Slowing transmission
Language challenges in community radio relay of COVID-19 risk communication in Afghanistan

March 2021
Overview

What you absolutely need to know

In 2020 Internews launched the Rooted in Trust project to counter rumors and misinformation about COVID-19. They commissioned Translators without Borders (TWB) to map community radio stations and investigate the language and translation challenges community radio broadcasters face when relaying official COVID-19 risk communication to their audience.

To better understand these challenges, TWB conducted a survey and interviews with 65 community radio broadcasters, representing a quarter of all community radio stations across Afghanistan. Based on our survey, we mapped community radio stations and the reach of each radio signal to estimate overall radio coverage across the country. Where possible, we triangulated our findings with data from Internews’ Information Ecosystem Assessment in Kabul, Kandahar, and Herat.

Community radio stations remain an important source of information, especially for rural populations, less literate individuals, and in remote provinces. During public health emergencies, broadcasters can turn into health communicators and support the relay of risk communication, but they face several challenges.

- **Radio signals don’t cover all provinces**
  Based on the radio signals we were able to map, radio coverage doesn’t reach people equally across the country. Speakers of marginalized languages have especially limited access to radio broadcasts. Relative to population density, speakers of Turkmeni, Brahui, Balochi, and Uzbeki have especially limited access to radio broadcasts.

- **Few broadcasts are in languages other than Dari and Pashto**
  Dari and Pashto are the main broadcasting languages, but not everyone understands them. Broadcasts in other languages are largely limited to adverts, short audio clips, and sporadic language mixing in talk shows and call-in shows. Dedicated programs providing in-depth information in another language are rare.

- **Language barriers reduce the quality and timeliness of broadcasts**
  Community radio stations lack resources and translation capacity to broadcast in languages other than Dari or Pashto. As a result, some important information is delayed, and some is never broadcast at all. The quality and level of detail of broadcasts in other languages is also reduced.

- **Broadcasters face difficulties accessing available information**
  Most community radio stations have limited access to the internet and experience electricity failures. This makes accessing and validating available information on COVID 19 extremely difficult. Also, background information is often passed to broadcasters in English, but with limited internet access this information can’t readily be translated.

- **Information needs to be provided in plain language**
  Broadcasters don’t relay information that uses complicated language or technical and medical terms. New terms and complex new information around medical issues need to be rewritten and presented in plain language for a general audience. Yet community radio stations often can’t provide plain-language editing, so don’t relay more complex information.
External information providers can reduce language challenges

Many organizations are involved in risk communication and community engagement. They can support community radio stations to relay COVID-19 information more effectively by making it easier for those stations to access, understand, and broadcast in a form relevant to their listeners. For example, they can provide:

- **Information in local languages**
  Translate content into Dari, Pashto, and the other languages spoken in the target area. Draw on existing language data or consult target audiences on language and communication preferences to reach those that are currently under-served.

- **Information in plain language**
  Avoid or explain technical terms, use simple sentence structures, use words and concepts familiar to your intended audience, and don’t distract from key messages with unnecessary detail.

- **Information in formats and file sizes suited to slow internet speeds**
  Transfer concise content in small file sizes for rapid download.

- **Training on basic medical concepts**
  Offer radio station staff a general introduction to medical concepts geared to aiding understanding of public health information, in the languages they are most comfortable in.

- **Glossaries to aid understanding**
  Explain new or complicated technical and medical terms, using tools like TWB’s COVID-19 glossary, which includes terms in Dari and Pashto.

- **Access to expanded research and mapping efforts**
  Improve the depth and breadth of understanding related to language challenges and solutions in community radio.
Survey of broadcasters

COVID-19 risk communication by community radio stations in Afghanistan

53 broadcasters

- Broadcasting in Dari or Pashto: 98%
- Broadcasting also in other languages: 40%
- 42% urban / 40% rural (18% unknown)

Percentage of radio stations not covering the language spoken in the area:

- Dari: 13%
- Pashto: 13%
- Nuristani: 13%
- Pashai: 13%
- Balochi: 8%
- Hazaragi: 6%
- Uzbeki: 6%
- Turkmeni: 4%
- Other: 4%

Provinces covered by radio stations:

Primary broadcast language:

- 60% Dari
- 38% Pashto
- 2% Other

Other broadcast language:

- 43% Dari
- 15% Hazaragi
- 20% Pashto
- 10% Uzbeki
- 12% Other

#LanguageMatters
C19 broadcasts 87% of community radio stations have aired information on COVID-19 since the beginning of the pandemic. 8% did so initially but stopped, 2% have begun to do so more recently.

Pre-produced content 89% of community radio stations use content on COVID-19 pre-produced by organizations or networks, 9% don’t, and 2% are not sure.

Suitability 78% find content produced by others well suited to their audience, 22% think it is only suited to parts of their audience due to language and technical terms.

Own content 96% of community radio stations produce their own content on COVID-19, 4% don’t know or prefer not to say.

Sources 62% use background information provided by Afghan ministries and authorities. 55% use information from WHO, 36% from other media and media networks, and 32% from INGOs.

Format used for COVID-19 broadcasts

- Radio show host talking about it: 68%
- Talk show with experts: 57%
- Call-in show: 38%
- Jingles: 23%
- Other: 6%

Who is doing translations?

- We discuss translations collectively: 32%
- Everyone translates as needed: 38%
- Designated staff members: 21%
- External translators: 1%

43% say they often have difficulty accessing background materials they need.

36% say they often have difficulty receiving background materials in all the languages they need.

38% say background materials often do not offer enough detail on the complex issues related to COVID-19.

23% say background materials often contain technical or medical terms that are confusing or difficult to understand.

23% say they face difficulties translating information based on these background materials.

Community radio data from Internews’ Information Ecosystem Assessment*

How often do you access the radio?

<table>
<thead>
<tr>
<th></th>
<th>Not at all / very little</th>
<th>Sometimes</th>
<th>Very often / always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>56%</td>
<td>16%</td>
<td>25%</td>
</tr>
<tr>
<td>Men</td>
<td>51%</td>
<td>15%</td>
<td>32%</td>
</tr>
<tr>
<td>Kabul</td>
<td>64%</td>
<td>13%</td>
<td>18%</td>
</tr>
<tr>
<td>Herat</td>
<td>54%</td>
<td>18%</td>
<td>26%</td>
</tr>
<tr>
<td>Kandahar</td>
<td>41%</td>
<td>17%</td>
<td>42%</td>
</tr>
</tbody>
</table>

*survey conducted with 650 members of the general public in Kabul, Kandahar, and Herat

Trust in community media

- Total: 14% Most of all, Unusually, Usually, Sometimes, Occasionally, Rarely, Seldom
- Women: 16%, 15%, 18%, 17%, 42%
- Men: 16%, 15%, 18%, 17%, 42%
- Kabul: 16%, 15%, 18%, 17%, 42%
- Herat: 16%, 15%, 18%, 17%, 42%
- Kandahar: 16%, 15%, 18%, 17%, 42%

Slowing Transmission
Findings

Radio coverage is patchy across Afghanistan

Radio continues to be one of the major sources of information in Afghanistan, especially for rural populations. Listening to the radio is more common in rural areas (62%) than in urban areas (42%), and more often used as a source of information in the east (70%) and southwest (69%) than in other regions. In a major disease outbreak like the COVID-19 pandemic, community radio stations play a crucial role in risk communication and information relay. Their role is especially important in rural areas with little access to other media and among population groups with low literacy rates.

To gain a more nuanced understanding of actual radio coverage in Afghanistan we asked questions of community radio stations. We approached 246 community radio stations. Forty-six of them responded with information on the height of the radio antenna, the power of their transmitter, and the frequency type used. For the remaining radio stations we took values from the closest radio stations with known values to estimate their potential reach. We used a digital elevation model to estimate how far each radio signal was likely to travel based on the terrain. This enabled us to map coverage of community radio stations across Afghanistan. Map 1 illustrates the reach of all 246 radio stations, along with the main language many of them broadcast in. Gray polygons on the map indicate radio stations that did not respond to our survey. Explore this data further through an interactive map.

From the community radio stations we were able to map, most broadcasts are concentrated around the cities of Kabul and Jalalabad. They cover Kabul, Nangarhar, and Laghman Provinces and parts of neighboring provinces. The main broadcasting language in this cluster is Pashto. A second smaller cluster of radio coverage is around the cities of Kunduz, Taloqan, and Mazar-i-Sharif in the north of the country, across Balkh and Takhar Provinces. Most radio stations in this cluster broadcast primarily in Dari. While the map doesn’t show broadcast languages for all 246 community radio stations, the general trend in radio coverage is clearly visible. Outside the main clusters, community radio signals cover the areas around larger cities and provincial capitals, like Kandahar, Herat, Chaghcharan, and Zaranj. Radio coverage is far less in the areas in between these clusters. Those with least radio coverage include the northeast and part of the eastern region, the northwest provinces bordering Turkmenistan, the central highlands, and the south of the country.

Map 1: Community radio stations’ primary broadcasting language

Map 2: Primary language spoken by the population

To see this data in an interactive web map click here.
Internews’ Information Ecosystem Assessment (IEA) presents a similar picture for the urban areas of Kabul, Kandahar, and Herat. The assessment found that 42% of people in Kandahar ‘always’ or ‘very often’ use radio as a source of information, compared with just 18% of people in Herat. In Herat, 68% said they access radio ‘not at all’ or ‘very little,’ compared with 41% in Kandahar. The limited radio coverage around Herat illustrated by our radio signal map (Map 1) may help explain these findings. Map 1 also shows that broadcasts in Pashto have a wider geographical reach than broadcasts in Dari. The impact of this is reflected in the IEA finding that 56% of Pashto speakers access radio, compared with just 38% of Dari speakers.

To further understand which population groups have less radio access, we compared our radio coverage projections against estimates of population density by first language (see Map 2). Comparison of Maps 1 and 2 shows that the areas with low radio coverage are also the most linguistically diverse.

Comparing general radio coverage regardless of language with population size by language group, coverage is best for speakers of Pashto, Nuristani, and Persian languages (including Dari, Hazaragi, Aimak and Tajik). Balochi, Turkmeni, Brahui, and Uzbeki speakers have the least access to radio broadcasts in any language. Pashto and Dari speakers on average have access to at least twice as many radio broadcasts as any other language group.

Sixty-six percent of Turkmeni speakers don’t receive any of the radio signals we mapped. Brahui and Balochi speakers have similarly limited access to radio broadcasts: 52% and 45% respectively don’t receive any of the radio signals mapped. Figure 1 summarizes the percentage of each language group with no access to any of the radio broadcasts mapped.

*Figure 1: Percentage of language group without access to radio broadcasts*
Speakers of marginalized languages lack broadcasts in their language

In the multilingual context of Afghanistan, Dari and Pashto are both lingua francas. They are also the primary radio broadcasting languages, as Map 1 illustrates. Eighty-seven percent of the community radio stations that participated in our research report using Dari and 75% report using Pashto either as a primary or as a secondary broadcast language. Speakers of both languages will therefore find it relatively easy to tune into a community radio station that relays information in their language. For speakers of other languages like Uzbeki, Pashai, Balochi, or Nuristani, broadcasting services in their primary language are less readily available.

“Health-related ads would better be produced in more than one language for the good of people, but multilingual content creation needs more resources.”

Radio broadcaster, Daikundi Province

All community radio stations participating in our survey used either Dari or Pashto as a primary broadcasting language. News bulletins are usually only in Dari and Pashto. Yet 40% of the stations reported also broadcasting occasionally in other languages. Community radio stations using Dari as their primary broadcasting language are mostly located in the north and west of the country and the central highlands. Some also air content in Uzbeki (35%), Hazaragi (13%), Turkmeni (10%), and Balochi (6%). Most of the community radio stations using Pashto as a primary broadcasting language are in the south, east, and central parts of the country. Some of these stations also broadcast in Pashai (19%) and in Turkmeni, Uzbeki, and Nuristani (each 5%).

Despite this diversity of broadcasting languages, there are several areas where the most commonly spoken language is rarely used in radio broadcasts. These include the northeast, where Nuristani is spoken, and Nangarhar Province, where Pashai is spoken. Figure 2 shows the proportion of radio stations that occasionally broadcast in those and other additional languages. It also shows the proportion of radio stations that never broadcast in those languages, even though they are dominant in that station’s coverage area.

“Our colleagues translate into Pashto, Dari and Uzbeki, but Uzbeki is very difficult as the written form is different from the local spoken form that people understand. We try to have information translated properly – or we do not use that information. We try to use the internet for that but most of the time it’s not very helpful.”

Radio broadcaster, Takhar Province

For example, while Nuristani speakers have one of the highest levels of radio coverage, they receive very few broadcasts in their language. Nearly 40% of all radio signals mapped across the country are broadcast from radio stations located in areas where Nuristani is spoken by the population, but only 2% of these broadcast content in Nuristani.
Figure 2 also suggests that a relatively high proportion of community radio stations (23%) occasionally broadcast in Uzbeki. Only 6% reported that they never used Uzbeki although it was spoken in the area covered. But the use of a language for radio broadcasting does not necessarily imply that broadcasts reach the people who speak that language. Many Uzbeki speakers live in areas not covered by the community radio stations we mapped. Maps 3 and 4 show the mismatch between Uzbeki-speaking areas and Uzbeki radio coverage.

Map 3: Population speaking Uzbeki by district

Map 4: Radio signal coverage in Uzbeki

To see this radio broadcast data for other individual languages click [here](#).

The data mapped in Map 3 and Map 4 does not indicate the types or duration of program broadcast in each language. Nearly all of the radio stations broadcasting in additional languages reported doing so at a minimal amount: not more than 5% or one hour a day. Content that is broadcast in other languages is not in a format designed to promote in-depth understanding. Jingles and adverts in between programs are the most commonly used formats for content in other languages. Key informants also cited entertainment shows, in particular call-in or talk shows, as examples of multilingual programs. These shows use different languages depending on the caller or guest. While this format might provide more in-depth information in a particular language than a jingle, listeners don’t know in advance to tune in for content in that language. Few broadcasters reported having regular shows in other languages.
Language barriers reduce broadcast quality

Community radio broadcasters are aware of the need for content in other languages, particularly during the COVID-19 pandemic and on public health in general. They feel they don’t broadcast enough in languages other than Dari or Pashto. But even those radio stations that regularly broadcast in other languages face difficulties producing content in those languages. Programming, jingles, and adverts in additional languages require staff who speak these languages fluently and who can translate and edit information for production. Most broadcasters say they don’t have the resources to extend their broadcasts and programming in these languages, especially in the difficult economic situation the pandemic has left most radio stations in.

The translation capacities of community radio stations are usually limited and most don’t have resources to outsource translation for languages other than Dari and Pashto. Most stations either don’t have a standard process for translation and expect staff to translate as needed (38%) or translate collectively among editorial staff (32%). While 21% of community radio stations say they have dedicated translation staff, they work largely into broadcast languages.

This lack of translation capacity is a particular challenge for COVID-19 risk communication and content production. Of the broadcasters participating in our survey, 36% say they face difficulties finding background materials in all the languages they need. Another 23% say they face difficulties translating background materials. And 13% say that translation in general is a challenge for producing high-quality informative content on COVID-19. This suggests that not all broadcasters face difficulties with translation. Those who don’t face difficulties broadcast largely in Dari and Pashto or limit their broadcasts in other languages to pre-produced content.

“Translation from English and Dari is very difficult for us. We try to be resourceful and reach out to friends and professionals, but that doesn’t solve our problem."

Khost Province

Without translation, not only can the information not be broadcast, radio staff themselves often don’t understand it. Broadcasters reported that much COVID-19 background information is shared or available only in English, which staff find hard to understand. Information in Dari or Pashto can also be a problem. A broadcaster from Khost Province in the Pashto-speaking southeast said their team found information in Dari very hard to understand.

To overcome language barriers, radio station staff use translation websites as far as internet connection and electricity supply allow. But broadcasters said these websites often produce inaccurate or nonsensical translations that need further editing. So they ask friends and professional contacts, university professors, and government officials to correct these preliminary translations for broadcasting. Since most radio stations cannot pay for these services, they rely on voluntary support. This means translation and editing take longer, if they happen at all, and information is often outdated by the time it is ready to air. Without accurate translation, broadcasters are justifiably reluctant to broadcast, so some potentially important information doesn’t reach the audience.

Frustrated by the impact this has on their ability to produce high-quality content, numerous broadcasters choose not to use any information written in English or other languages they don’t understand. They also reject information that is simply too complicated. This again impacts the quality of risk communication broadcasting on COVID-19.
Broadcasters’ voices on language and translation challenges

“We need to have broadcasting in Uzbeki, but we can’t afford it.”

Baghlan Province

“There were difficult terms. I asked doctors, and I paid for translation despite the harsh economic situation. We accessed most of the information in English or Dari and then translated it into Pashto. Then we simplified all the texts and [adapted them] to the local accent and spoken language. That was challenging and delayed our programs.”

Ghor Province

“Most information is in English. We have a major problem translating English. We use Google Translate - it helps to a certain degree, but it is not accurate. We send the text to friends online, we ask them for help to edit and correct the translation of complex medical terms and of the entire translation so that we can use it in our programs. Most of the time we face problems with the internet, so we can’t use Google Translate. If we can’t find someone to edit our information, we do not broadcast about that very important topic which people need to know about.”

Kunduz Province

“When our staff face difficulty in translating, we can solve that problem within our radio. We had 2 weeks’ training on translation of medical terms. When we face challenges in translation, we promise our listeners to find a proper translation and invite medical doctors or experts to help us.”

Baghlan Province

Broadcasters lack access to reliable information

All the community radio stations that participated in our survey were broadcasting information on COVID-19 (92%) or had done so (8%). Most stations used a mix of content produced by others (89%) and content produced in-house (96%). This tendency was also confirmed in interviews. Only one key informant said the radio station he works for has never aired content on COVID-19 due to a lack of access to reliable information.

To inform their audiences about COVID-19, broadcasters depend on reliable and accessible information from relevant authorities, and organizations. Yet difficulties accessing information limit their ability to produce high-quality content. Broadcasters participating in our survey considered sourcing reliable information the greatest challenge to producing content on COVID-19 (45%). This was repeated in nearly all interviews.

The pandemic itself limits information access. Lockdown, quarantine, and shortages of personal protective equipment limit broadcasters’ opportunities to interview or invite medical experts. As a result, they rely heavily on internet sources like websites and social media when access is possible. Those with internet access receive information via email, WhatsApp and Telegram.

Most broadcasters stressed the importance of reliable information on COVID-19, and mostly refer to official sources. In interviews they listed their main information sources as the health ministry,
Broadcasters need information in plain language

National authorities, international organizations, NGOs, and media networks provide both background information and pre-produced content for broadcasting. Community radio stations mostly receive pre-produced content from the health ministry (43%), UNICEF (28%), World Health Organization (15%) and radio networks (13%). Some stations have contracts to broadcast these materials, while others air it for free.

The pre-produced content is generally well received: 78% of community radio broadcasters consider it well suited to their audience. Another 22% think that pre-produced content is only suited to parts of their audience. The main reason is that most content is only available in Dari and Pashto, and less intelligible to their audience. Another limitation identified is the use of unfamiliar technical and medical terms.

“Lack of access to credible, reliable and simplified information on time was another challenge. No organization supported radios to enable them to produce high-quality information in this very new and specialized area of COVID-19. All information on COVID-19 for radios must have a main center where they prepare content as media staff are not specialized in medical issues.”
Kabul Province

However, many of the broadcasters we talked to reported that official information is often delayed, incomplete, or not updated. Validating information also results in significant delays. One broadcaster felt that community radio stations had lost listeners’ trust as a result of these challenges, which have diminished the quality of the information it is able to provide.

The IEA data offers some support for that view, in that community radio stations are less trusted than other media. Forty-five percent of respondents reported ‘good trust’ or ‘absolute trust’ in community media, lower than trust in government media (50%) and international media (61%). Yet community media is still markedly more trusted than community leaders, local government, and national government authorities, who all range between 33% and 35%. This highlights the important role community radio stations have to play in the relay of COVID-19 risk communication.

Broadcasters are rather more critical of the background information received, finding it not always adapted to the needs of their audience. Thirty-two percent of the broadcasters we interviewed find adapting information to the local context a major challenge. Insufficient detail on the complex issues related to COVID-19 is a problem for 38%, while 23% say they use technical and medical terms that are confusing and hard to understand (23%). The complicated scientific style of information on COVID-19, the lack of clear and concise explanations, and the use of medical terms was raised in every single interview with broadcasters.
Unknown medical terms were particularly challenging at the start of the pandemic. Broadcasters remember having to explain words like ‘pandemic,’ ‘COVID-19,’ ‘SARS,’ ‘MERS,’ and more basic medical concepts like ‘virus.’ Beyond terminology, they describe having to edit complicated descriptions into plain language that is easy for everyone to understand. Official information provided by national authorities in particular was described as too complicated to be broadcast without editing.

Like translation and validation, plain-language editing takes time and delays broadcasting. Most broadcasters don’t have a medical background, so again they rely on experts to help them understand medical information and find adequate alternatives to complex terms. Some have good relations with doctors at the local hospital or experts at the university to help, but other broadcasters, especially with rural stations, find this more challenging. To avoid delays, several radio station staff said they sometimes ignore more complex materials – with the risk of losing detail and quality of content and leaving audience questions unanswered.

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**Broadcasters’ voices on language and translation challenges**

“We do face challenges during translation as Dari and Pashto differ and many technical terms aren’t available in Pashto.”

Kabul Province

“We faced challenges in translating some terms and we tried to find alternative words for it. If we couldn’t find a translation we didn’t use that information.”

Nimruz Province

“In the case of complex medical terms, we avoid using that term because if it is broadcast without finding a proper translation it will not be effective for the audience. There is no reliable source to get the information to us on time, sometimes there is a delay in the dissemination of accurate information.”

Khost Province

“We don’t have direct contact with major media outlets or organizations, which becomes a big issue during crises. There is no agency that could support the media during a crisis or at least train the radio staff on any new topic. For example, at the beginning of COVID-19, even MoPH didn’t have information, we couldn’t access information on time, and we were struggling with the translation of complex words and terms.”

Kapisa Province

“Our translators do not have enough knowledge of medical terminologies so when they face problems we ask information from medical doctors.”

Bamiyan Province

“We had problems translating terms such as Corona or COVID-19 and we could not find an exact alternative name so we had to explain it to our people to comprehend. In case of medical terms we were assisted by the doctors or university teachers whom we would contact. We were simplifying translation according to local dialects so people would understand. Training and any support in this area will be very helpful for us to prepare more accurate and better information for our audience.”

Khost Province
Appendix

Methodology

This study was conducted between October 2020 and February 2021. An online survey in English, Dari, and Pashto was sent to 300 broadcasters working for 246 community radio stations using email and WhatsApp groups to ensure participation. We received 53 responses from 28 of Afghanistan’s 34 provinces.

We then conducted 45 semi-structured phone interviews with broadcasters. The sampling design included a few basic principles to ensure fairly equitable distribution based on linguistic, ethnic, and geographic factors. We conducted at least one interview with broadcasters from each of the 34 provinces and undertook two or even three interviews for the major cities where there is higher concentration of radio stations with broader broadcasting reach. Key informants had been partly identified via the survey. The overall sample for both activities covered 65 community radio stations. Interviews were conducted by a team of male and female Afghan researchers. Interviews were conducted in Dari and Pashto and recorded with consent of participants. All data was transcribed and translated before analysis. Qualitative data was used for further developing the quantitative findings. We also triangulated our findings with data from the 2020/21 Internews Information Ecosystem Assessment (EIA) as far as possible. To access the EIA report click here.

We developed the radio signal map on the basis of the survey responses on the location of each radio transmitter, the height of the antenna and the power of the transmitter. We used a digital elevation model and a line-of-sight analysis tool to estimate the reach of each radio signal in the surrounding terrain. In order to estimate the maximum length covered by any single radio signal, 1,000 watts were considered to be equivalent to 86 kilometers. For stations where we lacked data, we assumed its location to be in the center of the city, and estimated the antenna height and transmitter power by using the relevant attributes from the nearest neighboring station. For rural stations, we took the attributes from the nearest rural station.

For the dot density map we used available data on primary languages spoken by province from the 1997 CIA Factbook Map. We digitized polygon data and assigned language attributes based on the source dataset. We then overlaid those polygons on high-resolution population data from the 2020 Gridded Population Dataset from the WorldPop Project. This project started in October 2013 and provides an open access archive of spatial demographic datasets for Central and South America, Africa, and Asia through satellite imagery processing. It supports development, disaster response, and health applications. The data was transformed from a raster grid into spatially balanced points where each point corresponds to a thousand people living in the area. The points were then assigned the most likely first language spoken for clusters of people within those polygons. For locations that had overlapping polygons, we assigned 50% of the population to each language group. While this process is fairly imprecise and difficult to verify, it is helpful for making broad estimations of which language groups are less able to access radio broadcasts than others.

The research faced specific limitations considering the impacts of the pandemic and the deteriorating

security situation, particularly for journalists and media. One limitation to the study is the relatively small sample size that, although it covers one quarter of all community radio stations in Afghanistan, cannot be considered representative and doesn’t allow for generalizable conclusions. A history of threats against journalists may have made some broadcasters less willing to participate in the research. The remote online surveys skewed the sample toward participants with better internet access. While not a major limitation, conducting key informant interviews by phone created a different kind of rapport between the researcher and interviewees than face-to-face interviews would have done.

## Acknowledgments

Translators without Borders would like to sincerely thank all the individuals and organizations who supported and contributed to this study.

Translators without Borders believes that everyone has the right to give and receive information in a language and format they understand. We work with nonprofit partners and a global community of language professionals to build local language translation capacity, and raise awareness of language barriers.

Originally founded in 1993 in France (as Traducteurs sans Frontières), TWB translates millions of words of lifesaving and life-changing information every year. For more information on our work, visit translatorswithoutborders.org or contact info@translatorswithoutborders.org.

This research was conducted in partnership with Internews as part of the Rooted in Trust project which aims to collect, analyze and respond to rumors about COVID-19 and to work to better understand the information ecosystems in which they exist. Rooted in Trust is generously funded by the USAID Bureau for Humanitarian Assistance (BHA). The contents are the sole responsibility of Translators without Borders and do not necessarily reflect the views of Internews or USAID or the United States Government.