

# Unlocking Learning Resilience: Insights from ASER on Flood-Affected Districts in Sindh & Solutions for Learning Recovery

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Pakistan experienced one of the most devastating floods in its history in 2022, causing unprecedented damage to nearly 34,000 schools and impacting more than 3.6 million children (UNICEF, 2023). This led to setbacks in the education system in terms of interruption in schooling and learning losses. According to an in-depth damage assessment by the Sindh Education and Literacy Department (SELD), 19,808 out of 44,219 (i.e., 45%) schools were partially or fully damaged<sup>1</sup>.

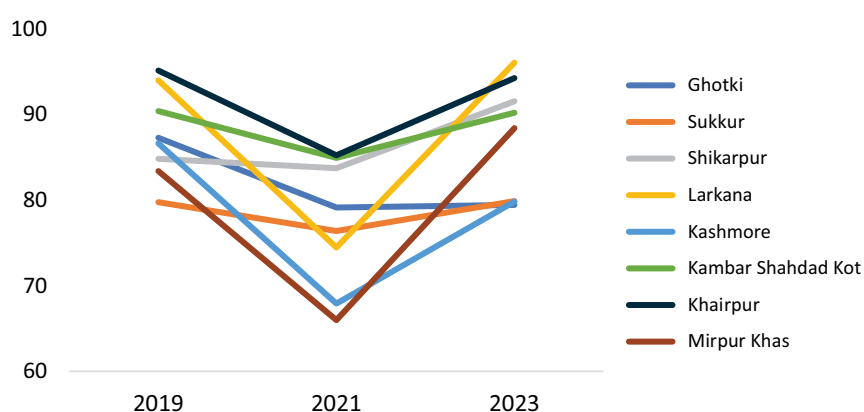
Strong global evidence indicates that disasters have a long-term, negative impact on learning (Baez, de la Fuente and Santos, 2010). Past crises in Pakistan also demonstrate this to be true, such as the 2005 earthquake which substantially reduced children's learning outcomes four years later<sup>2</sup>. Even prior to the floods, the education system had not quite recovered from the COVID-19 related learning losses caused by school closures during the pandemic. Childrens' sustained lower learning levels have far-reaching consequences for the already dismal state of Pakistan's human capital, which is one of the lowest in the region.

The latest ASER data on Sindh offers critical insight into schooling access and foundational learning trends in flood affected districts. Additionally, it also attempts to gauge the various aspects of the impact of the flood emergency on households. In context of these findings, evidence-based and innovative interventions to recover learning in emergencies can be considered.

## Enrolment and Learning Trends in Flood Affected Districts in Sindh

The overall share of enrolled children (age 6-16 years) in Sindh is around 85% according to the latest ASER 2023 cycle, which is despite the significant decrease in enrollment in 2021 relative to 2019 (80% as compared to 88%). Considering that two major shocks have impacted the education system in Sindh i.e., COVID-19 and the 2022 floods, the recovery in enrolment is reassuring. This trend is also reflected in the flood affected districts although with a large degree of variation.

**Figure 1: Percentage enrollment (6-16 years) by district**

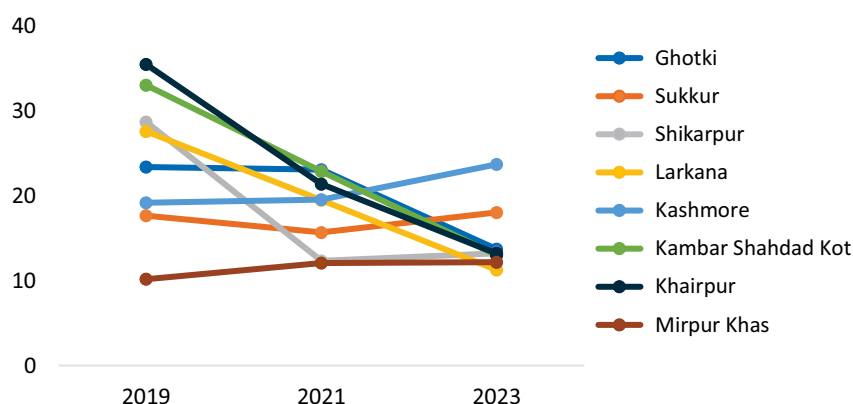


<sup>1</sup>[https://pnd.sindh.gov.pk/storage/resourcePage/6HlHeXyEgXgsTGiYMYVR2TJ1NAzS9eckS9eckS9GilZ1.pdf](https://pnd.sindh.gov.pk/storage/resourcePage/6HlHeXyEgXgsTGiYMYVR2TJ1NAzS9eckS9GilZ1.pdf)

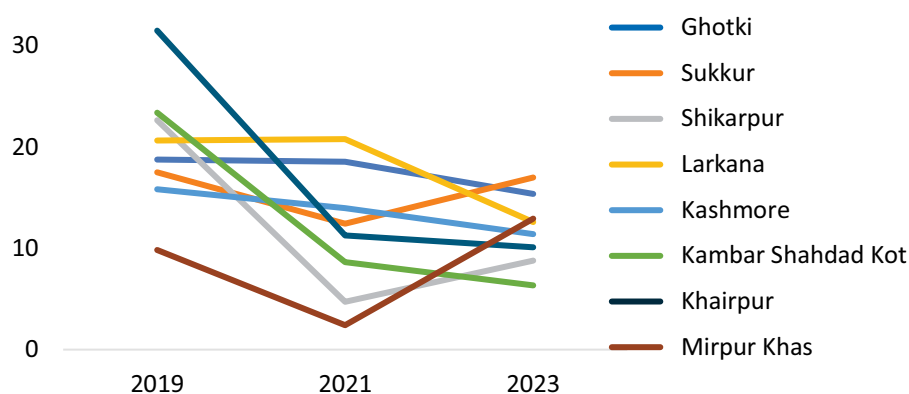
<sup>2</sup><https://blogs.worldbank.org/endpovertyinsouthasia/pakistans-floods-are-deepening-its-learning-crisis>

In stark contrast to the improvement in schooling access, the learning levels in Sindh remain dismally low; among children (ages 5-16 years), only 21% can read a Sindhi story, 20% can read an English sentence, and only 17% can do two-digit division. The trends in learning across flood affected districts are even more bleak. The percentage of children (age 5-16 years) who can read a Sindhi story is 11% in Larkana, 12% in Mirpur Khas, 13% in Shikarpur, 13% in Kambar Shahdad Kot, 13% in Khairpur, 14% in Ghotki, 18% in Sukkur, and 23% in Kashmore. Similarly, the share of children (age 5-16 years) who can do two-digit division is only 6% in Kambar Shahdad Kot, 9% in Shikarpur, 10% in Khairpur, 11% in Kashmore, 13% Larkana, 13% in Mirpurkhas, 15% in Ghotki and 17% in Sukkur.

**Figure 2: Percentage Children that Read a Sindhi Story by District**



**Figure 3: Percentage Children (5-16 years) that Can Do Two-Digit Division**



The learning losses are far more pronounced for children of age group 6-13 years, reflecting a foundational learning crisis among primary- and middle-school going age children. Even more striking is the gender gap in learning levels among children of age 6-13 years which has also widened over time. The share of girls (6-13 years) who can read a Sindhi story was 22% in 2019 as compared to 25% for boys; whereas in 2023 only 15% girls can read a Sindhi story relative to 19% boys.

### Impact of the 2022 Floods on Households and Schooling in Sindh

Households in Sindh were hit particularly hard by the climate-induced disaster. In Sindh, a substantial share (34%) of surveyed households reported being “significantly” affected by flooding in 2022. Across flood affected districts, the percentage of households “significantly”

affected was even higher; Khairpur (74%), Larkana (65%), Mirpur Khas (61%), Ghotki (45%), Sukkur (44%), Shikarpur (44%), Kashmore (36%), and Kambar Shahdad Kot (19%).

Furthermore, a large percentage of households reported being displaced in the aftermath of flooding; Shikarpur (15%), Larkana (8%), Kashmore (11%), Kambar Shahdad Kot (15%), Khairpur (18%), and Mirpur Khas (9%). This is validated by World Bank data that suggests that poorest households were nearly 3 times as likely to dwell in a temporary shelter.<sup>3</sup>

Loss of livelihood and displacement increased financial stress on households. Overall, 18% of surveyed households in Sindh reported their earning being negatively impacted by “more than 50%” due to flooding. Cross district variation is even more stark; the same level of income loss was reported in Khairpur (77%), Shikarpur (45%), Larkana (43%), Sukkur (39%), Kambar Shahdad Kot (16%), and Mirpurkhas (11%). Increase in socio-economic strain also impacted the mental health of household respondents; 28% households reported that their emotional and psychological well-being was “substantially affected” due to climate change. In districts that were worst hit by the floods, this percentage was significantly higher; Khairpur (74%), Larkana (66%), Mirpur Khas (45%), Sukkur (34%), Kambar Shahdad Kot (18%), Shikarpur (34%), and Ghotki (14%).

Education suffered major set-backs as learning was interrupted due to the flood-induced damage to infrastructure, use of schools as emergency shelters, and increase in travel time due to flooding<sup>4</sup>. This is also reflected in the latest ASER findings as 25% households in Sindh reported their children's schooling being “extremely affected” due to floods in 2022. In severely affected districts a higher share reported being “extremely affected”; Khairpur (76%), Larkana (59%), Shikarpur (41%), Sukkur (25%), Mirpur Khas (32%), Kambar Shahdad Kot (30%), and Kashmore (13%).

Awareness regarding climate change remains poor even in Sindh districts that were severely impacted by floods. Only 57% in Shikarpur reported being “informed” about climate change; 55% Larkana; 53% Kashmore; 50% Mirpur Khas; 33% in Sukkur; 30% in Kambar Shahdad Kot; and 21% in Ghotki.

### **Evidence-based Solution for Learning Recovery in Emergencies: Teaching at the Right Level (TARL)**

In the aftermath of the devastating floods in 2022, Idaara-e-Taleem-o-Aagahi (ITA) collaborated with the School Education & Literacy Department (SELD), Government of Sindh, with generous and timely support from the Foreign Commonwealth & Development Office (FCDO) to address the learning emergency in Sindh. ITA proposed an ambitious, yearlong project “Recovery for Foundational Learning: Flood Response in Sindh”, in the flood affected districts of Shikarpur and Ghotki in upper Sindh, within 391 target schools of SELD. The programme consisted of three intervention arms. Immediate relief was provided in the form of 65,000 Back-to-School kits, 10,000 reusable Menstrual and Hygiene (MHM) kits, 800 School Stabilization Kits, 800 Teaching Learning Material (TLM) kits, and 4000 Health and Hygiene Kits in the target districts.

In addition to receiving relief kits, 30,879 children also received remedial education through “Chalo Parho Barho/Teaching at the Right Level (TARL)” learning camps to address gaps in

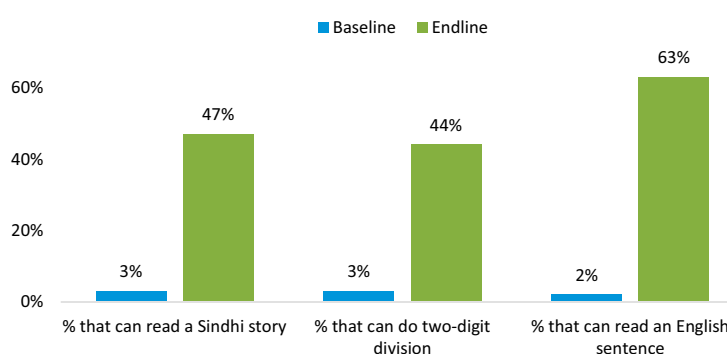
<sup>3</sup> <https://blogs.worldbank.org/endpovertyinsouthasia/pakistans-floods-are-deepening-its-learning-crisis>

<sup>4</sup> <https://blogs.worldbank.org/endpovertyinsouthasia/how-are-children-pakistans-2022-floods-faring>

foundational learning. 775 TARL-based learning camps were set up on government school premises to provide remedial instruction to in-school children within grade 3-5, and out-of-school children of ages 6-13 years. The accelerated learning camps facilitated student learning through structured and interactive activities to improve reading, writing, listening, speaking and practice in the three core subjects of Sindhi, Arithmetic and English. After the successful completion of the 60-day TARL-camp cycle, the children (including those out of school) were mainstreamed into public schools.

Chalo Parho Barho/TARL-based learning camps in Ghotki and Shikarpur improved basic literacy and numeracy among the 30,000+ beneficiary children. The results from periodic learning assessments (baseline, midline and endline) using ASER & International Common Assessment of Numeracy (ICAN) tools indicate steep gains; at endline 47% children could read a Sindhi story as compared to only 3% at baseline, at endline 44% could do two-digit division as compared to only 3% at baseline, and 63% could read an English sentence at endline as opposed to only 2% at baseline.

**Figure 5: Progress in Basic Learning Levels of Children in CPB/TARL-based Learning Camps**



## Way Forward

The crisis in foundational literacy and numeracy pre-dates the emergencies in Sindh i.e., COVID-19 and the 2022 floods. The learning losses remain persistent despite the recovery in enrolment, especially in flood affected districts. The promising results of Chalo Parho Barho/TARL-based learning camps in Ghotki and Shikarpur in Sindh indicate that short-burst, intensive TARL-based learning camps can be adopted as a potential model for foundational learning recovery in emergency contexts. Beyond its application through short-term learning camps, TARL can be made part of mainstream teacher training programs to be used in regular grades along with tailored content, assessments, pedagogy, and teaching learning materials (TLMs). TARL can also be incorporated into mainstream schools through a “Reading/Literacy Hour” to improve foundational learning. The slight recovery in enrolment trends in Sindh is a bright spot despite the continued challenges to learning. There is a pressing need for timely and effective action to close the gaps in basic learning and secure prosperity for future generations.

