



International
Labour
Organization



ADWA'
Advancing the Decent Work
Agenda in North Africa

ECONOMIC
RESEARCH
FORUM



منتدى
البحوث
الاقتصادية



HIGHLIGHTS: THIRD WAVE APRIL 2021

Rapid Labour Force Survey of COVID-19 Impact in Morocco

Published in October 2021

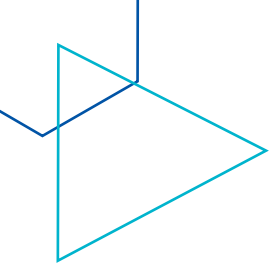
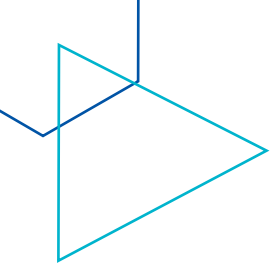


Table of Contents

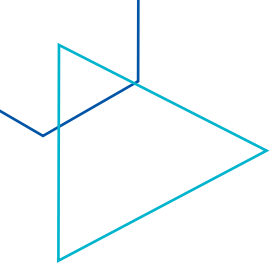
List of Figures	03
Introduction	05
The Covid-19 pandemic in Morocco	07
1. Employment and unemployment	09
2. Wages and income	14
3. Entrepreneurs and small businesses	16
4. Shift to online and home-based work	22
5. Have you had to...? Household coping strategies	23
6. Farmers	25
Appendix	27



List of Figures

Figure 1: COVID-19 case trends in Morocco and government response	8
Figure 2: Percentage distribution of respondents in April 2021, by main job/activity, as of February 2020	8
Figure 3: Percentage change in labour force distribution, February 2020– April 2021(%)	9
Figure 4: Percentage change in population unemployment share, by educational attainment, February 2020–April 2021 (%)	10
Figure 5: Percentage change in labour market status, by sex, February 2020–April 2021	10
Figure 6: Unemployment rates in November 2020-April 2021, standard definition and including those not actively searching (%), by wave	11
Figure 7: Labour market transitions, February 2020–November 2020 (Situation of working-age individuals in April as per their situation in February)	12
Figure 8: Labour market transitions, February 2020–April 2021 (Situation of working-age individuals in April as per their situation in February)	12
Figure 9: Labour market transitions, of formal and informal wage employees, February 2020–November 2020 and February 2020- April2021 (Situation of working-age individuals in November 2020 and April 2021 as per their situation in February)	13
Figure 10: In the last 60 days, have you experienced any of the following because of COVID-19 or related restrictions? (%), by wave	13
Figure 11: Households' total monthly income change by wave, compared to February 2020	14
Figure 12: Changes in wages and working hours in the 60 days preceding the survey, by sex	15
Figure 13: Changes in wages and working hours in the 60 days preceding the survey, by educational attainment	15
Figure 14: Average percentage change in nominal wages by sex, educational attainment, formality, sector type, and economic activity between February 2020 – April 2021(%)	16
Figure 15: Percentage distribution of enterprises, by number of workers in February 2020	17
Figure 16: Percentage distribution of enterprises' current status, by wave	17
Figure 17: Percentage distribution of enterprises, by number of workers in February 2020	18

Figure 18: Percentage of employers or business-owners who applied for or currently receive any government support	18
Figure 19: Employers' or business-owners' most-requested policy support for COVID-19 (%)	19
Figure 20: Businesses' strategies to reduce physical proximity with customers (%)	19
Figure 21: Change in sales/revenues in the last 60 days compared to sales/revenue in the same period last year in November 2020 to April 2021	20
Figure 22: Change in sales/revenues in the 60 days preceding the survey in April 2021 compared to sales/revenue in the same period last year, by enterprise size	20
Figure 23: Average decrease in sales/revenue reported by enterprises, by enterprise size (%)	21
Figure 24: Sales expectations for 2021 compared to 2019, by wave	21
Figure 25: Ability to work from home, by wave	22
Figure 26: Ability to work from home, by residence, sex, and educational attainment (%)	22
Figure 27: Food security: In the past 7 days, have you or any household member experienced any of the following? (%)	23
Figure 28: Did you need to resort to any of these coping strategies since the end of February 2020? (%)	24
Figure 29: Which kind of support did you receive in the past month? (%)	24
Figure 30: Relative to the same season in the last year, how much have you harvested (do you expect to harvest) for your farm for this crop?	25
Figure 31: Relative to the same season in the last year, how many seeds and inputs have you used (do you plan to use) for your farm for this crop?	25
Figure 32: Relative to the same season in the last year, how are /do you expect prices to change for this crop?	26



Introduction¹

This document summarises the key findings of the third wave of rapid labour force surveys conducted by ILO and ERF between March 11th and April 24th 2021 to monitor the impact of COVID-19 on households, household enterprises and farmers in Morocco. This report is part of series of panel surveys that track the evolution of the pandemic in Morocco's labour market. The survey was conducted by phone, using a random digital dialling (RDD) approach, and targeted mobile owners aged 18 to 64.

A sample of 2,007 interviews was collected in the first wave in November 2020. Ninety-one per cent of these respondents consented to being re-interviewed as part of the second wave; 43 per cent (863 out of 2,007) were reached. An additional refresher sample of 1,139 individuals was added, using Random Digital Dialling (RDD) methods, to reach a total of 2,002 interviews. Around 98 per cent of the respondents in the second wave (1956 out of 2002) agreed to be followed up in the third wave, but only 53 per cent were successfully re-interviewed. A refresher sample of 1,073 individuals was added to reach a total of 2,105 .

The survey produces data over three reference periods. The “baseline” pre-COVID situation is defined as the situation in February 2020 and is measured retrospectively as part of wave 1 for the panel sample or wave 3 for the refresher sample. Depending on the variable, the “current” situation is defined as the situation in either the previous month or the previous week.

The sample is weighted by considering households' demographics, the prevalence of mobile phones in Morocco and the numbers of mobile phones in each household. For the panel data, the attrition probability is computed and also considered in calculating the weights. The survey methodology and phone call outcomes are presented in more detail in the Annex.

The household questionnaire covers demographic and household characteristics, labour market status, education, food security, incomes, social safety nets, attitudes towards risks and social distancing, coping strategies, and mental health. It includes a core module, an individual module, a worker module, a farmer module, a household enterprise module, a women module, and a tracking module. A more detailed presentation of findings will follow this report.

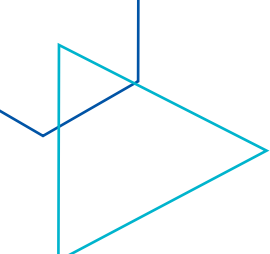
¹ Data used in this report are the cross-sectional data of the three waves.

² Only individuals of the second wave with consent were re-contacted in the third wave



Key Findings

- ▶ Since the onset of the COVID-19 pandemic, unemployment share has increased from 14 per cent in February 2020 to 20 per cent in February 2021, and then recovered partly to 16 per cent.
- ▶ After a substantial decrease from 55 per cent in February 2020 to 43 per cent in February 2021, the total employment share has returned to its pre COVID-19 level by April 2021. The inactivity rate first increased significantly (31 per cent to 39 per cent) between February and November 2020; it has then decreased and stands now below the pre-pandemic rate. Overall therefore, the employment rate has returned to its pre-COVID-19 level, but there is higher unemployment and lower economic inactivity.
- ▶ The overall recovery of the employment rate is mainly a function of more women having taken up jobs. Unemployment and inactivity are still higher than in February 2020 among men. After November 2020, rates of inactivity among women have steadily and significantly decreased. Their employment rate is now 30 per cent higher than before the pandemic.
- ▶ Highly educated individuals experienced the strongest increase in unemployment between February and November 2020, and the strongest recovery since; higher unemployment affects all educational segments but for those with less than basic education – those who can least afford outright unemployment.
- ▶ About 40 per cent of those unemployed in February 2020 went out of the labour force, and 28 per cent found a job by November 2020. By April 2021, only 16 per cent have gone out of the labour force, and 47 per cent found a job.
- ▶ In November 2020 and February 2021, around 50 per cent of surveyed respondents reported substantial decreases in monthly income since February 2020 (over 25%). In April 2021, that number has increased to 59 per cent. Similarly, the percentage of households reporting they could not buy the usual amount of food on account of income losses has continued to increase. Households continue to take money out of savings and turning to friends and relatives as their most common coping strategies.
- ▶ Nominal wages have contracted by 10% overall since February 2020. Wages have decreased most in the accommodation and tourism sector, and then in manufacturing. On the other hand an increase in agricultural wages is observed. Those with basic education have suffered the largest wage earnings losses (-19 per cent). We do not observe a major difference in wage trends between the formal and informal sectors. Wages have contracted a little more among men than among women.
- ▶ There is no clear evidence of recovery in small business as 83 per cent of the surveyed businesses that were active in February 2020, reported a decrease in their sales/ revenue in the last 60 days preceding the survey. While an improvement in business sentiment had been recorded between November 2020 and February 2021, by April pessimism concerning business sales for the year 2021 has gained 10 points (from 37% to 47%).



The COVID-19 pandemic in Morocco and policy responses

More than a year has already passed since the outbreak of the COVID-19 pandemic. Countries around the world have been significantly hit, especially at the low socio-economic level. The COVID-19 pandemic has pushed the Moroccan economy into its first recession since 1995. The Moroccan economy faced a sharp contraction in the Real Gross Domestic Product (GDP) of around 7 per cent in 2020. It is expected to rebound by 4.2 per cent in 2021³, provided that the vaccination campaign proceeds as planned and that the accommodative monetary policy and the fiscal stimulus are maintained.

After observing a peak in November 2020, the trend of the number of cases has been declining. On 28 January 2021, the Moroccan government started a nationwide COVID-19 vaccination campaign that aims to cover 80 per cent of the Moroccan population over 18 years old. Priority is given to citizens in the frontline of the pandemic, the elderly, and people with underlying health conditions. As of 29 June 2021, 9 million people were fully vaccinated in Morocco representing around 25 per cent of the population.

The Moroccan government has responded swiftly and proactively in the first months of the pandemic, imposing a state of emergency and a strict lockdown limiting movements to work and essential needs (health services and food). This has allowed limiting the spread of the virus the weeks after registering the 1st COVID-19 case on 2 March 2020⁴. The economic and social cost of such a stringent lockdown led the government to ease restrictions by the summer of 2020; international borders were reopened, and most businesses were authorized to resume activity, including cafés and restaurants. The pandemic rapidly progressed, reaching a peak of 6000 cases per day in November 2020. Other containment measures—including a national night curfew—were reimposed on 23 December 2020, initially for 3 weeks and later extended until 20 May 2021. The government also extended the state of health emergency until 10 July 2021⁵.

The creation of a USD 1 billion fund dedicated to the management of the pandemic has been amongst the first socio-economic policy responses adopted by the Moroccan government. This fund, financed primarily by the public budget, aimed at upgrading the health system and supporting most affected economic sectors. Social transfers to temporarily unemployed employees were extended and social contribution payments for some sectors (including tourism) further deferred until April 2021.

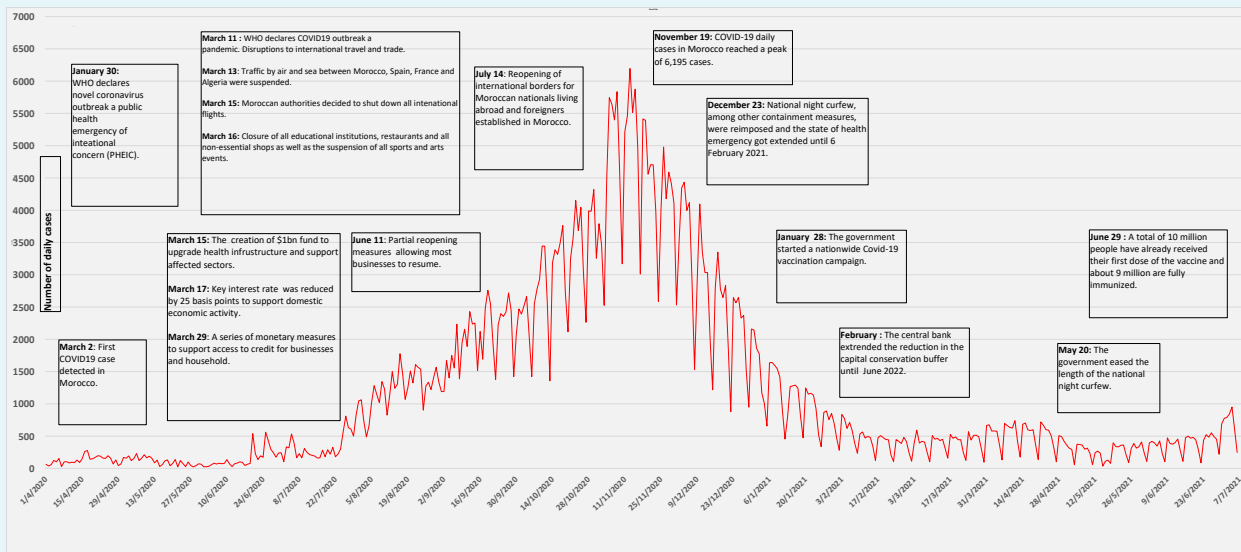
On the monetary side, the Central Bank of Morocco reduced the key interest rate by 75 basis points to 1.5 per cent in March 2020 and introduced a series of monetary measures to bolster credit for businesses and households. Supporting small and medium-sized enterprises (SMEs) and the self-employed, the payment of social security contributions were suspended and bank loans' interests frozen until 30 June 2020. The Central Bank of Morocco also adopted prudential and regulatory measures to support credit institutions in covering liquidity, equity, and the provisioning of claims. In April 2021, the government launched three post-crisis facilities to provide financing loans to very small firms, real estate firms, and to firms operating in the tourism sector.

³ World Bank 2021. "Morocco's Economic Update April 2021". <https://www.worldbank.org/en/country/morocco/publication/economic-update-april-2021>

⁴ EMNES. 2020. "Covid-19 in the Mediterranean and Africa - Diagnosis, Policy Responses, Preliminary Assessment and Way Forward." April.

⁵ IMF. 2021. "Policy Responses to COVID-19, Policy Tracker Database." February.

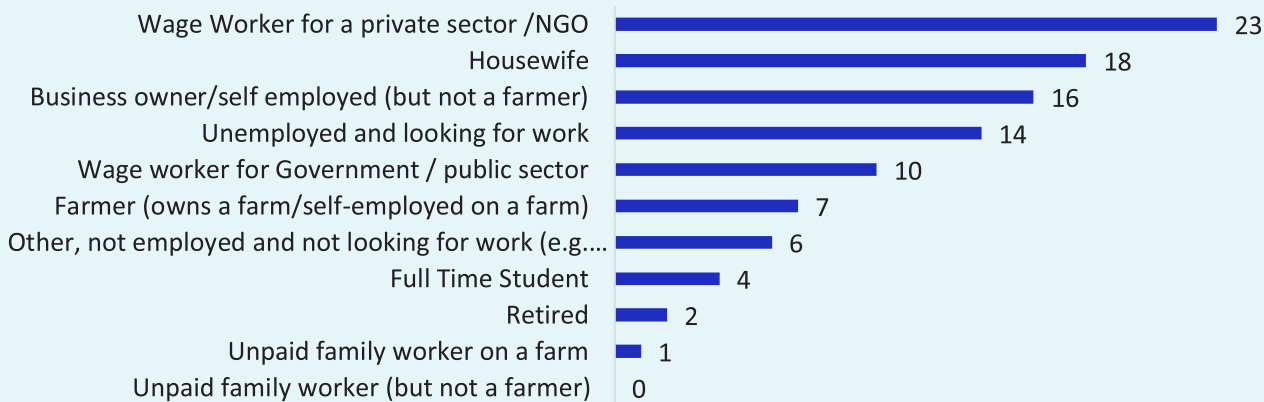
► **Figure 1: COVID-19 case trends in Morocco and government response**



Source: Constructed by authors using the WHO COVID-19 Database

The distribution of Moroccan participants in the third wave in April 2021 is illustrated in Figure 2 below, with respect to their job activity in February 2020.

► **Figure 2: Percentage distribution of respondents, by main job/activity, as of February 2020**

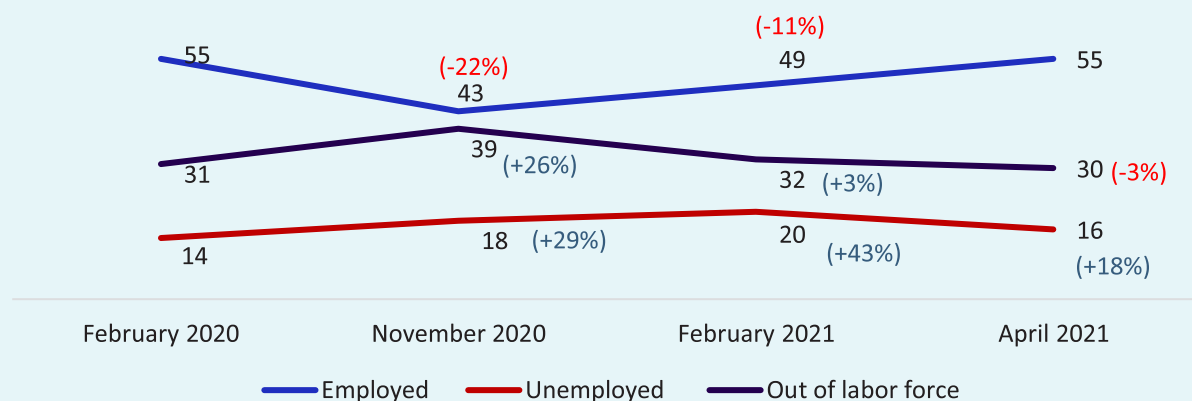


Source: Constructed by authors using ILO/ERF COVID-19 Monitor

► Employment and unemployment

Since the onset of the COVID-19 pandemic, unemployment has increased from 14 per cent in February 2020 to 20 per cent in February 2021, followed by a period of recovery. After a substantial decrease from 55 per cent in February 2020 to 43 per cent in February 2021, the employment share has recovered its pre-COVID-19 levels by April 2021 (Figure 3).

► **Figure 3:** Percentage change in labour force distribution, February 2020– April 2021⁶(%)



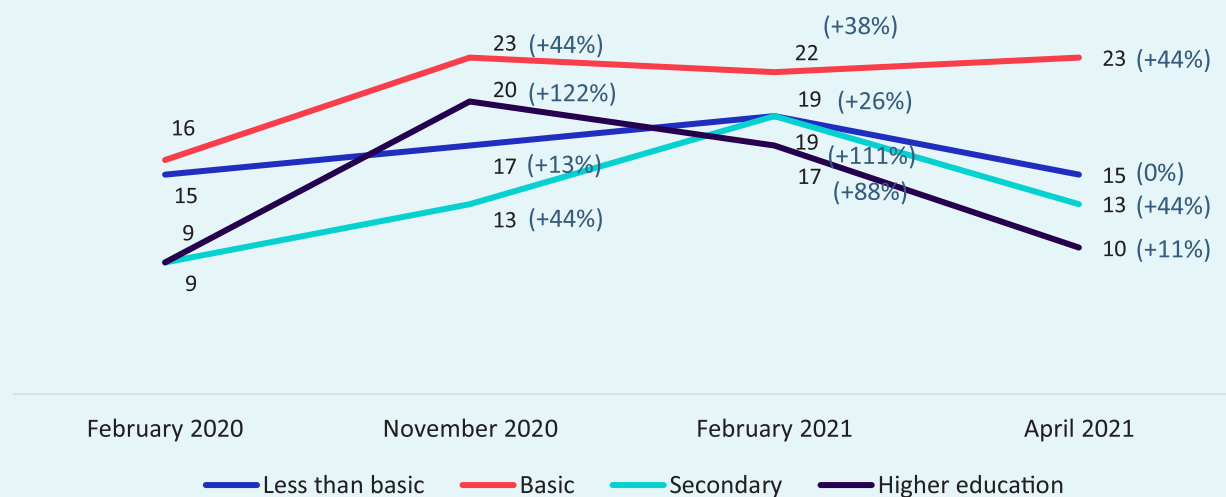
Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

By November 2020, individuals with higher levels of education had been the most affected group by rising unemployment, from 9 per cent in February 2020 to 20 per cent in November 2020. They also experienced the strongest recovery; as of April 2021, the unemployment share in the population had already fallen from 20 per cent to 10 per cent. Low educated individuals have the same unemployment share as of the pre-pandemic time with 15 per cent.

For individuals with basic and secondary educational attainment, the rise in the unemployment share has persisted until April 2021, highlighting a 44 per cent increase in unemployment share compared to February 2020 (Figure 4).

⁶ Labour force status in February 2020 is constructed for the respondents of the three waves.

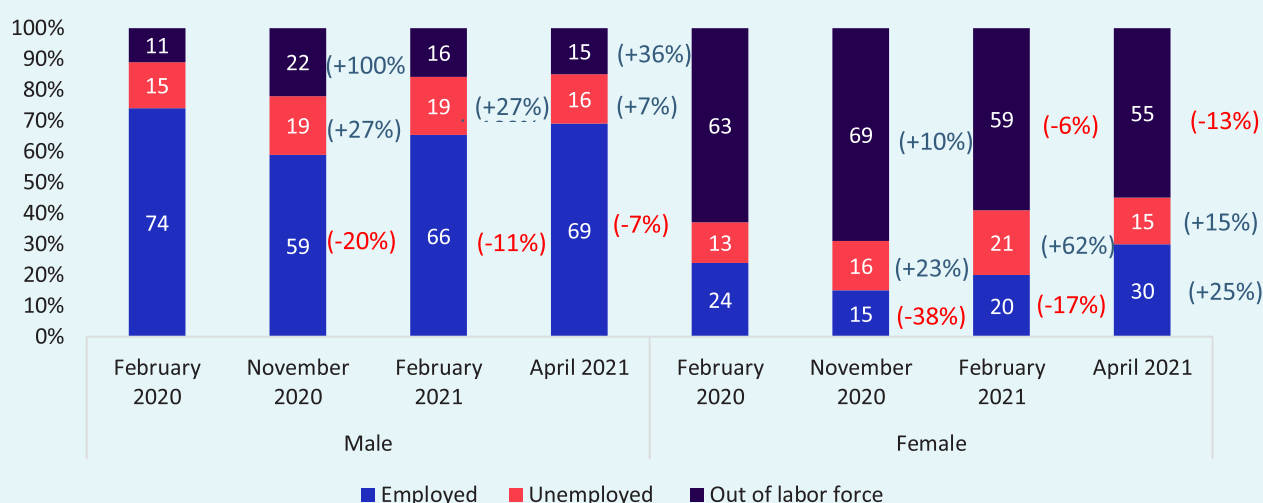
► **Figure 4:** Percentage change in population unemployment share, by educational attainment, February 2020–April 2021 (%)



Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

Since the onset of the COVID-19 pandemic, important differences in labour market trends are observed between both genders. After a substantial increase in males' inactivity between February 2020 and November 2020 from 11 to 22 per cent, it declined thereon to 15 per cent. Whereas for females, after an initial increase by 10 per cent, inactivity continually decreased, reaching 55 per cent in April 2021. The increase in the labour force participation among women led to an increase in the employment share by 25 per cent, compared to the pre-pandemic time. As for the unemployment share, the trend for men and women were in the same recovery direction (Figure 5).

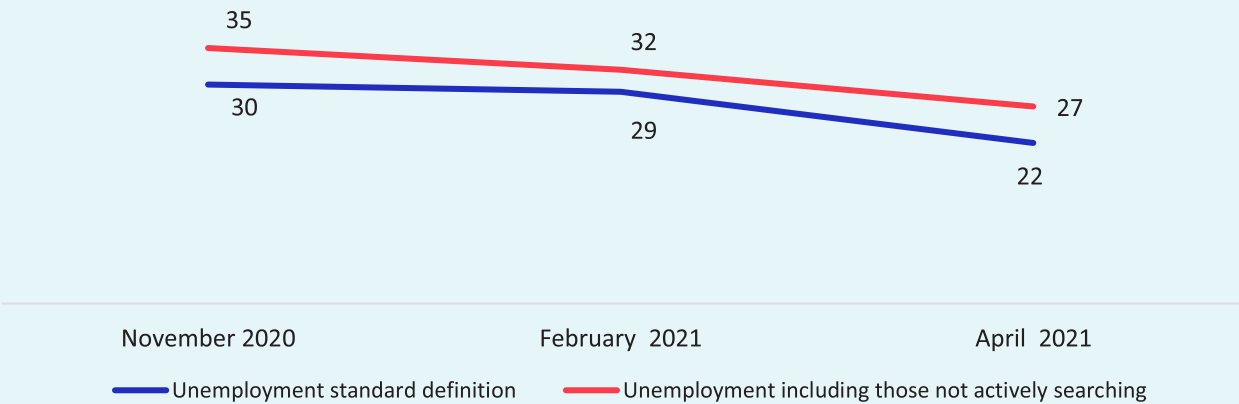
► **Figure 5:** Percentage change in labour market status, by sex, February 2020–April 2021



Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

Two measures of the unemployment rate using the week prior to the survey as a reference are presented in Figure 6. The first measure is based on the standard international definition of unemployment, the other includes among the unemployed also those who did not actively seek employment in the reference period. When dropping the job-search condition, we observe a 3 to 5 percentage points increase in the unemployment rate between the two definitions throughout the surveyed period. The trend, however, moved in the same direction from November 2020 to April 2021 (Figure 6), with a decline of 27 per cent if the standard definition is used, and by 23 per cent if the job search condition is dropped.

► **Figure 6:** Unemployment rates in November 2020-April 2021, standard definition and including those not actively searching (%), by wave



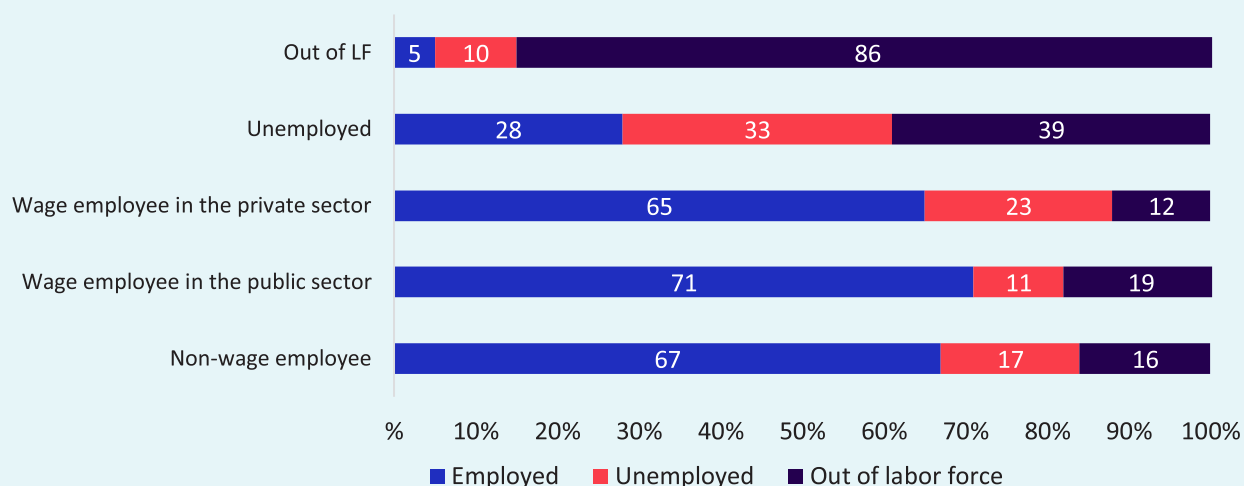
Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

Figure 7 and Figure 8 show transitions in the labour market status between the pre-pandemic status and ten and 14 months after, respectively. Comparing the transitions in the two durations shows a recovery in the employment and labour force participation.

By November 2020, 39 per cent who were unemployed in February 2020 went out of the labour force, and 28 per cent found a job (Figure 7). Whereas by April 2021, only 16 per cent have gone out of the labour force, and 47 per cent found a job (Figure 8). Joining the labour market increased among those out of labour force from 15 per cent in November 2020 to 31 per cent as of April 2021.

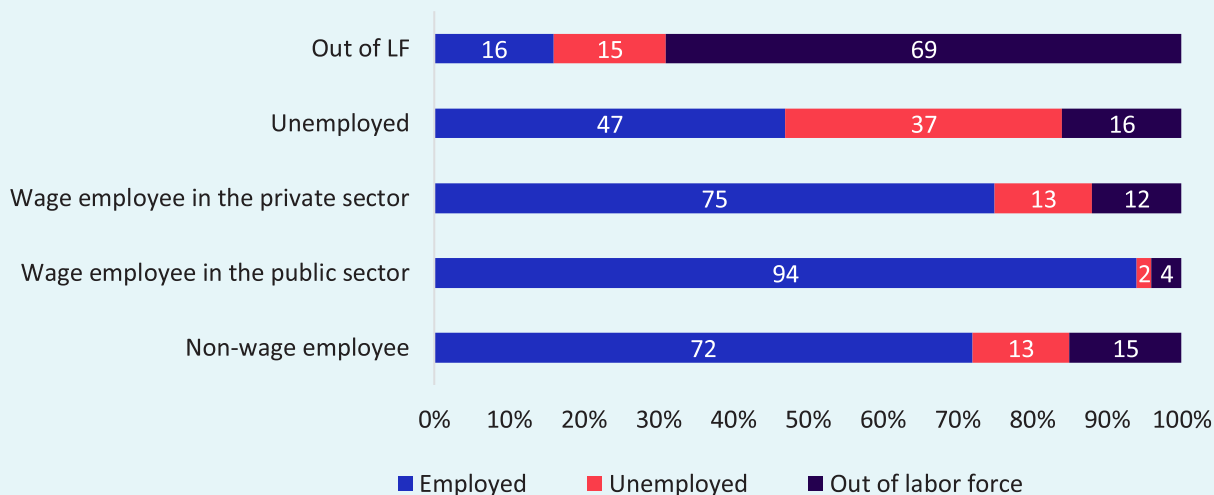


► **Figure 7:** Labour market transitions, February 2020–November 2020 (Situation of working-age individuals in April as per their situation in February)



Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

► **Figure 8:** Labour market transitions, February 2020–April 2021 (Situation of working-age individuals in April as per their situation in February)

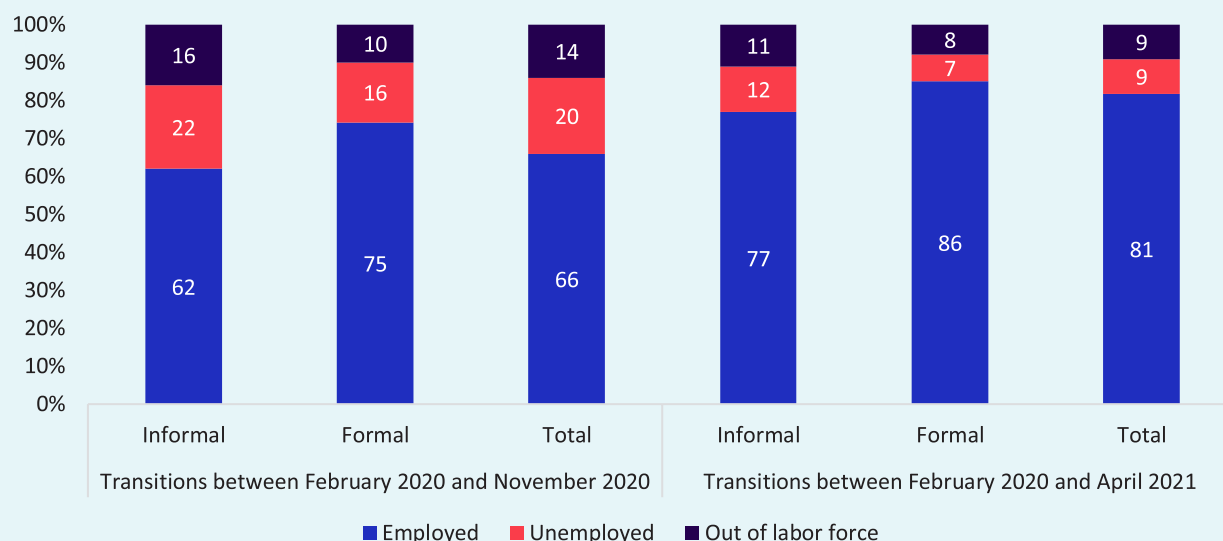


Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

Note: Non-wage employees includes self-employed, employers, and unpaid family workers.

Wage employees in the informal sector were more affected by the pandemic, where 22 per cent of them became unemployed within 8 months, compared to 16 per cent of the formal waged employees. Although informal waged employees are still more affected a year later, more workers in the sector are recovering and are able to find a job (77 per cent), compared to 62 per cent in November 2020.

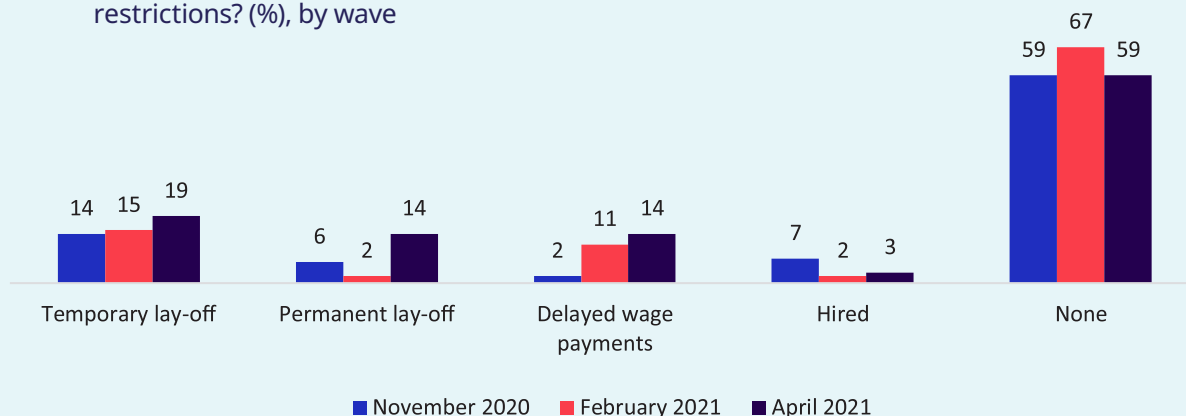
► **Figure 9:** Labour market transitions, of formal and informal wage employees⁷, February 2020– November 2020 and February 2020- April 2021 (Situation of working-age individuals in November 2020 and April 2021 as per their situation in February)



Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

Throughout the pandemic, around 60 per cent of the surveyed population have reported not experiencing any temporary or permanent lay-offs, delayed wage payments or job recruitments. Delayed wage payments, temporary, and permanent lay-offs were more pronounced by April 2021 compared to the previous waves (Figure 10).

► **Figure 10:** In the last 60 days, have you experienced any of the following because of COVID-19 or related restrictions? (%), by wave



Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

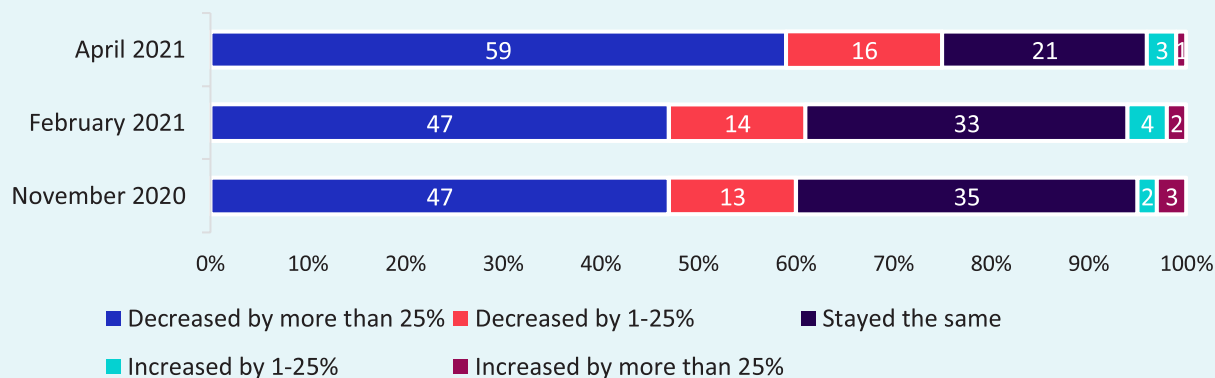
Note: Multiple answers are allowed.

⁷Formality is defined as workers benefitting from social insurance. As of February 2020, 27 per cent of the wage employees were working in the government, where 55 per cent were formal employees. While 73 per cent were in the private sector, of which 36 per cent were formal employees.

► Wages and income⁸

In November 2020 and February 2021, around 60 per cent of surveyed respondents reported a decrease in monthly income since February 2020. In April 2021, that number has increased to 75 per cent, showing no indication of income recovery since the onset of the pandemic (Figure 11).

► **Figure 11:** Households' total monthly income change by wave, compared to February 2020



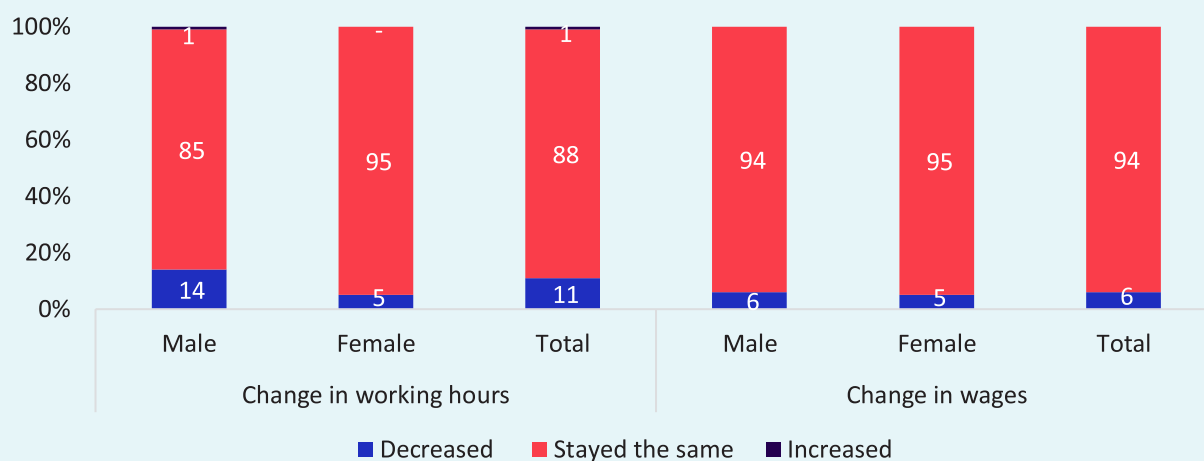
Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

Around 14 per cent of male wage employees have reported a decrease in their working hours compared to 5 per cent for female wages employees. Reported changes in wages were similar between men and women, about 6 per cent, respectively (Figure 12). Individuals with basic educational attainment were the most affected by changing working hours and wages (Figure 13).



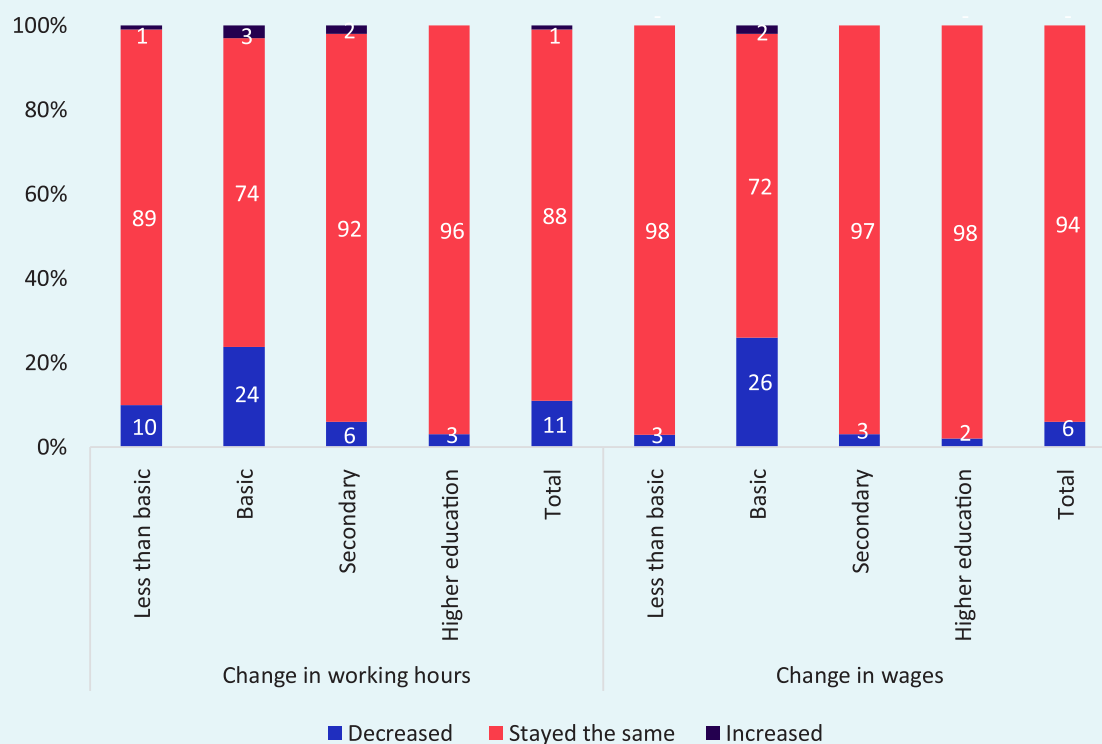
⁸ The analysis is based on those who were wage employees in February 2020.

► **Figure 12:** Changes in wages and working hours in the 60 days preceding the survey, by sex



Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

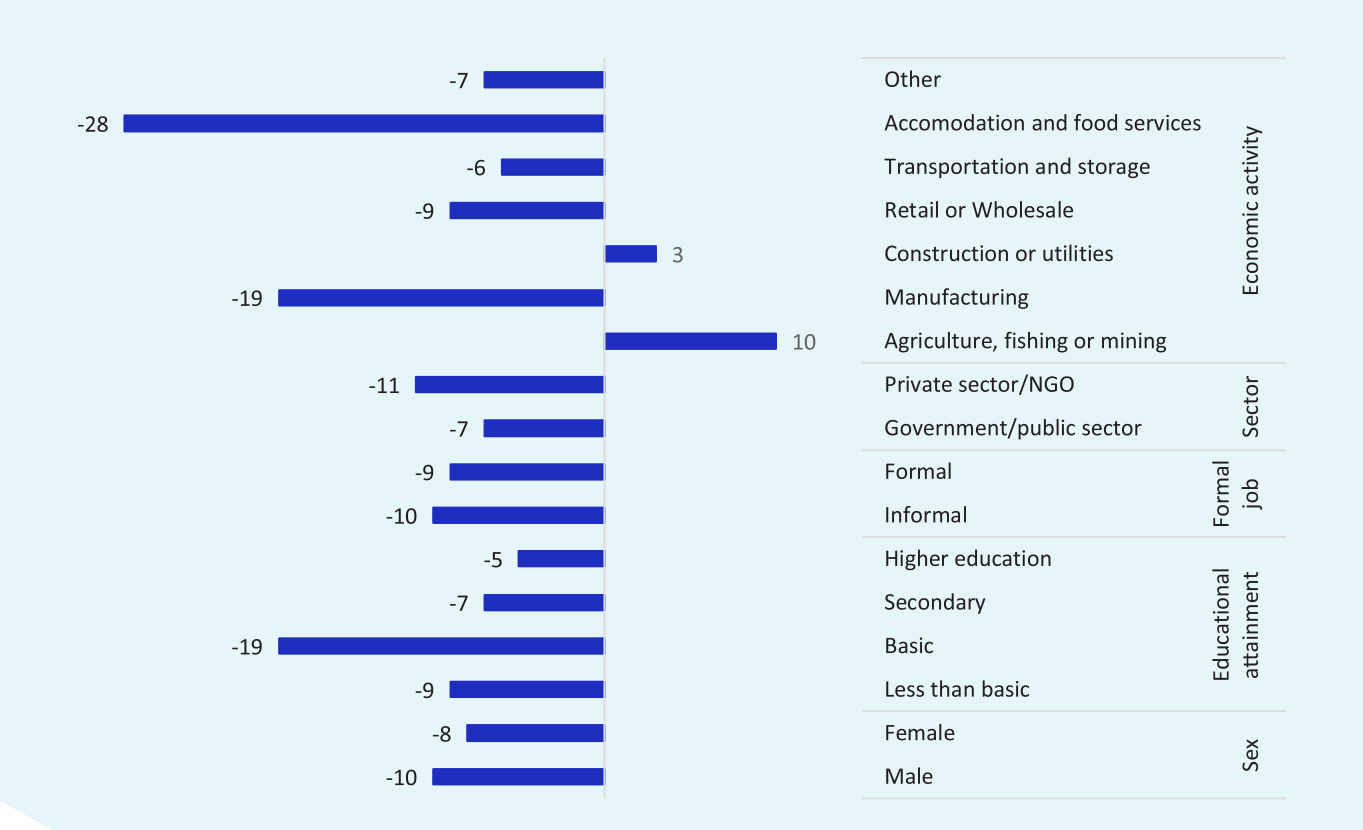
► **Figure 13:** Changes in wages and working hours in the 60 days preceding the survey, by educational attainment



Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

On average, there is a decline of 10 per cent in nominal wages between February 2020 and April 2021. The highest relative decline is observed in the accommodation, food service and manufacturing sectors (28 and 19 per cent respectively). There is a slight indication in the agriculture sector with an increase by 10 in the average wages (Figure 14).

► **Figure 14:** Average percentage change in nominal wages by sex, educational attainment, formality, sector type, and economic activity between February 2020 – April 2021(%)⁹



Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

Note: Changes in nominal wages are calculated using the reported wages in February 2020 and March 2021, after excluding the highest 1 per cent. Almost 24 per cent of wage employees did not report their wages for February 2020, while 26 per cent did not report their wages for March 2021.

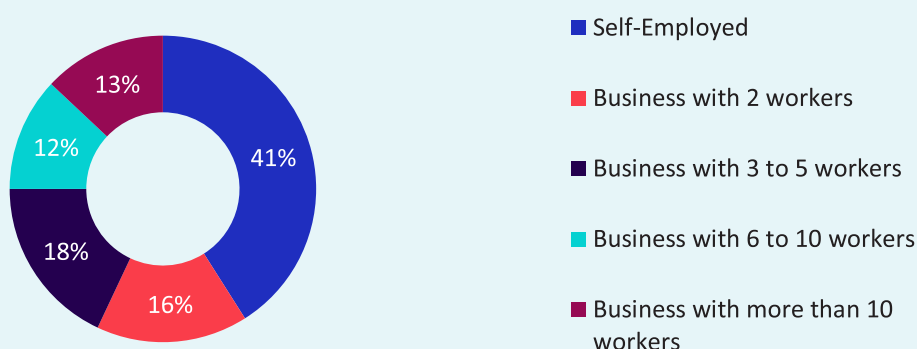
► Entrepreneurs and small businesses¹⁰

The surveyed population of enterprises is presented in the figure below (Figure 15). The self-employed account for 41 per cent and about 34 per cent are micro-enterprises employing 2 to 5 employees.

⁹ Inflation rate in March 2021 compared to March 2020 is 0.7 per cent https://www.hcp.ma/L-indice-des-prix-a-la-consommation-IPC-du-mois-de-Mars-2021_a2695.html

¹⁰ The analysis is based on those who were business owners in February 2020.

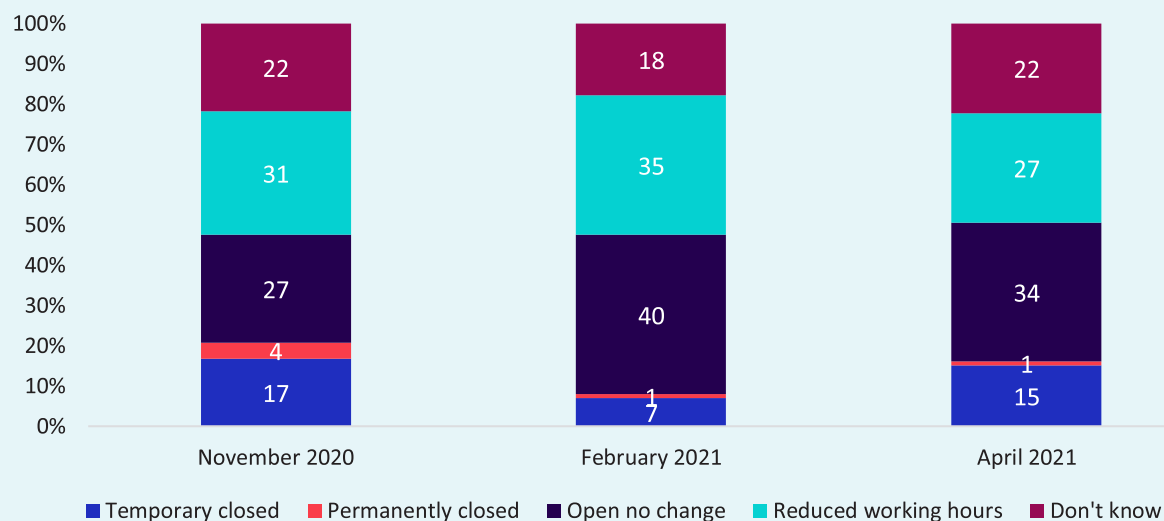
► **Figure 15:** Percentage distribution of enterprises, by number of workers in February 2020



Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

Since the onset of the pandemic, around one-third of the enterprises have had to reduce working hours. The percentage of enterprises reporting a temporary closure had decreased from 17 per cent in November 2020 to 7 per cent in February 2021, only to rise again to 15 per cent by April 2021. The percentage of enterprises that reported a permanent closure represented only a few percentage points throughout the pandemic (Figure 16).

► **Figure 16:** Percentage distribution of enterprises' current status, by wave



Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

► **Figure 17:** Reported changes due to COVID-19 outbreak and related restrictions, by wave (%)

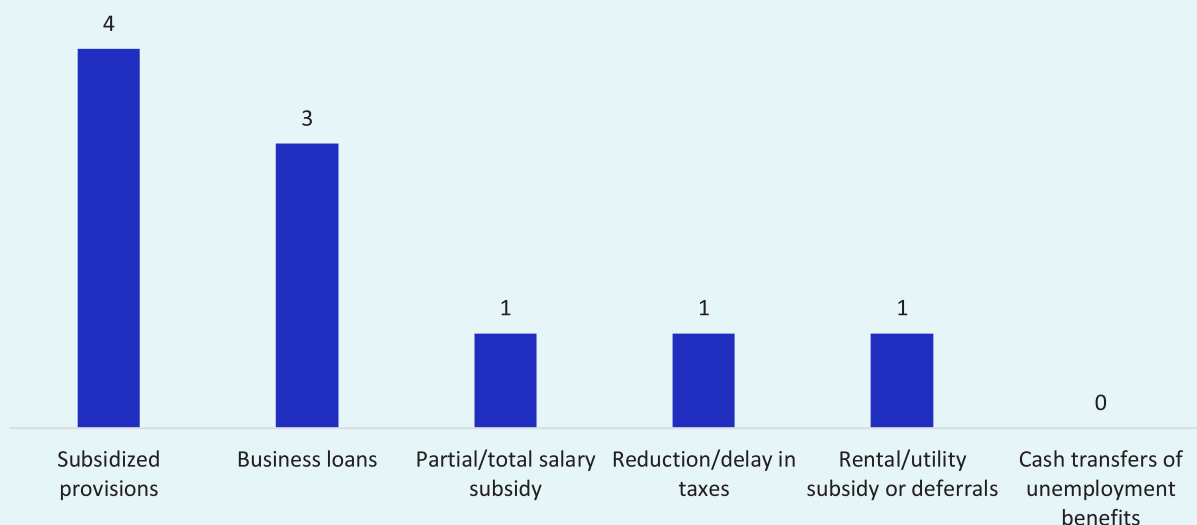


Source: Constructed by authorising the ILO/ERF COVID-19 Monitor.

Note: Changes reported only for employers.

Of all surveyed households that indicated owning a business, only around 10 per cent said they had applied for or are currently receiving government support¹¹ (Figure 18). Throughout the three waves, the most requested government support has been subsidized provisions and business loans (Figure 19).

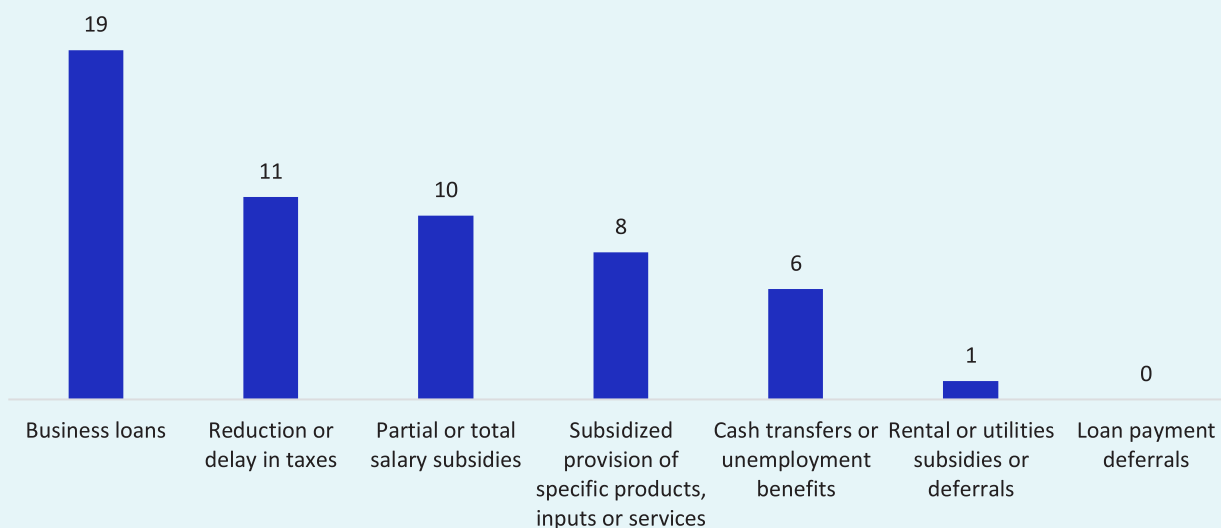
► **Figure 18:** Percentage of employers or business-owners who applied for or currently receive any government support



Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

¹¹ Multiple answers are allowed.

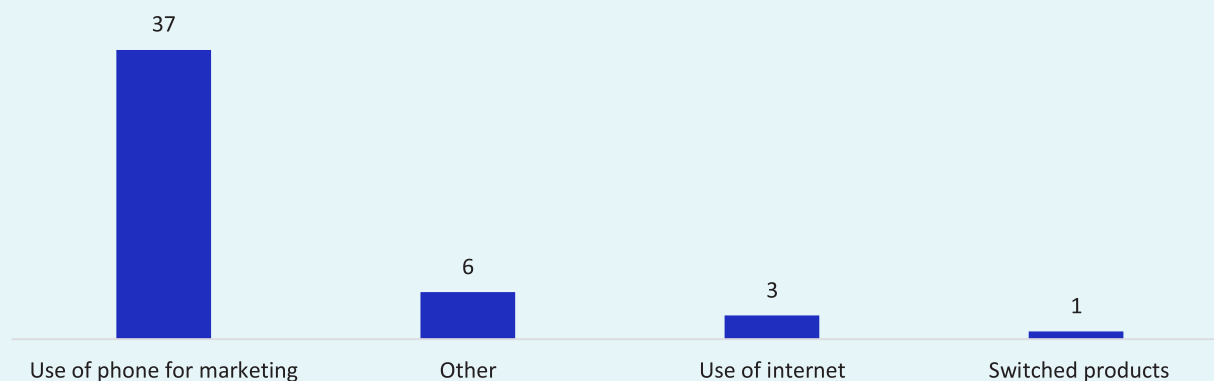
► **Figure 19:** Employers' or business-owners' most-requested policy support for COVID-19 (%)



Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

Throughout the three waves, the use of the phone for marketing and business is the most frequent strategy to reduce physical proximity with customers (Figure 20).

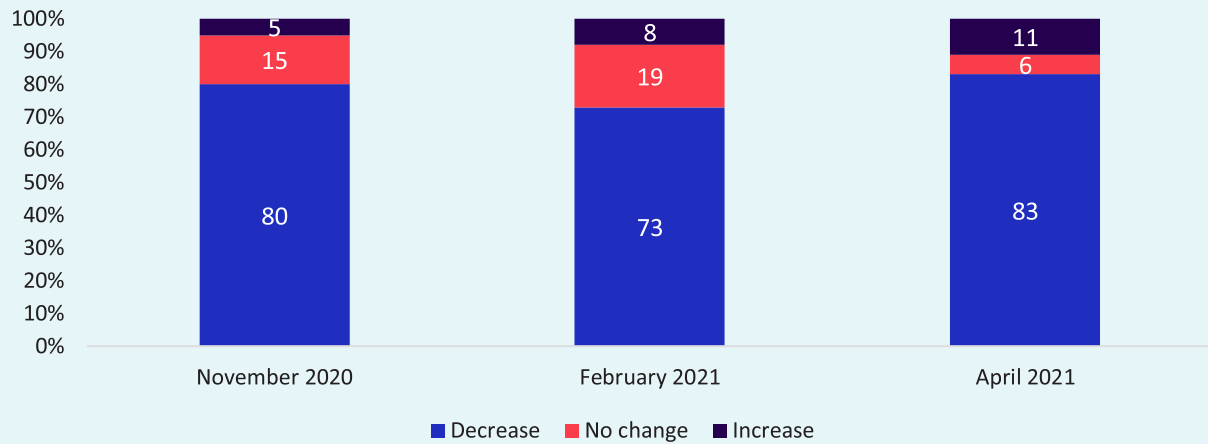
► **Figure 20:** Businesses' strategies to reduce physical proximity with customers (%)



Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

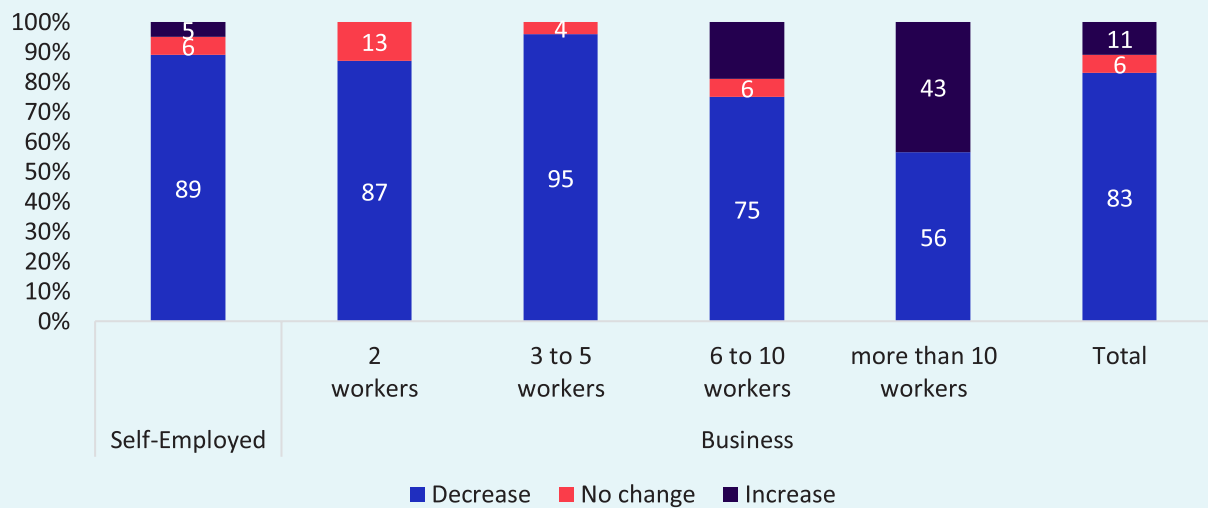
By April 2021, the percentage of surveyed businesses that reported a decrease in sales/revenues reached 83 per cent with an increase of 10 percentage points compared to February 2021, and 3 percentage points compared to November 2020 (Figure 21). On the other hand, the percentage of those reported an increase in their sales/revenues doubled between November 2020 and April 2021 and the expectations for 2021 compared to 2019 are optimistic. As of April 2021, 31 per cent of business owners expect an increase in revenue in 2021 vis-à-vis 2019, compared to 27 per cent in February 2021 and only 5 per cent in November 2020 (Figure 24). Larger enterprises were the least affected group in April 2021, only 56 per cent of which reported a decrease in revenues while 43 per cent even reported an increase (Figure 22, Figure 23).

► **Figure 21:** Change in sales/revenues in the last 60 days compared to sales/revenue in the same period last year in November 2020 to April 2021



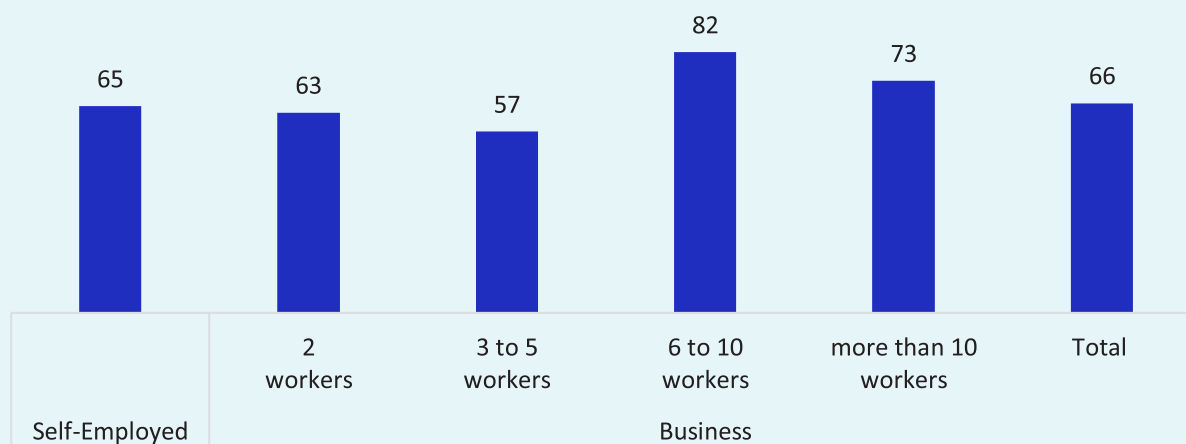
Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

► **Figure 22:** Change in sales/revenues in the 60 days preceding the survey in April 2021 compared to sales/revenue in the same period last year, by enterprise size



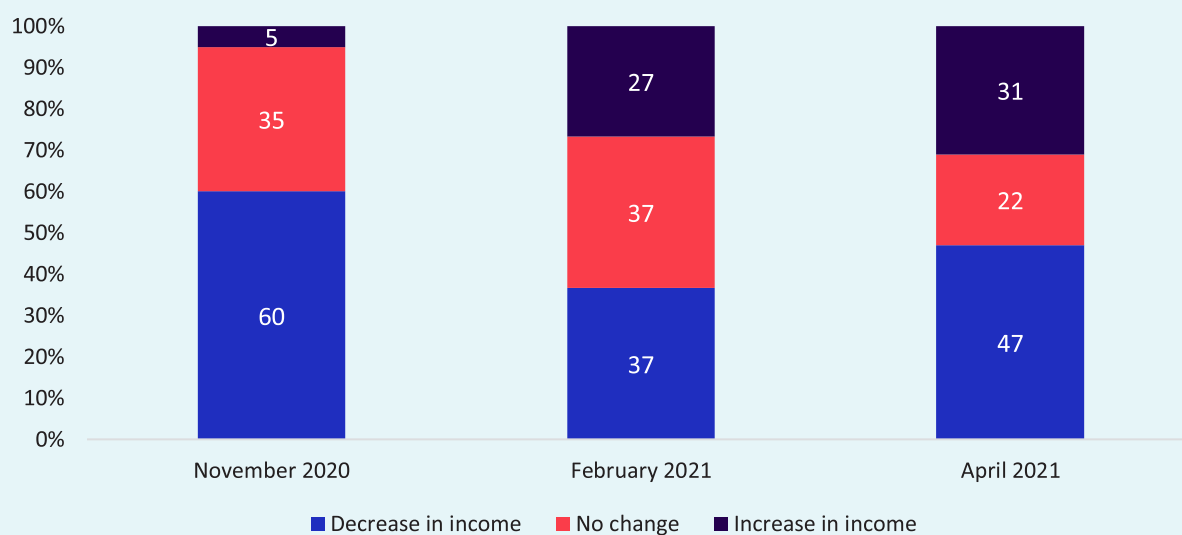
Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

► **Figure 23:** Average decrease in sales/revenue reported by enterprises, by enterprise size (%)



Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

► **Figure 24:** Sales expectations for 2021 compared to 2019, by wave

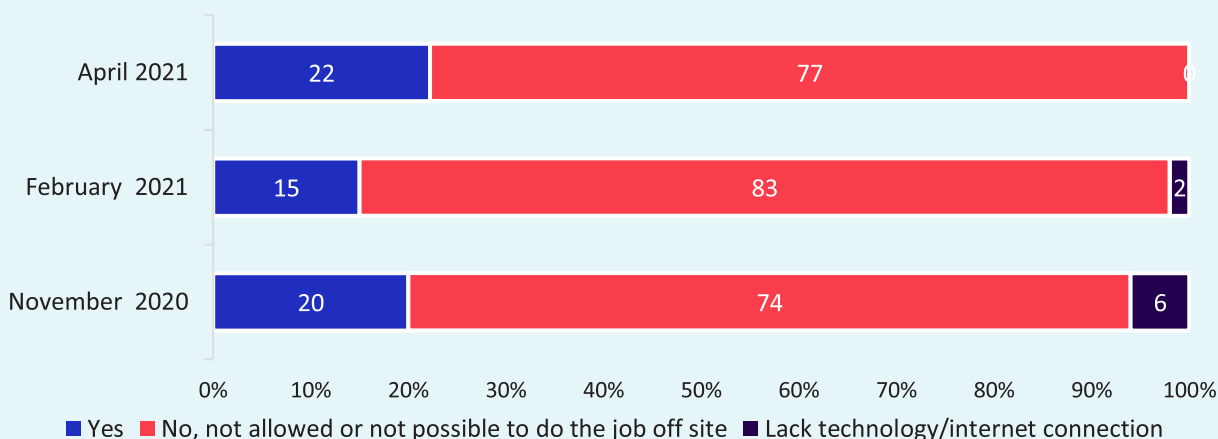


Source: Constructed by authors using the ILO/ERF COVID-19 Monitor

► Shift to online and home-based work

Throughout the three waves, there has been no stable trend in the ability to work from home . On average, around 20 per cent were able to work from home, and around 80 per cent were not able to. Either because the nature of the job does not allow them to, or because they lack the technology (Figure 25).

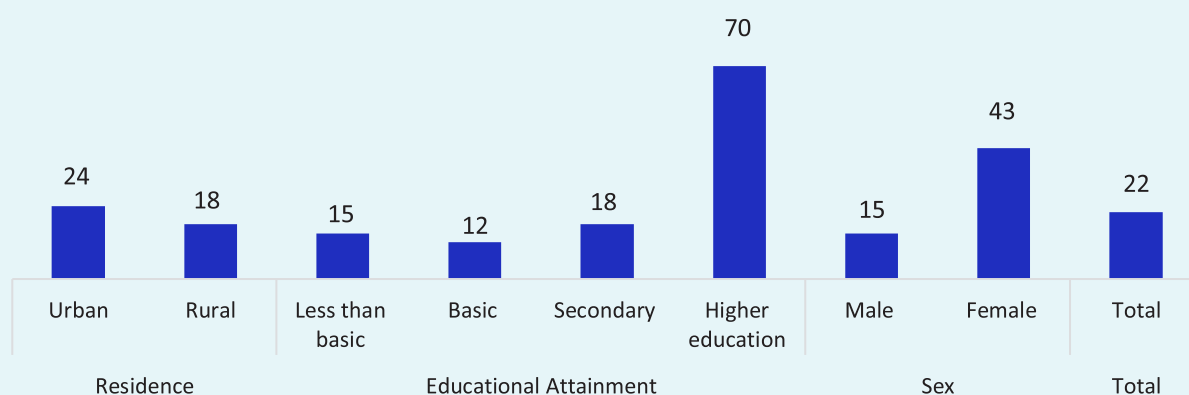
► **Figure 25:** Ability to work from home, by wave



Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

Workers with higher educational attainment were three to five times more likely to shift to online work than those with lower educational attainment (Figure 26).

► **Figure 26:** Ability to work from home, by residence, sex, and educational attainment (%)

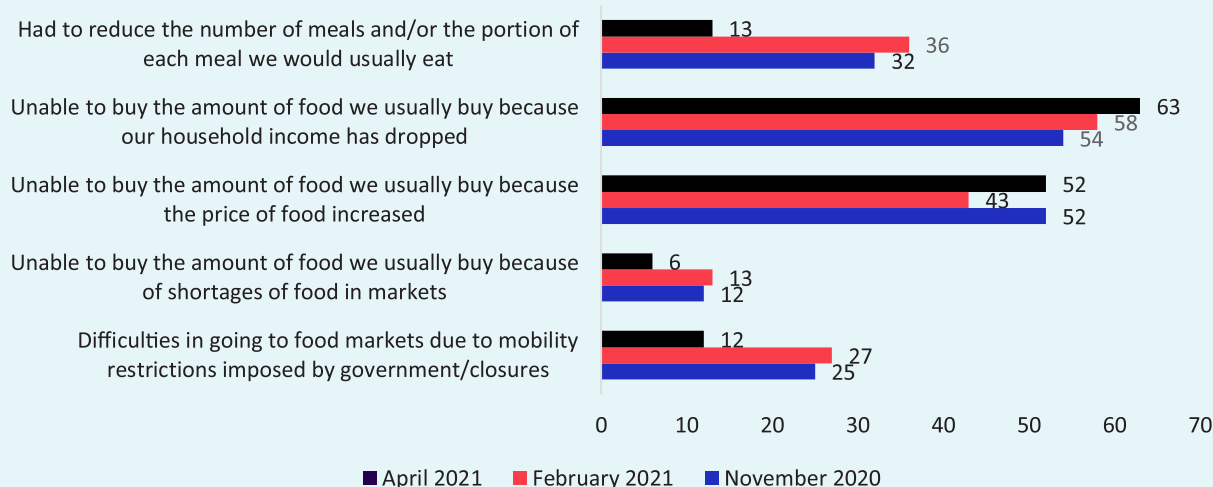


Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor.

► Have you had to...? Household coping strategies

Throughout the three waves, there is a slight increase in the percentage of respondents mentioning that their households were not able to buy the usual amount of food because the household income has dropped. In April 2021, more than half of the respondents reported not being able to buy the usual amount of food due to the increase in food prices (Figure 27). However, food shortage in the markets due to mobility restrictions are becoming less common difficulty.

► **Figure 27:** Ability to work from home, by residence, sex, educational attainment and economic activity

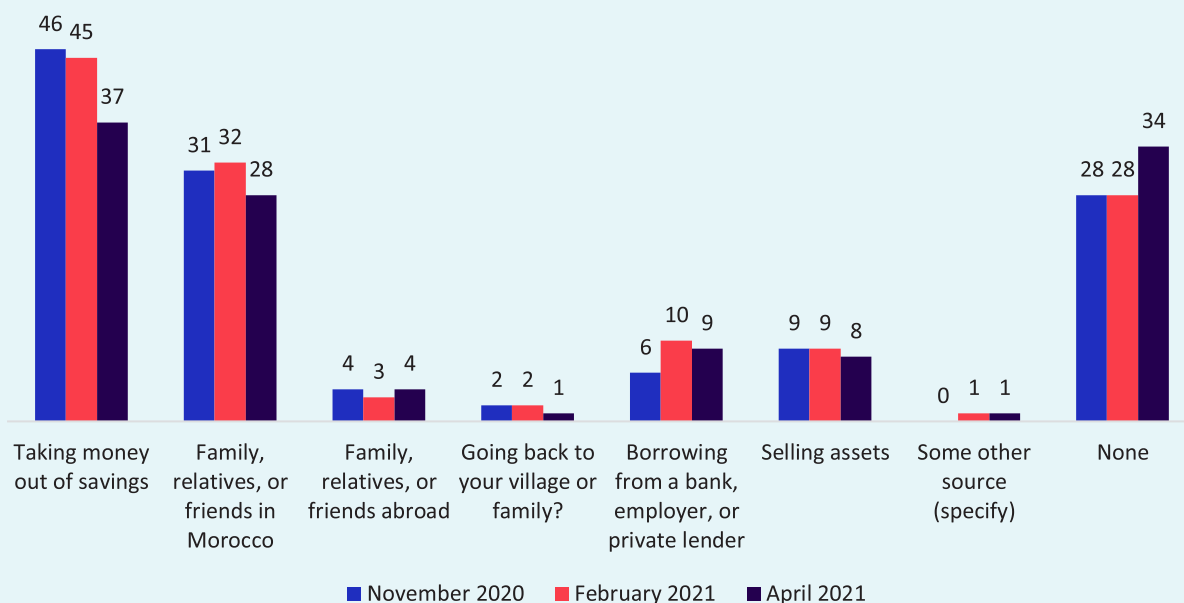


Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

Throughout the three waves, taking money out of savings and turning to friends and relatives were the most common coping strategies (Figure 28).



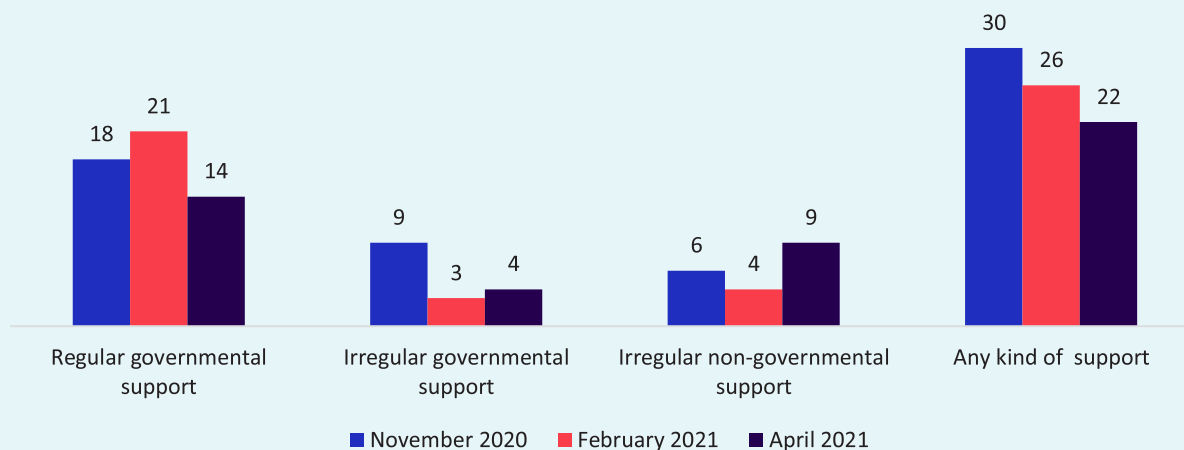
► **Figure 28:** Did you need to resort to any of these coping strategies since the end of February 2020? (%)



Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

While more households reported receiving irregular non-governmental support in April 2021 than in the prior waves, the percentage of regular and irregular governmental recipients has been declining.

► **Figure 29:** Which kind of support did you receive in the past month? (%)

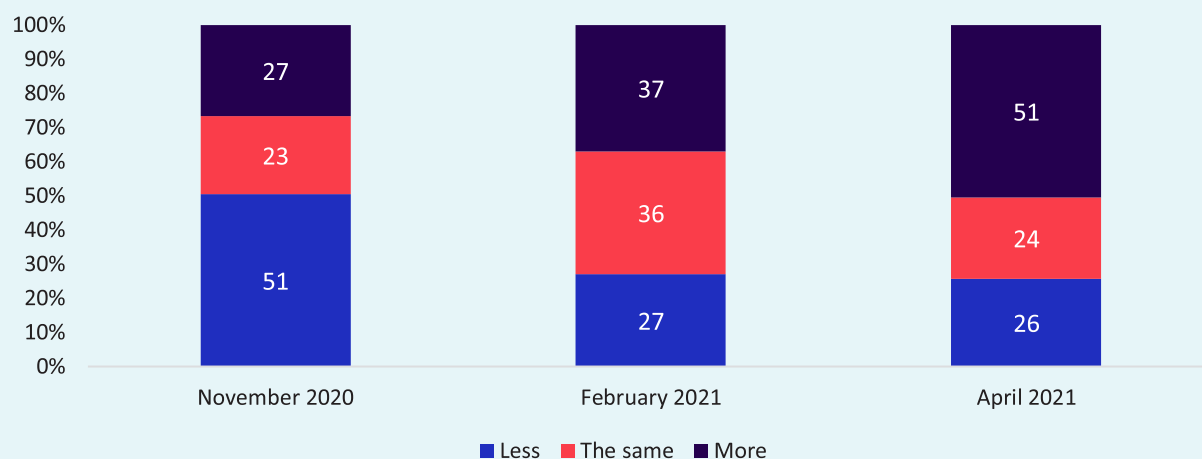


Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

► Farmers

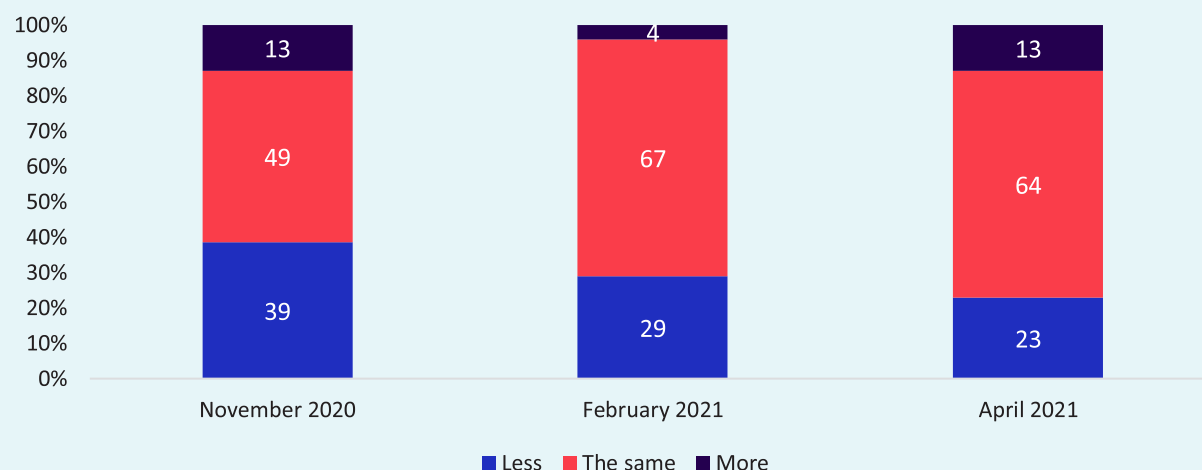
Throughout the three waves the proportion of farmers who reported a decline in actual or expected harvest has decreased from 39 per cent in November 2020 to 29 per cent in February 2021 and to 23 per cent in April 2021 (Figure 29). Meanwhile, more than half of the farmers in April 2021 reported using more seeds and inputs compared to last season (Figure 30). Despite the increase in the usage of inputs and the increase in harvest, three-fifths of the farmers in April 2021 are expecting a decrease in prices (Figure 31).

► **Figure 30:** Relative to the same season in the last year, how much have you harvested (do you expect to harvest) for your farm for this crop?



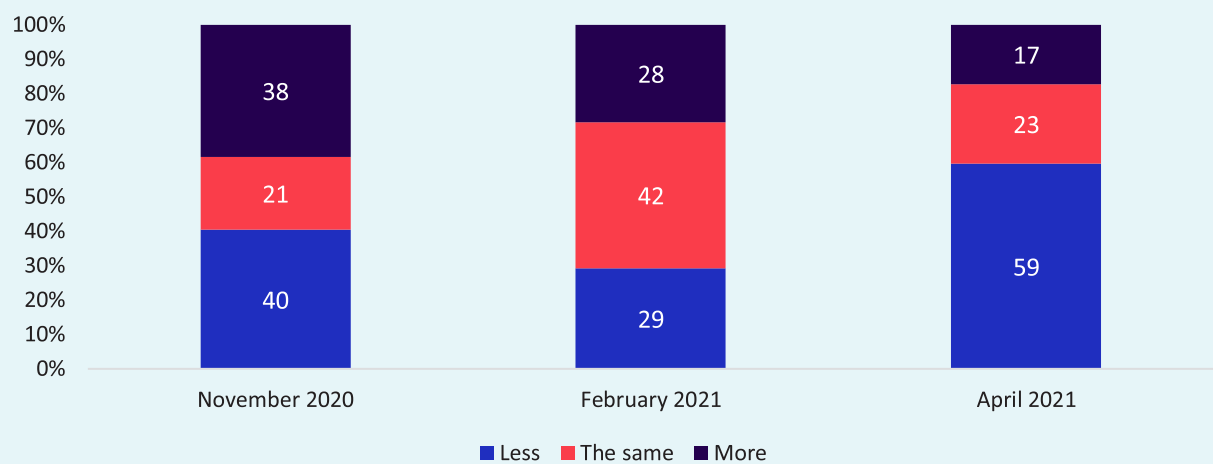
Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

► **Figure 31:** Sales expectations for 2021 compared to 2019, by wave



Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.

► **Figure 32:** Relative to the same season in the last year, how are /do you expect prices to change for this crop?



Source: Constructed by authors using the ILO/ERF COVID-19 Monitor.



Appendix

The COVID-19 pandemic poses a particular challenge for low- and middle-income countries, as well as vulnerable groups, such as informal and casual workers; and those engaged in survival self-employment. Assessing the impact of COVID-19 on the livelihoods of residents of countries in the Middle East and North Africa (MENA) region is critically essential to designing and assessing policy responses to the crisis and formulating plans for an equitable and sustained recovery. This survey, and the subsequent series of short panel phone surveys, are planned to monitor the effects of the crisis on households in Morocco.

The sample for the household survey were mobile phone users aged 18–64. Random digit dialing, within the range of valid numbers, was used, with up to three attempts if a phone number was not picked up/answered, was disconnected or busy, or picked up, but the respondent could not complete the interview at that time. Samples were stratified by country-specific market shares of mobile operators.

For follow-up waves, previous wave respondents were re-contacted if they consented to follow-up in the previous wave. Up to three attempts were used, including contacting second and family/friend numbers, if provided in wave one, on the third call. If the individual could not be reached or refused, a refresher individual was added to the sample in their place, randomly selected as with base wave respondents.

Inverse probability weighting was undertaken to reduce bias along with a several observable dimensions. Weights were created on three levels: Individual, household, and household member. Weights had the following inputs:

- Telephone operators and their market shares, provided by the data-collection firm
- Number of phones by the operator for individuals (individual weight) and household members (household weight and household member weight)
- Representative data with comparable demographic and household characteristics to weigh for non-responses

The panel attrition models use a few base wave variables in addition to those used for initial weighting. As specific additional variable is:

- Telephone operator
- Household income (categorically) in February 2020
- Base wave labour market status (employed, unemployed (search required), out of labour force)
- Interactions with sex for categorical income and base wave labour market status

The refresher weights are created in an identical fashion to the base wave, initial weights, but for the refresher samples within the subsequent waves of the panel.

For subsequent waves (waves after the base wave), cross-sectional weights combine the panel and refresher data. Weights are normalized to one within each of the panel and refresher samples and then combined into a single, representative cross-sectional weight.

All respondents who consented (1954 of 2002) to follow up in the prior wave were contacted in an attempt to include them in the subsequent wave. Varying degrees of follow-up occurred; 52.8 per cent (1032 of 1954) February 2021 respondents in Morocco were successfully tracked to April 2021.

► **Table 1:** Phone calls outcomes for Morocco panel sample

Result of call first try	N	col%
Phone disconnected/ busy Try for up to 3 times	151	7.7
Not in service	247	12.6
Did not answer try for up to 3 times	264	13.5
Picked up and refused	197	10.1
Incomplete, and refused	62	3.2
Incomplete, and call returned try for up to 3 times	1	0.1
Complete	1032	52.8
Total	1954	100

For the refresher sample, around 14501 random numbers were generated as a refresher individual, of which two thirds were not in service. The total sample size of those who completed the survey was 1073.

After excluding phones that were not in service, disconnected/busy (after multiple calls), and individuals who were not eligible from the response rate calculations, the response rates in the panel and refresher samples are 66 per cent and 20 per cent, respectively.



► **Table 2:** Phone calls outcomes for Morocco refresher sample

Result of call first try	N	col%
Phone disconnected/ busy Try for up to 3 times	3287	22.7
Not in service	5771	39.8
Did not answer try for up to 3 times	1898	13.1
Picked up and refused	1575	10.9
Incomplete, and refused	812	5.6
Incomplete, and call returned try for up to 3 times	3	0
Complete	1073	7.4
Not Eligible	82	0.6
Total	14501	100



Acknowledgements

This report is funded by the Swedish International Development Cooperation Agency (Sida), in collaboration with the International Labour Organisation's (ILO), and the project Advancing the Decent Work Agenda in North Africa – ADWA' Project.

