The objective of this analysis is to identify the impact of the COVID-19 pandemic on maize prices in the Banfora, Niéjeta and Tenkodogo markets. The analysis of the differences between observed prices and predicted prices from the thirteenth week to the twenty-sixth week of 2020 (from March to June) is based on a modeling of the trend in maize prices. During the confinement period, maize prices were higher than predicted due to the Covid-19 pandemic, and they gradually returned to their trend in the post-confinement period. However, a market-to-market variation is to be noted, as the rest of the document will show.

Banfora market case study

The Banfora market is a consumer and an assembly market located in the main maize production area in western Burkina Faso. The price of maize was stable and almost in line with the predicted price during March, but then jumped by 25% in the second week of April.

It remained constant after this increase until the second week of June. During the period of confinement, a positive deviation of 13% from the predicted price could be observed. The supply difficulties in the city of Banfora, quarantined because it was a focal point of the pandemic, might explain this trend.

Source: Authors from SIM/SONAGESS data

It should be noted that the increase in absolute and relative prices occurred two weeks after the restriction of movements decided by the Government of Burkina Faso. At the end of the confinement, in the first week of May, the difference between observed prices and predicted prices remained stable at an average of 12% until the second week of June. Then, observed prices and predicted prices came back to be on the same line. Maize prices were still presenting a stable level in the post-confinement period, although they were predicted to decrease due to the increase in supply. This could be explained by the increased demand pressure on the Banfora market, which is also an assembly market supplying other markets in deficit areas deprived of a regular supply during confinement.
Niéneta/Bobo-Dioulasso market case study

On the Niéneta market in the city of Bobo-Dioulasso, the price of maize was stable and below predicted level throughout March. Like in the Banfora market, a sudden, albeit more moderate, price increase of 12% was observed in the second week of April. After this, the price stabilized until the end of June with a slight deviation of 4% on average from the predicted price. At the end of the confinement, the price returned to the predicted trend. This resilience of the Niéneta market despite the disruptive effects of the pandemic can be explained by its very large connectivity. Indeed, the analysis of the network of grain markets in Burkina Faso (see Bulletin 006) has shown that Niéneta is the most connected market. This market is not only well supplied by surplus areas concentrated in the same region, but it also serves as a source of supply for the main markets in deficit areas.

Source: Authors from SIM/SONAGESS data

Figure 2: Maize price behavior in Niéneta/Bobo-Dioulasso

Tenkodogo market case study

Like in the other markets, after a period of stability during March 2020, an 8% increase in maize price occurred in the second week of April, two weeks after the start of the confinement period. The effect of the pandemic was observed from the last ten days of April until the end of May, when the observed price of maize was higher than the predicted price. The difference between actual and predicted price was 11% on average over the period. It was not until early June, i. e. one month after the quarantine was lifted, that the price of maize returned to its normal trend.

Source: Authors from SIM/SONAGESS data

Figure 3: Maize price behavior in Tenkodogo

The trend observed on the Tenkodogo market, which is both a consumer and an assembly market also located in a high production area, is somewhat different from the one observed in the maize production area (Haut-bassins region) where the Banfora and Niéneta markets are located. Indeed, the market supply disruptions stemming from the restrictions have led to an increase in maize prices. A downward trend will however start at the end of the confinement period, leading prices to their predicted level in early June. This stronger upward trend in price increase during confinement followed by a post-confinement decline for a market that is also an assembly market could be explained by a certain asymmetry between the supply of the market by small rural collection markets and its transfers to large consumption centers such as Ouagadougou. Indeed, the transport of small quantities of maize from rural collection areas may have been more disrupted by the restrictions on movement of people than the more structured transport of large quantities of maize to large consumption centers. This could explain the poor supply during confinement of the Tenkodogo market, which still had to face the same demand from large urban consumption areas, hence the price increase during confinement.

In general, at the start of the confinement period, markets reacted almost immediately to the disruptions resulting from the associated measures, particularly the restrictions on the movement of people and goods. However, the return to normal at the end of the confinement was achieved with a certain delay. This delay could be explained by the gradual lifting of confinement measures, including the restrictions related to public transport.