic opportunities:** gold mining is a primary source of income for local populations.
- **Lack of regulation:** less stringent enforcement of mining regulation (enabling legal and illegal activities).

The most mentioned destinations traveled to by gold-miners are:

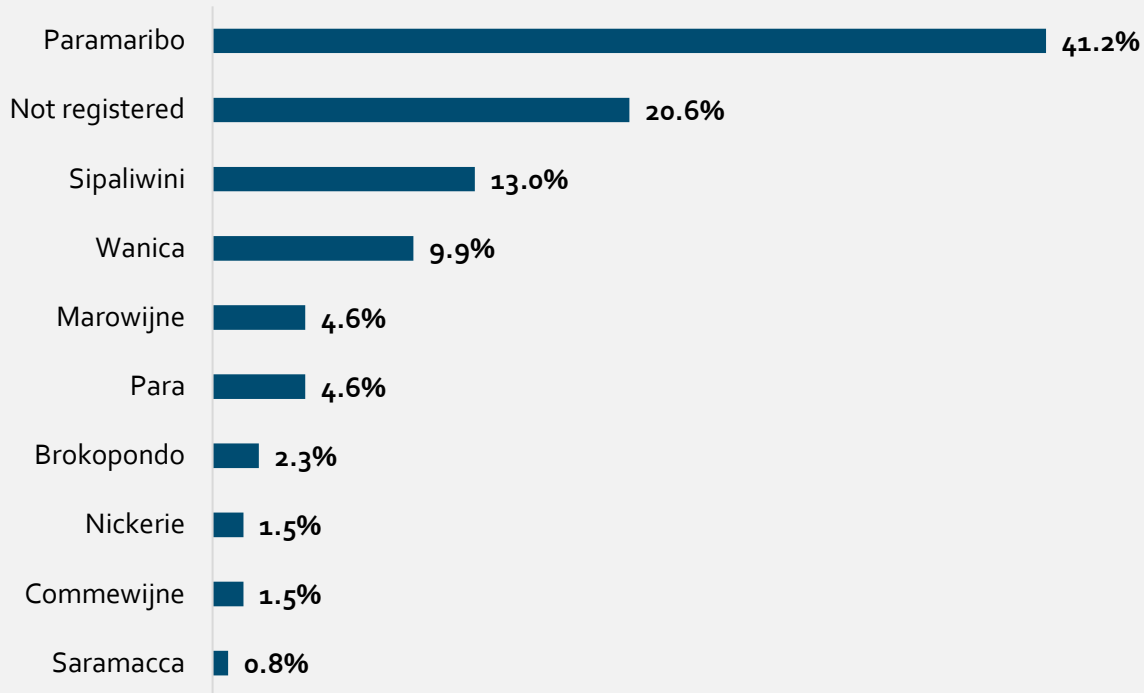
- Lawa villages (43%)
- Stoelmanseiland(15%)
- Drietabbetje (11%)
- Godo Holo (10%)





## Residence of the miners

n=131

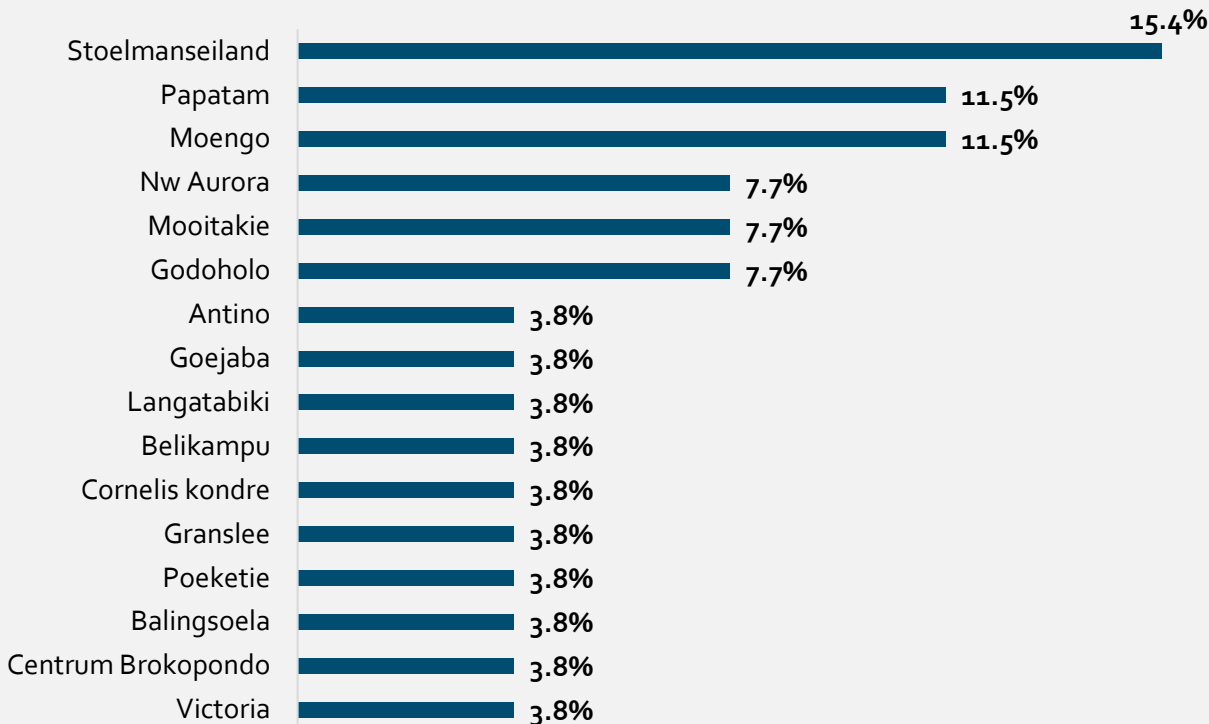


Out of the respondents working in the mining sector, 41.2% live in Paramaribo, followed by 20.6% who are not registered in Suriname and 13% in Sipaliwini.



## Residence of the miners in Sipaliwini (n=17), Brokopondo (n=3) & Marowijne (n=6)

n=26



Out of the respondents working in the mining sector, 26 of them live in Sipaliwini, Brokopondo and Marowijne.

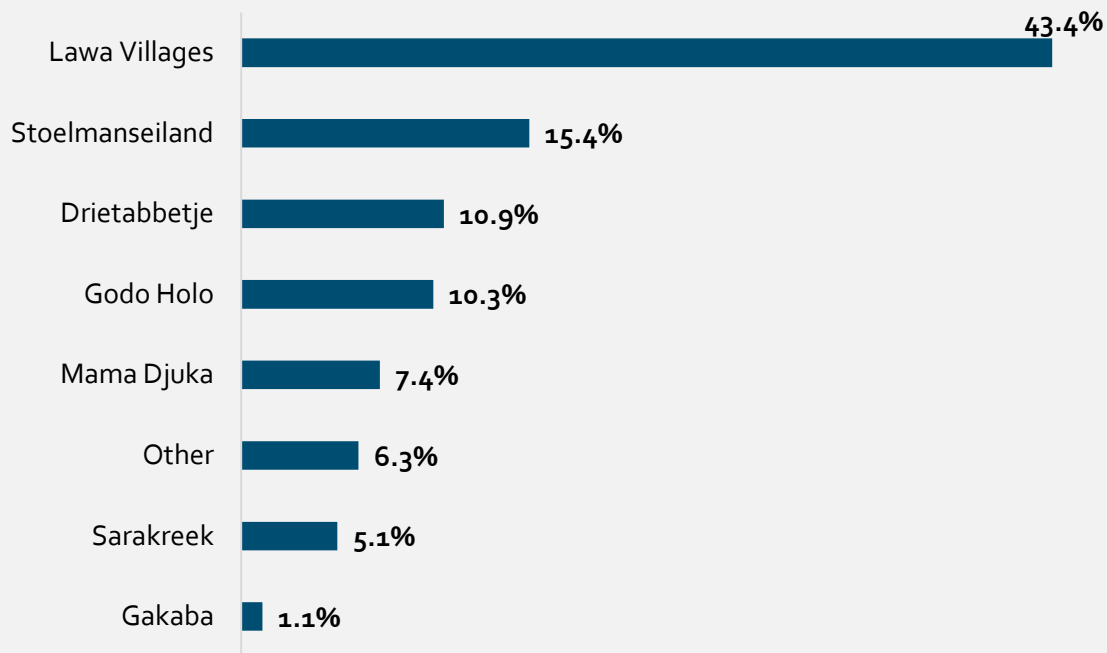
For Sipaliwini, Stoelmanseiland is predominant (15.4%).

For Marowijne, Papatam (11.5%) and Moengo (11.5%) are predominant.



## Most mentioned destinations traveled to/from in the past year by the miners

n=175



Lawa Villages are by far the most frequently mentioned destinations, with 43.4% of miners traveling to or from there. This suggests it is a major hub or area of activity for miners.

Stoelmanseiland is the second most popular destination but with significantly fewer mentions at 15.4%.

# Pilots survey

## Additional data

Insights in the perceptions & experiences of domestic flight pilots in Suriname regarding cargo, passengers, airstrips & domestic flights in general.





A pre-designed questionnaire from the IDB was used for the pilot survey.

**SURVEY TO PILOTS**

**A - General information**  
 Open answer fields

A.1 Airline

A.2 Main type of aircraft

A.3 List of destination aerodromes most frequently flown

**B - Customers profile**  
 Assign a % of total on each group

	Total	Example
<b>B.1 Passengers profile</b>	0%	100%
B.1.1 Local community		40%
B.1.2 Contractors		15%
B.1.3 Medical personnel		30%
B.1.4 Education personnel		10%
B.1.5 Tourists		0%
B.1.6 Other (all categories must add 100%)		5%
B.1.7 Miners		0%
B.1.8 NGO staff		0%
B.1.9 Specify "Other" if >10%		0%
<b>B.2 Cargo profile</b>	0%	

**Data collection method:** sending out the online (digital) survey to the all pilots within the network

**Approach:** All pilots within the network were approached through the airlines with the survey link and specific follow-up (reminders, appointments).

**Period of data collection:** 22<sup>nd</sup> of May- 4<sup>th</sup> of June 2024

**Population:** The total number of identified pilots at the different airlines was an average of 29 pilots.

**Sample size:** Given the (small) size of the population, the response target was at least 50% of the population. The minimum response target is 15.

**Achieved responses= 12**

Domestic flights-airlines	Number of 'domestic flights' pilots per airline	Minimum response target	Achieved Responses
Blue Wing Airlines	8	4	4
Gum Air	13	7	5
Vortex Air Services	4	2	3
MAF Suriname	4	2	0
	<b>29</b>	<b>15</b>	<b>12</b>

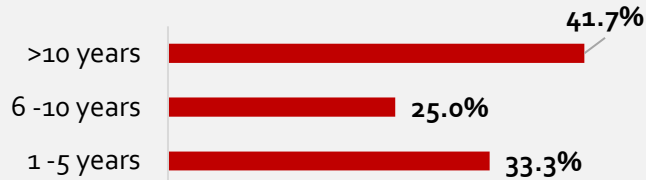
# Pilots Profile



75% Males &  
25% Females

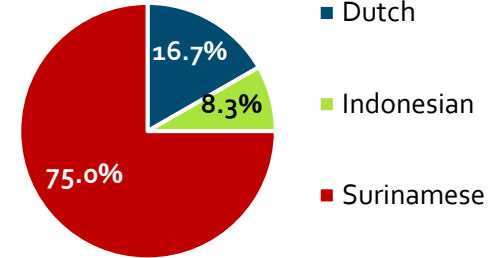
## Flight experience

n= 12



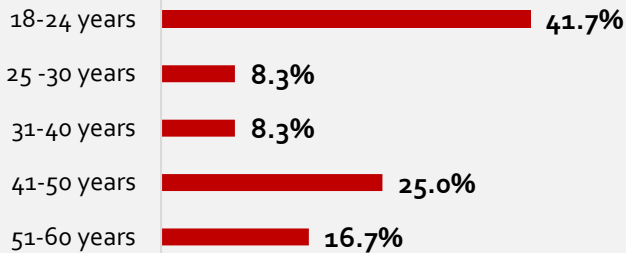
## Nationality

n= 12



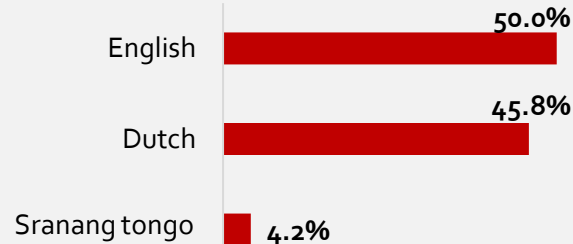
## Age group

n= 12



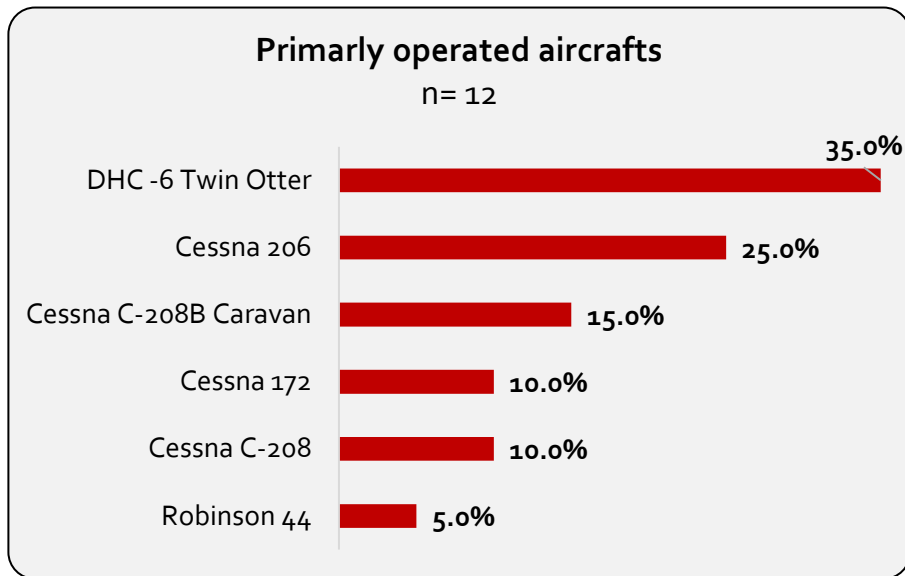
## Spoken languages

n= 12





# Types of aircrafts



All pilots operate more than 1 type of aircraft.

The most operated aircrafts for domestic flights are **DHC-6 Twin Otter** (35.0%) and **Cessna 206** (25.0%).

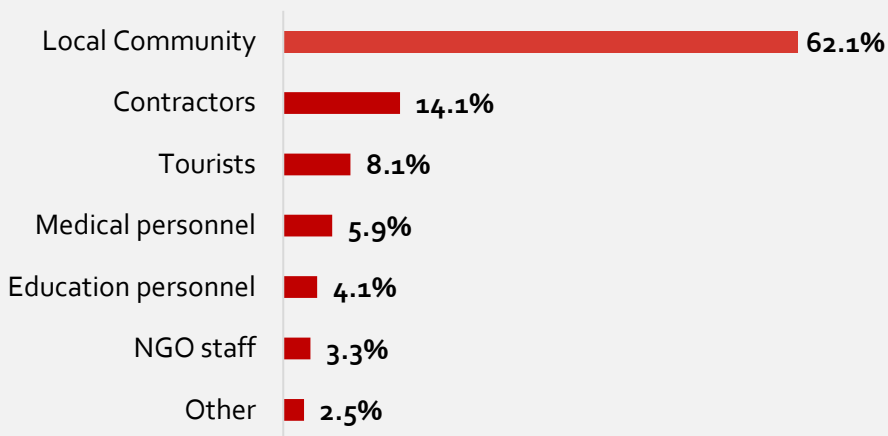
What types of aircraft do you primarily operate for domestic flights?

# Distribution of types of passengers



## Average distribution of types of passengers

n= 12



According to the percentage estimates of domestic flights pilots regarding **distribution of the type of passengers, local community is the biggest subgroup** (est. average=62.1%), followed by contractors (est. average= 14%) and medical personnel (est. average= 5,9%).

However, the pilots are not able to suggest for what reasons the local community travels inland. The passengers survey however suggests that the main reason for travel is work-related for most (69.5%) of them.

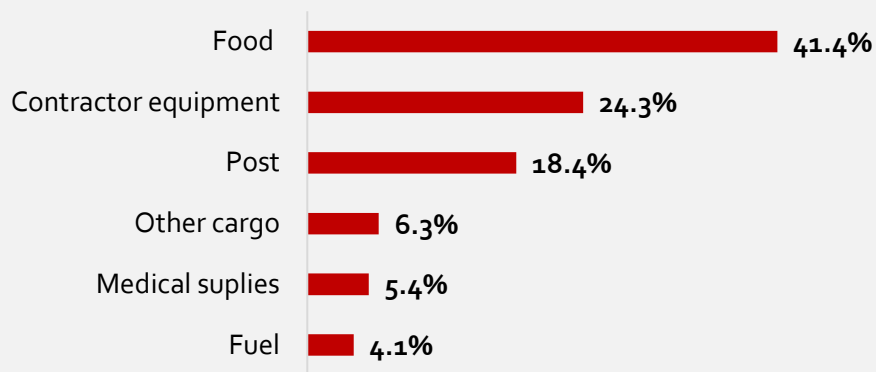
Can you give an estimate of the percentage distribution of the types of passengers you encounter on your regular flights?

# Distribution of types of cargo



## Average distribution of types of cargo

n= 12

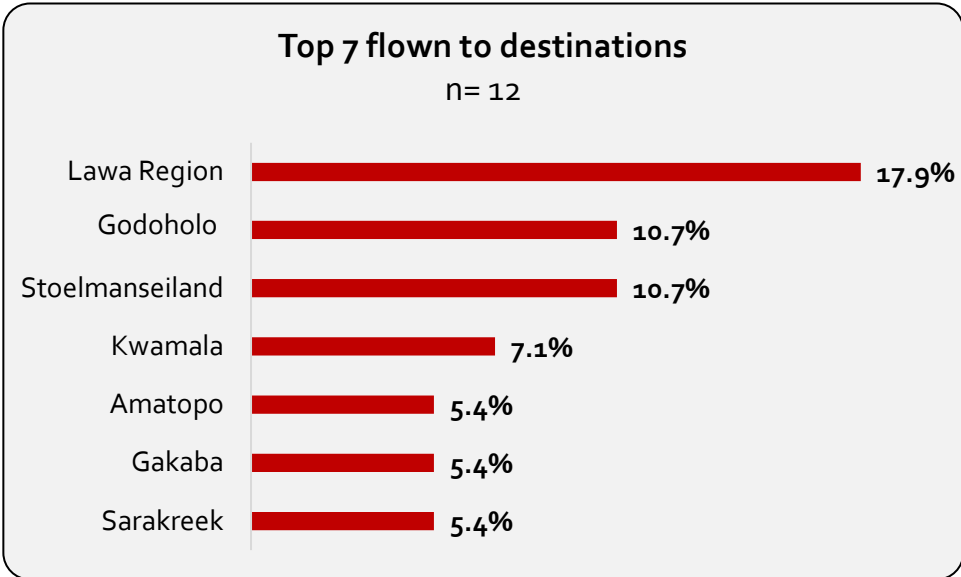


According to the pilots, the percentage estimates of domestic flights regarding **distribution of the type of cargo**, most of the cargo consists of:

- Food items (est. average= 41.4%)
- Equipment & tools (est. average= 24.3%)
- Mail/ documents and small package (est. average= 18.4%)
- Medical supplies (est. average= 5.4%)
- Fuel (est. average= 4.1 % )
- Other cargo (est. average= 6.3%).

Can you give an estimate of the percentage distribution of the types of cargo you encounter on your regular flights?

# Most frequently flown to destinations

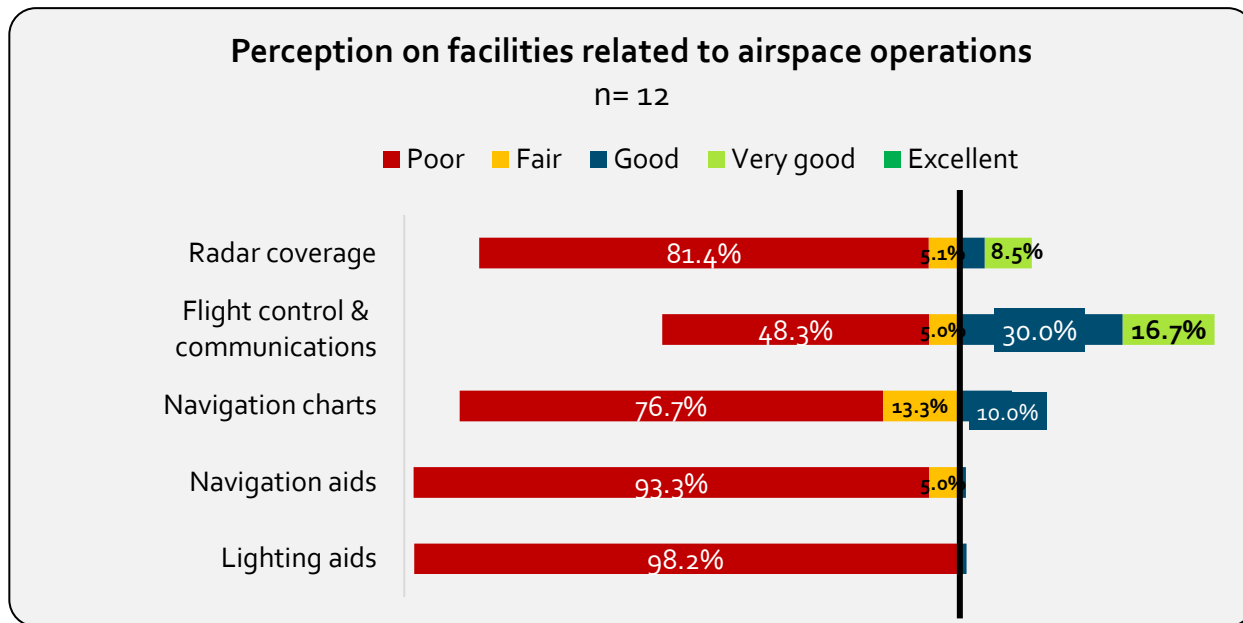


Which airstrips (destination aerodromes) have you most frequently flown to in the past year?

All pilots fly to more than one destination. Based on the **pilot's most frequently flown to destinations** in the past year, the **top 7 destinations** are:

1. Lawa villages (18%) (Tabiki, Antino & Anapaiké)
2. Stoelmanseiland (11%)
3. Godoholo (11%)
4. Kwamalasamutu (7%)
5. Amatopo (5%)
6. Gakaba (5%)
7. Sarakreek (5%)

# Perception on facilities related to airspace operations



The pilots rate **various facilities** related to the **airspace operations** mainly as **poor**.

They're **least satisfied** with the facilities regarding **lighting aids (98.2%)** and **navigation aids (98.3%)**.

They are **most satisfied** with the facilities regarding **flight control & communications (46.7%)**.

Please rate the airstrips with regard to airspace.

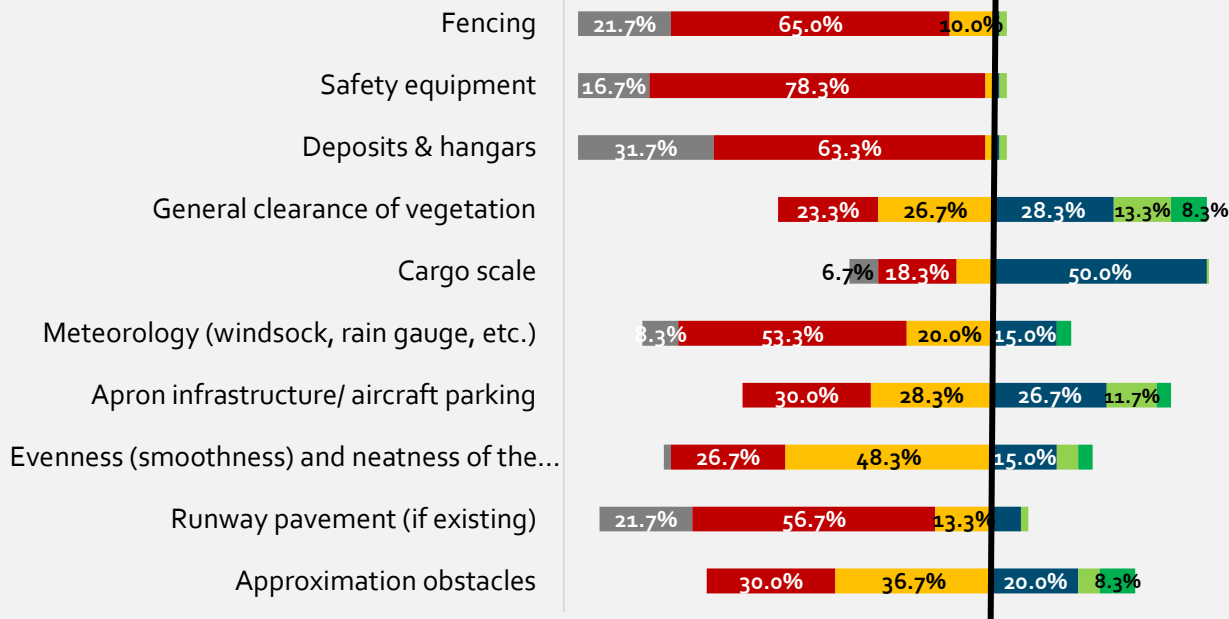
# Perception on airside facilities



## Perception on airside facilities

n= 12

■ N/A ■ Poor ■ Fair ■ Good ■ Very good ■ Excellent



The pilots rated **various facilities on the airside** mainly as **poor**. They're **least satisfied** with the facilities regarding **fencing, safety equipment, deposits & hangars & runway pavement**. They're **most satisfied** with the facilities regarding **clearance of vegetation and cargo scale**.

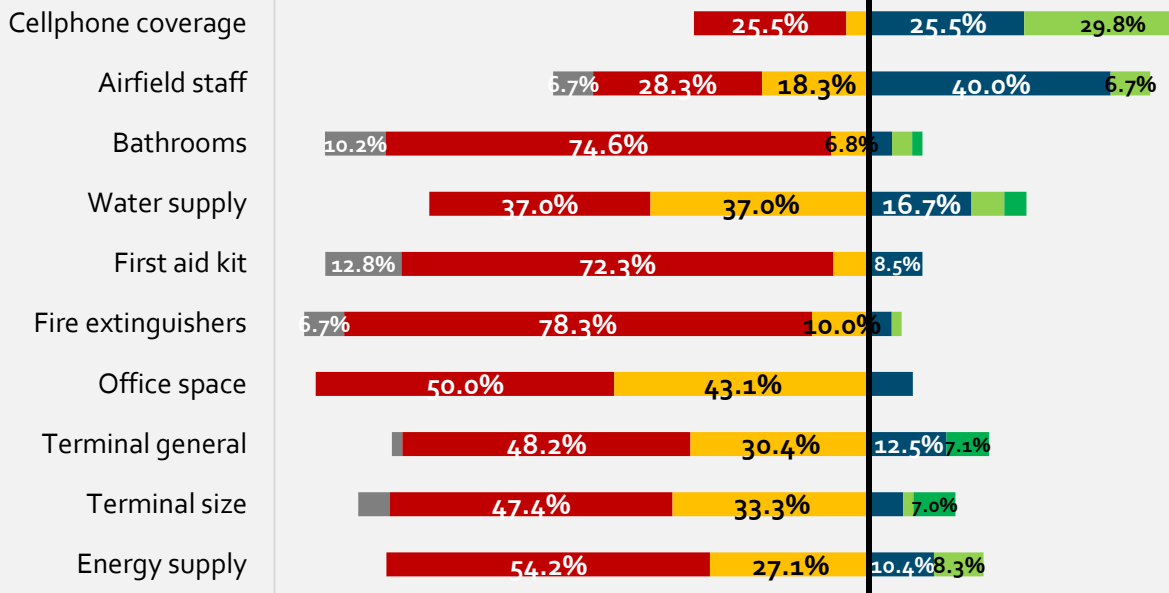
# Perception on landside facilities



## Perception on landside facilities

n= 12

■ N/A ■ Poor ■ Fair ■ Good ■ Very good ■ Excellent



The pilots rated **various facilities on the landside** mainly as **poor**. They're **least satisfied** with the facilities regarding **fire extinguishers (95.0%)** and **bathrooms (91.6%)**. They were **most satisfied** with the facilities regarding **cell phone coverage (55.3%)** and **airfield staff (46.7%)**.

# Challenges according to the pilots

## Challenges identified by pilots regarding airstrip facilities:

- **Airstrips** are **rough** on aircrafts. This can be improved by grading, and filling with fine gravel or laterite.
- **Rain** significantly affects **airstrip conditions** which causes airstrips to be unsuitable for landing/departure after heavy rain.
- Many airstrips have no lights and radar coverage, lack of navigation aids (aeronautical chart/ map displays incorrect information), also there are extremely outdated communication equipment.

## Quotes

*“Some are not suitable for landing and departing aircraft after there’s a significant amount of rain. They require a better drainage systems, so the water doesn’t sit on the runway, which in turn also improves the rate at which the strip is ‘dry’ again.”*

*“Windsocks are not always present, sometimes missing or torn, which renders it unusable. We rely on other indicators to give us a feel of the wind direction. Also, No fencing and safety equipment on the strips.”*

*“Communication between aircraft and radio control is limited to certain distances. We communicate aircraft to aircraft to maintain separation. Communication equipment from radio control is extremely outdated, which also plays a factor.”*





# Key conclusions Passenger Survey

- The demographics of passengers of domestic flights is mostly **male (67%)** from the **age category 18-60 years (68.5%)**, having **secondary education or lower (69.3%)**.
- Most frequent destinations from Paramaribo are **Lawa-villages (37.5%)**, **Stoelmanseiland (13.6%)**, **Godoholo (10.8%)**, **Drietabbetje (8.5%)**.
- Main reason for domestic travel is **work-related (69.5%)** and the nature of work is mainly in the **mining industry (51.8%)**.
- The majority of passengers experience the booking process of domestic flight as **easy & convenient**. While for a small group, someone else does the bookings.
- In general, passengers are **quite satisfied with the services** of the domestic airlines. They're most satisfied with the check-in procedure (90.2%) and least satisfied with the ticket prices (33.6%).
- Overall, the passengers are **quite satisfied with the airstrips** considering the given circumstances. They're most satisfied with the accessibility of airstrips (74.4%) and least satisfied with the condition of the runways (22.1%).

# General Recommendations

Based on the descriptive data, the following recommendations are applicable for the bank:

- Identify **tailormade strategies & action plans for specific target groups** within the pool of passengers (e.g. work-related passengers, Solo-travelling passengers, Non-Surinamese passengers, passengers traveling to critical airstrips, passengers travelling to the most frequent destinations etc.)
- **Share customer feedback** with the respective airlines to support a better domestic flight experience.
- **Improve the infrastructure and equipment** of the airstrips especially taking the safety aspects into account, starting with the destinations with most frequent flights.



# Project Team

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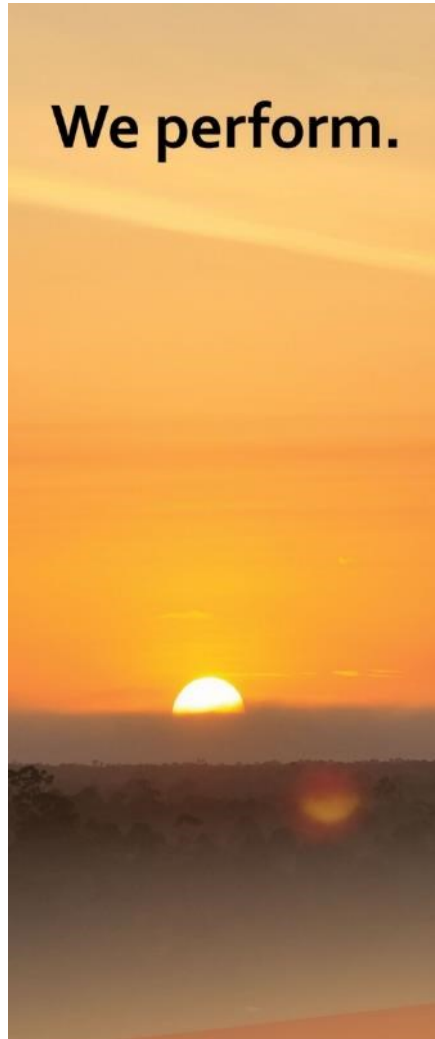


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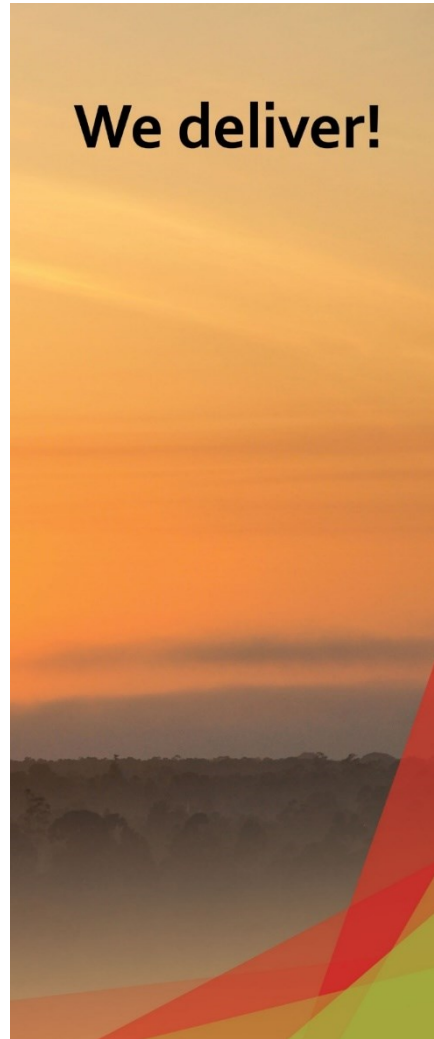
**We listen.**



**We perform.**



**We deliver!**



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