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Sustainable Development Goal-4 with the Perspective of Public Schools in Punjab

Abstract

This qualitative study aimed to examine the practical implications of Sustainable Development Goal-4 (SDGs) in public schools of Punjab. SDG-4 targets were analyzed through an educational plan framework (Asghar, 2016). Qualitative Content Analysis (QCA) was deployed to analyze the status of implementation of SDG-4 and key gaps between the settled targets of SDG-4 and initiatives taken by the School Education Department Govt. of Punjab by organizing textual data and producing codes, and themes. Findings revealed that the School Education Department is managing three projects ie. Punjab Human Capital Investment Project (PHCIP), Actions to Strengthen Performance for Inclusive and Responsive Education (ASPIRE), and Transformation in Access, Learning, Equity & Education Management" (TALEEM) funded by World Bank and UNICEF respectively by its attached organization Punjab Monitoring and Implementation Unit-Punjab Education Sector Reforms (PMIU-PESRP). The findings of the present study are very informative as well as useful for researchers, School Education Department, and donor-funded agencies. Key recommendations include continuous teachers training; provision of resources to access quality and inclusive education; targeted interventions and societal awareness for removal of language and gender disparities in order to ensure equal learning opportunities for all.

Key Words: School Education Department, SDG-4, PMIU-PESRP, World Bank, UNICEF

Introduction

Pakistan is the sixth most populous nation in the world, with an estimated 182 million residents and a per capita income of US\$1,360 in 2013 (Javeed, Khan, Rehman, & Khurshid, 2021). Pakistan has continuously underperformed compared to other emerging countries especially those in South Asia at its level of per capita income. At 6.7 million (or 12 percent of all children globally), Pakistan has the second-highest proportion of school-age children in the world, with a female preponderance of 56 percent. Public education investment has been only 2.5 percent of the country's GDP in 2013. Education for All (EFA), Millennium Development Goals (MDGs), Sustainable Development Goals (SDGs), and Universal Primary Education (UPE) have all made pledges to extend high-quality education across the globe (Farooq, 2018; UNESCO, 2019). The majority of the settled targets related to the

above-mentioned pledges had not been achieved by Pakistan. However, it has improved its metrics of educational outcomes during the last ten years (Khan, Sarmad, Ullah, & Bae, 2020; World Bank, 2023).

Punjab is one of Pakistan's most economically active provinces, contributing 52% of the country's GDP (Benedek, Gemayel, Senhadji, & Tieman, 2021; Khushik, & Diemer, 2020). This province is the most populous in Pakistan, accounting for 56% of the country's total population. School Education Department (SED), Government of Punjab governs 48,362 public schools, which employ 339,422 teachers and have more than 11.71 million students enrolled from katchi (pre-primary) through grade 10, across 36 districts of Punjab (School Information System, 2023). Today, low-cost private schools have established themselves as a competitive alternative to the public school system, enrolling almost a third of students in grades 6 to 10 and nearly a fourth of students in grades 11 to 15. The Government of Punjab (GoPb) has worked with the private sector to deliver education through the Punjab Education Foundation (PEF), which reported approximately 7379 partner schools and 2.6 million student beneficiaries (Annual School Census, 2022-23).

The School Education Department, headed by the Government of Punjab, has been working to strengthen the public school system with funding/aid from donors including the World Bank, UNICEF, and the Foreign, Commonwealth and Development Office (FCDO) (PMIU,2023). The Punjab Education Sector Reform Program (PESRP), a sector-wide, medium-term education program that supports free and inexpensive public education at the basic and secondary levels (up to Grade 10), has been in operation since 2003. The Government of Punjab has concentrated on systemic improvements in the education sector for long-term results backed by the World Bank through the First Punjab Education Sector Project (PESP I), the Second Punjab Education Sector Project (PESP II) and the Punjab Education Sector Project (PESP III) (Annual School Census, 2022; PMIU,2023).

Literature Review

The Punjab Monitoring and Implementation Unit (PMIU), Education Sector Reform Program (PESRP), has been actively working towards the achievement of Sustainable Development Goal 4 (SDG4) in the province of Punjab in collaboration with the School Education Department (SED) (Abbas, Nadeem, & Majoka, 2021; Dhindsa, 2017; Malik & Asghar, 2022; Sohail, Ullah, Sohag, & Rehman, 2022). As a partner in this international commitment to SDG-4, PMIU-PESRP (School Education Department) has initiated various projects and regular activities. These projects are funded through donors (UNICEF & World Bank) and are aimed at improving the education sector in the region. One of the significant projects undertaken by PMIU was the Punjab Education Sector Program Phase-III (PESP-III) (World Bank, 2023). Upon the successful completion of PESP-III, PMIU launched another significant project called the "Punjab Human Capital Investment Program (PHCIP)," in collaboration with the World Bank. This project targeted 11 Districts with the lowest Human Capital attainment in Punjab, namely Bahawalnagar, Bahawalpur, Bhakhar, Dera Ghazi Khan, Khushab, Layyah, Lodhran, Mianwali, Muzaffargarh, Rahim Yar Khan, and Rajanpur. The main objective of PHCIP was to strengthen the quality of Early Childhood Care and Education (ECCE) through various interventions in 3400 schools of above mentioned 11 districts (PMIU, 2023; Zia, Siddique, Hussain, Bano, & Shahzad, 2021).

Another project undertaken to meet the objectives of SDG4 is the "Transformation in Access, Learning, Equity & Education Management" (TALEEM), funded by UNICEF. This

project also focuses on improving access to inclusive and quality education in Punjab through various components ie. Improving Access and learning at the Primary Level, Improving Equity and Inclusive Education, Improving Efficiency in Education Planning and Decision Making, Improving Access and Learning at Middle Level (ASP), Changing Mindset through Effective Communication and Improving Access & Learning at Primary Level.

The Actions to Strengthen Performance for Inclusive and Responsive Education (ASPIRE) is another project being implemented by the Punjab Monitoring and Implementation Unit (PMIU) with funding from the World Bank with the collaboration of the Ministry of Federal Education and Professional Training (MOFEPT). The primary aim of ASPIRE is to strengthen the education system in Punjab, particularly in six districts that have been identified based on specific selection criteria. These criteria include having the highest percentage of Out-of-School Children (OOSC) and being ranked lowest on the Gender Parity Index (GPI). The ASPIRE project caters to the following six districts in Punjab: Bhakkar, Lodhran, Dera Ghazi Khan, Rajanpur, Muzaffargarh, and Rahim Yar Khan. These districts have been identified as areas where the education indicators are relatively weak, and there is a need for targeted interventions to improve access and quality of education.

Objective

The objectives of this study were to:

- investigate the status of implementation of SDG-4 in public schools of Punjab.
- explore the gaps in the practical implications of SDG-4 in the schools of Punjab.

Research Questions

The following research questions guided the study:

1. What is the status of the implementation of SDG-4 in public schools of Punjab?
2. What are the gaps in the practical implications of SDG-4 in the schools of Punjab?

Methodology

A qualitative research methodology is applied in this study. Qualitative research is an essential approach to comprehending social reality and investigating the interpretations that people make of events (Pattinson, 2015; Mason, 2018). This study employed the qualitative content analysis method (Merriam, 2009). According to Khokhar and Muhammad (2020), Qualitative content analysis (QCA) can manage large data sets and accomplish objective content analysis, which makes it a useful research tool. QCA helps researchers "swift through vast volumes of data methodically with reasonable ease".

By examining the textual data and producing codes and themes, QCA was done on documents obtained by PMIU-PESRP based on the details of projects to examine the status of implementation and gaps between the initiatives taken by Govt. of Punjab and settled targets of SDG-4. It was analyzed through an educational plan framework (Asghar, 2016).



Findings

Following are the findings of the study obtained through QCA:

PESP-III (funded by World Bank) project achieved several milestones in line with SDG-4:

1. **Introduction of Private School Vouchers:** Private school vouchers were introduced to enhance access to quality education for children from marginalized backgrounds. These vouchers provided financial support to eligible students, enabling them to attend private schools and receive quality education. The total beneficiaries of this program who received vouchers were 211,139; 114,015 Boys and 97,124 Girls respectively.
2. **Public-Private Partnerships in Education:** PESP-III fostered collaborations between the public and private sectors to improve the overall education system. The project aimed to enhance the quality of education and infrastructure in schools by leveraging the expertise and resources of both sectors. 923,836 students benefited from this initiative: 498,871 Boys and 424,965 Girls respectively.
3. **Quality Improvement in Primary Classrooms:** The project focused on improving the quality of education in primary classrooms by providing professional development opportunities for teachers, implementing effective teaching methodologies, and enhancing learning materials and resources. A continuous professional development regime by training and utilizing all 3200 Assistant Education Officers (AEOs) was introduced for all primary school teachers in 36 districts of Punjab. AEOs provided mentorship to Primary School Teachers (PSTs).
4. **Quality Improvement in ECE Programs:** Under an initiative related to Early Childhood Education (ECE), support was provided to enhance the quality of preprimary grades i.e., ECE. This initiative focused on meeting quality standards for ECE by providing training to staff and ECE kits and furniture. Under this initiative ECE classrooms were established/upgraded in 7,067 schools (one classroom per school) to meet the Quality Standards as prescribed by the ECE Policy 2017 for example thematic wall paints, training of ECE teachers, availability of a trained caregiver, and ECE kits.

5. **Stipends for Secondary School Girls:** To encourage girls' education and address the gender gap in education, stipends were provided to secondary school girls launched in 2004 and revamped in March 2017. About 500,000 girls in the districts are getting benefits from this initiative per annum till the completion of the project. The stipend amount is PKR 1000 /-per month i.e., PKR 3000 /-per quarter.

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1. **Baseline Survey (Needs Assessment):** A comprehensive baseline survey was conducted to assess the current state of Early Childhood Education specifically teaching practices quality and children's learning (literacy and numeracy) in the 900 sample PHCIP schools of 11 target districts. This provided insights into the areas requiring improvement and acted as a foundation for the project's interventions. This survey would help to establish a baseline for the project and measure the impact of the ECCE interventions at the stage of the mid and final evaluation of the project.
2. **Strengthening of ECCE Rooms:** The project focused on upgrading and improving the physical infrastructure of 3400 Early Childhood Education classrooms to create a conducive and child-friendly learning environment. ECCE classrooms of 3400 PHCIP Schools have been renovated.
3. **Provision of Teaching and Learning Materials:** Age-appropriate furniture consisting of Study Chairs (81,600), Study Tables (10,200), Learning Corner Shelves (17,000), Library Corner Shelves (13,600), Notice Board (3400), and White Board (3400) and high-quality teaching and learning materials including Lesson plans/Teacher guides, Children's activity books, Flash Cards, Parent Guide, and Caregiver guide are provided to support the development of foundational skills and knowledge in young learners. The delivery of age-appropriate furniture has been completed in 330 schools. The procurement of tables for ECCE teachers is under process through UNICEF. The student activity book is developed with the approval of PCTB. The assessment structure for the Teacher Guide, Parent Guide, and Caregiver guide has been developed. ECCE Learning Kit has been delivered in 3400 Schools.
4. **Training of ECCE Workforce and School Leadership:** Professional development and training programs are organized for teachers and school leaders involved in Early Childhood Education. This ensures that they have the necessary skills and knowledge to provide effective education and care to young children. PHCIP Schools 14711 ECCE Teachers and 3400 Caregivers have completed the online ECCE certification course.
5. **Social Mobilization:** The project actively engaged and mobilized communities and parents to participate in and support Early Childhood Education programs. Community involvement is crucial for creating a holistic learning environment for children.
6. **Midline and Endline Surveys:** Midline and end-line surveys would be conducted to evaluate the impact of the project and measure progress towards achieving the set objectives. These surveys will help in making informed decisions and adjustments to the initiative as needed.

Another project undertaken to meet the objectives of SDG-4 is the "Transformation in Access, Learning, Equity & Education Management" (TALEEM), funded by UNICEF. This project also focuses on improving access to inclusive and quality education in Punjab through various components:

1. **Improving Access & Learning at Primary Level:** Efforts are made to enhance access to education for children at the primary level and improve the quality of learning outcomes.
 - 32,383 tablets are being provided, one per school, to all primary schools in Punjab to support digital initiatives, data collection, and online training of teachers.
 - Establishment of learning camps during summer vacations for Out of School Children (OOSC) and those with low learning levels in 12 districts of Punjab. This initiative will support around 400,000 students by 2025. The 12 districts are: Muzafargarh, DG Khan, Rahimyar Khan, Mianwali, Bahawalpur, Rajanpur, Lodhran, Bhakar, Pakpattan, Layyah, Chiniot, and Bahawalnagar.
 - Establishment of 1,000 literacy centers by L&NFBED in 05 districts. The districts include Rajanpur, DG Khan, Rahimyar Khan, Bahawalpur, and Muzafargarh.
2. **Improving Equity and Inclusive Education:** TALEEM aims to promote equity in education by addressing barriers that hinder marginalized and disadvantaged groups from accessing education. It seeks to create an inclusive learning environment for all students by:
 - Provision of accessible infrastructure in 2100+ schools in Jhelum and Multan.
 - Health screening of 300,000+ students in SED schools, and provision of assistive devices to identified students based on their need in Jhelum and Multan.
 - Health screening of 36,000 students of SpED and provision of assistive devices across Punjab.
3. **Improving Efficiency in Education Planning and Decision-Making:** This component involves improving the efficiency of education planning and decision-making processes to enhance the overall effectiveness of the education system.
 - Operationalization of a centralized Data Centre at PMIU-SED, and development of an Integrated Management Information System (IMIS) to support evidence-based decision-making.
4. **Improving Access and Learning at Middle Level (ASP):** The project targets improving access to education and learning outcomes for students at the middle level.
 - Establishment of 1,500-afternoon schools in selected 14 districts of Punjab. The districts include Chakwal, Faisalabad, Gujranwala, Gujrat, Khanewal, Lahore, Mandi Bahauddin, Multan, Narowal, Rawalpindi, Sahiwal, Sargodha, Sialkot, TT Singh.
 - 140,000+ students are projected beneficiaries of this initiative.
 - 4,172 teachers of afternoon schools are being trained by QAED in the 14 districts.
 - **Changing Mindset through Effective Communication:** This initiative focuses on creating awareness and promoting a positive mindset towards education, especially for those who may be reluctant to send their children to school. Activities include Community awareness sessions, a Back-to-School campaign, School Enrollment Drive, Sports events, Policy Dialogues, Hero Awards, etc.

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1. Provision of 400 Toilet Blocks for Girls at the Elementary Level: One of the crucial aspects of the ASPIRE project is to ensure that girls have access to proper sanitation facilities in schools. By constructing 400 toilet blocks specifically for girls at the elementary level, the project aims to improve school attendance and retention rates for girls.
2. Construction of 1088 Classrooms: Overcrowded classrooms can hamper the learning process and overall educational experience for students. ASPIRE addresses this issue by constructing 1088 new classrooms in the targeted districts. This expansion will provide a conducive learning environment for students and alleviate overcrowding.
3. Establishment of Transgender Schools: In line with the principles of inclusivity and equity, the ASPIRE project includes the establishment of schools specifically for transgender students. This initiative is a significant step towards providing a safe and supportive learning environment for transgender individuals, addressing their unique needs, and ensuring their access to education. Transgender schools have been established at 09 divisional headquarters of Punjab. Two teachers from each division have been trained by Japan International Corporation Agency (JICA).
4. Improving Internet, Health, and Hygiene Facilities (Through NSB): Access to the Internet and improved health and hygiene facilities in schools are essential for enhancing the overall quality of education. ASPIRE focuses on upgrading and improving these facilities through support from the Non-Salary Budget (NSB). Internet facility has been provided in 288 schools where I.T. labs were established but had no Internet access. Whereas the facility of the payment of internet billing is provided in 1088 schools of six targeted districts.

Issues to be addressed

SDG 4 (Sustainable Development Goal 4) focuses on ensuring inclusive and quality education for all and promoting lifelong learning opportunities. Achieving the SDG 4 targets in the educational system of Punjab, a province in Pakistan, poses several challenges and issues.

1. Access to Education: One of the significant issues in Punjab's educational system is ensuring equal access to education for all children, particularly in rural and marginalized areas. A considerable number of children, especially girls, still face barriers like long distances to schools, lack of transportation, financial constraints, etc.
2. Quality of Education: While increasing access to education is crucial, ensuring the quality of education is equally important. Many schools in Punjab lack basic infrastructure, qualified teachers, and adequate learning resources. This affects the overall learning experience and outcomes for students.
3. Teacher Shortage and Quality: Punjab faces a shortage of qualified and trained teachers, especially in rural areas. The recruitment of well-trained educators is necessary to maintain quality education. Moreover, ensuring that existing teachers receive continuous professional development is essential for enhancing teaching methodologies and subject knowledge.

4. **Gender Disparities:** Gender disparities persist in Punjab's educational system. Girls are often at a disadvantage due to sociocultural norms, early marriages, and limited opportunities for continuing education. Addressing these disparities requires targeted interventions and societal awareness.
5. **Language Barrier:** Punjab has a diverse linguistic landscape, with Punjabi being the most widely spoken language. However, the medium of instruction in schools is often Urdu or English, leading to a language barrier for students whose mother tongue is different. This can hinder their learning progress and comprehension.
6. **Inadequate Education Budget:** Insufficient allocation of funds to the education sector is a common problem. A lack of financial resources can hamper infrastructure development, teacher training, and access to quality learning materials.
7. **Standardized Testing and Rote Learning:** The emphasis on standardized testing and rote learning in the education system can inhibit critical thinking and creativity among students. There is a need to shift towards more innovative and student-centric teaching approaches.
8. **Dropout Rates:** High dropout rates are a concern in Punjab's educational system. Economic reasons, child labor, and lack of interest in education are some of the factors contributing to this issue.
9. **Inclusion of Marginalized Groups:** Ensuring education for children with disabilities and other marginalized groups is a challenge that requires special attention and support services.
10. **Lack of Technical and Vocational Education:** The educational system in Punjab tends to prioritize academic pathways over technical and vocational education. This creates a skill gap in the job market and limits opportunities for students who may excel in hands-on learning.

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