



# The Impact of Mobile Cinema Events on Potential Migrants in Guinea

Impact Evaluation Report

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**ABBREVIATIONS AND ACRONYMS**

AICS	Italian Agency for Development Cooperation
CAPI	Computer-assisted personal interviewing
DiD	Difference-in-difference
GMDAC	Global Migration Data Analysis Centre
IOM	International Organization for Migration
OLS	Ordinary least squares
PSM	Propensity score matching
RCT	Randomized controlled trial
UNHCR	United Nations High Commissioner for Refugees



Participants of film screening in a village in Guinea.  
© CinemArena 2019

# EXECUTIVE SUMMARY

## Background

- Every year, thousands of migrants crossing Africa and the Mediterranean die in hopes of reaching Europe. Many migrants are misinformed about the risks of irregular migration and often rely on migrant smugglers who spread inaccurate information for monetary gain. One of the International Organization for Migration (IOM)'s responses in this area is the implementation of a wide range of awareness-raising campaigns, particularly in West Africa, to promote safe migration choices.
- This Global Migration Data Analysis Centre (GMDAC) study is the second publication in a series of scientific impact evaluations aimed at assessing the effects of such campaigns on potential migrants. This study examines the effects of the CinemArena campaign in Guinea. CinemArena is an IOM-managed mobile cinema and community discussion initiative that aims to raise awareness about the possible dangers of migrating among potential migrants and share information about safe alternatives to irregular migration.
- Guinean nationals were among the three largest migrant groups arriving by sea in Spain in 2018 and 2019, and among the top 10 for sea arrivals in Italy in the same period. In 2019, Guineans represented 27 per cent of arrivals in Europe from West Africa. Overall, Guinean nationals represent approximately 5 per cent of recorded (irregular) migration arrivals to Europe in recent years.

## Methodology

- The objective of this study is to test whether attending CinemArena awareness-raising events in Guinea had a measurable effect on potential migrants' knowledge, risk perceptions and intentions regarding irregular migration. The study uses a difference-in-difference (DiD) estimation – a statistical technique aimed at distinguishing causal relationships from mere correlation. This method is a specialized approach to verify whether programme impacts can be directly attributed to the programme itself, rather than to other relevant factors, such as the economic context or changes in migration policies.

## Methodology

- In total, approximately 16,000 people attended 32 CinemArena awareness-raising events in Guinea in early 2019. The impact evaluation is based on a subsample of “potential migrants”, i.e. individuals between the ages of 15 and 39 that are considering migrating abroad. This study collected data on potential migrants in villages that the campaign visited (i.e. treatment group) and similar villages that the campaign did not visit (comparison group). Combined, the impact study is based on a total sample of 2,825 potential migrants in 63 villages in the regions of Boké, Boffa, Gaoual and Koundara in Guinea.
- In treatment villages, 1,739 men and women between the ages of 15 and 39 were surveyed (baseline) a few days prior to arrival of the caravan. Out of these, 1,494 (86%) attended the events and were successfully interviewed again approximately three months later. In the comparison villages, 1,040 individuals with the same profile were also surveyed before the events and three months after. In both treatment and comparison villages, individuals were only included in the study if they had previously considered migrating and were willing to attend an information event.

## Baseline results

- The campaign was successful in reaching members of its intended target group and met a clear demand for information on migration among community members. Forty (40) per cent of respondents said it was either “likely” or “very likely” that they would migrate to Europe in the next 24 months. However, only one in five said that they had made any preparations for a potential move. Almost one in three respondents with strong migration intentions reported that they would migrate even if a visa application were rejected.
- Only 10 per cent of respondents felt well-informed about migration to Europe; most lacked basic information regarding visa eligibility and asylum procedures, as well as information about the duration and cost of an irregular migration journey.
- Most potential migrants in this study considered irregular migration to be generally very dangerous; approximately half perceived specific risks such as exploitation or ship wreckage during the journey, and unemployment, housing issues or social exclusion in countries of destination.
- Further target group analysis revealed that those potential migrants with more financial means were more likely to fit the ideal CinemArena target group, i.e. having strong migration intentions and little knowledge about migration. Larger villages were not more likely than smaller villages to host the relevant target group.

## Impact on potential migrants

- The majority of participants found the campaign to be informative and touching. Most remembered key messages from the event even three months after participation. Almost all respondents who attended the events said they would like to receive more information about migration in the future.
- The causal impact estimate (DiD) shows that participating in CinemArena film and discussion events:
  - Increases awareness of the dangers of irregular migration by 10 per cent;
  - Increases the percentage of people with knowledge of the financial costs related to irregular migration by 23 per cent;
  - Reduces stated intentions to migrate to Europe without a visa (i.e. irregularly) by 10 per cent; and
  - Increases positive perceptions of future economic opportunities at home by 19 per cent.
- Attending the event did not improve how well potential migrants self-assess their knowledge about migration to Europe. The results are also mixed in relation to the degree to which the campaign affected the perception of specific risks along the migration journey and at destination. While the campaign increased the likelihood of perceiving “exploitation” and “expulsion” as key risks, there were no effects, and partly negative effects, on risk perceptions related to “lack of food and water” “sickness” and “ship wreckage/sinking.” The campaign, focusing on the risks of the journey, had no effect on perceptions of risks related to the situation in destination countries including “social exclusion”, “discrimination”, “housing” and “unemployment.”

## Recommendations

- Participating in discussion immediately after the documentary screening improved the perception of future economic opportunities at home. Future campaigns can build on this unexpected result by providing further information and tools on how to best invest in the local community.
- Some films screened at the event were not based in Guinea, not available in local languages or subtitled only in French. Only 54 per cent of the baseline study sample reported that they spoke French. Campaign impacts may be amplified by relying on local content and local field teams.
- An overwhelming majority of potential migrants who attended the CinemArena events said they would like to receive more information. Future campaigns could invest in ways to continue the conversation beyond one-off events and allow potential migrants to submit follow-up questions and access reliable information more easily.





# 1. INTRODUCTION

## IN BRIEF

- Every year, thousands of migrants crossing Africa and the Mediterranean die in hopes of reaching Europe. Research has shown that migrants sometimes embark on their journeys without accurate or complete information, and as a result, may unknowingly put their lives at risk.
- International organizations, civil society organizations and governments have turned to information and awareness-raising campaigns as a tool for raising awareness about the risks of irregular migration in hopes of saving lives and facilitating safe migration decisions.
- Despite the growing number of information campaigns on the risks of irregular migration, there is limited empirical evidence on the impact and effectiveness of these campaigns.
- This report is the second publication under the International Organization for Migration's Global Migration Data Analysis Centre (IOM GMDAC) programme to improve the evidence base in this field by conducting a set of scientific impact evaluations.

In IOM reports that 20,000 deaths have been recorded in the Mediterranean Sea between 2014 and 2020.<sup>1</sup> The United Nations High Commissioner for Refugees (UNHCR) estimates that land migration within Africa may be twice as deadly as

<sup>1</sup> IOM Missing Migrants Project, available at <https://missingmigrants.iom.int/>.

migration crossing the Mediterranean.<sup>2</sup> Migrants who survive their journeys are often exposed to a range of abuses, including physical and sexual violence, forced labour, financial exploitation, food shortages, abduction and extortion (IOM, 2014; Galos et al., 2017; Mixed Migration Centre, 2018; UNHCR, 2018).

Research has shown that migrants sometimes embark on their journeys without accurate or complete information, and as a result, may unknowingly put their lives at risk (IOM, 2017; European Commission, 2018; Regional Mixed Migration Secretariat, 2014; Gillespie et al., 2016; Foran and Iacucci, 2017). According to a recent report by the United Nations Development Programme (UNDP, 2019a) approximately half of recent African migrants in Europe had expected to encounter danger during their journey compared to 93 per cent that reported having experienced real danger. IOM finds that half (56%) of the migrants interviewed in IOM Niger transit centres in 2016 declared they did not collect information about migration before departing (IOM, 2017). Over 80 per cent of the individuals who provided feedback on their information sources said the information turned out to be false. A recent GMDAC study showed that almost 43 per cent of potential migrants that responded to a survey in Dakar reported they did not feel well informed about how to migrate to Europe. Thirty-seven (37) per cent said they were not well informed about the risks associated with migration, and most potential migrants were misinformed about the legal context of migration in terms of visa and international protection eligibility (Dunsch et al., 2019).

Migration is a large business for people smugglers who often spread misinformation for monetary gains. The fees charged to smuggle migrants can differ substantially based on the point of origin, with figures ranging from USD 2,000 to USD 10,000 (Dunsch et al., 2019; Europol/INTERPOL, 2016). A conservative estimate of the smuggling business along all sea smuggling routes for the year 2016 ranges between USD 320 million and USD 550 million (United Nations Office on Drugs and Crime, 2018). International organizations, civil society organizations and governments have turned to information and awareness-raising campaigns as a tool for raising awareness about the risks of irregular migration in hopes of countering misinformation by smugglers, facilitating safe migration decisions and ultimately saving lives, facilitating safe migration decisions and countering misinformation by smugglers. According to an internal review by the European Commission, the European Union and European Union governments funded, implemented or endorsed more than 100 such information and awareness-raising campaigns targeted at migrants since 2014.<sup>3</sup> Campaigns can take many forms, focus on different messages and reach different target groups. Common approaches include town hall events, workshops, film screenings, theatre plays, concerts, billboards and radio programmes. Increasingly, campaigns also include online and social media components, mainly through Facebook advertising, groups and dedicated websites (López, 2019).

Despite the growing number of information campaigns on the risks of irregular migration, there is limited empirical evidence on the impact and effectiveness of these campaigns (Browne, 2015; Schans and Optekamp, 2016; Tjaden et al., 2018; López, 2019). In response, GMDAC has launched a programme to improve the evidence base in this field by conducting a set of scientific impact studies. These studies aim at measuring the effects of IOM campaigns on potential migrants' knowledge, perceptions and intentions, as well as testing some of the assumptions underlying information campaigns.

In September 2019, GMDAC launched its first rigorous impact study of the IOM Migrants as Messengers Campaign in Dakar, Senegal (Dunsch et al., 2019).<sup>4</sup> The following reports presents the second rigorous study under this programme, which assessed the impact of the IOM CinemaArena campaign in Guinea.

***Migrants sometimes embark on their journeys without accurate or complete information, and may unknowingly put their lives at risk.***

<sup>2</sup> See [www.dw.com/en/land-migration-in-africa-twice-as-deadly-as-mediterranean-says-unhcr/a-51096086](http://www.dw.com/en/land-migration-in-africa-twice-as-deadly-as-mediterranean-says-unhcr/a-51096086).

<sup>3</sup> Presentation of the Vice-chair of the European Commission working group on information campaigns at the European Migration Network, Annual Conference in Vienna on 3 December 2019.

<sup>4</sup> Available at <https://publications.iom.int/books/migrants-messengers-impact-peer-peer-communication-potential-migrants-senegal-impact>.



## 2. THE GUINEAN MIGRATION CONTEXT

### IN BRIEF

- Guinea is a country of origin and transit for migrants heading to Europe.
- Approximately, 12 per cent of the population has plans to migrate abroad.
- Between 2016 and 2018, Guinean nationals represent around 5 per cent of all migrants that arrived irregularly in Europe by sea or were detected attempting to cross a border irregularly, and less than 2 per cent of all asylum applications in the European Union.
- However, Guineans are among the three largest migrant groups arriving in Spain in 2018 and 2019 and among the top 10 arrivals in Italy in the same period. Guineans represent 10 per cent of all irregular sea arrivals from Africa and 27 per cent of arrivals from West Africa in 2019.

The West African state of Guinea borders Guinea-Bissau, Senegal and Mali in the north, and Sierra Leone, Liberia and Côte d'Ivoire in the south. In 2018, the country had a population of 12.4 million (UNDP, 2019b). The UN estimates that the population of Guinea will double by 2050. Forty-two (42) per cent of the population is under the age of 15, and 36 per cent live in urban areas; 87 per cent of Guineans are Muslims, and the largest ethnic groups are Fulani (Peul), Malinke and Soussou.<sup>5</sup>

Guinea's Human Development Index – a composite measure of life expectancy, schooling and per capita growth – for 2017 puts the country in the low human development category, positioning it at 175 out of 189 countries and territories.<sup>6</sup> Estimates for

<sup>5</sup> European Commission, Knowledge Centre on Migration and Demography, 2017. UNDP, 2019b.

<sup>6</sup> UNDP, 2019b.

2017 suggest that 47 per cent of the population falls under the poverty line (Central Intelligence Agency, 2019); 16 per cent are undernourished.<sup>7</sup> Only 16 per cent of Guineans have access to electricity, and 35 per cent of households have access to a source of clean drinking water (Sidibe, 2017). Public debt amounts to approximately 38 per cent of GDP. In recent years, the economy has also been severely affected by the Ebola epidemic (World Bank, n.d.).

Guinea is particularly vulnerable to climate change. Droughts, floods, high temperatures, landslides, high winds and coastal erosion are likely to impact the country during the upcoming years. Specifically, the northern prefectures Gaoual, Koundara and Mali are likely to be severely affected by droughts (UNDP, 2017). Between 50,000 and 70,000 citizens are already affected annually by flooding during the rainy season (World Food Programme, n.d.). As most Guineans rely on agriculture for their livelihoods, a decrease in agricultural production and resulting loss of income can result in significant displacement of the population (UNDP, 2012). Similarly, Guinea's population is especially vulnerable to rising sea levels as a result of climate change. This is because a large part of its population, namely 38 per cent, lives in the country's coastal zone (UNDP, 2017).<sup>8</sup>

Political unrest continues to exist in Guinea, and tensions flare up especially leading up to presidential elections (BBC, 2017). While the outbreak of the Ebola virus in 2014 paused political unrest, protests broke out again in Guinea's capital city, Conakry, due to a delay in the 2015 presidential and local elections (Maastricht Graduate School of Governance (MGSoG), 2017).

In the context of migration, Guinea is mostly a country of origin and transit. According to recent UN estimates for 2018, half a million Guinean nationals lived abroad, approximately 24,000 as recognized refugees and 33,000 as asylum seekers. According to a study by the Guinean National Institute of Statistics, the international emigration rate increased from 7 per cent in 2007 to 30 per cent in 2013 (Massandouno and Cissé, 2017). Similarly, in 2017, three out of ten Guineans reported that they (or a member of their household) went to live in a foreign country for more than three months in the last three years before the survey.<sup>9</sup>

The Internal Displacement Monitoring Centre estimates that approximately 4,000 Guineans were displaced internally due to disasters in 2018. Guinea received approximately USD 48 million in remittances in 2018 according to recent World Bank data – less than 1 per cent of its annual GDP that year. However, according to national Afrobarometer surveys for 2016–2018, 1 in 5 Guineans depend on money sent home from abroad, and almost 1 in 3 has a family member that lives abroad.<sup>10</sup>

According to the Trafficking in Persons Report by the United States Department of State (2017), Guinea can be considered a source and transit country for children, men and women who are subjected to human trafficking for the main purposes of sexual exploitation and forced labour. Due to its illicit nature, data on the exact number of victims of trafficking is limited. In 2017, the U.S. Department of State (2017) downgraded Guinea to Tier 3 in its Trafficking in Persons Report due to insufficient efforts in fully meeting the minimum standards of the Trafficking Victims Protection Act (MGSoG, 2017).

According to IOM estimates of emigration plans based on Gallup World Poll data from 2015, 12 per cent of the adult population in Guinea had plans to migrate abroad within the next 12 months (Tjaden et al., 2018). Fifteen (15) per cent have considered moving to another country “a lot” according to Afrobarometer data from 2016 to 2018. According to the Afrobarometer, 29 per cent of potential Guinean migrants want to migrate within West Africa, 27 per cent to Europe and another 24 per cent to North America. More than 80 per cent of potential migrants want to move for economic reasons in search for better living conditions, which is consistent with other survey evidence from Guinea (Massandouno and Cissé, 2017).

For national and regional migration data, visit IOM's Global Migration Data Portal at

 [www.migrationdataportal.org](http://www.migrationdataportal.org)

<sup>7</sup> European Commission, Knowledge Centre on Migration and Demography, 2017.

<sup>8</sup> Cited in Maastricht Graduate School of Governance (MGSoG), 2017.

<sup>9</sup> These statistics were computed using data from the Afrobarometer surveys conducted in Guinea in 2017.

<sup>10</sup> See [afrobarometer.org/sites/default/files/publications/Dispatches/ab\\_r7\\_dispatchno288\\_looking\\_for\\_opportunity\\_africans\\_views\\_on\\_emigration1.pdf](http://afrobarometer.org/sites/default/files/publications/Dispatches/ab_r7_dispatchno288_looking_for_opportunity_africans_views_on_emigration1.pdf).

According to UNHCR (n.d.) data on arrivals to the European Union via the Mediterranean, 140,000 migrants arrived in Europe in 2018 (Cyprus, Greece, Italy, Malta and Spain), 180,000 in 2017, 373,652 in 2016 and 1,000,000 in 2015. From January to October 2019, there were 72,000 arrivals at European Union borders, among them, 3,300 Guinean nationals representing 4.5 per cent of all arrivals, and 10 per cent of arrivals from Africa and 28 per cent from West Africa.<sup>11</sup> According to data on arrivals compiled by IOM, approximately 14,000 Guinean nationals arrived in the European Union in 2017 (4% of all arrivals) and approximately 7,000 in 2018 (5% of all arrivals).<sup>12</sup> While the overall percentage of Guinean migrant arrivals in Europe in recent years appears low, Guinean nationals are consistently represented under the 10 largest migrant groups in terms of arrivals in Italy and under the 3 largest migration groups in terms of arrivals in Spain.<sup>13</sup>

According to Eurostat data on first-time asylum applications in the European Union, Guinean nationals represented less than 2 per cent out of all asylum claims for 2016–2018.<sup>14</sup> However, in 2018, the numbers of asylum claims from Guinea (3,000) reached almost half of the number for Nigerian nationals despite the fact that Nigeria's population is almost 16 times larger.

In 2018, the European Union Border Agency (Frontex) reports approximately 150,000 detections of illegal border crossings at the European Union's external border compared to 200,000 in 2017. There were 57,000 detections on the Western Mediterranean route, 57,000 on the Eastern Mediterranean route and 23,000 on the Central Mediterranean route.<sup>15</sup> Out of all illegal border crossings along all European Union land border points, 13,160 were Guinean nationals in 2017 (6.5%) and 6,011 in 2018 (4%).<sup>16</sup>

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<sup>11</sup> See <https://data2.unhcr.org/en/situations/mediterranean>.

<sup>12</sup> See <https://migration.iom.int/europe?type=arrivals>.

<sup>13</sup> See <https://data2.unhcr.org/en/situations/mediterranean>.

<sup>14</sup> See [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Asylum\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Asylum_statistics).

<sup>15</sup> See [https://frontex.europa.eu/assets/Publications/Risk\\_Analysis/Risk\\_Analysis/Risk\\_Analysis\\_for\\_2019.pdf](https://frontex.europa.eu/assets/Publications/Risk_Analysis/Risk_Analysis/Risk_Analysis_for_2019.pdf).

<sup>16</sup> Ibid.



### 3. THE CAMPAIGN: CINEMARENA

#### IN BRIEF

- CinemArena is a mobile cinema initiative launched to raise awareness among potential migrants in rural areas in West Africa about the dangers of undertaking the migrant journeys, as well as share information about safe alternatives to irregular migration including opportunities for potential migrants in their home countries.
- In January and February 2019, the CinemArena team organized 32 film screenings in 32 villages across various regions of Guinea.

CinemArena is a mobile cinema initiative launched in 2002 by the Italian Ministry of Foreign Affairs and International Cooperation and the Italian Agency for Development Cooperation (AICS). Initially, the campaign was developed to raise awareness of HIV/AIDS and malaria in remote areas in African countries. The 2018/2019 edition of CinemArena is the result of a new collaboration between AICS, the Italian Ministry of Interior and IOM. The new project phase aims to raise awareness among potential migrants in rural areas of West Africa about the dangers of undertaking the migrant journeys. The campaign shows the serious risks that migrants may face during their travels, as well as shares information about safe alternatives to irregular migration including opportunities for potential migrants in their home countries.<sup>17</sup>

In 2018 and 2019, the CinemArena caravan travelled through the most remote African routes in Côte d'Ivoire, the Gambia, Guinea, Nigeria and Senegal, bringing outdoor cinema events to more than 200 villages. At each event, the CinemArena team screened movies about migration based on a mix of fictional stories and real testimonies. The movies were usually preceded or followed or preceded by workshops, theatre performances, dancing and other activities.

This GMDAC study presents the results from an impact evaluation conducted on the CinemArena activities in Guinea.

<sup>17</sup> See [www.iom.int/news/latest-edition-cinemarena-mobile-cinema-initiative-launched-rome](http://www.iom.int/news/latest-edition-cinemarena-mobile-cinema-initiative-launched-rome).

In Guinea, the mobile cinema events were held between 15 January 2019 and 24 February 2019. During this period, 32 film evenings were organized (see Table A1 in the Annex for a full list of locations). There were 200 to 500 spectators of all ages who attended each of the 32 CinemArena screenings.<sup>18</sup> The caravan drove from one village to the next village in the morning. In the afternoon, the team set up the mobile cinema at prominent locations within the village. The CinemArena team in Guinea included a group of Italian nationals managing the logistics and schedule and two local facilitators. Games, dances and theatre were organized to attract and entertain audiences before films were eventually screened after sunset. Following each movie screening, two contracted local staff facilitated a discussion about migration with the audience.

### 3.1. Live performance and movie screenings

The CinemArena team arrived in the villages in the afternoon to find a suitable venue for the event and set up the screening before night-time. During this time, the facilitators – in this case, local IOM staff – presented the CinemArena project to the villagers and told them about the screening that would take place during the evening.

Before the main cinema screening, the team organized children's dance competitions, traditional dance presentations, participatory theatre performances or singing performances as introductory entertainment.

#### Box 1. CinemArena pre-screening short movies

##### *A Place on the Plane (2016)*

Short film

##### *The Red Balloon (1956).*

After the screening of *The Red Balloon*, three children from the audience were interviewed about the film. Then they were rewarded with balloons.

##### *FOLI*

music clips

##### *Charlie Chaplin*

short film



Theatre play in Boké about the story of a young man leaving his hometown for a foreign country and falling into the bad hands of a smuggler.  
© CinemArena 2019

After these events, a series of short films was projected to entertain the audience. In the afternoon and early evening, many children and teenagers attended the activities while the audience became older and more mixed with the hour. The purpose of this long introduction is to gather as many people as possible and get their attention for the headline event – the documentary *Migrant, Retour de l'Enfer*<sup>19</sup> which was screened in the evening after sunset. The film is a 52-minute long documentary directed by Patrick Fandio and produced in 2017 by Hemisphere Media Production Africa, a production company based in Abidjan, Côte d'Ivoire.

<sup>18</sup> Estimation from end-of-mission report by CinemArena's field coordinator, Laura Di Castro.

<sup>19</sup> Hemisphere Africa, "Migrants, return from hell", 9 June 2017. Available at [www.youtube.com/watch?v=icfztPXNiDk&t=1401s](https://www.youtube.com/watch?v=icfztPXNiDk&t=1401s).

The focus of the documentary is on the dangers of irregular migration. The documentary follows five main characters throughout the film, all of them having undertaken a dangerous irregular migration journey to Europe. Throughout their stories, all the main dangers irregular migrants are exposed to are shown or described, such as exploitation, abduction, extortion and detention in Libya, ship wreckage and homelessness in Côte d'Ivoire and Italy and lethal sea crossing on the shore of Morocco (see Box 2).

The documentary emphasizes the high risks these migrants took, the dangers they faced and also their desperation and regrets. Many migrants shown say that if they had known what could happen, they would never have migrated irregularly. Some scenes depict the struggle of the migrant's family who is left behind. Parents are blackmailed by human traffickers to send more money for their detained child and relatives search for their missing son or brothers.

**Box 2.** Official description of the documentary film

They were leaving for an improbable Eldorado. But the path to European paradise has turned into a way of the cross for these illegal migrants. Back from hell, back in Côte d'Ivoire, stuck in the Niger, or freshly landed in Italy, these young people – for the first time – provide unpublished testimonies of their dangerous journey. A true word, poignant stories that tell of the dead, racketeering, violence, failure, detention in Libya or the murderous crossings of the Mediterranean.

## 3.2. Group discussion

After each screening, subcontracted facilitators moderated a discussion with the audience of all ages. Audience members discussed the documentary and shared their opinions on what they had seen, as well as their experiences and views on migration. Many attendees expressed frustration and concerns about their living conditions and lack of opportunities at home.

In general, CinemArena's team reported that audience participation was more active in rural villages than in larger cities such as Conakry. In most evenings, the public showed a strong interest in the proposed theme; there were many testimonies from returning migrants who told their stories.

In Saraboido, a young returning migrant shared his harsh travel experiences:

**”** *I went through Niger, then I arrived in Algeria. When you get there, you have to pay 2 million; if you don't have the money, they torture you. ... When you do the adventure, you can starve; while at home, you can eat when you want. I went a week without food, only by drinking water. ... I have friends who are still in Algeria. I told them to come back, but they want to keep working to win, even if they can't send the money to the parents ... but it's precisely to help the family that they left! If you want to go to Europe, you must take the visa. Otherwise, it is better to stay at home.”<sup>20</sup>*

According to the field team, such stories – real testimonials of abuse and extortion in Algeria, Libya or Morocco or sinking dinghy boats in the Mediterranean – were shared in most villages.

Another key theme of discussion in most of the events also revolved around optimism about the future, the possibility of better economic opportunities at home and the need to invest locally (see Box 3).<sup>21</sup>

<sup>20</sup> Quote from CinemArena end of mission report, “Rapport de fin de mission” by author Laura Di Castro, field coordinator for CinemArena in Guinea. This quote is from an intervention of a young man during post-screening discussion in Saraboido village.

<sup>21</sup> Recording of these discussions are not available. Recording were not feasible due to the size of the audience, lively atmosphere at the event and data protection concerns.

**Box 3.** A mother addressing the women of her village after a screening

**”** We – the mothers who financed our children’s trips – understood! We’re not going to give a dime to our children anymore to support migration. We prefer to invest locally! I am addressing the young people: you have seen with your own eyes what is happening there! We mothers will no longer support this cause!”



Intervention of a woman in the village of Madina Toubataye.  
© CINEMARENA team 2019

A typical CinemArena intervention in a village lasted between four to five hours from the time of arrival to the end of the discussion.



## 4. METHODOLOGY

This study aims to present scientifically robust evidence on the impact of the CinemArena campaign in Guinea in 2019 (see section 3 for details on the campaign). The main objective of this report is to assess the effects of attending one of the 32 CinemArena film screening events on potential migrants' knowledge about migration to Europe, perceptions of the risks associated with irregular migration to Europe and intentions to migrate (irregularly).

There are different techniques to evaluate the impact of campaigns. The recommended approach to arrive at robust results involves econometric methods for causal inference. Appropriate methods include so-called experimental designs such as randomized controlled trials (RCT), as well as quasi-experimental approaches, such as difference-in-difference (DiD) estimation, regression discontinuity, instrumental variables and matching (Gertler et al., 2016). All these approaches are statistical analyses using empirical techniques that are aimed at distinguishing causal relationships from mere correlation.

In the ideal case scenario, members of the target group are randomly selected to participate in the events (treatment group), while others (control group) participate in similar events that are unrelated to migration issues (see Dunsch et al., 2019 for more details). This setup – which is the standard case in RCT settings – allows the researcher to compare the outcomes of the campaign with what would have happened without it (“counterfactual”).

In the case of CinemArena, GMDAC had no influence over where the campaign would take place, which individuals participate and what content potential migrants will be exposed to. As a result, a RCT was not feasible due to practical implementation constraints. Alternatively, the team decided to apply a quasi-experimental method, namely a DiD design. This approach also addresses some of the limitations of standard evaluations that are common in this field, specifically, the degree to which the effects of campaign activities on migrants can be directly attributed to a campaign itself, rather than other relevant factors (such as the economic context or changes in migration policies).

## 4.1. Methodology and study design

### 4.1.1. Quasi-experimental method: Difference-in-difference

The DiD, also known as the “double difference method” (Athey and Imbens, 2006), is increasingly used in the field of social sciences, particularly development economics and impact evaluations in cases when RCTs are not applicable. The principle is simple: two groups are compared over two periods of time, pre-intervention and post-intervention. One group benefits from the programme (the treatment group), the other one does not (the control group).

In this study, the treatment group is the population in the villages that the CinemArena caravan visited. This population is exposed to the information campaign. For each village that took part in the CinemArena campaign (see Annex), the GMDAC team carefully selected “control villages” that were as similar as possible to the treatment villages (see section 4.2.2 for how villages were selected). The people in the control group did not see the movie because the caravan did not stop in their village.

This DiD approach can be illustrated as follows:

**Figure 1.** Illustration of difference-in-difference approach

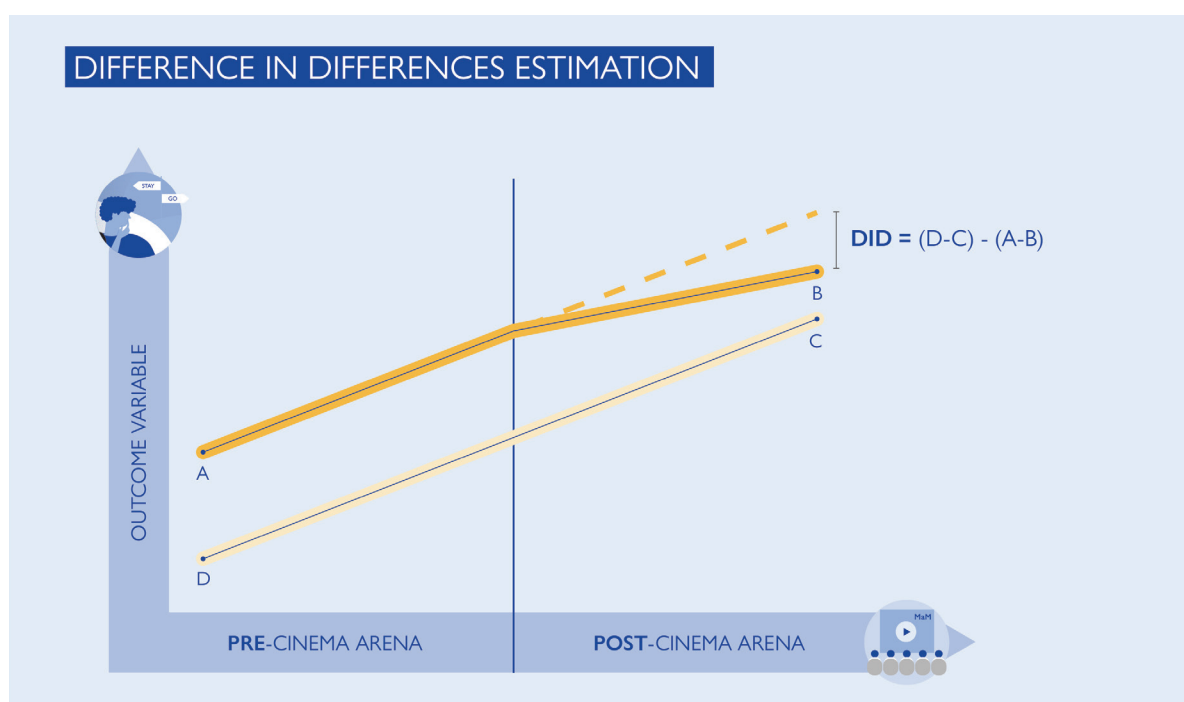


Table 1 explains what each coefficient is in detail.

**Table 1.** Parameters in “difference-in-difference estimation”

Outcome	Interpretation
D	This coefficient is the level of the outcome in the control group.
C – D	This coefficient is the difference in mean over <i>time</i> in the control group of the outcome variable.
A – B	This coefficient is the difference in mean over time <i>in the treatment group</i> of the outcome variable.
(C – D) – (A – B)	This coefficient is the DiD, the difference in mean.

We are estimating the following DiD<sup>22</sup> specification:

$$Y_i = b_0 + b_1 y_{i|time=1} + b_2 y_{i|group=1} + b_3 y_{i|time=1group=1} + X + e_i$$

$Y_i$  is the outcome of interest (that is, see above, knowledge, risk perceptions and intentions),  $i=\{1,2,3...N\}$ , “time” is a binary variable equal to 1 if the measurement period was after the CinemArena intervention (endline) and 0 for pre-CinemArena measurement (baseline). “Group” is a binary variable equal to 1 when the individual is in the treatment group and 0 for individuals in the control group.

Assume that the outcome of interest is the intention to migrate, measured as a binary variable (e.g. “yes” or “no”). The variation in the intention to migrate after treatment is explained by the following: (a) the intercept  $b_0$ , which is the level of the intention to migrate pre-intervention; (b)  $b_1$ , which is the change in the intention to migrate over time for all the individuals in the sample, (c)  $b_2$ , which is the change in the intention to migrate between treatment and control group and finally (d) and  $b_3$  an interaction variable between treatment identifier and time period. The treatment effect is measured by  $b_3$ , also called the DiD coefficient.  $X$  is a vector of control variables including gender, age, marital status, number of children, size of household, ethnicity, employment status, main source of income, their capacity to save, access to basic clean water, energy and health care, receipt of remittances, personal contacts in Europe and family pressure to migrate as well as the number of days between endline and the intervention (see Table 3 for summary statistics). The error term  $e_i$  accounts for the unobservable factors that could potentially affect the outcome variables.

Following Crump et al. (2009), the DiD models are applied to a pre-screened (“trimmed”) sample that was restricted based on the propensity (see section 4.1.2) to be selected into treatment (see Crump et al., 2009; Gibson and McKenzie, 2014). Standard errors were clustered at the level of the village and individual fixed effects were applied across all models. The results are robust against different specifications (i.e. matching, DiD only and various propensity score calculations).

#### 4.1.2. Increasing comparability: Propensity score matching

Comparability between control and treatment group is central to any impact evaluation technique. This comparability has important implications for how accurate the impact of the intervention – in this case, the CinemArena campaign – can be estimated (that is, internal validity). In quasi-experimental designs like the DiD, internal validity is subject to concern: in the absence of a random assignment, there is no guarantee that the two groups are comparable at baseline. Propensity score matching (PSM) is one method to make up for the absence of random assignment to the treatment group and control group in quasi-experimental designs (Caliendo and Kopeinig, 2008). Rosenbaum and Rubin (1997), who introduced the use of PSM in social sciences, define it as “the conditional probability of assignment to a particular treatment given a vector of observed covariates”.

In a nutshell, PSM seeks to identify “statistical twins” in the control group and the treatment group. Twins are identified by observable individual (for example, gender, age, income, marital status, education and household size) and context characteristics (access to water and electricity). Individuals are matched across treatment and control group based on their likelihood to fall into the profile of a person that was actually exposed to CinemArena.

The estimated propensity score was used to restrict the analysis sample for the DiD analysis (see previous section). This means that the impact was estimated based only on a sample of potential migrants that had a similar probability of being part of the CinemArena event.

The following section describes in detail the data collection process and fieldwork. It provides details on the main demographic characteristics of the sample and highlights the limitations and challenges of the evaluation.

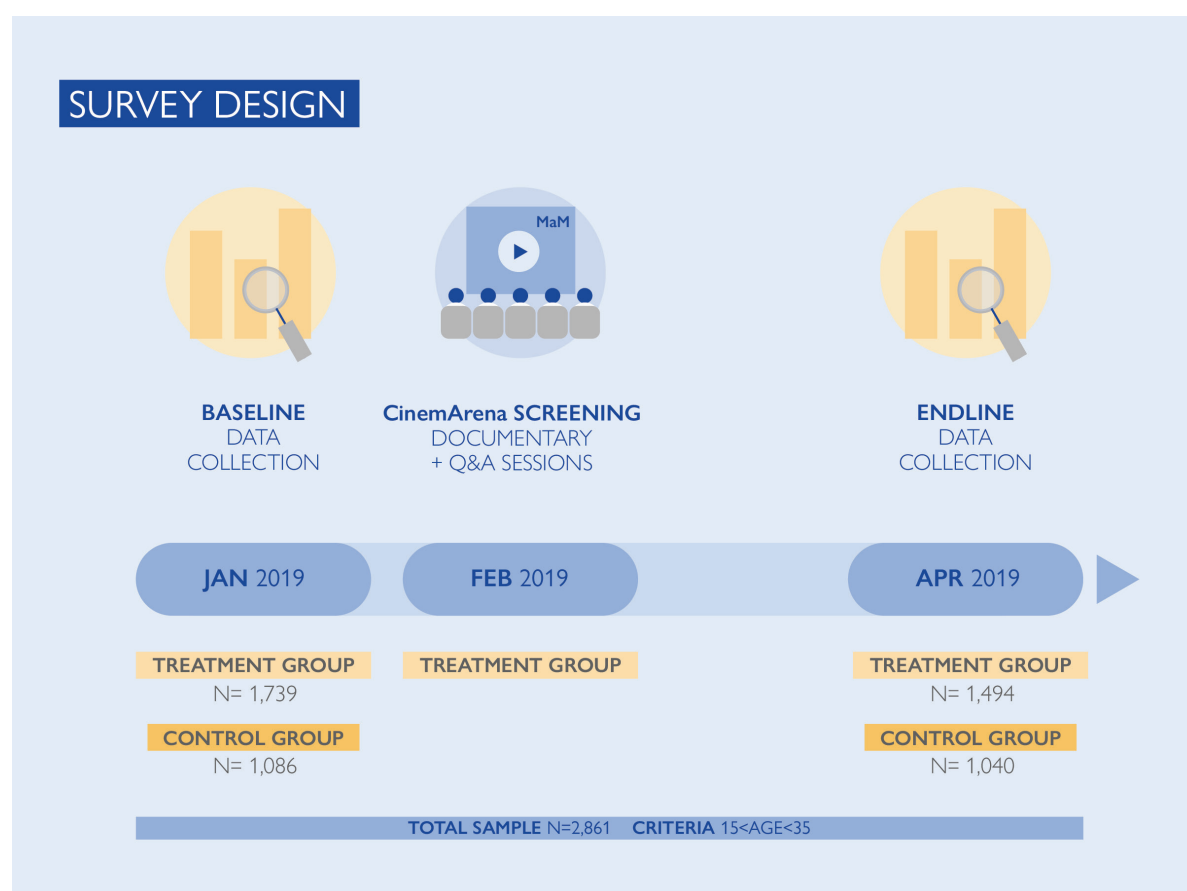
<sup>22</sup> The notation from Imbens and Athey in *Identification and Inference in Nonlinear Difference-in-Differences Models* (Athey and Imbens, 2006) is adapted.

## 4.2. Data collection and fieldwork

The impact evaluation design (see previous section) requires a control group and treatment group, as well as a data collection before and after CinemArena campaign – respectively called baseline and endline. Figure 2 provides an overview of the data collection schedule and corresponding collected data.

The following section describes how the control villages were selected and displays the main features of the treatment and control villages (section 4.2.1). The survey instrument (that is, the questionnaire) and enumerators work are presented in section 4.2.2. The data collected during baseline and endline are presented in section 4.2.3. Finally, the potential limitations of the evaluation are addressed and discussed.

**Figure 2.** CinemArena's impact evaluation



Source: GMDAC 2020, Guinea Impact Evaluation data set.

### 4.2.1. Recruitment and training of enumerators

Enumerators were recruited among a pool of voluntary returnees that the local IOM office assisted. In Guinea, returnees created their own organization called l'Association des Migrants Retournés. Supported by IOM, the association provides support for recent and settled returnees with the aim of improving social inclusion and psychosocial well-being. Returnees who speak local languages have first-hand experience of (irregular) migration, which makes them particularly sensitive to and knowledgeable about the issue at hand and – as the team learned – highly motivated individuals. It is important to highlight that the same group of enumerators were used for data collection in both treatment and control group, thus, limiting potential bias in the impact estimate. The enumerators were trained to limit their interaction with survey respondents to administering the survey. The background of enumerators was not revealed to survey respondents and enumerators were instructed not to share any additional information – personal or otherwise – relevant to migration that is not already contained in the questionnaire.

Their experience also allowed them to provide crucial input during the questionnaire design when concepts were translated to the local cultural context.

Seven enumerators were recruited that were supported by a field coordinator, an impact evaluation officer and programme coordinator in addition to the local IOM office. Enumerators spoke the local languages, which vary across the region, in addition to French, the official language.

The GMDAC evaluation team conducted a three-day enumerator training to ensure a solid understanding of the concepts and items. Enumerators were familiarized with the questionnaire which – especially at baseline – was rather detailed. Perfect understanding of the meaning of each question, as well as smooth operation of the computer-assisted personal interviewing (CAPI) questionnaire was ensured. As respondent fatigue is a very common issue in surveys, the use of CAPI as an interviewing technique considerably reduces the time of interview but also requires additional training of the enumerator.

The enumerator training incorporated pilot tests of the questionnaire. Enumerators tested the questionnaire in local markets, which informed further adjustments.

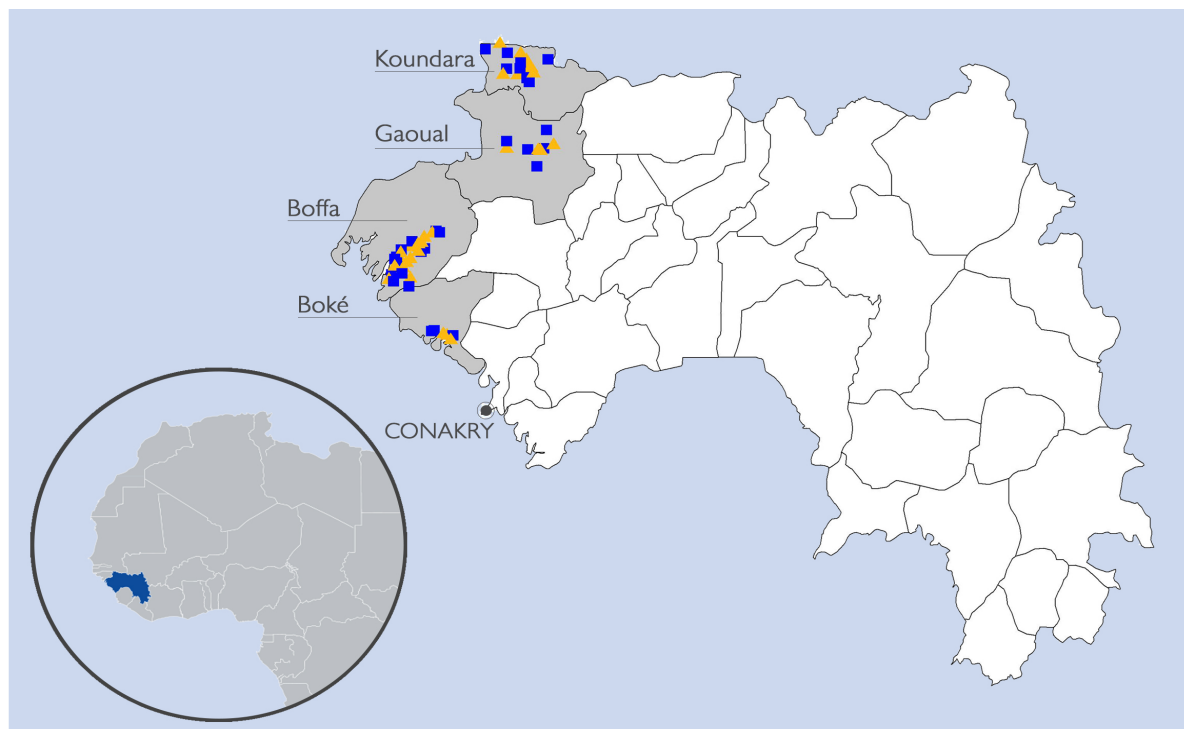
#### 4.2.2. Selection of participating villages

The country is subdivided into nine administrative regions. The campaign focused on the region of Boké and covered four of the five prefectures of the Boké region, namely Boffa, Boké, Gaoual and Koundara (see Figure 3). The population in Boké region largely relies on agriculture and livestock for livelihood support. According to Bah and Bangoura (2017), 65.1 per cent of Guineans living in Boké are illiterate.

The CinemArena campaign in Guinea had a fixed itinerary. All villages in the treatment group were selected during a scouting mission led by CinemArena's field coordinator in December 2018. The provinces were chosen based on emigration levels and their border position with Senegal and Guinea-Bissau. Within these regions, the villages were selected according to two main criteria:

- (a) Accessibility of the village by the caravan (several trucks and minivans); and
- (b) Approval by local authorities (mayor or chief of the village), which were first approached during the scouting mission and asked for approval.

**Figure 3.** Map of targeted provinces and villages by treatment status



Note: The map is based on GPS coordinates collected during the endline survey. This map is for illustration purposes only. The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by IOM.

Figure 3 shows the geographical position of both treatment villages (the yellow dots) and the control group (the blue dots). The itinerary of the caravan covers the west coast of Guinea – the region of Boffa and Boké – and the north-west and north regions of Gaoual and Koundara at the border of Guinea-Bissau and Senegal respectively.

For each selected village along the CinemArena route, the GMDAC team carefully selected a control group village. Control villages had to be close enough to the CinemArena village to ensure similarity in terms of language, ethnic composition, infrastructure and others, yet far enough to avoid spillover. Spillover bias can arise when individuals who attended the CinemArena event interact and share information with individuals from the control group. Accounting for rural contexts and limited infrastructure, a distance of 6 km was used as general guidance. The CinemArena event usually started at around 6:30 p.m. and ended late at night. Because of the distance between treatment and control villages, it is assumed that it is unlikely for the inhabitants of the control group to be informed of the caravan and to travel such a distance in order to attend the event. While it is certainly possible that attendees discuss their experience with contacts in control group villages in the months between the event and the final survey three months later (see section 4.3.4 on spillover), the design tried to make it impossible for individuals from control villages to attend in person.

In the ideal case, census data or representative survey data could inform the selection process. However, this data was not available or not accessible at the time that field operations were implemented. As a result, control villages were hand-picked by the research team based on geographical proximity and expert input by regional authorities and the Guinean IOM office.

To confirm general similarity of control and treatment villages, the field team collected key information about all villages based on a survey with prefectural youth representatives and/or subprefects that form part of local authorities of each targeted province. The opinions of officials were used as cross-validation of the identification of the control villages. In some cases, regional authorities helped to identify new control villages. In addition, the evaluation team collected data on all village characteristics through local chiefs. This information was used to account for minor differences in the villages in the statistical analysis.

One more control village was added to adjust for oversampling in treatment villages and to preempt attrition issues. The additional control village, Younkoukou, was selected by taking advantage of the fact that the CinemArena no longer took place in Younkoukou as planned. The next section describes how respondents were selected within each village.

### 4.2.3. Characteristics of participating villages

The GMDAC field team collected comprehensive information about the villages that were selected. This information is crucial to validate the selection of control villages and to consider context factors that are relevant for migration in the statistical analysis (Fafchamps and Shilpi, 2013; Shilpi et al., 2014). Information was collected from local authorities. It is important to note that this information is largely anecdotal and subjective, as there was no way to validate the information received. In order to minimize the risk of subjective responses resulting from interviews with the chief of the village and ensure their reliability, surveys were conducted in the presence of at least one of the chiefs of the village councillors and/or in the presence of the local youth representative who had a good knowledge of the realities of the village.

The village survey includes information on the following:

- (a) Demographic and socioeconomic characteristics of the villages, such as population size and age demographics;
- (b) Infrastructure including accessibility of roads, health centres, public schools and hospitals, as well availability of certain public services including electricity and clean water;
- (c) Context information about migration such as estimated migration flows; and
- (d) GPS coordinates.

The following briefly presents descriptive characteristics of the sampled villages (see Table A5 in the Annex for a full list of summary statistics).

Particular statistical approaches were applied to ensure that these differences do not bias the results (see section 4.2).

Control villages are, on average, similar to CinemArena villages in terms of access to public electricity (10%), access to drinking water (12%), as well as distance to hospitals (15 km) and markets (6 km). The analysis also reveals differences between treatment and control villages, particularly with respect to distance to nearest primary and secondary school (6 km versus 13 km), distance to the nearest police station (5 km versus 11 km), and distance to the nearest highway (2 km versus 7 km). One key difference between treatment and control villages is population size (961 versus 3,045).<sup>23</sup> In many cases, CinemArena took place in larger villages along the major highways – at times in the capital of the selected districts. This strategy left only smaller villages as candidates for the control group. The difference between control group and treatment group village does not necessarily affect the treatment effect – that is, the DiD estimator (see section 4.1). The DiD does not require villages to be similar. Nevertheless, various statistical methods to account for differences at village level were applied to ensure the reliability of the impact estimate (see section 4.1).

### 4.2.4. Questionnaire development and piloting

The questionnaire was developed based on a review of existing instruments from previous studies (Dunsch et al., 2019) and the available literature (Tjaden et al., 2018). The Guinean IOM office provided input to facilitate adjustment to the local context. Enumerators provided valuable input on questionnaire design during enumerator training and piloting given their unique background (see section 2.2.4).

<sup>23</sup> Given the subjective nature of the village survey, the village survey was matched – in particular the number of inhabitants per village – with the statistics of the National Institute of Statistics of the Republic of Guinea, which can be found at the following address: [www.stat-guinee.org/](http://www.stat-guinee.org/). From the comparative analysis, it appears that the information collected is realistic and consistent with the information from the Statistical Institute of Guinea. However, in 4 of the 63 sampled villages – namely Boffa Centre, Gaoual Centre, Koundara Centre and Koumbia – the number of inhabitants per village seems unrealistic. Those village names coincide with the names of prefectures (subregions). Further cross-checks revealed that local authorities reported on the size of the subdistrict rather than the village of the same name. As a result, the researchers decided to drop those villages from the summary analysis. Population size of all villages will be considered in the form of quartile distributions in the econometric analysis.

The baseline questionnaire is divided in five modules:

- (a) Sociodemographic characteristics (such as age, gender, location, family context and marital status);
- (b) Socioeconomic status (such as education, income, employment and material deprivation);
- (c) Migration context (such as family abroad and remittances);
- (d) Key outcomes (knowledge about migration, perceptions about risks, intention to migrate (irregularly); and
- (e) Additional information was collected to assess spillover, contamination and compliance – common sources of bias in impact evaluation surveys (see section 4.3 on data quality and limitations).

The survey was programmed using Kobo Toolbox and administered through tablets such as CAPI. The average length for the baseline questionnaire is approximately 30 minutes. An early version of the questionnaire was piloted in Nigeria when CinemArena was implementing the information campaign in Benin City (Southern Nigeria) in November 2018. The questionnaire was piloted again as part of the enumerator training. Both tests informed further adjustments of the questionnaire.

## 4.2.5. Data collection and sample description

### *Baseline data collection*

Baseline data was collected one to two days prior to the date of the CinemArena event in both control and treatment villages. It is important to note that, throughout the campaign, the impact evaluation activities did not overlap or interfere with campaign implementation. Data was collected by a trained team of local Guinean nationals (see section 4 on selection of enumerators) that conducted interviews with likely event attendees one or two days before the CinemArena team arrived (see section 4 for details on the data collection process).

The field team was divided in two groups, each one collecting data in either control or treatment villages. Upon arrival in the village, the team first established contact with the local authorities to collect context information, explain the survey and secure approval for data collection. Afterwards, enumerators were allocated various key sites in the village (such as mosque, market, school and main street) and conducted random walks in the vicinity. After identifying a specific location for the enumerators to start, households were selected through the household selection procedure used in the Afrobarometer surveys. At the household level, the field enumerators present the objectives of the survey to the head of household or his/her representative. The interviewer goes back to the head of household or his/her representative and asks to provide a list of people aged between 15 and 39 who are currently living in the household. Following this, the interviewer randomly selects a respondent who wishes to participate in the survey from the list provided by the head of household or his/her representative.

The sampling strategy aimed to identify survey respondents that will most likely represent the audience of the CinemArena campaign. As a result, several inclusion criteria were established to filter the target population:

- (a) The respondent must be between the ages of 15 and 39 years of age;<sup>24</sup>
- (b) The respondent has generally considered migration in broader terms; and
- (c) The respondent has an interest in attending a movie event on migration.

The selection procedure of respondents within villages was consistent across all participating villages.

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<sup>24</sup> Massandouno and Cissé (2017) used data from the 2014 General Population and Housing Census to show that the large share of international migrants are aged from 15 to 39 years old.

## Endline data collection

The endline is the second wave of data collection and was conducted in April and May 2019, three months after the CinemArena movie event. The main challenge was to be able to reinterview the same people interviewed during the baseline to observe any changes in knowledge, perceptions and intentions over time. Survey dropout (or attrition) reduces the sample size, limits the explanatory power of the model and possibly introduces bias in the impact estimate. Only 84 baseline respondents were not reinterviewed in the endline resulting in a very low dropout rate (attrition) of 3 per cent.

Several steps and measures were put into place to limit dropout:

- (a) Based on a complete list of participants from the baseline survey, enumerators set up appointments via mobile phones ahead of time.
- (b) Respondents were offered a phone credit of 30,000 Guinean francs (approximately USD 4) for successful participation in the endline survey. No incentives were used in the baseline survey.
- (c) In cases where a face-to-face interview was not achieved, the survey was conducted by telephone.

When the interviewer is unable to identify or locate the baseline's respondents, several strategies were used to locate the missing respondents. Among other strategies, these include the following:

- (a) Upon arrival of the survey team in the village, enumerators approached the head of the village, passers-by, religious leaders or market workers for referral to find missing baseline respondents.
- (b) The contact details of baseline respondents who were still not reinterviewed were sent to a subcontracted call centre in Conakry that followed up with respondents several times over the phone.<sup>25</sup>

The endline survey also verified how many baseline survey respondents in the CinemArena villages (treatment) participated in the event (so-called compliers). Out of 1,698 reinterviewed individuals in the treatment villages, 1,494 (88%) attended the full event (main film and discussion).

### 4.2.6. Sample description

Initially, 2,825 individuals in 63 villages in Guinea were enrolled in the study – 1,739 in treatment villages, 1,086 in control villages. More people were intentionally enrolled in the treatment group (i.e. oversampling) to anticipate that not everyone will eventually attend the event. As discussed in the previous section, the endline survey confirmed that 204 individuals in treatment villages did not show-up to the event – equivalent to 12 per cent of CinemArena invitees.



Interview situation in Boké region in rural Guinea.  
© 2019/Horace GNINAFON

<sup>25</sup> A callback survey was set up where the endline questionnaire was shortened to five questions (the main outcome variables). This survey company called back the whole sample in August and early September 2018 so approximately two months after the endline. Out of the 2,861 people at baseline, 1,941 were reached by phone and interviewed. The attrition on the callback survey is of 32 per cent.

**Table 2:** Overview of study samples and attrition

	Control group	Treatment group	Total
Enrolled at baseline	1 086	1 739	2 825
Attrition/dropout	43	41	84
No-shows/Non-compliers		204	204
Contamination	3		3
Gross panel sample	1 040	1 494	2 572

**Statistical adjustments for causal impact estimate**

"Statistical twins" - Outside propensity score of 0.1–0.9	381	841	1 222
Dropout due to item non-response	14	1	25
Net analysis sample	645	652	1 297

Source: GMDAC 2020, Guinea Impact Evaluation data set.

The summary table (see Table 3) displays the main descriptive statistics of the sample – those male and female community members between the ages 15 and 39 that were enrolled in the study and invited to attend the CinemArena campaign. The average baseline survey respondent was 24 years old and likely to be male, single and living in a household with seven other people. The average level of education is six years of schooling. Approximately half of the sample went to high school (around 50% to 55%); few people attended to university. Forty-two (42) per cent of respondents are unemployed, 21 per cent are students, and 32 per cent are working. One third of the sample generated income based on farming activities and another third relies on parents for livelihood support. During the last 12 months, 8 per cent of respondents experiences a lack of access to clean drinking water and medicine, 14 per cent experienced a lack of access to a hospital and one in four respondents lacked access to cooking fuel. Seventy (70) per cent of respondents have a direct contact – a friend or family members – who lives abroad. Only 10 per cent of respondents report any pressure to migrate from their families.

**Table 3.** Summary statistics of survey respondents (potential migrants in Guinea)

Characteristic	Average	Minimum	Maximum
Age	23.9	15	39
Female	17.4	0	1
Ethnic group:			
Peul	39.9	0	1
Soussou	19.4	0	1
Diakhanke	13.3	0	1
Malinké	7.6	0	1
Lanouma	6.9	0	1
Other	12.9	0	1
Household size	6.6	1	20
Family status:			
Single	60.9	0	1
Married: monogamously	31.6	0	1
Married: polygamously	4.8	0	1
Other	2.8	0	1
Number of children	1.0	0	13

Years of schooling	5.8	0	19
Employment status:			
Unemployed	41.6	0	1
Working	31.7	0	1
Student	20.8	0	1
Other	5.9	0	1
Income source:	0.0		
Family	31.0	0	1
Farming	31.7	0	1
Business/ salary	18.4	0	1
Other	18.9	0	1
Saving capacity	51.3	0	1
During the last 12 months...			
Lack access to clear water	8.2	0	1
Lack access to medicines	7.8	0	1
Lack access to hospital	13.8	0	1
Lack access to fuel (for cooking)	25.5	0	1
Direct contact living abroad	70.6	0	1
Family pressure to migrate	10.5	0	1
Days between event and endline	89.0	53	127

Note: N = 2,797–2,825 depending on survey item.

Source: GMDAC 2020, Guinea Impact Evaluation data set.

## 4.3. Data quality and limitations

### 4.3.1. The common trend assumption

An important assumption of the DiD method (see section 4.1) is the “parallel trend assumption”. It states that the distance between the levels of the outcome variable of interest (such as intention to migrate) in the treatment and control groups must remain consistent over time. In other words, migration trends would have continued in line with past trends in both treatment and control group villages if the campaign had never happened.

There are two main reasons that attenuate issues related to parallel trend assumption. First, there were no external shocks or structural changes that occurred between the baseline and endline that could have possibly changed the natural evolution of the trend of the measurement variables. Such “shocks” could, for instance, be another information campaign or the arrival of a factory that dramatically changed employment rates in the control group and therefore the intention to migrate. Nothing of that magnitude happened during the three months gaps between the baseline and endline. Second, potential differences between control and treatment villages were carefully adjusted through matching and individual-level fixed effects approaches.

### 4.3.2. Non-compliance and attrition

A common risk of bias in estimating programme effects are non-compliance (i.e. invited individuals do not attend the intervention/ event) and attrition (i.e. the team is unable to re-contact baseline respondents in the endline).

The endline confirmed that only 204 individuals in treatment villages did not show up to the event – equivalent to 12 per cent of CinemArena invitees. Attrition was low at 84 individuals or 3 per cent of the total sample. The attrition was similar in both treatment and control villages (see section 4.2.6). As a result, neither non-compliance nor attrition presented any issue for the reliability of the analysis.

### 4.3.3. Response bias

Response bias – a common issue in survey-based research – can come in many shapes and forms. It is possible that respondents answer questions in ways that they think the enumerator expects them to respond. Variants of response bias are sometimes called “social desirability bias” or Hawthorne effect. This study attempted to mitigate possible bias due to this bias in several ways: (a) enumerators exclusively represented peers from similar regions, neighbourhoods and ethnic groups; (b) respondents were contacted several times over the course of three to four months; (c) the evaluation team was independent from the campaign implementers and did not visit the villages at the same time that the campaign was present; and (d) respondents in the control group (who did not attend any event) were asked identical questions, which allows to adjust for response bias across treatment and control group. The first three measures increased trust in the survey team and ensured that respondents provided truthful responses. In addition, some research suggests reliable answers might be obtained through direct survey questions, particularly in cases where irregular migration is commonplace (McKenzie and Siegel, 2013).

### 4.3.4. Contamination and spillover

Contamination can be an issue in impact evaluations if participants in the control group are exposed to the intervention, that is, if they participate in the campaign or other types of campaigns that happened at the same time. Spillover is another issue that occurs when participants in the campaign later tell members of the control group about the events and the messages. Both contamination and spillover can bias the results.

The results clearly show that neither spillover nor contamination appear to be an issue. The 210 persons from the treatment group that reported that they did not attend the CinemArena event (non-compliance/“no-shows”) were dropped from the survey. Only three persons from the control group attended the CinemArena (contamination) and were dropped from the analysis. The 7 persons from the control group who knew someone that did attend the CinemArena screening were also dropped out as well.

### 4.3.5. Detailed information about discussion

Following the screening of the documentary film, the audience discussed what they have seen but also exchanged views about migration more generally. According to the field implementation team, many discussions focused on economic opportunities at home and the need to invest into the local community instead of migrating abroad. The results (see section 5) show that participating in the event increased positive perceptions of future opportunities at home. Unfortunately, no transcripts of the discussions are available, which prevents any further research on the relative impact of the discussion versus the documentary film alone.



## 5. RESULTS

### 5.1. Target group analysis

CinemArena’s objective is to raise awareness of the dangers of irregular migration to the European Union in communities with high migration potential. Reaching the intended target group is key for any impactful campaign. CinemArena’s ideal-type target group consists of community members with a high inclination to migrate irregularly to Europe and limited knowledge about the migration journey. This section provides information on how to identify target group members among the communities that CinemArena visited based on analysis of the baseline survey data.

While all community members may attend the CinemArena events, only a subsample of likely migrants were included in the sample of the impact evaluation study, namely individuals between 15 and 39 that are considering migrating abroad. Eighty-eight (88) per cent of study participants between 15 and 39 that were initially enrolled in the study and invited to attend the CinemArena event, actually attended. This highlights that the survey already selected the right target audience and reduces the scope for variation regarding ideal targeting.

However, the following analysis further explores the profile of ideal campaign target groups available in the baseline survey.

**Table 4.** Overview ideal target group profiles for targeting analysis

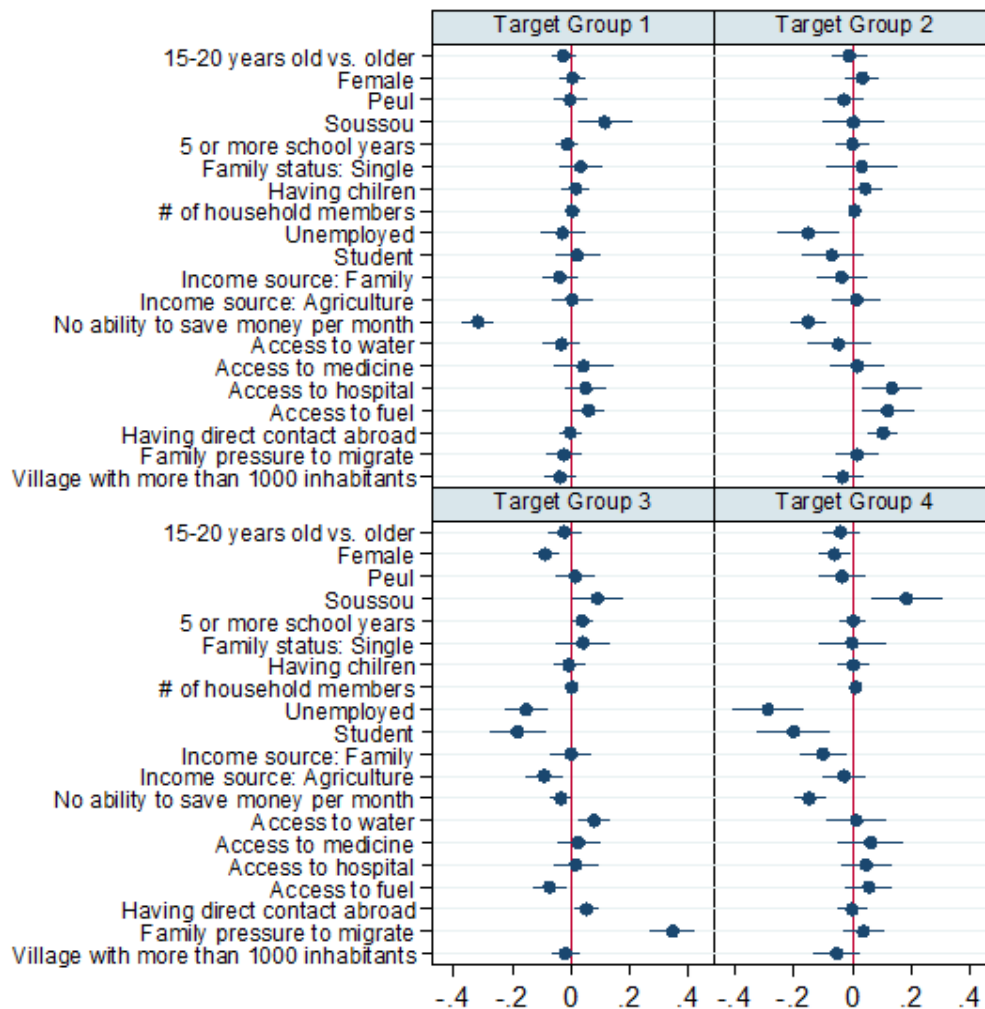
Target Group 1	Community members who: (a) say there is a very high probability that they will migrate to Europe in the next two years even without a visa; and (b) say they know little about migration.
Target Group 2	Community members who: (a) have considered migration a lot; and (b) say they know little about migration.
Target Group 3	Community members who have already made preparations for a trip.
Target Group 4	Community members who say there is a very high probability that they will migrate to Europe in the next two years even without a visa.

Figure 4 shows which characteristics are associated with the likelihood of fitting the outlined target groups. The results show limited variation. This suggests that the subsample of individuals that were initially invited to participate in the study are already a selective group that broadly meets the criteria of the campaigns’ target group profile.

However, the results provide a few insights for future targeting of campaign activities in Guinea. Members of the Soussou ethnic group and those individuals with more financial resources are more likely to fit the ideal target group profile, i.e. they want to migrate

and have limited information about migration. Figure 4 shows that individuals that are not able to save money are unemployed or gain their income in agriculture are less likely to fall into the defined target group than those that are able to save money, make money from a salary or run a business. There appears to be no differences in relation to the size of the village. Community members living in villages of less than 1,000 inhabitants are not more or less likely to fit the profile of the intended CinemaArena target group. Villages with better access to hospitals, water, fuel and medicine are also not more likely to host target group members than those with less access.

**Figure 4.** Likelihood of fitting the profile of the ideal campaign target group member (in percentage points)



Note: N = 2,661. Analysis based on baseline data set for both treatment and control group. Only respondents with non-missing information across all variables included. Models are based on an OLS regression with clustered standard errors on the village level.

Source: GMDAC 2020, Guinea Impact Evaluation data set.

## 5.2. Before the campaign – baseline results

This section presents key descriptive results of the baseline survey from both treatment and control villages (see section 4.2). The data was collected several days before the events took place in the treatment villages. The baseline analysis helps to put the impact evaluation results (see section 5.4) into context, describes the study population in more detail and provides general pointers for future campaign development.

### HIGHLIGHTS

- Almost half of respondents say they know nothing about how to migrate to Europe. The large majority of respondents is not familiar with the legal context of migration to Europe including visa eligibility and asylum procedures as well as the costs of irregular migration.
- Most respondents think that irregular migration is very dangerous, yet perceptions vary depending on specific risks that may occur.
- Almost half of all respondents intend to migrate to Europe even when a legal visa is likely unattainable.

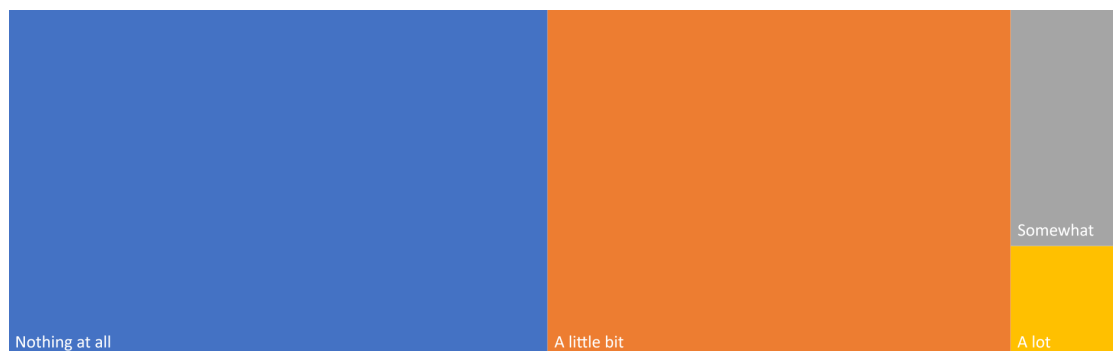
### 5.2.1. Self-assessed knowledge about migration



The general assumption behind information campaigns is that many migrants are unaware or ill-informed of the risks and/or difficulties they expose themselves to when migrating irregularly (Nieuwenhuys and Pécoud, 2007; Pécoud, 2010). One of the main objectives of campaigns is to combat misinformation and raise more awareness of the realities of migration and facilitate informed and safe decisions (Schans and Optekamp, 2016; Tjaden et al., 2018).

The baseline survey reveals large knowledge gaps and a low self-assessed level of knowledge regarding migration among potential migrants in the study sample. Of the survey respondents, 48 per cent report that they know “nothing at all” about how to migrate to Europe. Another 41 per cent say they know “a little bit”. Only 11 per cent of potential migrants think they are informed “somewhat” or “a lot” (see Figure 5).

**Figure 5.** How much do you know about how to migrate to Europe?



Note: N = 2,820, all baseline survey respondents, see Table 2 in section 4.2.6.

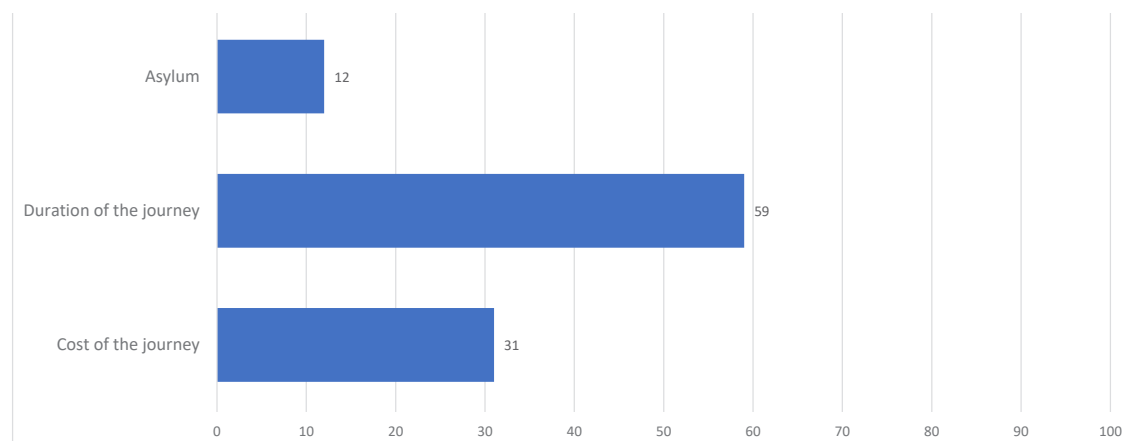
Source: GMDAC 2020, Guinea Impact Evaluation data set.

In terms of specific aspects of irregular migration to Europe, 31 percent survey respondents know how much it costs and 59 per cent say that they know how long it takes (Figure 6). Among those that have a general idea, 56 per cent estimate that it would take an irregular migrant less than three months to arrive in Europe. Only 8 per cent estimate a journey longer than one year. A migration journey from West Africa to Europe that takes less than three months appears optimistic considering available qualitative accounts suggesting that the irregular migration journey can take much longer than expected. Many migrants get stuck in transit countries having to work to save up additional resources to fund a trip across the Mediterranean (Altai Consulting, 2015; European Commission, 2018; UNODC, 2018; Hagen-Zanker and Mallet, 2016).

Regarding the formal context of migration, striking gaps emerge. Among survey respondents, 88 per cent reported that they did not know what asylum is. Among those that say they know what asylum is, approximately one in three respondents think they are eligible for refugee status.

Almost everyone is aware of the fact that migrants require a visa to travel regularly to Europe (99%), yet the chances to legally obtain a visa are perceived differently. Of the potential migrants in the study, more than half think it is likely or very likely that they would get a visa to travel to Europe or the United States of America regularly. This does not change depending on how much respondents said they know about how to migrate to Europe or whether or not they said they have already made preparations. This result highlights the widespread misunderstanding of the legal context of migration.

**Figure 6.** Percentage of potential migrants surveyed that report having knowledge about specific aspects of irregular migration to Europe



Note: N = 2,820, all baseline survey respondents, see Table 2 in section 4.2.6.

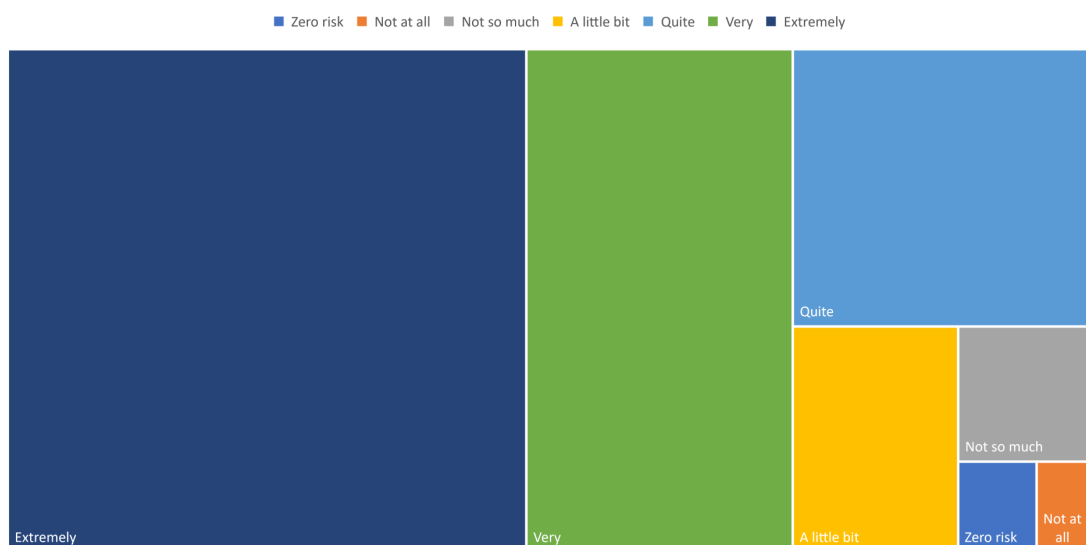
Source: GMDAC 2020, Guinea Impact Evaluation data set.

## 5.2.2. Risk perceptions



The main objective of the CinemArena campaign is to raise awareness of the risks associated with irregular migration to Europe. Whether or not individuals migrate or not, such a far-reaching decision should be as informed as possible. The role of risks is central to the decision to migrate (Jaeger et al., 2010). Particularly in the economic literature, migration decisions are often described as a weighting of benefits, costs and potential (economic) gains (Williams and Baláž, 2012). Better awareness on the dangers of irregular migration could therefore change the equation and potentially reduce harm in case migrants would pursue perilous routes.

On average, potential migrants in this survey believe that irregular migration is very dangerous. Of the respondents, 72 per cent say that irregular migration to Europe is either “very” or “extremely” dangerous (Figure 7). Three out of four migrants perceive irregular migration to be dangerous.

**Figure 7.** How dangerous do you think it is to migrate to Europe irregularly?

Note: N = 2,820, all baseline survey respondents, see Table 2 in section 4.2.6.

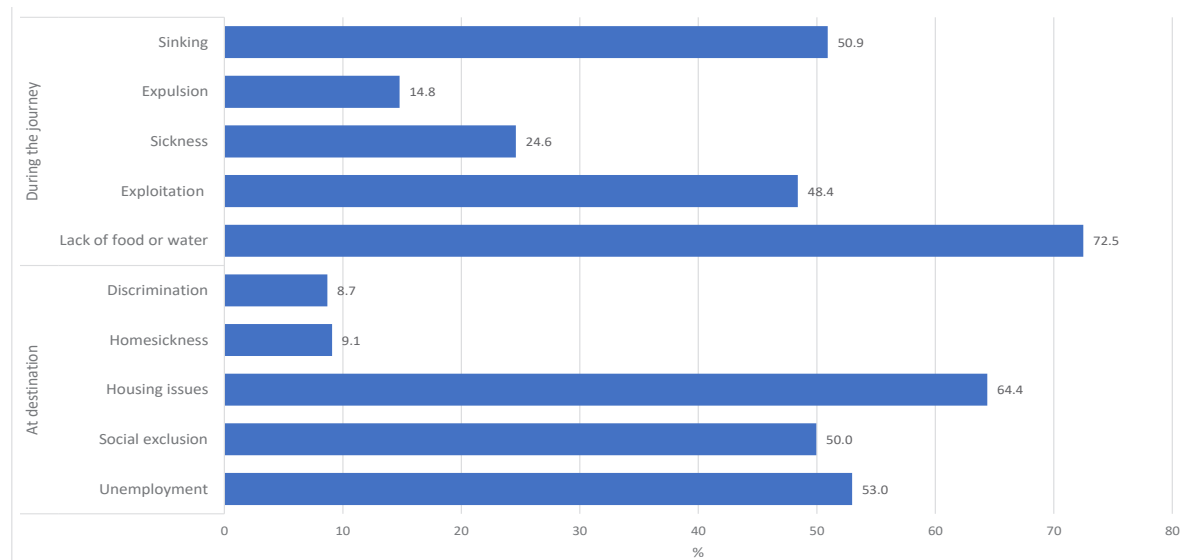
Source: GMDAC 2020, Guinea Impact Evaluation data set.

This high baseline level of risk awareness is likely a result of information relayed through social or traditional media, contacts abroad or returnees. Only 4 per cent of study participants said they had been exposed to any information activity before CinemArena arrived. This highlights one of the strengths of the mobile caravan, which reaches distant and rural locations that conventional campaigns usually do not penetrate. Most study participants reported no exposure to any other institutional source of information on the dangers of irregular migration. Of the respondents, 71 per cent say they know at least one person in Europe, and their main way of communication with them is via Facebook (72%) before cell phone calls (32%) and WhatsApp (21%).

However, it is possible that there is a stark difference between the perception of abstract danger and specific risks that can occur along the journey. Regarding particular risks, around half or more of the respondents believe that irregular migration journey may involve a lack of food or water, exploitation and mistreatment or ship wreckage (sinking). Less than 1 in 4 potential migrants in the study expect risks related to sickness or expulsion (see Figure 8).

For some migrants, the situation after arrival in Europe is not what they expected. Many face labour exploitation, discrimination and social exclusion. The survey asks potential migrants in Guinea about their perceptions of risks in relation to challenges in the destination country. Less than 10 per cent of the respondents identify homesickness or discrimination as risks. On the contrary, half or more of the respondents see unemployment, housing and social integration as key challenges after arrival in the country of destination.

**Figure 8.** What are the specific risks that are likely to happen?



Note: N = 2,820, all baseline survey respondents, see Table 2 in section 4.2.6.

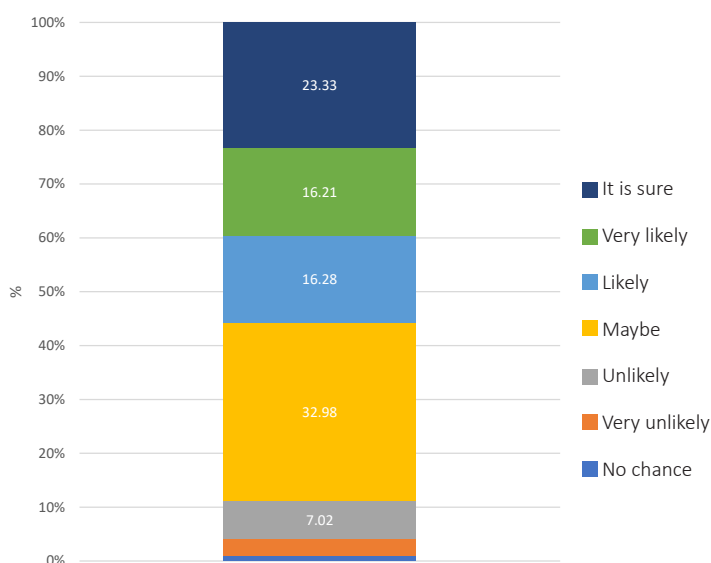
Source: GMDAC 2020, Guinea Impact Evaluation data set.

### 5.2.3. Irregular migration intentions



The main objective of the campaign is to promote informed migration decisions. Irregular migration from West Africa to Europe is often associated with substantial risks of abuse and exploitation. Whether study participants change their intentions to embark on dangerous irregular journeys – among other dimensions – is one indication of future choices that are likely to be safer. Given that the study was not designed to measure migration behaviour (i.e. migration flows), migration intentions are a useful if imperfect proxy for measuring actual migration behaviour (Tjaden et al., 2018; Van Dalen and Henkens, 2008).

More than half of survey respondents have somewhat considered moving to another country in general; 37 per cent have considered it a lot. However, only 1 in 5 respondents said that they have made any preparations for a potential move. Among those that have considered migrating, 76 per cent wish to migrate to Europe, 13 per cent to the United States and 6 per cent to other West African countries. Among those respondents wishing to migrate to Europe, 40 per cent report that it is either sure or very likely that they will migrate in the next 24 months. Overall, these results show that the campaign succeeded in reaching its defined target group of potential migrants.

**Figure 9.** How do you evaluate the probability that you will migrate to Europe within the next two years?

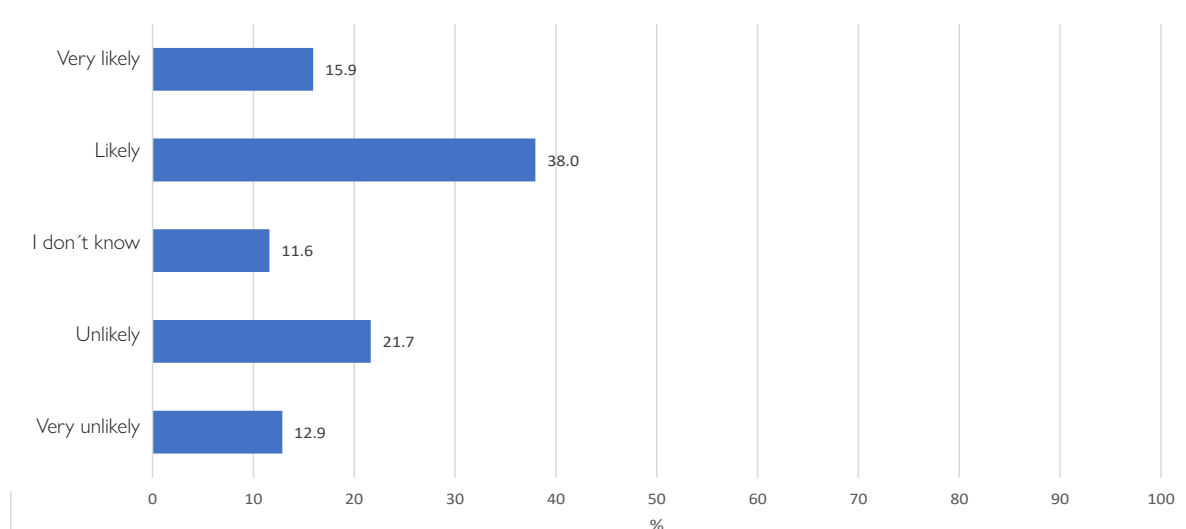
Note: N = 2,820; all baseline survey respondents, see Table 2 in section 4.2.6.

Source: GMDAC 2020, Guinea Impact Evaluation data set.

In terms of the reasons for wanting to leave, 88 per cent refer to economic motivations, 9 per cent to political issues and 7 per cent to social issues. However, half of survey participants say that they are worried about the safety of their families in the area where they live.

Given the sensitivity around irregular means of travel, the survey did not directly ask about intentions to migrate irregularly. Instead, several questions about legal pathways were used to approximate the group of individuals who were likely to be willing to migrate without a regular visa.

Of the survey respondents, 54 per cent think that they would likely or very likely get a visa to travel to Europe or North America. This does not change depending on how much respondents said they know about how to migrate to Europe or whether or not they have made plans yet. This highlights the lack of understanding of the legal context of migration to Europe more generally. Still, for those that think that a legal visa is likely unattainable, 39 per cent of respondents say it is likely, very likely or sure that they will attempt to migrate Europe in the next 24 months.

**Figure 10.** How do you evaluate your chances to migrate regularly (i.e. obtain a visa) for Europe?

Note: N = 832. Endline respondents in control group only because variable is measured at endline and treatment group is already affected by the campaign.

Source: GMDAC 2020, Guinea Impact Evaluation data set.

## 5.2.4. Economic opportunities



The pursuit of better economic opportunities is the main reason for 88 per cent of respondents that consider migrating to Europe (see previous section). Fifty-two (52) per cent of respondents that are not studying are unemployed. Those with jobs define themselves as self-employed or independent workers that do occasional jobs. The main source of income for 60 per cent of respondents is farming or relatives. Fifty-one (51) per cent of respondents are not able to save any money per month. One in four respondents does not have access to fuel for cooking.

One key theme of discussion following the documentary screening in each village (see section 3.2) focused on economic opportunities at home. Economic opportunities in local communities play a major role when deciding whether to migrate elsewhere. Despite economic difficulties and widespread material deprivation, many still feel optimistic about the future. Forty-one (41) per cent of respondents think there will be more economic opportunities in five years.

## 5.3. Direct audience feedback

This section presents results from survey questions that directly relate to the event itself. As a result, the descriptive results are based on the endline survey conducted only in treatment villages, i.e. those villages that the mobile cinema visited.

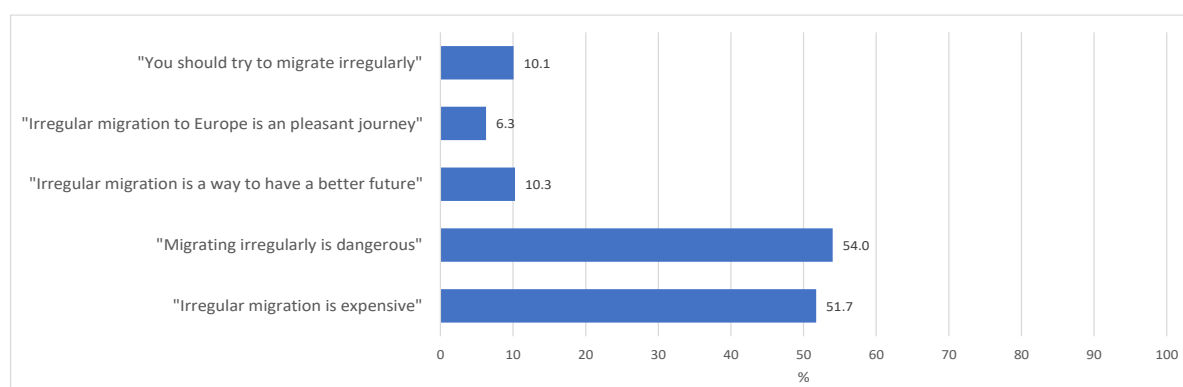
### HIGHLIGHTS

- Three months after participating in the mobile cinema event (CinemArena) in Guinea, most potential migrants clearly recalled the main messages of the film. Most thought the films were informative and sad.

All study participants (control and treatment group) were interviewed three months after the CinemArena campaign in Guinea was completed. Those study participants that attended the CinemArena events (treatment villages) were asked to recall the event and the main messages and provide direct feedback. It is important to assess what the audience remembers to put any potential effects (see section 5.2) of the campaign in context.

Out of all study participants in treatment villages that were initially invited to attend the CinemArena event, 88 per cent did; 71 per cent attended the event from beginning to end. Most attendees remembered the content of the event. This may not be surprising given that, in rural settings, an event such as the mobile cinema screening are special and rare occasions. The overwhelming majority (90%) of study participants said that the main messages of the movies were either that “irregular migration to Europe is dangerous” or that it is “expensive” to migrate irregularly.

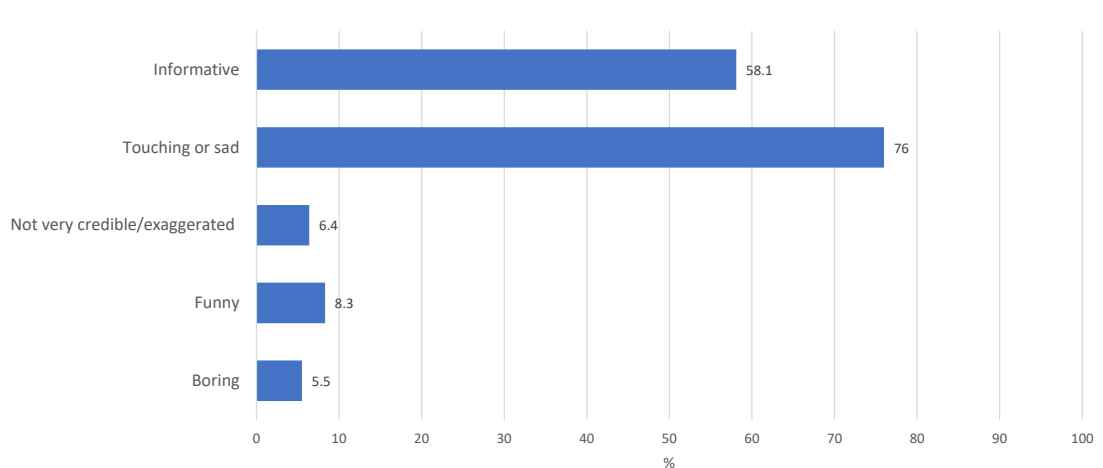
Communication campaigns can have unintended consequences when key messages are misunderstood. The evaluation team asked about recalling messages that were explicitly not featured in the campaign. Figure 11 shows that most potential migrants in this study were able to identify the main messages correctly.

**Figure 11.** From what you remember, what is the general message of the documentary?

Note: N = 1,498; Figure based only on subsample of treatment group, i.e. survey respondents that participated in the endline, that were located in villages that CinemArena visited and that attended the event.

Source: GMDAC, 2020, Guinea Impact Evaluation data set.

Most event participants included in the study found the main film to be informative and/or touching or sad. Less than 10 per cent found the movie to be boring, funny and/or exaggerated (Figure 12).

**Figure 12.** What do you think about the movie?

Note: N = 1,498; Figure based only on subsample of treatment group, i.e. survey respondents that participated in the endline, that were located in villages that CinemArena visited and that attended the event.

Source: GMDAC, 2020, Guinea Impact Evaluation data set.

In academic and policy discussions, information campaigns with the aim to raise awareness of the risks of irregular migration are sometimes perceived as soft migration deterrence (Heller, 2014; Pécoud, 2010). The main target group (potential migrants) remains absent from this academic and political debate. In this survey, the team asked about the impressions of potential migrants themselves. The results show that 85 per cent of event participants in this study think that “the campaign was here to help”. Furthermore, the campaign was met with great demand for information about migration. Of the participants of the survey, 99 per cent said they would like to receive more information. Future studies should explore what exactly the follow-up information needs of campaign participants are and how they could be best addressed.

Direct feedback from event participants is useful for improving the campaign, yet it invites a host of issues when attempting to measure the real impact on participating in the event. As described in section 4 (Methodology), this study applies scientific methods to assess the causal effect of event participation on potential migrants selected for this study versus comparable individuals that have not participated in an IOM campaign (control group). The following section shows the results from the rigorous impact evaluation – illustrating the measurable effects of a mobile cinema on potential migrants’ knowledge, subjective information levels, risk perceptions and migration intentions.

## 5.4. Estimating campaign impacts on potential migrants

This section presents causal estimates of the impact of participating in CinemArena events in Guinea in 2019 on potential migrants between 14 and 39 years old. The analysis makes use of data collected before the event and three months after as well as data collected in the villages where the events took place and similar villages where no events occurred. The DiD technique – an econometric approach to estimating programme effects using a counterfactual design – was applied. The methodology is described in detail in section 4.1.

### HIGHLIGHTS

- Potential migrants that participated in the CinemArena event were, on average, more likely to perceive higher risks associated with irregular migration to Europe, feel more informed about the costs of irregular migration, were less likely to intend to migrate without a visa and more likely to have optimistic views of future economic opportunities at home (relative to the control group).
- The campaign had no effect on how well potential migrants feel informed generally about migration to Europe and mixed effects on the perception of specific type of risks associated with the migration journey and the situation in countries of destination.

### 5.4.1. Self-assessed knowledge about migration

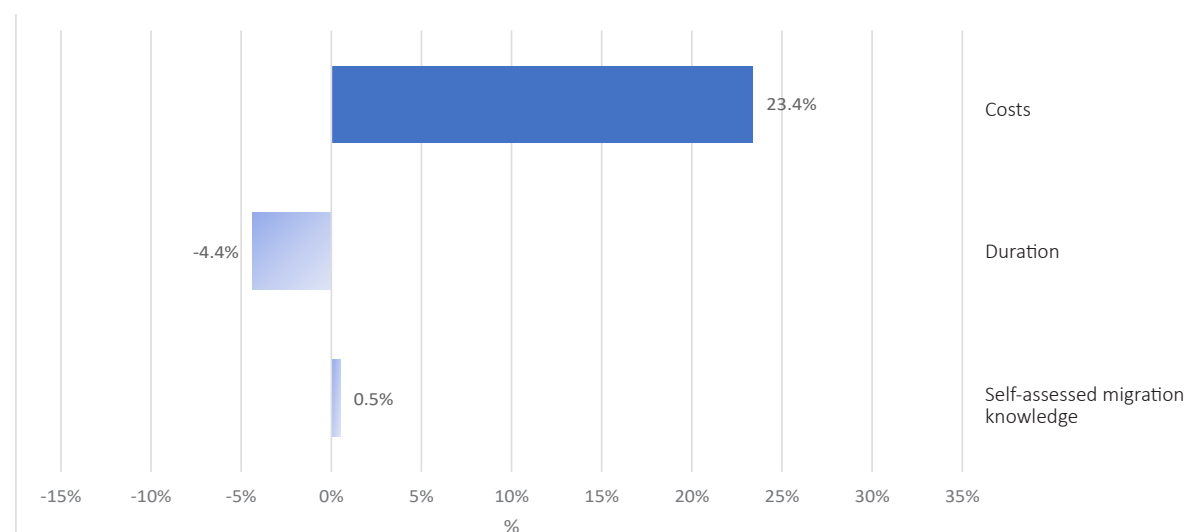


On average, the campaign increased knowledge about costs of the journey by 23 per cent. In other words, almost 1 in 4 potential migrants in this study showed improved knowledge on costs.

CinemArena had no significant effect on how well participants think they are informed about how to migrate to Europe more generally. It is important to note that the question is “How much do you know about how to migrate to Europe?”. The question does not refer specifically to irregular migration. The absence of any campaign effect could be because the films did not provide information about how to migrate to Europe regularly. The content of the campaign largely focused on messages about how not to migrate to Europe irregularly.

There also appears to be no effect of participating in the CinemArena event on the perception of the duration of the irregular migration journey.

The results for costs and duration must be interpreted in relation to the content of the documentary. The screened documentary put emphasis on the cost of irregular migration, which was explicitly mentioned, while the duration is never directly stated. The documentary overall conveys the sense that it takes some time without ever being specific on how long the journey could be. It is not possible to assess whether further information on the duration and costs of the journey were shared in the group discussion following the film. However, it is likely that personal assessments of the duration vary substantially on a case-by-case basis.

**Figure 13.** Impact of attending CinemArena screening on knowledge about migration

Note: N = 1,273. See section 4.1. for details of the estimation model. See Table A2 and Table A3 in the Annex on variable operationalization. Dark blue bars represent effects with p-values below 0.5. Light blue bars represent non-significant effects. See Table A5 in the Annex for full output.

Source: GMDAC 2020, Guinea Impact Evaluation data set.

### 5.4.2. Risk perceptions



The results show that the campaign increased the level of risk perceptions among potential migrants in the sample.

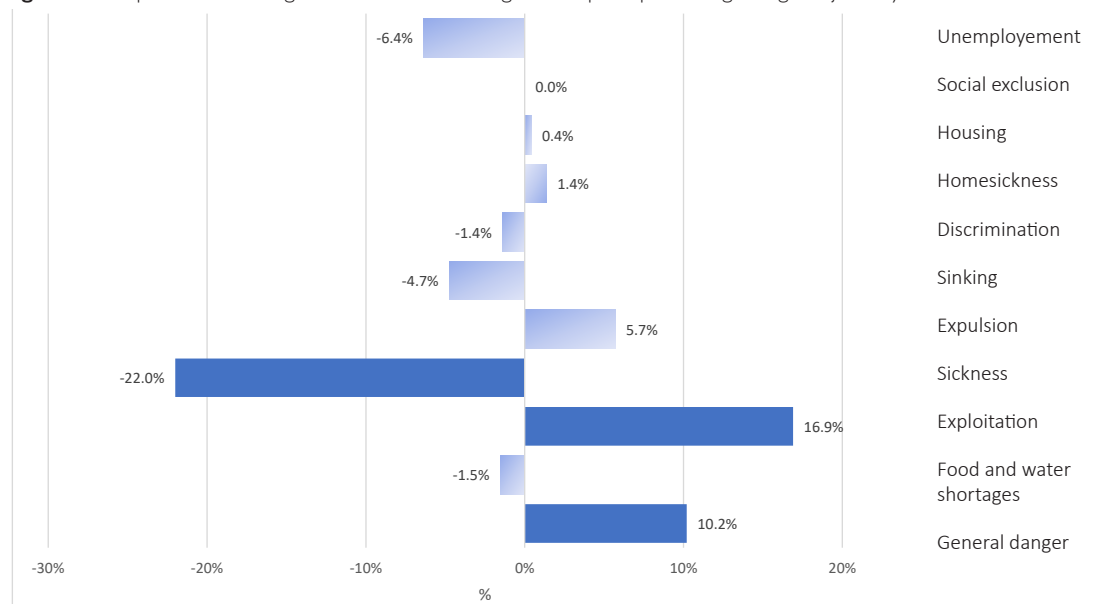
On average, attending the CinemArena event increased the level of how dangerous the irregular migration journey is perceived by 10 per cent. In other words, while risk perceptions are already quite high before CinemArena events occurred, 1 in 10 participants perceive even higher risk levels as a result of the events.

The perceived risk of being exploited increases significantly by 17 per cent after CinemArena intervention. The risk of getting sick decreases. One potential explanation is that many potential migrants perceived sickness along the irregular migration to be a very likely scenario and that these perceptions were adjusted downward given that none of the testimonials directly described experiences of sickness.

The results also show that the campaign had no considerable effect on the risks in the destination countries such as unemployment, social exclusion, housing, homesickness, discrimination or particular risks along the migration journey, such as sinking, expulsion or food and water shortages.

The fact that the campaign did not affect perceptions of risks that may occur in the destination countries is less surprising when considering that most testimonials included in the documentary film focused on risks along the irregular migration journey. The result highlights the potential of incorporating more information on the situation in destination countries. Many potential migrants have limited information about destination countries (e.g. the risk of unemployment, see section 5.2) and diaspora members living in Europe may share a biased account of their hardship on social media.

**Figure 14.** Impact of attending CinemArena screening on risk perceptions regarding the journey and life at destination



Note: N = 1,273. See section 4.1. for details of the estimation model. See Table A2 and Table A3 in the Annex on variable operationalization. Dark blue bars represent effects with p-values below 0.5. Light blue bars represent non-significant effects. See Table A5 in the Annex for full output.

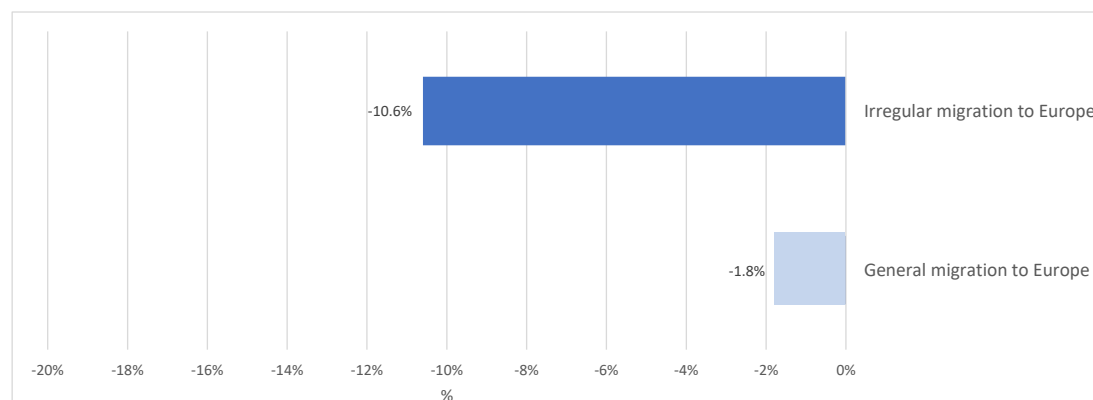
Source: GMDAC 2020, Guinea Impact Evaluation data set.

### 5.4.3. Irregular migration intentions

This section presents the impact of CinemArena on two types of migration intentions: general migration intentions and likely irregular migration intentions. The general intention to migrate to Europe within the next two years reflects general migration aspirations. Those potential migrants who say they are very likely to migrate to Europe and believe it would be unlikely that they get a visa to do so regularly are considered to be likely irregular migrants.

The results show that attending the CinemArena event reduces the intention to migrate without a visa by 11 per cent. In other words, approximately 1 in 10 study participants changed their migration intentions as a result of the campaign. There is no considerable effect on regular migration intentions. This suggests that the campaign does not reduce the overall desire to migrate to Europe, but it influences the particular way of pursuing such migration plans.

**Figure 15.** Impact of attending CinemArena screening on migration intentions



Note: N = 1,273. See section 4.1. for details of the estimation model. See Table A2 and Table A3 in the Annex on variable operationalization. Dark blue bars represent effects with p-values below 0.5. Light blue bars represent non-significant effects. See Table A6 in the Annex for full output.

Source: GMDAC 2020, Guinea Impact Evaluation data set.

#### 5.4.4. Economic opportunities



As described in section 3.2, a key theme of discussion among community members after watching the documentary film centered on future economic opportunities at home and the need to invest locally instead of embarking on perilous journey. Unfortunately, transcripts about these discussions are not available.

The results show that participating in the CinemArena events increased the perception of whether there will be more economic opportunities in the country in five years by 19 per cent (see Table A6 in the Annex).

This result is surprising given that the discussion on this issue was purely driven by local community members. Such events did not emphasize messages around opportunities at home. For future campaigns, the result highlights the potential of incorporating such messages about opportunities at home and provide further information or tools to facilitate investment in the local community.



## 6. CONCLUSIONS

Information and awareness-raising campaigns are a popular and long-standing policy intervention in many fields, most prominently in health, education and development. The use of campaigns in the field of migration is also not new (Tjaden et al., 2018 for a review), yet the number of implemented campaigns, as well as the scope and diversity of the activities has dramatically increased in recent years.<sup>26</sup> The growth in campaigns is largely linked to the sharp increase in migration to Europe and the well-documented harms inflicted on migrants in the process, particularly irregular migrants from Africa who attempt to cross the Sahara and the Mediterranean.

Recently, awareness-raising interventions have come under fire more generally (Christiano and Neimand, 2017; Kolbert, 2017) and, more specifically, in the field of migration (Schans and Optekamp, 2016). One key concern is that campaigns are inherently ineffective because they are based on wrong assumptions about what migrants know already and how they make decisions. Available studies largely relied on anecdotal and qualitative accounts. In response to calls for more reliable empirical evidence on campaigns effects (Browne, 2015; Tjaden et al., 2018), GMDAC launched a series of scientific impact evaluations to study the effects of different campaigns on potential migrants. Conventional evaluations have strong limitations and are likely to overestimate the effects of campaigns (Tjaden et al., 2018).

The results presented in this study are consistent with emerging evidence in this field (Dunsch et al., 2019).<sup>27</sup> Together, they paint a more nuanced picture than the political debates about information campaigns suggest. Studies confirm glaring information needs and knowledge gaps among potential migrants. Awareness-raising activities responding to those needs can have measurable (causal) effects on certain dimensions (mostly risk perceptions and migration intentions) months after participation in awareness-raising events.

However, it is important to keep realistic expectations. There is now consistent evidence that campaigns may change migration-relevant perceptions and intentions of, on average, 1 to 2 out of 10 participants. Effects of this magnitude are considered large among social scientists (given the stringent and conservative research design); however, policymakers may have different perceptions. Overall, rather than a full dismissal of the approach, the more important question appears to be: “Under which conditions does awareness-raising for migrants work better than in others, and for whom”?

<sup>26</sup> According to the European Commission's working group on information campaigns, the European Union and individual European Union Member States funded more than 100 migration campaigns since 2014 (see presentation of the Vice-chair of the EC working group on information campaigns at the European Migration Network, Annual Conference in Vienna on 3 December 2019).

<sup>27</sup> There are several scientific studies underway, including those by Beber and Scacco and Bah, Batista and McKenzie.

While this study aimed to provide further evidence on the impact of awareness-raising activities, there are still several open questions. First, do changes in risk perceptions and migration intentions lead to changes in behaviour, i.e. flows? Second, how long do campaign effects last? Do they wane off beyond six months? Third, which messages work best? Like many other recent campaigns, CinemArena focuses on highlighting the risk associated with irregular migration from West Africa to Europe. However, there is a lack of evidence on which kinds of messages are more effective than others to effect eventual safe migration behaviour. Alternative approaches involve highlighting opportunities at home through featuring success stories of those who stayed, options to migrate within West Africa or legal pathways to Europe.

Despite these important remaining questions, this study has aimed to make a decisive step forward in closing the evidence gap in relation to migration campaigns and provide insights for policymakers, practitioners and researchers in this field.





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## ANNEX: Supplementary materials

**Table A1.** Provinces, villages and number of interviews at the baseline

PROVINCE	CONTROL GROUP		TREATMENT GROUP	
	VILLAGES	N	VILLAGES	N
Boffa	Kissing	31	Boffa Centre	38
Boffa	Soumbouyady	34	Thia	37
Boffa	Walia	37	Yenguisa	33
Boke	Castri	21	Boké Centre	51
Boke	Diahabya	41	Dabankou	76
Boke	Diarabaka	21	Filima	53
Boke	Fadougou	19	Fodeconteya	58
Boke	Guillere	21	Guidali	56
Boke	Kaboye Kanpate	31	Kaboye	57
Boke	Karkouba	60	Kakoui	45
Boke	Katounou	32	Katougouma	48
Boke	Kawass	22	Kolaboui centre	49
Boke	Kibola	33	Kolia Snamato	43
Boke	Kiyaye	23	Korera	59
Boke	Madina Kebenya	28	Madina Toubataye	38
Boke	Sangareko	30	Sarabaya	48
Boke	Tantoulmane	26	Tamakene	44
Boke	Yatiya	35	Tanene Centre	47
Gaoual	Alphaya	20	Basanto	50
Gaoual	Boumehou	28	Gaoual Centre	58
Gaoual	Kayan	20	Koumbia	48
Gaoual	N'diouriah	26	Koursitel	53
Gaoual	Toulon	27	Sinthirou	46
Koundara	Akadasso	29	Boundoufourdou	42
Koundara	Bidalyera	30	Kamabi	51
Koundara	Madina Badiar	35	Kandaïda	38
Koundara	Missira	39	Koundara Centre	57
Koundara	Salemata	32	Madina Djan	39
Koundara	Sambaldé	59	Sambailo	35
Koundara	Sinthiourou Maroye	59	Saraboido	45
Koundara	Wadiatoulaye	26	Tabadel	52
Koundara	Younkougou	65		

**Table A2.** Covariates and propensity score matching variables

VARIABLE	QUESTION	MEASUREMENT
Individual-level characteristics		
Gender	What is your gender?	Male = 0; Female = 1
Age	What is your year of birth?	Continuous
Family status	What is your current family status?	Categorical variables: 0 = Married/In a relationship; 1 = Single/ Divorced/Widow
Schooling	How many years did you go to school?	Continuous
Children	How many children do you have?	Continuous
Household size	How many people live in the same house/apartment with you?	Continuous
Ethnic group	Respondents ethnic group	Categorical: 0 = No; 1 = Yes; Each ethnic group is a dummy.
Employment	Are you currently employed?	Categorical: 0 = Unemployed; 1 = Working; 2 = Student; 3 = Other
Income	What is currently your main source of income?	Categorical: 1 = Business/salary; 2 = Family; 3 = Agriculture; 4 = Other
Contacts	Do you personally know someone that has migrated to Europe?	Binary: 0 = No; 1 = Yes
Pressure	Does your family want you to migrate to Europe?	Binary: 0 = No; 1 = Yes
Access to medicine	Do you have access to medicine?	Binary: 0 = No; 1 = Yes
Access to fuel	Do you have access to fuel?	Binary: 0 = No; 1 = Yes
Access to water	Does your neighborhood have access to clean drinking water?	Binary: 0 = No; 1 = Yes
Time lag	The number of days between the CinemArena event and the last interview	Binary: 0 = No; 1 = Yes
Village characteristics		
Electricity	Does the village have an autonomous electrification network (solar panel, group, generator, etc.)?	Categorical variables: 0 = No; 1 = Yes
Access to water	Is the village connected to the SEG drinking water distribution network?	Categorical variables: 0 = No; 1 = Yes
Village size	How many inhabitants are there in the village?	Numeric variable ranging from 1 to 10: Each group is a decile calculated on the number of inhabitants.

Note: The full questionnaire is available upon request.

**Table A3.** Outcome variables

VARIABLE	QUESTION	MEASUREMENT
<b>RISKS PERCEPTIONS</b>		
RISKS ALONG THE JOURNEY	<i>According to what you know, what are the specific risks that are likely to happen during such a journey?</i>	
Lack of food		Binary: 0 = No; 1 = Yes
Exploitation/ mistreatment		Binary: 0 = No; 1 = Yes
Sickness		Binary: 0 = No; 1 = Yes
Expulsion		Binary: 0 = No; 1 = Yes
Sinking		Binary: 0 = No; 1 = Yes
RISKS AT DESTINATION	<i>According to what you know, what are the specific risks that are likely to happen at destination?</i>	Categorical: 0 = No; 1 = Yes; Each ethnic group is a dummy.
Housing		Binary: 0 = No; 1 = Yes
Social exclusion		Binary: 0 = No; 1 = Yes
Discrimination		Binary: 0 = No; 1 = Yes
Unemployment		Binary: 0 = No; 1 = Yes
Homesickness		Binary: 0 = No; 1 = Yes
Danger	<i>According to what you know, how dangerous do you think it is to migrate to Europe irregularly?</i>	Likert scale answer ranging from “zero risk” to “extremely” recoded as a dummy variable:  0 = Zero risk, not at all, no so much, a little bit, dangerous.  1 = Very/extremely dangerous
<b>KNOWLEDGE</b>		
Duration of the journey	<i>How long do you think it would take someone to migrate to Europe irregularly?</i>	Recoded; binary: 0 = “more than three months”; 1 = “Less than 3 months”
Costs of the journey	<i>Do you have an idea of how much it cost someone to migrate to Europe irregularly?</i>	Binary: 0 = No; 1 = Yes
Actual cost	<i>Please give an estimation in local currency.</i>	Continuous variable. The logarithm of the estimated amount is converted in USD.
General knowledge	<i>How much do you know about how to migrate to Europe?</i>	Recoded likert scale: 0 = “Nothing”, “A little bit”, “Somewhat”; 1 = “A lot”
<b>MIGRATION INTENTIONS</b>		
Irregular migration	<i>How do you evaluate the probability that you will migrate to Europe within the next 2 years? (adjusted for knowledge about access to legal visas).</i>	Categorical variable: 0 = Low; 1 = High. The equivalent of the variable “intention” who perceived low chances to obtain a legal visa
<b>ECONOMIC OPPORTUNITIES</b>		
Opportunities	<i>Do you think there will be more economic opportunity in your country in 5 years?</i>	Categorical variable: 0 = No, Don’t know, maybe; 1 = Yes.

Note: The full questionnaire is available upon request.

**Table A4.** Summary statistics by treatment group

CHARACTERISTICS	CONTROL GROUP		TREATMENT GROUP		Difference in means
	Mean	SD	Mean	SD	
Age	24.96	6.36	23.07	6.04	1.89
Female	0.21	0.41	0.15	0.36	0.06
Ethnic group:					
Peul	0.40	0.49	0.42	0.49	-0.02
Soussou	0.25	0.43	0.14	0.35	0.1
Diakhanke	0.09	0.29	0.16	0.36	-0.07
Malinké	0.06	0.23	0.09	0.28	-0.03
Lanouma	0.04	0.19	0.09	0.28	-0.05
Other	0.16	0.37	0.11	0.31	0.06
Household size	5.47	4.57	7.35	4.15	-1.88
Family status:					
Single	0.49	0.50	0.68	0.46	-0.2
Married: monogamously	0.43	0.49	0.25	0.43	0.18
Married: polygamously	0.05	0.23	0.04	0.21	0.01
Other	0.04	0.19	0.02	0.15	0.01
Number of children	1.28	1.78	0.88	1.63	0.4
Years of schooling	4.13	4.49	6.92	4.95	-2.8
Employment status:					
Unemployed	0.47	0.50	0.37	0.48	0.1
Working	0.32	0.47	0.32	0.47	0
Student	0.08	0.27	0.29	0.46	-0.22
Other	0.13	0.33	0.02	0.13	0.11
Income source					
Family	0.12	0.32	0.43	0.49	-0.31
Farming	0.48	0.50	0.22	0.41	0.26
Business/ salary	0.10	0.30	0.24	0.42	-0.14
Other	0.31	0.46	0.12	0.32	0.19
Saving capacity	0.49	0.50	0.52	0.50	-0.04
Lack access to clear water	0.11	0.32	0.06	0.23	0.06
Lack access to medecines	0.06	0.25	0.08	0.27	-0.02
Lack access to hospital	0.09	0.29	0.16	0.36	-0.06
Lack access to fuel (for cooking)	0.08	0.27	0.37	0.48	-0.29
Direct contact living abroad	0.61	0.49	0.77	0.42	-0.15
Family pressure to migrate	0.07	0.25	0.13	0.34	-0.07
Days between event and endline	86.31	19.67	89.47	20.19	-3.17
Observations	1 040		1 494		2 534

Note: The full questionnaire is available upon request.

**Table A5.** Summary statistics of villages' characteristics by treatment group

	CONTROL GROUP	TREATMENT GROUP	TOTAL SAMPLE Mean (SD)	Min	Max	DIFFERENCE IN MEANS
Fountain available	0.78	0.78	0.78	0	1	0.00
	0.42	0.42	0.42			(0.03)
Connected to drinking water network	0.09	0.15	0.12	0	1	-0.05
	0.30	0.36	0.33			(-0.62)
Connected to electricity grid	0.06	0.15	0.10	0	1	-0.09
	0.25	0.36	0.30			(-1.04)
Distance to nearest highway	6.60	2.46	4.71	0	39	4.13*
(in km)	8.89	6.13	7.96			(2.10)
Distance to nearest clinic (in km)	5.16	2.33	3.86	0	20	2.82*
	5.51	3.62	4.91			(2.36)
Distance to nearest primary school (in km)	1.16	0.13	0.69	0	9	1.03*
	2.13	0.58	1.68			(2.62)
Distance to nearest policy station (in km)	11.16	4.63	8.17	0	30	6.53***
	6.50	5.00	6.67			(4.36)
Distance to market (in km)	5.81	5.22	5.54	0	37	0.59
	4.54	8.48	6.58			(0.32)
Distance to nearest hospital (in km)	16.03	13.04	14.6	0	65	2.99
	12.95	12.20	12.6			(0.91)
Distance to nearest secondary school (in km)	11.75	5.41	8.85	0	45	6.34*
	9.47	9.04	9.73			(2.63)
Number of ethnic groups residing in village	2.81	5.37	3.98	1	14	-2.56***
	1.73	3.28	2.84			(-3.64)
Population size	961	3 045	1 914	200	10 000	-2 083.77***
	900	2 653	2 164			(-3.90)
More than 1 000 residents	0.25	0.70	0.46	0	1	-0.45***
	0.44	0.47	0.50			(-3.83)
Observations	32	27	59			59

Note: \*p < 0.1; \*\* p < 0.05, \*\*\* p < 0.01; SD = standard deviation. Due to the data quality from the village survey conducted in Boffa Centre, Gaoual Centre, Kolaboui Centre and Koundara, these observations from the sampled villages' data analysis were excluded. The full questionnaire is available upon request.

Source: CinemArena Impact Evaluation data set 2019.

**Table A6.** DiD estimates on migration intentions, knowledge about irregular migration and perceptions of economic opportunities at home

MIGRATION INTENTIONS, KNOWLEDGE AND OPPORTUNITY PERCEPTIONS							
OUTCOME		General migration	Irregular migration intentions	Self-assessed	Duration of irregular migration to Europe	Costs of irregular migration to Europe	Economic opportunities at home
DiD	Coef.	-0.0273	-0.0880**	0.0327	-0.0607	0.150**	0.152**
	SE	(-0.74)	(-2.99)	(1.31)	(-1.66)	(3.93)	(2.71)
	N	4 933	4 933	5 064	5 064	5 064	5 047
DiD with covariates	Coef.	-0.0347	-0.0920**	-0.00202	-0.0862*	0.152**	0.144*
	SE	(-0.88)	(-3.01)	(-0.08)	(-2.29)	(3.72)	(2.49)
	N	4 689	4 689	4 818	4 818	4 818	4 802
DiD with trimming	Coef.	-0.0176	-0.106**	0.00493	-0.0437	0.234**	0.191**
	SE	(-0.41)	(-2.91)	(0.15)	(-0.99)	(4.10)	(2.68)
	N	2 546	2 546	2 624	2 624	2 624	2 622

Notes: +p < 0.1; \* p < 0.05, \*\* p < 0.01; SE = Standard error clustered at village-level; DiD = Difference-in-difference. See section 4.1. for details on the specification of the model; see Table A2 and A3 for details on the operationalization of outcome variables and covariates.

**Table A7.** DiD estimates on migration intentions, knowledge about irregular migration and perceptions of economic opportunities at home

PERCEPTIONS OF RISKS ASSOCIATED WITH IRREGULAR MIGRATION TO EUROPE												
OUTCOME												
		General danger	Food and water shortages	Exploitation	Sickness	Expulsion	Sinking	Discrimination	Homesickness	Housing	Social exclusion	Unemployment
DiD*	Coef.	0.104**	-0.0507	0.167**	-0.212**	0.0542*	-0.0938	-0.0134	-0.0223	0.00916	0.0510	-0.0906*
	SE	(2.74)	(-1.36)	(4.59)	(-4.38)	(2.19)	(-1.50)	(-0.71)	(-1.27)	(0.24)	(1.18)	(-2.16)
	N	5 026	5 064	5 064	5 064	5 064	5 064	5 060	5 060	5 060	5 060	5 060
DiD with covariates**	Coef.	0.0969*	-0.0579	0.161**	-0.213**	0.0600*	-0.0856	-0.0120	-0.0241	-0.00834	0.0456	-0.101*
	SE	(2.47)	(-1.51)	(4.27)	(-4.35)	(2.22)	(-1.34)	(-0.58)	(-1.32)	(-0.20)	(1.02)	(-2.33)
	N	4 790	4 818	4 818	4 818	4 818	4 818	4 814	4 814	4 814	4 814	4 814
DiD with trimming***	Coef.	0.102*	-0.0154	0.169**	-0.220**	0.0571	-0.0474	-0.0139	0.0138	0.00418	0.0662	-0.0635
	SE	(2.35)	(-0.35)	(2.99)	(-3.69)	(1.61)	(-0.59)	(-0.65)	(0.66)	(0.07)	(1.25)	(-1.33)
	N	2 610	2 624	2 624	2 624	2 624	2 624	2 621	2 621	2 621	2 621	2 621

Note: +p < 0.1; \* p < 0.05, \*\* p < 0.01; SE = Standard error clustered at village-level; DiD = Difference-in-difference. See section 4.1. for details on the specification of the model; see Table A2 and A3 for details on the operationalization of outcome variables and covariates.

