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SENEGAL

THE IMPACTS OF COVID-19 ON HUNGER PROJECT PARTNER COMMUNITIES IN SENEGAL

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EXECUTIVE SUMMARY

In March 2020, governments around the world attempted to manage the COVID-19 pandemic through national lockdowns and border closures. This global shutdown impacted people in a variety of ways—from halting economic activity and forcing millions out of work, to limiting access to healthcare, to causing food insecurity. The purpose of this assessment is to measure the effects and impacts of the health crisis caused by COVID-19 on The Hunger Project's (THP) partner communities in Senegal and to assess their capacity for resilience and ability to overcome the shocks of COVID-19 and the new challenges presented by the pandemic. The main objective of this study is to conduct a survey of households and traditional leaders in each community, including head nurses, neighborhood or village godmothers (*badjenu gox*) and epicenter leaders. Additionally, specialists in health and development issues, health relays and leaders of epicenters were interviewed.

This study was carried out with participation from members of Dahra, Dodel, Diokoul, Mpal, Namarel and Yenne Epicenters (THP program work areas). It was carried out by a multidisciplinary team led by the THP-Senegal Monitoring and Evaluation and Learning Officer and composed of other experts, including a journalist and a specialist in field surveys. A total of 267 households spread over 67 villages were surveyed by telephone, given the restrictions in place to control the spread of COVID-19.

It emerged from this study that people in the communities demonstrate a good understanding of many of the preventative measures and symptoms of the disease; however efforts must be made to ensure a broader understanding of hygienic practices and for the adoption of these preventative measures. For example, while hand washing and the use of masks are well known to the population, the practice of using of a disposable tissue while sneezing is less well known.

The inability to travel to the communities has strained THP's traditional programming, which is based on in-person workshops. Therefore, this study was designed to understand where community members were obtaining the latest information. It emerged that traditional media has served as a source of information for many people who consider it more reliable than social networks. Community radios played an essential role in raising awareness and disseminating information in Dodel and Namarel Epicenters particularly, where the leaders have regularly used the radio for public announcements and development activities.

It also emerged that the socioeconomic situation of households has been impacted negatively by the lockdown measures taken by the State of Senegal, ranging from the restriction of mobility, the ban on gatherings and the closure of markets. Most of the rural economy depends on the weekly markets (*loumas*) and their closure has been strongly criticized by many. The closure of land and air borders has dealt a hard blow to fishermen, who are forced to dock their big canoes because they have become unprofitable, in favor of small canoes that

allow them just to feed their families. Herders have had to trade their cattle for necessities just to survive. Farmers have seen much of their onion production rot in the fields due to lack of marketing.

Faced with this crisis, households have adapted as best they can by emphasizing food expenditure to the detriment of incidental expenditure. The number of meals has been reduced for some, while others have redefined the content of these meals, especially for breakfast.

From food insecurity to economic impacts to mutual aid, the shocks of the COVID-19 pandemic on rural communities have been great. The pandemic has tested the ability of THP work areas in Senegal to overcome shocks to the community in an effective manner, but it is clear that the communities are resilient and have the skills to overcome these challenges.

BACKGROUND

Since December 2019, the world has been living under the specter of an unprecedented health crisis. Starting in China, COVID-19 quickly spread throughout the world and was declared a pandemic on March 11, 2020 by the World Health Organization¹. Africa has not been spared, including Senegal, which recorded its first case on March 2, 2020. The Senegalese government took strong and restrictive measures to reduce the risks of spreading the virus in the Senegalese territory. It set up a committee composed of the medical corps to manage the health response, and other organizations to manage the social and economic response². The State has mobilized a response fund to support vulnerable communities affected by the health crisis, called "Force COVID," however, these actions will likely not adequately cover the need. At particular risk of being overlooked by Force COVID, are rural women and youth, many of which have not been recorded in the social register of beneficiaries for family security grants, the main targets of the Government of Senegal for relief funding.

Economic and financial consequences were not long in manifesting themselves with the economic slowdown. The initially forecast growth rate of 6.8% is now estimated at less than -0.7% for the year 2020.³ The rural area, where nearly 53.42% of the population lives, has seen its economic activities drop with the closure of weekly markets and the ban on inter-city transport. Additionally, in the rural areas where THP-Senegal operates, community members report the soaring prices of basic necessities, coupled with a drop in income. As a result, the issue of food security has become a major concern for both the government and non-governmental organizations.

In terms of the health response, the equipment and resources of the hospital services to treat those affected have been strengthened with the establishment of Epidemic Treatment Centers (ETCs). However, medical facilities technical platforms in rural areas are very poorly equipped to deal with the crisis.

With this context, THP-Senegal conducted this study to truly appreciate the consequences of this pandemic on the daily lives of the populations in the epicenter communities.

¹ <https://www.who.int/news/item/27-04-2020-who-timeline---COVID-19>

² <https://www.sec.gouv.sn/lois-et-r%C3%A8glements/lois-et-d%C3%A9crets-0>

³ <https://www.tresor.economie.gouv.fr/Pays/SN/indicateurs-et-conjoncture>

SECTION I: METHODOLOGY

The main objective of this study is to measure the effects and impacts of the COVID-19 pandemic on THP partner communities in Senegal and to assess their resilience. Specifically, the aim is:

- To assess and analyze the effects of the pandemic on the economic activities of THP's partner communities and their living conditions;
- To assess the level of knowledge of these populations about COVID-19;
- To understand the level of compliance with preventative measures and the strategies implemented to deal with the COVID-19 crisis.

Approach

The study began with surveys on July 20, 2020, 20 days after the lifting of the state of emergency declaration that had significantly reduced the mobility of people. Before the surveys were administered, there was one day of training for the interviewers to better understand the questionnaire and the objectives of the study. These surveys, initially planned to take place over 9 days, were extended to 15 days due to the coincidence with the 'Aïd el-Kebir holiday period. The validation process for the questionnaire somewhat delayed the study, which was supposed to take place in June 2020. Thus, adjustments were made to combine household surveys and individual interviews to avoid the study being delayed.

Sampling plan

The cluster-based sampling approach, in which the village committees are the primary unit and the households are the secondary unit, was supplemented by the snowball approach to implement the households survey.

The sampling size have been calculated from the following formula

$$\text{Sample size} = \frac{\frac{z^2 \times p(1-p)}{e^2}}{1 + \left(\frac{z^2 \times p(1-p)}{e^2 N} \right)}$$

N = population size • e = Margin of error (5%) z = score (1.65) related to confidence level of 90%

P: population proportion

A coefficient has been calculated by taking account of the sample size found and the total of household where the study occurred, after then the coefficient has been applied to each of epicenter household to find the needed sample size. Adjustments were made taking into account the available telephone numbers.

Conducting the Survey

Given the context of the COVID-19 pandemic and the mandated reduction in mobility, the household survey was conducted by telephone. In total, 267 households were interviewed. They were distributed among 67 villages in the epicenters of Dahra, Diokoul, Dodel, Mpal, Namarel and Yenne.

The questionnaire used was generated by THP-Senegal and validated after input from the Monitoring, Evaluation & Learning Senior Program Officer based in New York and colleagues in other THP program countries in Africa. It has six sections and is addressed to the heads of households. It was administered by three interviewers, two external interviewers and the Head of Monitoring and Evaluation of THP-Senegal.

To support data collection, each interviewer received a list of contacts and the number of households to be surveyed in each epicenter. The THP Monitoring, Evaluation & Learning officer verified the operability of the telephone numbers provided to the interviewers while enrolling the coordinators of the epicenter village committees in this study.

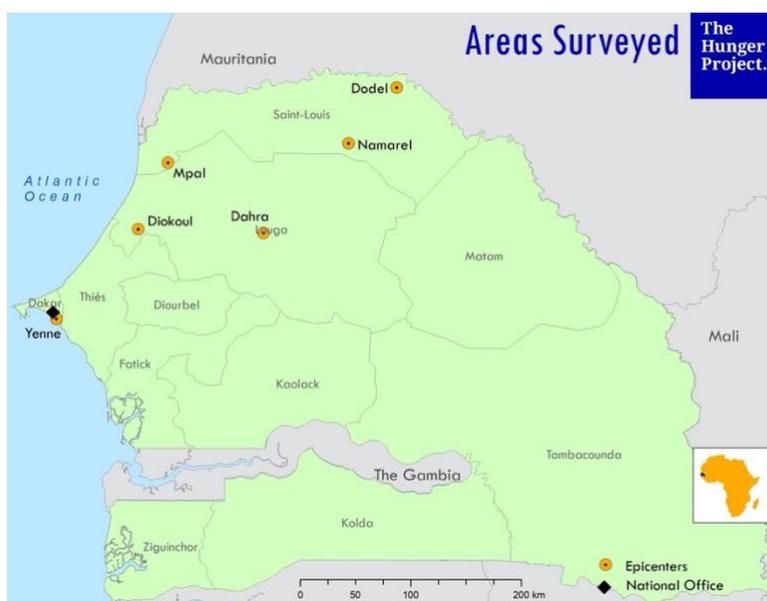


Table 1: Target List

| Epicenter | Number of villages surveyed | Number of households surveyed |
|------------------|------------------------------------|--------------------------------------|
| Dahra | 16 | 87 |
| Ndioum/Dodel | 11 | 45 |
| Diokoul | 6 | 10 |
| Mpal | 9 | 18 |
| Namarel | 18 | 44 |
| Yenne | 7 | 63 |
| TOTAL | 67 | 267 |

Data Collection Tools

For the purposes of data collection, different survey tools have been developed to suit the targeted audience and the specific types of information to be collected. Samples of these products are available in Annex 2.

Table 2: List of Targets and Tools Used

| Tools | Targets | Number |
|------------------|--------------------------|---------------|
| Household survey | Head of household | 267 |
| Health post card | Health post chief | 3 |
| Interview guide | Health godmother | 2 |
| Interview guide | Leaders of the epicenter | 5 |
| Interview guide | Development officer | 3 |

Focus group and individual interviews

Given the travel restrictions in place, the epicenter leaders were crucial to the organization of focus groups. The leaders received the validated questionnaire by email or WhatsApp and the THP Monitoring, Evaluation & Learning officer, based in Dakar, called via video chat to supervise and facilitate these meetings.

For individual interviews involving head nurses and community relays, the interview guide was conducted by telephone. The leaders of the epicenter recorded the calls and sent the tapes to the Monitoring, Evaluation & Learning officer for transcription and analysis.

Data processing and analysis

The database was exported to Excel from the iFormBuilder platform, THP's standard MEL database. The THP Monitoring, Evaluation & Learning officer was responsible for processing and analyzing the data.

Difficulties and limitations of the study

This study took place during the COVID-19 pandemic. Thus, a number of difficulties were noted in the conduct of this evaluation. The faulty telephone network in some places made communication impossible at times. In addition, some phone numbers in THP's database do not work anymore. For those who have a telephone, the lack of electricity in the village meant that the telephone could be out of power for a whole day.

Women were much more receptive to the survey than men, who sometimes refused to answer our questions. Some households were caught up in field work or household chores and, as a result, missed scheduled appointments.

Socio-demographic characteristics

The majority of those surveyed were female (55.05%). The average age of the survey respondent was 47. The average household size was 15 people, but it varied depending on the locality. In Yenne, because of its urban environment and the density of the population, there are nearly 17 people per household, whereas Namarel, with its dispersed dwellings, records the smallest number of people per household with 12 people.

Education Level

Education is one of the areas which THP-Senegal attaches great importance given its contribution to the fight against poverty. Indeed, the insufficiency of school infrastructure is one of the greatest challenges facing the government due to the increasing population of school age children. Thus THP-Senegal has set up a system in each epicenter to promote the education of children and the literacy of partner communities in local languages. The graph below gives us an indication of the level of education of the communities in the localities studied.

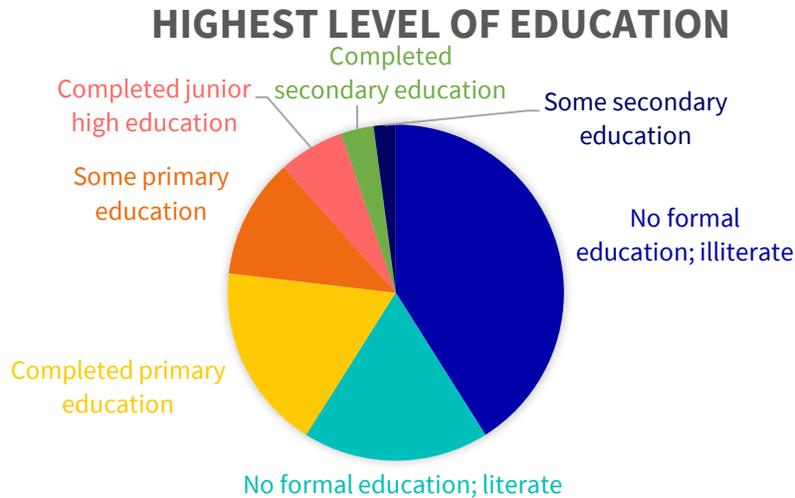


Figure 1: Levels of education in surveyed epicenters

In summary, 61.22% of the individuals surveyed can read and write, but only 3% were able to complete high school. A significant proportion of the population surveyed (56%) have not followed a formal school course, and of this population the majority of these are illiterate (60%). Among those who completed the primary education cycle (17%) only 6% were able to access secondary school. According to the population, the low level of schooling is largely due to poverty.

SECTION II: SURVEY ANALYSIS

Knowledge of the Disease

The majority of the people surveyed have a fairly broad knowledge of the general symptoms of the disease (fever, dry cough, sore throat, etc.) and of the preventative measures, but respect them to varying degrees. Based on the survey discussions, it appears that many are not following the guidance about preventative measures. Some people are still in denial of the disease, as Adama Sow, health case manager in charge of the Gaddaty health hut, testifies:

"Since the beginning of the pandemic, I have visited several villages to sensitize the population on the preventative measures to adopt and explain the symptoms, but I have the impression that some people continue to believe that the disease does not exist, and that is what frightens me as a health actor."

Women are more committed than men to respect the preventative measures and are more likely to set up handwashing stations and implement hygiene protocols for their families, including the children, as attested by the testimony of Aby Touré, Mpal Epicenter:

"I don't joke about cleanliness, especially in this period of pandemic. I set up a handwashing system very early in my house with my own means. Everyone who comes into the house is required to wash their hands. Also, my grandsons when they come back from school, I set up a place where they leave their bags to be disinfected."

The work done by the *Bajenu Gox*, or “village godmothers,” was praised by many of the people interviewed. The *Bajenu Gox* initiative provides support to women during the prenatal, delivery, and postpartum periods. The *Bajenu Gox* act to relay other public health information as well, conducting awareness meetings on topics like malaria and HIV/AIDS. They have shown unfailing commitment through the awareness and information sessions and have been an important lever in the fight against COVID-19.

Knowledge of preventative measures

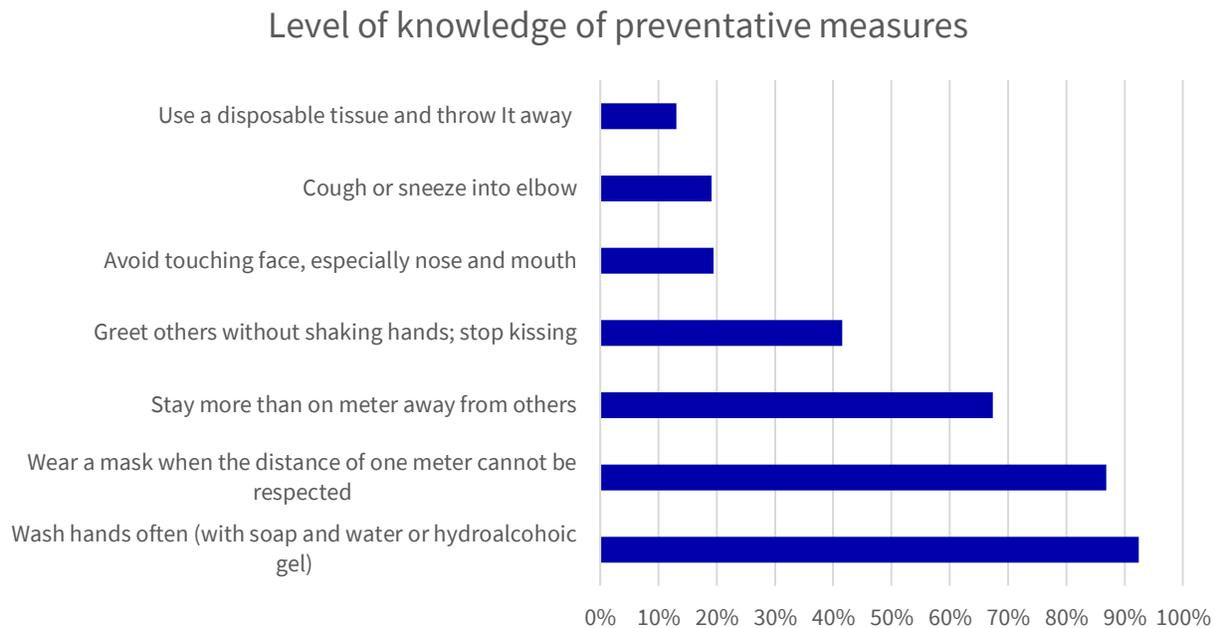


Figure 2: Level of knowledge of preventative measures in surveyed Epicenters

Most preventative measures are known by a large proportion of the households surveyed. Handwashing is the most known, and the most used, by households (92.5%). It is followed by the wearing of masks (86.89%), which is considered to be an effective way to protect against the virus. However, the use of a handkerchief in case of sneezing is little known. Only 13.10% of households said they were aware of this preventative measure, and in some villages, there are no handkerchiefs to throw away. In Dodel, for example, only 4.44% of households consider sneezing into a handkerchief and throwing it in a garbage can as a preventative measure. This measure is best known in Mpal, where 39% of the households surveyed said they were aware of it.

During the focus groups, the cost of masks was mentioned as a barrier by some participants, who believe that the price is relatively high for a head of household who has to buy nearly 20 disposable masks per week to comply with health guidelines. It is not uncommon to see someone wearing a mask for two days, despite what this entails in terms of hygiene, due to lack of sufficient means. Adama Sow reports most people in rural areas have been using reusable, cloth masks made by local tailors. This presents hygiene concerns because wearing the same mask day after day may hinder the health benefits of wearing one. Changing masks or washing masks daily is recommended but is often not an option due to financial restrictions for all community members.

To mitigate the cost of the masks, community-based youth organizations engaged tailors from the different neighborhoods of the Mpal and Yenne Epicenters to make masks available to the population at a lower cost (200 FCFA per unit) and of good quality. In spite of this and the rapid spread of the disease, the wearing of masks is still not unanimously accepted in

these communities. In Dodel and Namarel, the turban, which is part of the populations' clothing tradition, is often used as a means of protection against COVID-19. As Moussa Bâ living in Namarel testifies:

"Here, few people wear masks as we are in a desert area, people are used to protecting themselves against sand winds with their turban, it is the same device that is used to protect against COVID-19."

Knowledge of symptoms

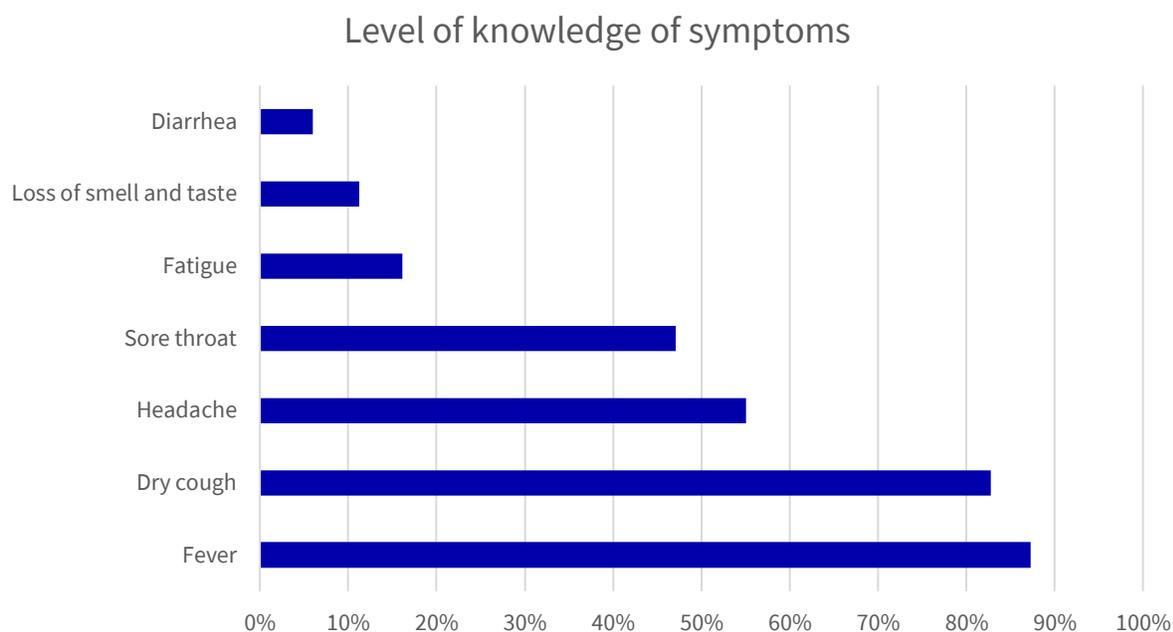


Figure 3: Level of knowledge of symptoms in surveyed epicenters

The study reveals that households know the symptoms of COVID-19 to a varying degree. Indeed, 87.26% of households recognize fever as a symptom and 82.77% recognize dry cough. However, only 6% of households think that diarrhea is a symptom and only 11.23% of households say a loss of smell and taste is a symptom of COVID-19.

Information Channels

All the households surveyed said that they were informed of the existence of the disease at a very early stage through different information channels. THP-Senegal has carried out information and sensitization campaigns using traditional communication media, in addition to channels adapted to the locality, such as carts and other vehicles equipped with sound equipment broadcasting messages.

Health center posters have been used during awareness caravans. However, a low frequency of visitation to the health centers has been observed during this period, because many people

were afraid of contracting the coronavirus. To inform themselves, people used more traditional media.

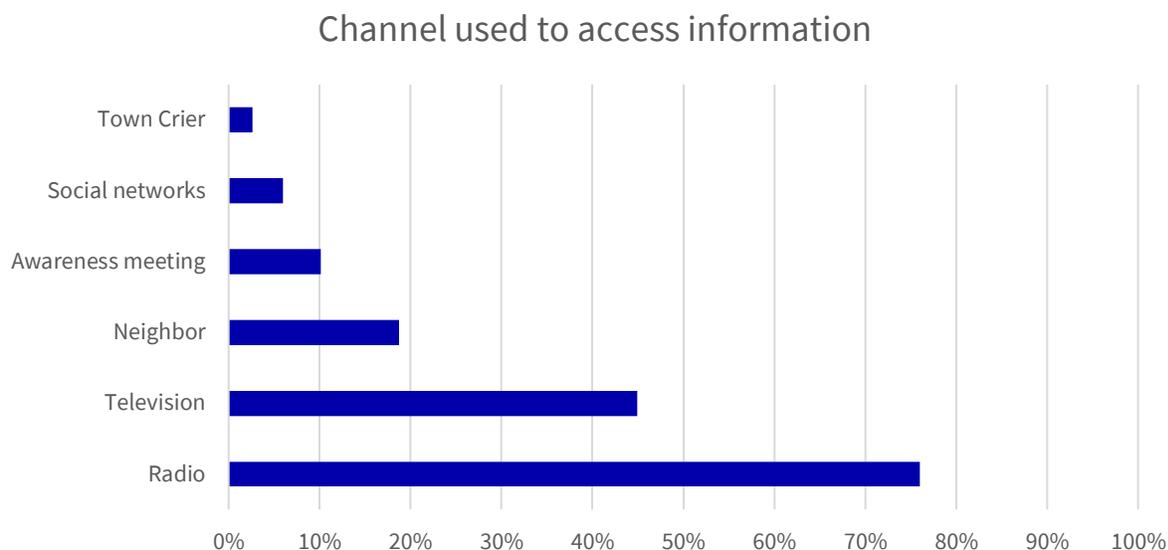


Figure 4: Channel used to access information among surveyed population

The graph above shows that the radio (76.04%) was the most popular means of getting information. The use of the radio is explained by the fact that it is the most accessible means of information, especially for the inhabitants of villages who do not have electricity.

The villages served by the epicenters of Namarel and Dodel are not well served by traditional media and national radio. As such, community radio stations were leveraged to carry out the awareness campaigns. 88.76% of the households surveyed in Dodel and Namarel said they had received information from community radio stations.

Television was used by 44.94% of households to provide information about COVID-19, and many of these households say they follow the MSAS (The Ministry of Health and Social Action) daily updates on the progress of the disease.

Social media (6%) and Town crier (2.62%) were least used by households for information. For those who use social media for information, their average age is 43 and many of them are in Dahra and Yenne. These are two peri-urban localities which benefit from better coverage of Internet networks. Households using

Recommendation:
When designing training modules, facilitators should focus on sharing about the symptoms of the disease, the protocol for burying the dead of COVID-19 and the preventative measures that are not well known to the general public, in particular sneezing into a handkerchief, to complement the information being shared through other media channels.

traditional media for information find it to be much more reliable than social networks, which sometimes convey false information.

Only 10.11% of the households surveyed participated in awareness meetings to learn about the disease. This low number is explained by the constraints related to the distancing health protocol.

Economic consequences on households

The health pandemic has led to an unprecedented economic and financial crisis that has generally affected all households. No sector has been spared. This study revealed that 77.15% of the households surveyed experienced decline in income with varying proportions depending on the sector of activity, which is explored in more detail below.

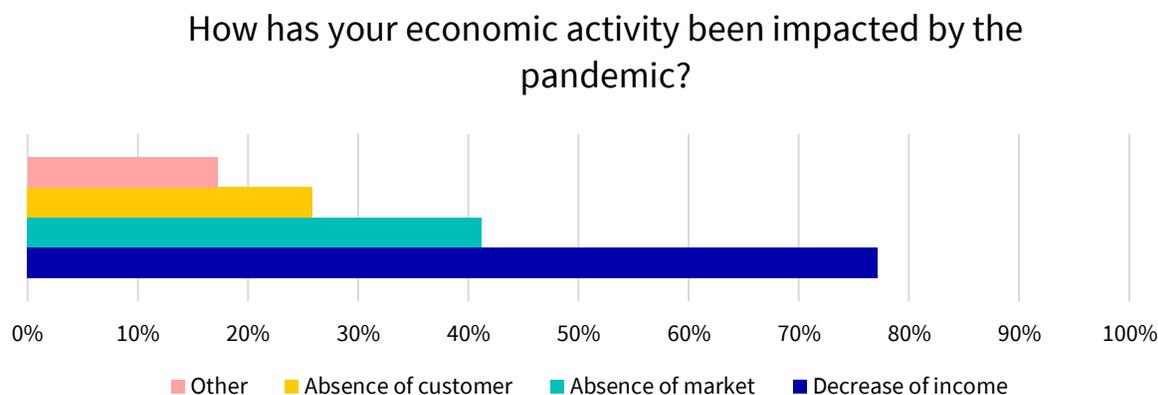


Figure 5: How Economic Activities Have Been Impacted in surveyed epicenters

Households Active in Trade

The study found that households that are active in trade, about 37% of the total surveyed, seem to be more affected by declining incomes due to supply difficulties, loss of purchasing power of the population and distrust of some people for hygiene reasons.

The testimony of a respondent residing in Yenne is enlightening:

"I ran a small business on the corner of the street where I was serving breakfast. With the health crisis, many clients no longer come, certainly they are afraid of catching the disease. My revenue losses are huge."

The product supply chain with Mauritania has been disrupted by the closure of the borders. This has reduced the availability of certain products such as milk and sugar in Namarel and Dodel, where people are facing rising costs of goods. As Salif sow de Thialaga at Dodel attests:

"All commodity prices have increased. The can of oil that was bought to 20,000 FCFA is now sold at 22,000, the 25 kg milk bag has

seen an increase of 7000 FCFA , from 45,000 FCFA to 52,000 FCFA , at the same time household incomes have decreased. This makes our lives difficult."

Breeders

23% of households earning their income from livestock say they are experiencing a decline in income. This loss is related to the closure of weekly markets, combined with the prohibition of ceremonies or parties that cause gatherings of people (family ceremonies for example, Gamou, Ziar, etc). Typically, these ceremonies are very common opportunities for the sale of livestock for consumption.

These breeders hoped to make up for the losses during Aid el Kebir holiday. Unfortunately, the expected revenues were not seen for several reasons, including the low purchasing power of the population and the increasing number of people who have begun selling sheep after receiving funding from the rapid entrepreneurship delegation.

Moussa Harouna Bâ of Namarel said:

"A good part of the breeders make substantial gains during the Aid el Kebir period that covered their annual expenses and allowed them to buy sheep for the coming year. Unfortunately, this is not the case this year, the health crisis has gone through this. Unsold sheep will increase loads and at the end of wintering, livestock feed will have to be purchased, the price of which is sometimes out of reach of the breeders. This year is likely to be difficult for breeders despite the early installation of wintering."

Agricultural households

Approximately 58% of Senegal's population lives in rural areas. Nearly 70% of these people are involved in agriculture and the sector contributes 16% to the GDP.⁴ Family farms occupy nearly 95% of the country's agricultural land.⁵ Many farmers still depend on rain-fed agriculture, which remains variable depending on the season. This sometimes compromises agricultural production. However, flood farming is practiced in the Senegal River valley, especially for the cultivation of millet and maize. Market gardening crops are highly developed in this part of the country, especially in Dodel and the surrounding villages, which produce a good amount of the onion consumed in Senegal.

13.85% of the people surveyed said they earn their income from agriculture. These farmers believe that their income has dropped significantly due to the slump in production caused by the state of emergency decreed by the government, which has considerably reduced the mobility of people and goods. Trucks and other transport vehicles that moved product from production areas to large markets or storage facilities were almost at a standstill.

⁴ https://www.ansd.sn/ressources/publications/1-SES-2016_Etat-structure-population.pdf

⁵ <https://www.ipar.sn/IMG/pdf/lagriculture-familiale-a-lepreuve-de-la-secheresse-et-de-la-liberalisation.pdf>

Tahirou Sy from Nianga Idy village testifies:

"Usually, the traders came from Dakar to buy the harvest, unfortunately, this year it's something else. So, a good part of the onion production has rotted in the fields due to a lack of conservation infrastructure and customers. What we have left, we are trying to sell it at the weekly markets that have just reopened, but for the moment it is not very crowded. Many people do not want to take the risk of going there. Now that the rainy season has started, we are faced with another problem, which is the delay in the implementation of inputs, especially fertilizer, which will undoubtedly hinder the growth of crops, therefore the expected yields. If there was a system of conservation and processing of agricultural products, certainly a good part of these products would be valued."

Households criticize the fact that the line of Rapid Entrepreneurship Delegation credit of two billion CFA Francs, which was designated to benefit merchants for the purchase of onion production in the Niayes and the Valley did not benefit producers of Dodel and Mpal.

Fishing households

For households involved in fishing in Yenne, the decline in income is mainly due to the fall in fish prices. Indeed, fish such as thiof and sea bream, which are typically destined for export, have seen a drastic drop in their price due to the closure of borders. These fish now trade between 2,500 and 3,000 FCFA, down significantly from their normal price of 6,500 FCFA per kilogram. This led many fishermen to dock the large canoes because the revenues they earned from the sale of fish no longer covered the costs of buying fuel and bait. This has had a negative impact on the economy of wholesalers who depend largely on these fishermen. The other problem raised by households during the survey is the increase in costs associated with the purchase of ice. As Thiandoum attests:

"People who used to come from Dakar to buy fish, now they prefer to buy at the central market of Pikine much closer, which causes poor sales at Yenne."

According to postmaster Amadou Sow:

"The fuel subsidy could boost the fishing economy in Yenne, which occupies more than 90% of households, so fish such as Thiofs and sea bream will be accessible to a good part of Senegalese, especially those in the interior of the country."

However, a timid recovery is being noted in the sector at Yenne. The women processors who had a large stock of smoked fish are gradually selling it and the fishing companies based in Diamniadio and Dakar are starting to relaunch their orders for fish.

Difficulties Accessing Credit

The COVID-19 pandemic has significantly reduced access to credit. The decline in economic activities has created repayment difficulties at epicenter microfinance centers. However, in Mpal the committee has adjusted the granting of credit, favoring small loans in order to limit the risks associated with the non-payment of these credits.

Household coping strategies

In the wake of the health crisis, many rural households have seen their incomes decline significantly. To cope with this situation, households have adopted different strategies, notably in the management of expenditures. Participants in the focus groups say they are redefining their priorities, which will now be geared toward food spending. Non-food expenditures such as education and transport have been on a downward trend due to school closures and reduced mobility.

While some households have reduced the amount of rice they prepare for meals, others have adopted the habit of eating one meal per day. Some community members say that they postpone lunchtime until 4 p.m. or 5 p.m., knowing that they will not have dinner.

Alternatively, some community members set aside part of their lunch in order to save it for dinner. In many households, the taste or quality of the food no longer matters, as it is more important that there is food to eat. In many households, traditional breakfast bread has been replaced by couscous mixed with milk. This change in habit is due to the decrease in household savings, as community members fall back on what is available and cost efficient.

Over 65% of households have reported severe or moderate hunger, based on THP's household hunger score.⁶ Children are at an increased risk for malnutrition as the pandemic continues to affect food quantity and quality. Of particular concern, the pandemic has caused a decrease in nutrition consultations, especially among children under 5 years of age, making it difficult to understand the severity of hunger children are facing. According to Mbidi's health post chief:

"The number of children coming for consultations has decreased from 100 per month to 30, which is not without saying that nutritional monitoring of these is now difficult."

Social solidarity among the population has helped to mitigate the negative effects of the crisis, between the sharing of meals, the sharing of donations at Yenne and the contributions of villagers and those living overseas. This outpouring of solidarity made it possible to buy

⁶ <https://www.fantaproject.org/monitoring-and-evaluation/household-hunger-scale-hhs>

large quantities of rice and distribute them to community members. This was most notable in Dodel, where the amount of 5000.000 FCFA was raised to purchase of food for the people. This action was strongly welcomed by the population.

The government's aid, given as part of the resilience plan to alleviate the suffering of the population, was deemed insufficient by some of the population. Notably the villages of Gassel and Djouth, all located in the commune of Doumga lao, Podor department, say they have received nothing.

With the closure of the weekly markets, farmers adopted the strategy of bartering in order to sell their livestock, often with a loss of value, as the shopkeepers who traded them rice, oil and sugar most often undervalued the value of the cattle. This adaptation strategy was combined with telephone sales, with negotiations taking place via telephone before delivery. As Mamoudou MBelgane, says:

"I have never seen such a crisis in my lifetime. Today I am 60 years old. I only have my cattle to live on. The closure of the weekly markets led me to trade my ram which could cost 80,000 FCFA for rice, sugar for a value of 50,000 FCFA. But in accepting this transaction, my water bill remains unpaid, because I have no money to honor it. The main thing for me is to feed my family."

The loss of income and the uncertainties of the future during the COVID-19 lockdowns led to a stressful situation in households, which many experts believe has led to an increase in domestic violence. Our survey revealed that 30% of the households surveyed had experienced domestic violence, with verbal abuse as the most cited form. Dahra Epicenter records the greatest number of marital conflicts, with 59% of households admitting to experiencing difficulties within their household. At Yenne, nearly 19% of respondents believe that they have experienced difficult situations which have led to domestic conflicts. In Namarel, 11% of households have experienced domestic violence.

Water and sanitation

This health crisis is a reminder of the absolute necessity for populations to have access to safe water to protect themselves against disease. Nearly 94.75% of the population have access to drinking water through different sources, such as drilling or tap. However, nearly 5.25% of households report using water from an uncovered well, which does not meet the criteria for potability according to the criteria established by the World Health Organization.

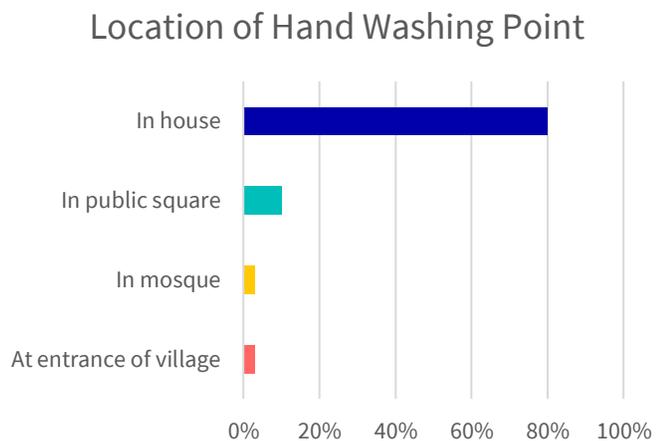


Figure 6: Hand washing locations

Household access to water has facilitated the establishment of hand-washing stations to comply with WHO's health protocol. Among the preventative measures, hand washing is the most well-known (92%). 79% of households surveyed say they have a hand-washing station, which is significant when compared to the national rate of 27.2%.⁷ Almost 64.35% of these hand washing points have been installed by households themselves, with equipment often composed of cans, soap and bleach. Now, the challenge lies in the sustainability of community hygiene actions, which will undoubtedly help to prevent other diseases related to hygiene.⁸

Furthermore, it is important to stress that the synergy of action that occurred between medical authorities, NGOs and local authorities has resulted in the establishment of hand-washing stations in public places and at the entry of villages. This is to enable people from elsewhere to comply with the preventative measures. In Diokoul, this action was carried out by the leaders of the epicenter and the people strongly welcomed this incredible citizen initiative.

Recommendation:

It is important to change the basic handwashing equipment currently used by households to a sustainable system of barrels and taps. Local authorities and nongovernmental organizations have an important role to play here.

⁷ https://satisfaction.ansd.sn/ressources/publications/Repere%20statistique%20COVID_N3-acces%20eau%20et%20lavage%20des%20mains.pdf

SECTION III: RECOMMENDATIONS

For the government of Senegal

- To increase the observance of preventative measures, regulation compliant face-to-face interaction between the population and medical staff, including community volunteers trained in health, would be more effective in educating the community than a radio or TV show hosted by people unknown to the locality. This approach would certainly allow the many people who still doubt the existence of the disease to better understand the dangers that lie ahead.
- Communication media should take the different aspects of the evolution of the disease into account, i.e. follow an evolutionary curve instead of showing only the preventative measures already known by a majority of the public.
- The government should rely more on the remarkable capabilities of neighborhood leaders or village leaders to share the message with their communities rather than sending youth teams to places where they are not well known. This will increase the number of people who trust the information.
- To support economic relief, we highly recommend that the government reexamine the quotas required for the distribution of livestock feed. As it stands, the quantities distributed are below the needs.

For communities

- One of the lessons learned from this study is the disinformation on social networks has ended up creating panic in some communities. Communities should favor traditional media for information or refer to the local medical authorities.
- The establishment of processing units and storage stores could be a solution to the loss of agriculture product.
- To reduce the rate of domestic violence during times of hardship, communities should set up warning and watchdog committees in which the teachers, the villages chief, the religious leaders and the neighborhood or village godmothers are trained in stopping domestic violence and commit to playing a great role in preventing it.

For The Hunger Project

- The need for an emergency fund as part of our food security programs has become clear.
- THP must now be flexible in redefining projects in the event of an emergency, which will undoubtedly help to relieve people who continue to seek help. To do this, it is important that funders also have flexibility to maximize the impact of their investment. For example, THP could support animators who have already received training in soap and bleach manufacturing to enable them to become true entrepreneurs. With this pandemic, soap and bleach have been used a lot at the first level of prevention.

- The pandemic has also revealed that non-governmental organizations, central and local authorities must agree on a common and coordinated approach to relief efforts to ensure greater efficiency. Aid distribution actions have not been coordinated, so many needy households have been left stranded. Hunger Project Epicenter Officers can play a key role in this effort at the local level, supporting the identification of the people most vulnerable to the effects of the pandemic to ensure aid is directed appropriately.

CONCLUSION

Beyond this health crisis, which has challenged the past's certainties and spurred the idea of redefining priorities, this study has demonstrated the fragility of social safety nets and the impact of late government reaction to emergencies, particularly in terms of food. The three-month closure of weekly markets has broken the economic momentum for a large part of the rural population. The consequences of this break were felt strongly in households, most of which survive thanks to small business and extensive livestock farming and agriculture without formal distribution channels.

However, social solidarity has at times mitigated the effects of the crisis. In the communities of Dahra, Diokoul, Mpal, Dodel, Namarel and Yenne, the distribution of food for the benefit of the population has been lifesaving. Community initiatives, such as the manufacturing of masks and the establishment of hand-washing stations, have highlighted the ability of these communities to react and adapt to crisis situations. These initiatives show investing in the leadership skills of community members is a critical step in building resilience in rural communities.

ANNEXES

Annex 1: Indicators

| Indicators | Surveyed areas | National average |
|----------------------------------------------------------------------------------------------|----------------|------------------|
| Proportion of population has heard of coronavirus | 100% | |
| Proportion of population with comprehensive correct knowledge of coronavirus | 62,41% | |
| Proportion of population reporting coronavirus | 13,11% | |
| Proportion of households recording a case of domestic violence in their locality | 29,96% | |
| Proportion of population economically impacted by coronavirus | 92,13% | |
| Prevalence of households with moderate or severe hunger | 65,54% | 21,00% |
| moderate | 61,42% | |
| severe | 4,12% | |
| Percentage of population using a basic drinking-water source | 85,77% | 71,00% |
| Percentage of population accessing handwashing stations | 79,03% | 68,00% |
| Percentage of population accessing handwashing stations and using soap/bleach/hand sanitizer | 77,15% | |
| Proportion of households below the poverty line | | |
| National | 13,50% | |
| 1.90/day | 7,31% | 38,00% |
| 1.25/day | 5,54% | 11,00% |

Annex 2: Questionnaires

Health Post Chief Questionnaire

I/Localization

- Region :
- Department ;
- Commune :
- Village :

II/Consultation

1. How COVID-19 impacted the level of consultations?
2. Do pregnant women respect prenatal consultations?
3. If not, why not?
4. Have nutritional monitoring and vaccination of children been impacted by the coronavirus pandemic??
5. If yes, how?

III/Training and awareness raising?

1. Are the trainings on the health protocol well followed by the communities?

2. Are there multiplier sessions?
3. If yes, how do you ensure that the health protocol is respected?

IV/Equipment for the respect of preventative measures

1. Does the staff of the health post have full personal protective equipment?
2. If not, what is missing?
3. Do you receive any assistance?
4. If yes, from whom? (Local authorities, NGOs, goodwill)

Village Godmother Interview Guide

I/Localization:

- Région :
- Département :
- Commune :
- Village :
- Neighborhood :

II/Identification:

- Name and last Name:
 - Sex :
 - Age :
1. In the exercise of your duties, what are the difficulties you are facing in this period of pandemic?
 2. What is your role in the pandemic plan?
 3. How do you appreciate the training and awareness sessions? Themes, level of participation,
 4. What is your relationship with the medical staff?
 5. How do you work with the health relays?
 6. For the animations, what are the points that need to be improved?

Epicenter Leaders Interview Guide

We are going to start by talking about the level of commitment and mobilization of populations in the management of the pandemic.

- Région :
 - Département :
 - Commune :
 - Epicenter :
1. How do you evaluate the involvement of the partner communities in the fight against the coronavirus pandemic?
 2. What challenges have you faced in this time of pandemic?
 3. Have you undertaken any specific actions in favor of communities?
 4. If yes, which ones? mask donations, money collection, awareness workshops

5. How do you appreciate the role played by women and youth in the fight against the pandemic?
6. Did you work with the others organization that intervene in the area?
7. If yes, what was the field in which you worked together?