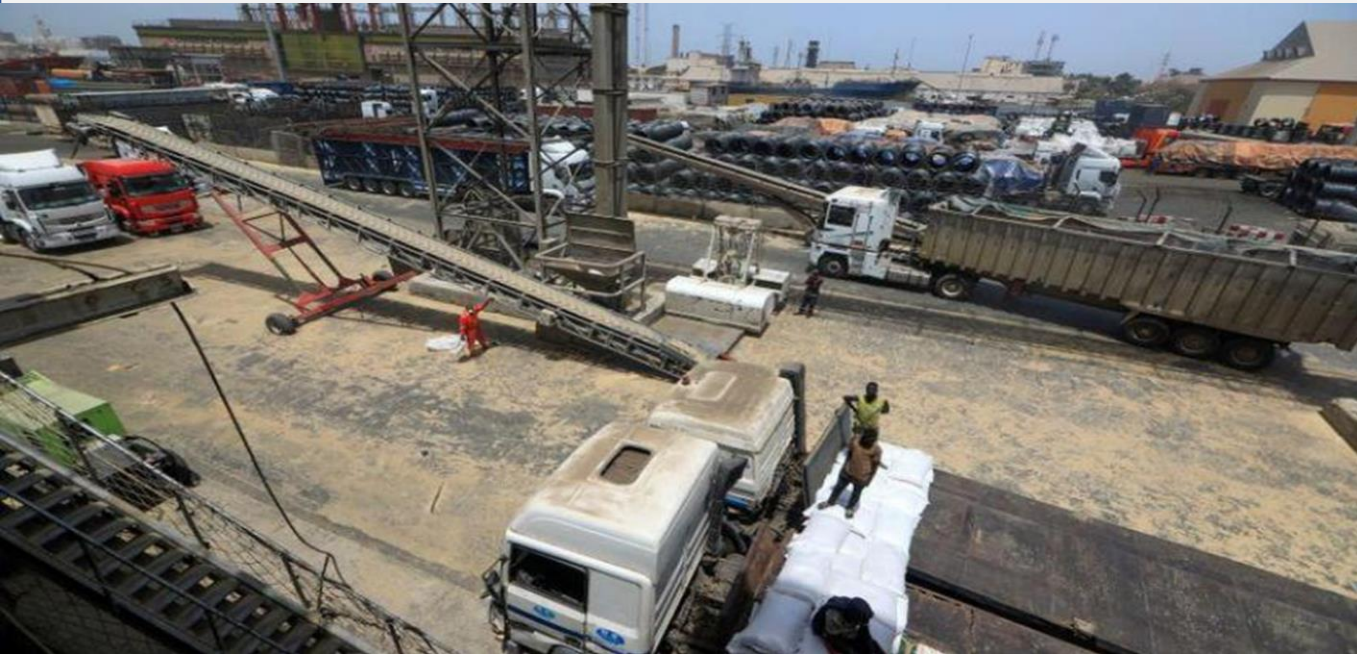


# The impact of COVID-19 on industries without smokestacks in Senegal

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## Objectives/Summary

1

The estimated impact of COVID-19 on economic growth and overall employment in Senegal

2

Estimated impact of COVID-19 on the IWOSS sectors in the case study

- COVID-19's impact on productivity and employment in IWOSS sectors
- Will COVID-19's effect on IWOSS be transitory or structural?

3

How does COVID-19 affect the recommendations in the country case study for supporting the development of IWOSS?

# Overview on IWSS

- IWSS called “industries without smokestacks” are characterized by (i) being tradeable, (ii) generating high value-added per worker, (iii) having a greater potential for technological change and productivity growth, and (iv) showing evidence of scale and/or agglomeration economies
- IWSS sectors: agro-processing, horticulture, tourism, trade, transport
- IWSS, unlike manufacturing, has recorded higher-than-average increases in both productivity and employment share between 2001-2017 (Mbaye&al)
- Tourism plays an important role in stimulating economic growth. At a global level, the tourism sector employs 277 million people and accounts for nearly 10 percent of global GDP (Page, 2019)
- Horticulture also offers promises for growth: With technological advancements, fresh vegetables and flowers that used to be produced for local consumption can now be transported and sold globally (Page, 2019).

# Overview on IWSS

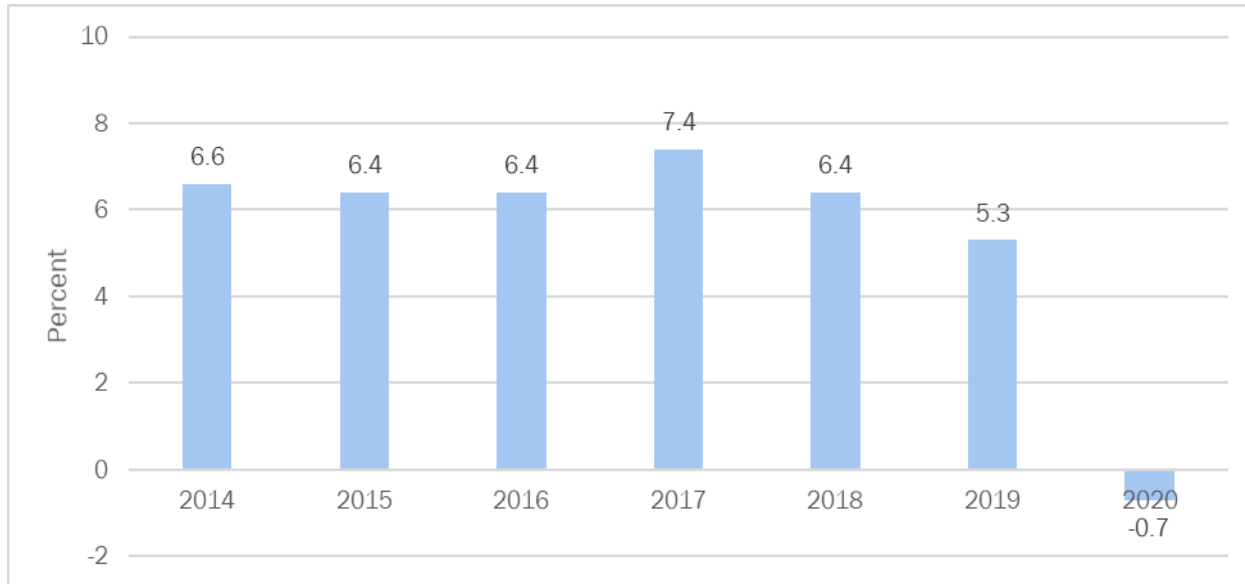
- Between 1999 and 2019, horticulture increased its value-added more than four times. Manufacturing's increased only 2.7 times, which is also slightly lesser than tourism's 2.8 times
- agri-business has performed particularly poorly over sample period, with its sub-sectors (mainly food and beverages) performing worse than manufacturing
- This poor growth could be explained by the fact that most of them bear the burden of the same costs associated with manufacturing's inability to grow
- For example, while labor regulations are particularly stringent for all industries in Senegal, collective bargaining applicable to manufacturing—and, consequently, agro-processing—has made those regulations even more stringent than in other IWSS sectors

# Methodology

- We used several data from different sources (see on graph) to build the paper, but the ANSD survey on post-COVID investment intentions of informal enterprises helped to estimate the impact of COVID-19 on the IWSS sectors
- This survey included 267 enterprises from all sectors, of which only four (4) sectors were considered in the IWSS sector, which are tourism, trade, transport, and agro-processing.
- Others sources : ANSD (2019), ANSD and author's calculation, ILOstat, Direction de la prevision des etudes economiques (DPEE, 2020), International Monetary Fund (IMF, 2021)

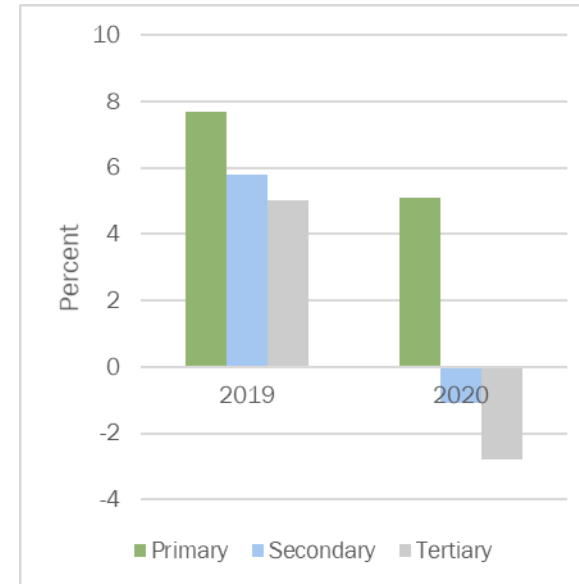
# 1 The estimated impact of COVID-19 on economic growth and overall employment in Senegal

Figure 1: Senegal's annual GDP growth rates, 2014-2020 (%)



Source: ANSD 2019.

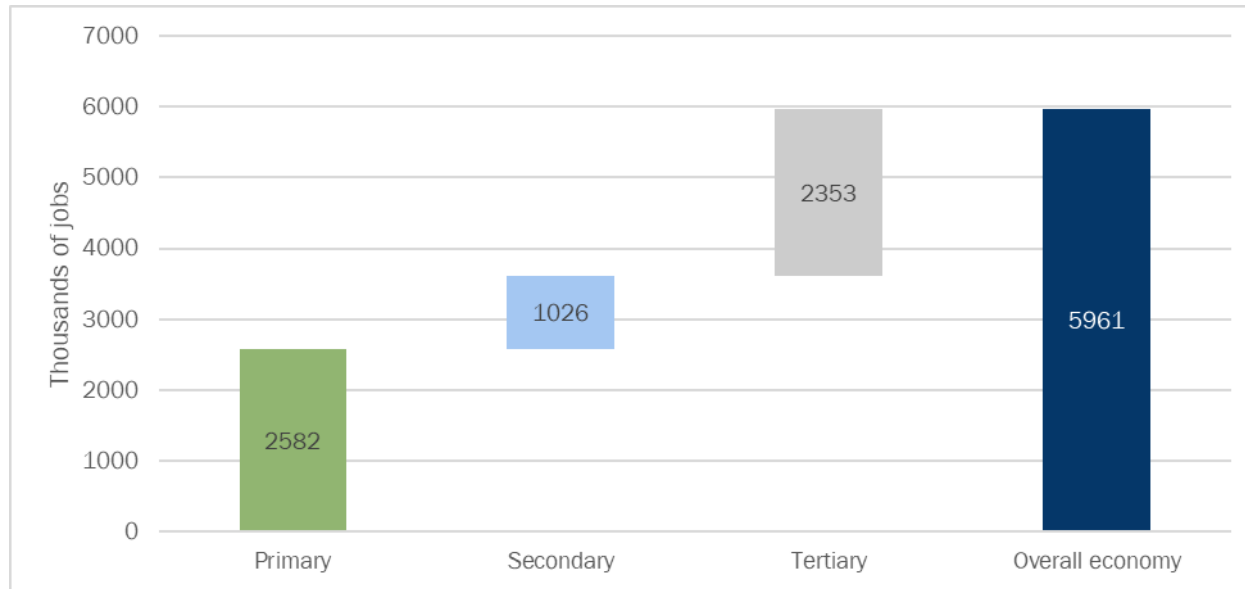
Figure 2: Impact of COVID-19 on sectoral value-added growth rates (%)



Source: ANSD 2019, authors' calculations.

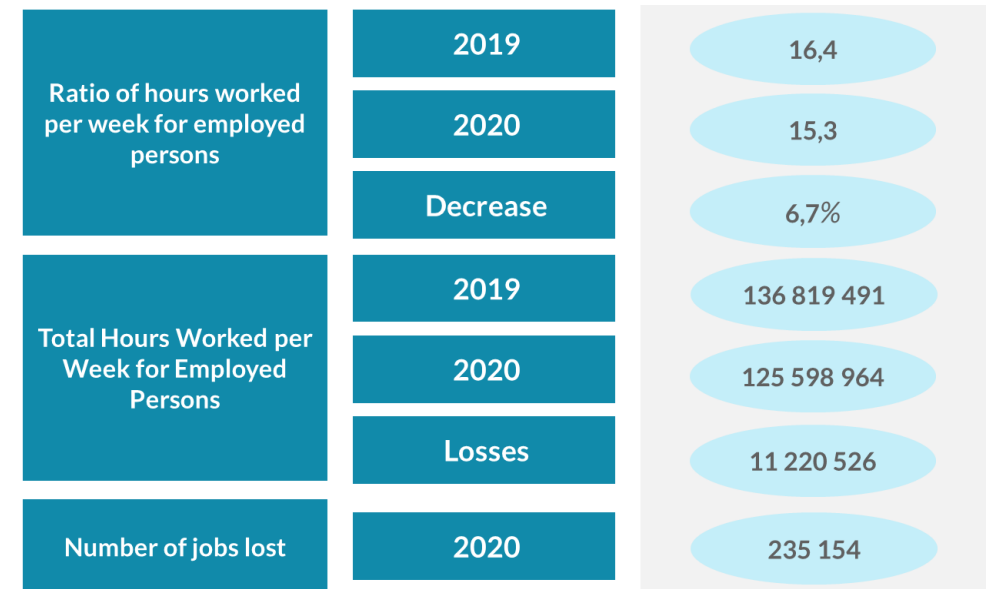
# 1 The estimated impact of COVID-19 on economic growth and overall employment in Senegal

Figure 3: Employment in Senegal, by sector, 2019



Source: ANSD 2019, authors' calculations.

Figure 4: Senegal's employment outlook in 2020



Source: ILO Stat 2020; authors' calculations.

## impact of COVID-19 on the IWOSS sectors in the case study

- COVID-19's impact on productivity and employment in IWOSS sectors

**Table 2: Change in output level during COVID-19 (%)**

	Decrease	Constant	Increase
Agro-processing	67	27	7
Trade	84	16	0
Transport	69	31	0
Tourism	100	0	0

Source: ANSD 2020 - Survey on post-COVID investment intentions; authors' calculations.

**Table 2: Magnitude of output decrease during COVID-19 (%)**

	<25%	[25% ; 50%[	[50% ; 75%[	> 75%
Agro-processing	50	50	0	0
Trade	11	48	30	11
Transport	33	56	11	0
Tourism	10	20	50	20

Source: ANSD 2020 - Survey on post-COVID investment intentions; authors' calculations.



## impact of COVID-19 on the IWOSS sectors in the case study

- COVID-19's impact on productivity and employment in IWOSS sectors

**Table 3: Evolution of men employment (%)**

	Decrease	Constant	Increase
Agro-processing	20	80	0
Trade	31	66	3
Transport	15	77	8
Tourism	60	40	0

Source: ANSD 2020 - Survey on post-COVID investment intentions, authors' calculations.

**Table 4: Proportion of the decrease for male employment (%)**

	< 4 workers	[4 ; 6 workers]	[7 ; 10 workers]	>10 workers
Agro-processing	33	0	67	0
Trade	40	50	0	10
Transport	50	0	0	50
Tourism	17	17	0	67

Source: ANSD 2020 - Survey on post-COVID investment intentions, authors' calculations.

**Table 5. Evolution of women employment (%)**

	Decrease	Constant
Agro-processing	27	73
Trade	28	72
Transport	15	85
Tourism	60	40

Source: ANSD 2020 - Survey on post-COVID investment intentions, authors' calculations.

**Table 6: Proportion of the decrease for women employment (%)**

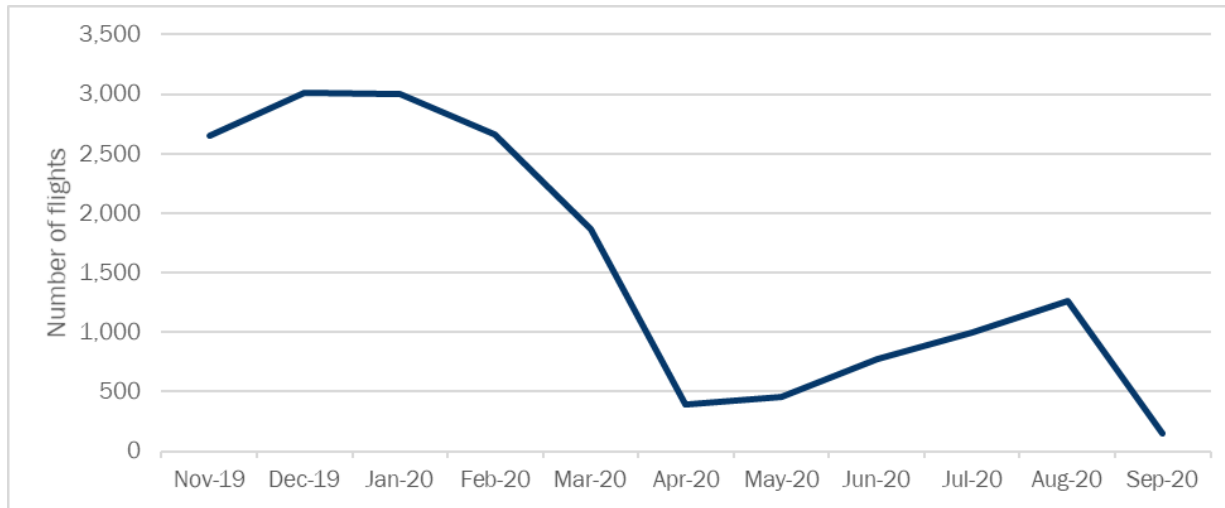
	< 4 workers	[4 ; 6 workers]	[7 ; 10 workers]	>10 workers
Agro-processing	75	25	0	0
Trade	67	22	0	11
Transport	100	0	0	0
Tourism	17	33	0	50

Source: ANSD 2020 - Survey on post-COVID investment intentions, authors' calculations.

## 2 impact of COVID-19 on the IWOSS sectors in the case study

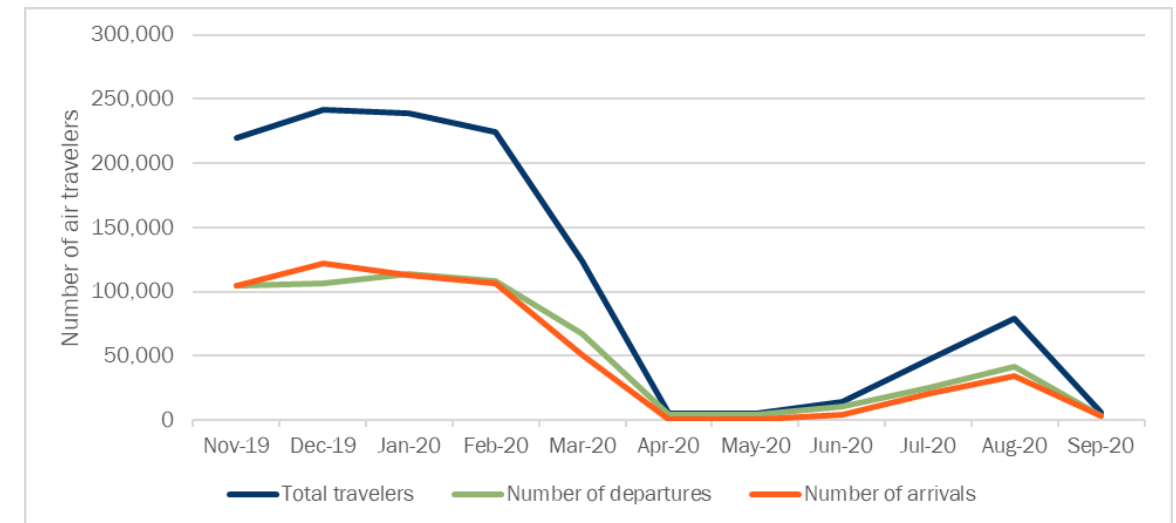
- COVID-19's impact on productivity and employment in IWOSS sectors

Figure 5: Change in aircraft arrivals and departures under COVID-19



Source: DPEE (2020), Direction de la Pr vision des Etudes Economiques.

Figure 6: Change in number of air travelers under COVID-19, incoming and outgoing flights

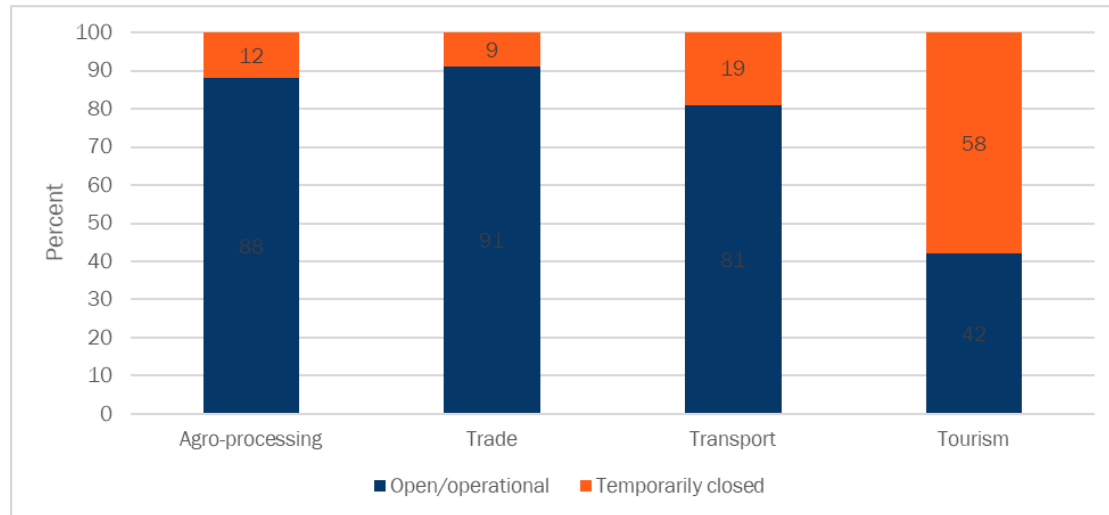


Source: DPEE (2020), Direction de la Pr vision des Etudes Economiques.

## 2 impact of COVID-19 on the IWOSS sectors in the case study

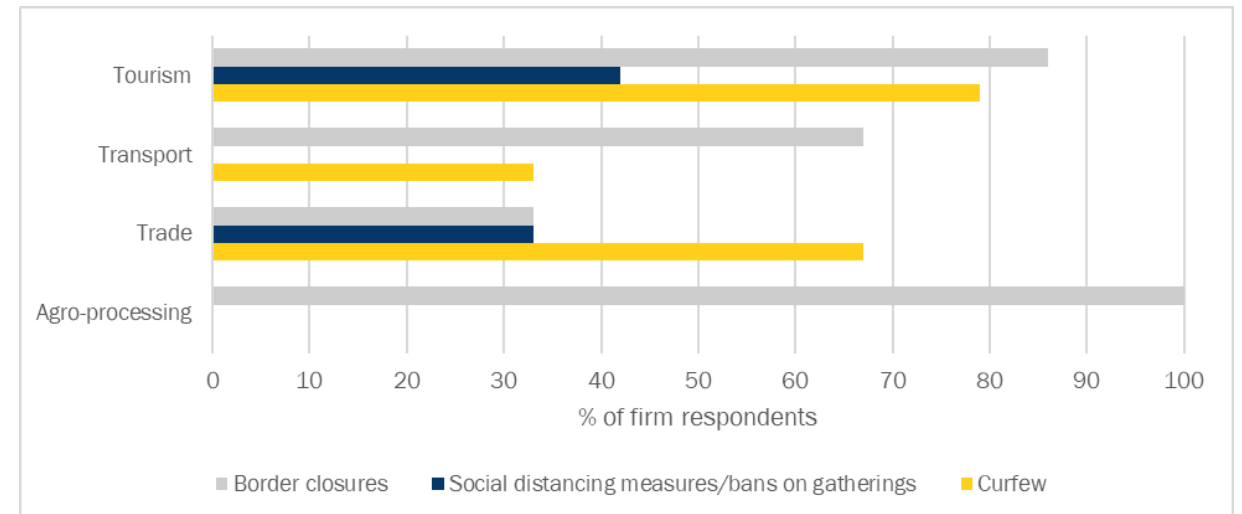
- Will COVID-19's effect on IWOSS be transitory or structural?

Figure 7: Operational status of firms across select IWOSS sectors (%)



Source: ANSD 2020 - Survey on post-COVID investment intentions; authors' calculations.

Figure 8: Reasons cited for firm closures under COVID-19 (%)



Source: ANSD 2020 - Survey on post-COVID investment intentions; authors' calculations.

## 2 impact of COVID-19 on the IWOSS sectors in the case study

- Will COVID-19's effect on IWOSS be transitory or structural?

Table 7: Perception of the companies on prospective activities (%)

	Increase	Constant	Decrease
Agro-processing	13	40	47
Commerce	34	13	53
Transport	15	31	54
Tourisme	30	20	50

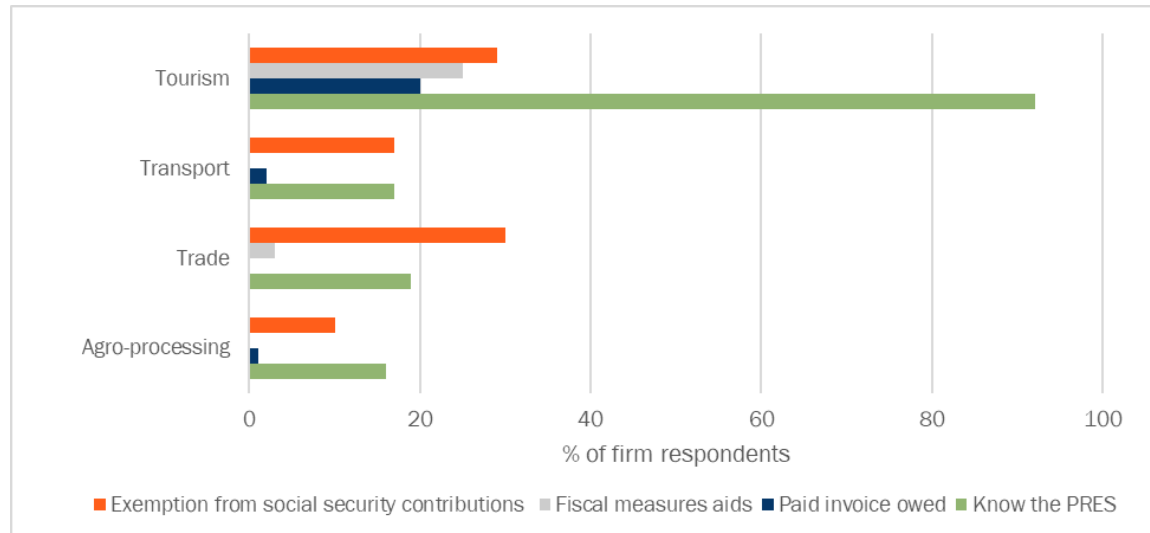
Table 8: Magnitude of the decrease (%)

	<25%	[25% ; 50[	[50% ; 75[	>75%
Agro-processing	100	0	0	0
Commerce	27	45	27	0
Transport	50	50	0	0
Tourisme	33	33	0	33

Source: ANSD 2020 - Survey on post-COVID investment intentions, authors' calculations

Source: ANSD 2020 - Survey on post-COVID investment intentions, authors' calculations

Figure 9: Awareness of and benefit from government support to private enterprises (% of firm respondents)



## How does COVID-19 affect the recommendations in the country case study for supporting the development of IWOSS?

**Table 9: Summary of constraints, recommendation, and impact of COVID-19 on recommendations for the different sectors**

Sectors	Biggest issues	Recommendations	Impact of COVID-19
Horticulture	<ul style="list-style-type: none"> <li>• Difficult access to financing, especially for women</li> <li>• High interest rate in the loan market</li> <li>• Lack of qualified and skilled labourers</li> <li>• Ramifications of climate change</li> </ul>	<ul style="list-style-type: none"> <li>• Infrastructural investment</li> <li>• Increase opportunities for conservation and transformation</li> <li>• Provide capacity building opportunities</li> <li>• Develop and vulgarize climate change adaptation measures</li> </ul>	✘
Tourism	<ul style="list-style-type: none"> <li>• Climate change issues: rising sea levels</li> <li>• Lack of touristics investment in rural areas</li> </ul>	<ul style="list-style-type: none"> <li>• Important infrastructural investment in rural areas</li> <li>• Attract private investment in rural areas</li> <li>• Identify climate change mitigation measures</li> </ul>	✘
Agro-processing	<ul style="list-style-type: none"> <li>• Lack of policy that promote private investment : time reduction</li> <li>• Lack of financing</li> <li>• Reduce barriers of entry and barriers of operations</li> <li>• Crucial to have access to foreign markets with accessible import and export procedures</li> </ul>	<ul style="list-style-type: none"> <li>• Smoothen the entry and operating procedures in the sector</li> </ul>	✘

Impact on the recommendations: ■ Low ■ medium ■ Strong

Thank you!