ASIA-PACIFIC: HOPE AND SOLUTIONS FROM LIVING AT THE EDGE OF THE CLIMATE CRISIS

PAKISTAN

CLIMATE CALAMITIES AND ITS IMPACT ON PEOPLE LIVING WITH HIV

ACT! ACTIVISTS' COALITION ON TB ASIA-PACIFIC
APCASO Strengthening community systems. Advancing human rights.
ASSOCIATION OF PEOPLE LIVING WITH HIV PAKISTAN

BACKGROUND

Climate change poses a fundamental threat to human health, affecting both the physical environment and aspects of natural and human systems. The Asia-Pacific region is vast and geographically diverse, spanning from the Himalayas to the tiny island states in the Pacific. Due to this diversity, the region encompasses all climate zones, resulting in a wide range of weather patterns from the monsoons in South and Southeast Asia, tropical cyclones in the Pacific, and the extreme snowy winter in Siberia.

The Asia-Pacific region faces a daunting spectrum of natural disasters and stands at the forefront of the climate crisis. Its coastal regions are particularly threatened by rising sea levels and cyclones, while its lowlands and the central dry zone are vulnerable to the impacts of floods and droughts. A person living in Asia-Pacific is six times more likely to be affected by disaster events than someone living outside the region.

Against this backdrop, it is pertinent to note that as the climate crisis intensifies, the Asia-Pacific region stands at the centre of both its worsening impacts and its most transformative potential solutions. This story series aims to capture the disproportionate impact of the climate emergency on vulnerable communities in the region and the human stories that drive communities in building and maintaining resilience in the face of the climate crisis.

COUNTRY SNAPSHOT

OVERVIEW

- **Population:** 247.5 million as of 2023
- **Economy:** GDP - USD 338.9BN
- **Income Classification:** Lower Middle-Income Country
  - Pakistan's poverty rate sits at 42.3% in FY24, with an estimated additional 2.6 million Pakistanis falling below the poverty line compared to the previous year.
  - Unemployment rate in 2024 was estimated to be 7.5%.
- **Daily Life & Culture:** Pakistan is a largely agricultural country, with an estimated 68% of its population involved in the industry in some form. It is the 5th most populus country in the world—behind only India, China, the United States, and Indonesia—and is predominantly Muslim, with over 96% of Pakistanis identifying as Muslim, according to the 2023 Population Census

HEALTH INDICATORS

- **Tuberculosis:** 611,000 current cases in 2022.
- **TB Incidence Rate:** 277 cases per 100,000 population as of 2023.
  - Pakistan accounted for 5.7% of global TB cases in 2022, placing it as the fifth-highest ranking country in terms of TB prevalence.
- **HIV:** 290,000 estimated cases (adults and children) as of 2023.
- **Accomplishment of 95-95-95 by 2025 UNAIDS Global Targets**
  - 23% know their HIV status
  - 15% PLHIV on ART
  - 11% PLHIV on ART, virally suppressed

  According to UNAIDS, HIV prevalence increased to 0.2% in 2022, from less than 0.1% in 2015.

CLIMATE RISK INDICATORS:

- **World Risk Index Ranking:** Pakistan is a high-risk country according to the World Risk Report, ranking 11th highest among 193 countries. The 2025 Climate Risk Index by GermanWatch, however, places Pakistan as the highest due to recent high economic losses.
- **Climate Change Impact:** Rising global temperatures have caused glaciers in Pakistan's northern regions to melt more rapidly, increasing the risk of Glacial Lake Outburst Flood (GLOF) by a significant degree. Erratic weather patterns have also led to extreme weather events occurring at an alarming rate, such as major floods in 2010 and 2022, a deadly heat wave in mid-2024, and toxic smog density in late 2024. These events have affected more than 50 million lives and caused a significant damage to the economy. The average daily maximum temperature in Pakistan has increased by 0.87°C between 1961 and 2007, and is projected to rise by 1.3°C to 4.9°C by the 2090s.

CLIMATE CHANGE BRINGS PAKISTAN'S PLHIV AND THE PROGRAMS THEY DEPEND ON TO A HALT

One early morning in November 2024, the Air Quality Index (AQI) in Multan, the 5th-most populated city in Pakistan's Punjab province, reached a peak of 2,135—well past the safety threshold of 100. In response, the city went on lockdown, closing parks and other public spaces until the middle of the month.

Nearby Lahore, the province's capital, was similarly blanketed in a thick layer of smog. Hospitals saw patients—many of them children, the elderly, and young men—coming in with eyes reddened from irritation, difficulty breathing, and bouts of coughing. The city government was forced to limit the mobility of its population, shutting down outdoor areas and public utility vehicles that left passengers exposed to the poisonous air, such as *tuk tuks*.

According to Asghar Satti, the National Coordinator of the Pakistan Association of People Living with HIV (APLHIV), the smog also caused significant impediments to their support programs.

"In the first quarter of 2024, we sent out food shipments, nutritional support to almost 9,000 PLHIVs, but because of the smog and smog issues, the delivery was delayed for more than one month," he shares. "That was something beyond our control, because you were not permitted to go out at night time. The visibility was okay around 12:00 p.m. to 3:00 p.m., so you had only three to four hours of mobility."

CLIMATE CHANGE, AN OVERLOOKED FACTOR IN HEALTH RESPONSE

While the smog is directly caused by a variety of human activities—motor vehicle exhaust, heavy construction work, the burning of crops, and industrial emissions, to name a few—one often-overlooked factor is climate change. An absence of rain due to erratic weather patterns has caused the smog to start earlier than usual and become denser.

Pakistan consistently ranks among the most vulnerable countries to climate change; the 2024 World Risk Report places it at 11th out of 193 countries, while the 2025 Climate Risk Index by GermanWatch places it at 1st. This is due in

part to the country's diverse geography—while its proximity to the equator makes it prone to higher temperatures, parts of its territory are also home to the Hindu Kush-Karakoram-Himalayan system, a mountain range often referred to as "The Third Pole" due to its high concentration of glacial formations.

Rising global temperatures have accelerated the melting of these glaciers, while also contributing to alarming heat waves in the region. As a result, Pakistan has experienced a wide variety of extreme weather conditions, often reaching the point of national emergency. In 2022, massive flooding impacted one-third of the country, impacting an estimated 33 million people. In 2024, a heatwave claimed the lives of more than 568 Pakistani people, with temperatures reaching as high as 52°C in the Sindh province.

"We have shifting monsoons bringing down more than the normal volume of rainfall within a very short span of time, in an area that was not historically a monsoon area, hence without any coping mechanism. There is growing evidence of the process of desertification," explained journalist and climate change advocate Afia Salam, referring to the process of factors such as drought, deforestation that turn fertile land into desert.

"We have a long coastline which is battered by more storms than it has historically faced, so there is a mix of factors that are contributing to Pakistan's placement at the top of the vulnerability index," she added.

The country's economy also took a significant blow during the COVID-19 pandemic, bringing its poverty rate to a staggering 40.5% in Fiscal Year 2024, according to the World Bank. These financial conditions severely compromise Pakistan's resilience against climate change-related risk.

Health concerns brought about by the effects of climate change have taken their toll on the economy, as well, Salam points out.

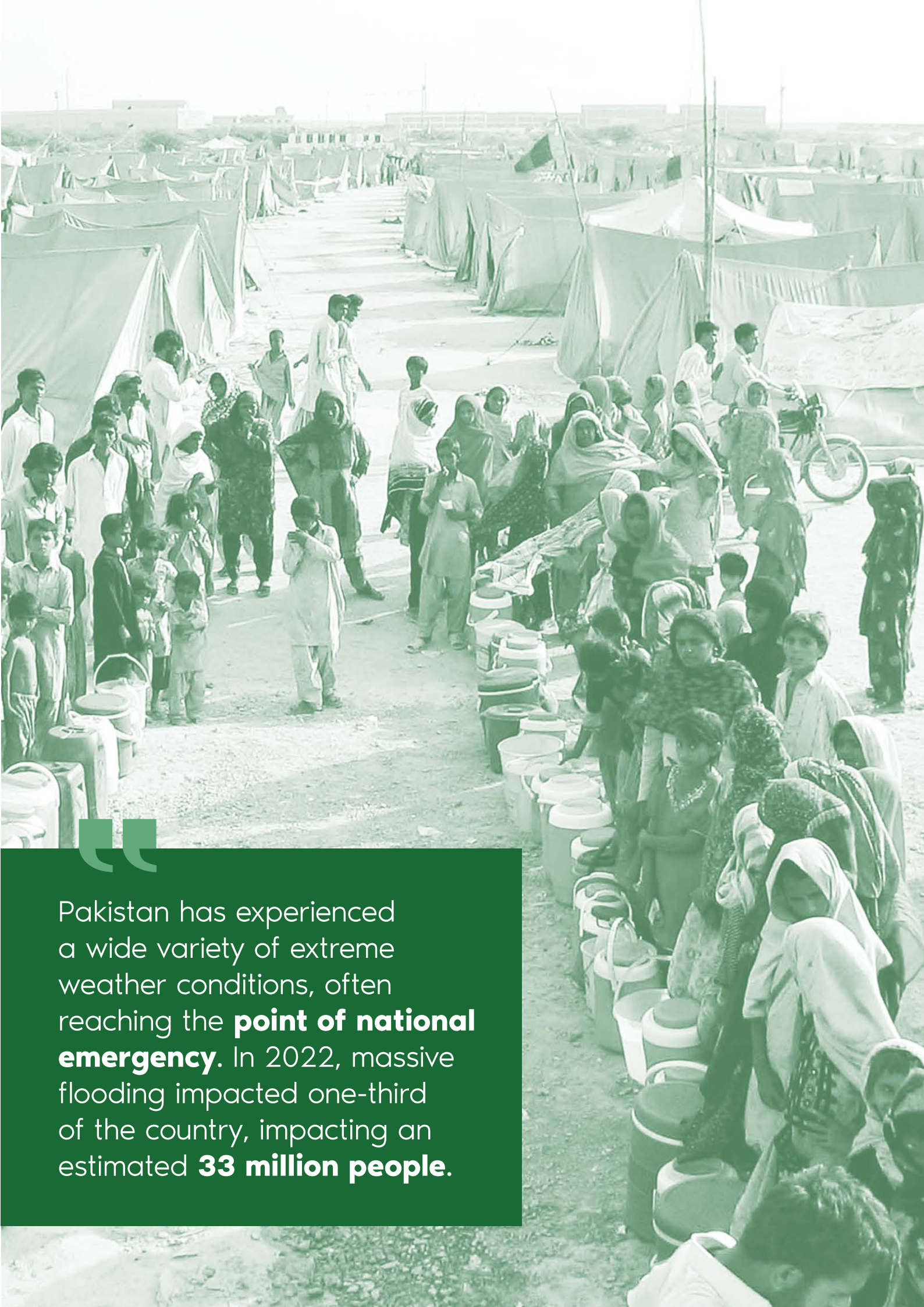
"Poor air quality and health costs of climate change due to waterborne diseases have a huge management cost, which takes a large chunk out of the GDP."

And, according to Satti, these complications are making Pakistan's PLHIVs an even more vulnerable population.

EFFORTS AT THE COMMUNITY AND GRASSROOTS LEVEL

HIV support in Pakistan relies heavily on grassroots-level efforts. Community outreach programs often make up for the lack of accessibility to antiretroviral therapy (ART) centers and other healthcare providers, as Satti explains. Even though the number of ART centers across Pakistan has risen from just 11 in 2013 to 94 as of 2024, it's not enough to address the needs of the entire PLHIV population in the country.

"In most of the cases, there is only one [ART] center in a district, so people are still facing issues accessing those ART centers if you compare them with the out-of-pocket expenses that they incur to access these centers," Satti says.



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PLHIVs will sometimes need to travel three to four hours to get to the nearest ART center, he explains, and by the time they arrive, they can no longer be accommodated. The only options left by then are to either spend another three to four hours traveling back home or to find a room to rent for the night so they can drop by the center in the morning. With Pakistan's current economic situation making livelihoods more difficult to come by, getting treatment becomes a complicated decision.

Climate change-exacerbated air pollution further increases the risks for PLHIVs. Public space closures like those experienced in the last quarter of 2024 not only delay shipments of food, medicine, and other necessary supplies to PLHIVs, but they also effectively "trap" the individuals in their homes. It makes more sense to skip a long trip to the ART center than it does to be exposed to the toxic air, or to risk vehicular accidents caused by low visibility due to the smog.

This is especially true for Pakistan's PLHIVs, as a high concentration of them reside in areas that are prone to extreme weather conditions and pollution, particularly Punjab and Sindh.

"The data indicates that almost 52% of HIV prevalence is in Punjab province, and around 40-41% prevalence is in Sindh province. So, meaning by that around 91-92% of HIV prevalence is in these two provinces," he says.

In response to the 2022 floods, APLHIV had to mobilize their community support groups according to a priority system just to ensure that the PLHIVs most in need could still get help.

Satti, Uzair the Deputy National Coordinator at the APLHIV and team coordinated with the National AIDS Control Programme (NACP) to organize PLHIVs in these areas under four categories: those who had more than a month's supply of medication, those with a month's supply, those with two weeks' supply, and those with less than two weeks' supply.

Members of the community support groups would then facilitate the distribution of supplies, prioritizing the latter two PLHIV categories with a critically low supply of medication. The outreach workers would collect the medicines from the ART centers closest to them and then deliver them, often by foot or by bicycle, to the PLHIVs they worked with.

Pakistan's reliance on community-based support goes well beyond supply distribution. According to Satti, there are currently around 50 HIV diagnostic centers in the country—a number he feels is inadequate. In 2018, APLHIV pioneered a program to introduce community-based testing programs, which now operate in more than 50 communities, while also providing prevention and counseling services.

A large thrust of these efforts also involves community-based monitoring, which allows them to locate and track the movement of the PLHIVs they serve. However, climate change has also impacted their monitoring programs, as mass displacement has made it difficult to get solid data on vulnerable populations. The 2022 floods alone displaced roughly 8 million people, with smaller floods throughout the years displacing others. In 2010, catastrophic flooding displaced an estimated 11 million people nationwide.

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FALLING FAR BEHIND TARGETS

As effective as these community efforts have been, however, Pakistan has a long way to go towards meeting the UNAIDS 95-95-95 goals, wherein at least 95% of PLHIVs in the country should ideally know of their status, while 95% of those who know their status are getting treatment, and 95% of those who've received treatment already have suppressed viral loads. As of 2022, only 23% of the country's PLHIVs are aware of their status, and only 15% of them are on ART. Only 11% of PLHIVs on ART have reported suppressed viral loads.

According to Satti, part of this is because APLHIV's efforts are almost entirely funded by grants from the Global Fund. According to Pakistan's 2023 funding request to The Global Fund–from 2024 to 2026, the estimated funding allocated by the Pakistan government amounts to a total of USD26.35 M, which leaves them with an estimated finance gap of USD161.23 M even after the addition of expected foreign aid.

The uncertainty surrounding the USA's recent freeze on foreign aid funding may or may not impact these figures as the US government was not listed in the document as an expected source of foreign funding. Entities to which the USA traditionally donates, such as UNAIDS and WHO, are, however, listed among Pakistan's external resources, so there is a possibility that funding will be affected by the decision.

Any significant progress to be made on the mitigation of climate change-related risks is also dependent on foreign aid, according to Salam.

LIVING WITH HIV AND DEALING WITH CLIMATE CHANGE

"In a country which is underdeveloped—we say we are developing, but basically the country has almost 40% of people below the poverty line—there is a resource constraint, and a lot of funds that were available for climate adaptation have been reported for disaster regions and recovery," she explains.

"A lot of assistance that Pakistan receives is in the form of soft loans. We have had some grants, development projects funded by the World Bank, the Asian Development Bank, the Asian Infrastructure Development, the German Agency for Development, FCDO, which is now the new name for UKAid, and the Chinese and Saudi governments, and the EU. But after the disaster of 2022, when [the] UN issued a call for aid to Pakistan and an assessment was placed for the world, despite encouraging pledges, not all those pledges made up for the amount asked for recovery, and even the pledges have not yet actually [been fulfilled] in totality."

Because recent calamities have hampered Pakistan's internal capacity to address the issues surrounding PLHIVs, climate change, and the relationship between them, projections for the country reaching its 95-95-95 goals aren't favorable, regardless of the significant progress Satti, his team, and other organizations have made over the past decade. Without external aid, any movement towards those goals will likely stall.

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A few months after the very air in Punjab became such a hazard that it effectively shut the region down, Multan and Lahore have registered better, albeit still dangerous, AQIs. As of 10 March 2025, Multan's AQI is at 158, whereas Lahore's is at 170—both still well above the safety threshold of 100. These readings still present significant health risks to Pakistan's PLHIVs, many of whom live in this very province. Climate change continues to be a genuine concern across the country, in many other forms.

"I am 54 years old, and for the first time ever in my life, I have seen that throughout the winter season, starting from the end of October, in Islamabad, we have not received even a single drop of rain," Satti shares.

"But we know that maybe by the end of February, or at the start of March, there will be heavy rainfall. And there will be flash flooding everywhere. So that is the kind of pattern, basically, we are facing. And in addition to so many issues that we face on a daily basis, now I just come to terms with how PLHIVs are facing these issues."

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The Pakistan story is a collaboration between APCASO, the Activist Coalition on TB, Asia-Pacific (ACT!AP) and Association of People Living with HIV (APLHIV) Pakistan.

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APCASO is an Asia-Pacific regional civil society network organisation that serves as a catalytic platform for advocacy and community systems strengthening for health, social justice, and human rights for key, vulnerable, and marginalised communities in Asia and the Pacific.

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