PUBLIC PRIVATE PARTNERSHIPS

IN EDUCATION: BEST PRACTICES

Sindh Capacity Development Project

SINDH CAPACITY DEVELOPMENT PROJECT (SCDP)
CONTRACT AWARD AID-391-C-15-00010

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LIST OF ABBREVIATIONS

AASP	Adopt-A-School Program
ADU	Academic Development Unit
ASER	Annual Status of Education Report
BECS	Basic Education Community Services
BEF	Balochistan Education Foundation
CT	Certificate in Teaching
CBOs	Community Based Organizations
DEOs	District Education Officers
DPOs	District Program Officers
ECCE	Early Childhood Care Education
E&SEF	Elementary and Secondary Education Foundation
EFA	Education For All
EMIS	Education Management Information System
EMO(s)	Education Management Organization(s)
e-PPP	Education Public Private Partnership
ESSP	Existing School Support Program
EVS	Education Voucher Scheme
GB	Gilgit Baltistan
GCS	Girls Community Schools
GER	Gross Enrolment Ratio
GoP	Government of Pakistan
GoS	Government of Sindh
FAS	Foundation Assisted Schools

FSP	Female Stipend Program
ICT	Information and Communication Technology
IFIs	International Financial Institutions
IFTVS	Iqra Farogh-e-Taleem Voucher Program
IMF	International Monetary Fund
KP	Khyber Pakhtunkhwa
KPIs	Key Performance Indicators
M&E	Monitoring and Evaluation
MDGs	Millennium Development Goals
NCHD	National Commission for Human Development
NER	Net Enrolment Ratio
NFE	Non Formal Education
NSP	New School Program
OECD	The Organization for Economic Co-operation and Development
OOSC	Out of School Children
PPP	Public Private Partnership
PPP Node	Public Private Partnership Node, School Education & Literacy Department
PPRS	Promoting Private School in Rural Sindh
PEF	Punjab Education Foundation
PPRS	Promoting Private Schools in Rural Sindh
PTC	Project Technical Committee
PSSP	Public School Support Program
QAT	Quality Assurance Test
RSU	Reform Support Unit

SAP	Structural Adjustment Programs
SAS	Sindh Education Foundation Assisted Schools
SAT	Scholastic Assessment Test
SBEP	Sindh Basic Education Program
SCDP	Sindh Capacity Development Project
SDGs	Sustainable Development Goals
SDP	School Development Plan
SEF	Sindh Education Foundation
SELD	School Education & Literacy Department, Government of Sindh
SERP	Sindh Education Reform Program
SESP	Sindh Education Sector Plan
SLOs	Student Learning Outcomes
SMC	School Management Committee
SPP	Sindh Public Procurement
SSC	Secondary School Certificate
UNESCO	United Nations Educational, Scientific and Cultural Organization
USAID	United States Agency for International Development
UBL	United Bank Limited
VEC	Village Education Committee

EXECUTIVE SUMMARY

The world, since 1980s, has witnessed a major trend in reducing the public sector through the privatization of many of its functions to make it more efficient and cost effective. This has been in the form of the privatization of state owned organizations as well as through the public-private partnerships. Consistent with the global trends, we have also witnessed significant privatization of state owned entities and lately several instances of public private partnership (PPP), including the use of PPPs to transfer the execution of social services.

This study discusses significant programs of the public private partnerships in education sector (e-PPPs)- and more specifically those that have been implemented in Pakistan to identify the best practices to improve the service delivery at relatively lower cost. To identify the best practices, an identification criterion has been used on the basis of the guidelines issued by the Commonwealth Secretariat for identification of the 'Good Practice in Education- 2018'.

The International e-PPP programs from Venezuela, Malaysia, Colombia and Bangladesh have been studied in this report. These models were chosen on the basis of their wide-range coverage of the private sector involvement in education in partnership with the public sector, providing the relevant policy lessons for Pakistan, especially Sindh. Out of the studied programs, the most relevant are child subsidy based, which are being already implemented in Pakistan through the Punjab and Sindh Education Foundations (PEF & SEF).

Fe y Alegria Network from Venezuela adopts decentralized management of resources. The Principals have the authority to recruit and dismiss teachers, acquire supplies, and sign maintenance contracts, among other things. Furthermore, per child cost in these schools is at par with public schools making them financially viable.

The Trust School Program in Malaysia follows 5 Years School Transformation Plan, which encourages the introduction of new approaches towards teaching and learning, combined with the improved management practices. In this model, the capacities of teachers and school leaders are built with the help of third party. The assessments and feedback are integral part of this program.

Concession Schools in Colombia designate school management to private sector and financial responsibilities to public sector. These schools enjoy same per child cost as public schools, which makes the model financially sustainable. The school facilities have been built with an outstanding architecture and, in evenings these are used as community centers.

Girls Stipend Program from Bangladesh is a targeted voucher and stipend program that aims to increase enrolment and retention of girls in secondary schools. The stipend is directly extended to the students to cover their educational cost. The program has resulted in an increase in female enrollment rate.

In Pakistan, prominent e-PPP programs from Khyber Pakhtunkhwa, Punjab and Sindh have also been studied. However, the study clearly indicates that the most impactful programs are those being implemented by the Punjab Education Foundation (PEF) and Sindh Education Foundation (SEF).

Programs from Khyber-Pakhtunkhwa include Girls Community School program, which targets girls' enrollment through temporarily set-up community schools until a formal school opens in the vicinity. Other noteworthy program in KP is 'Tameer-e-School Program' that uses technologically innovative techniques for engaging private sector funding to improve infrastructure of public schools.

In Punjab, PEF voucher based programs covers 2.8 million children. There are two programs, Education Voucher Scheme and Foundation Assisted schools, both use voucher funding to support to low cost schools to provide quality education to children free of cost through government support.

In Sindh, the SEF voucher based program covers over 500,000 children. Additionally, there is an 'Adopt a School Program' under which the public sector schools managed by the Education and Literacy Department are given under the management of private partners. The latest intervention is the handing over of newly constructed schools in eight districts of Sindh to the Education Management Organizations (EMOs) under Sindh Basic Education Program (SBEP).

Promoting Private Schools in Rural Sindh being implemented by SEF provides voucher funding to private operators for the establishment of new schools. The program has established 1179 schools during past 10 years. It is recommended that SEF should also implement voucher/ per child subsidy program for low cost private schools on the model implemented by PEF.

Adopt-a-School Program facilitates private sector and civil society to adopt the public sector schools for increasing ownership and value addition. This program needs clear rules and procedures, and greater ownership of SELD to ensure better learning outcomes, as elaborated in the recommendations in chapter 10 of this report.

Education Management Organizations (EMOs) Program is the most recent e-PPP program in Sindh. Under this Program, SELD outsources the management of public schools constructed under SBEP to the private organizations for ten years, under a PPP Agreement. This framework has inbuilt monitoring mechanisms of periodic reports of Independent Experts (IEs) and Independent Auditors (IAs).

The costs have been compared for the models in Punjab and Sindh within the limitation that cost alone cannot be made the base for determining the quality of any program. The overall effectiveness needs a more elaborate value for money analysis. Given the differences across various programs, limited data availability and the relatively smaller time period for EMOs a comparative value for money analysis has not been possible. In terms of simple costs the EMO model appears to be relatively more expensive but a final determination of value for money can only be made after the results of the intervention become more evident. These results may include learning outcomes, gender inclusion and others. While evaluating the cost impact of EMOs reforms considerations should be given to the fact that EMOs are required to work with the government staff posted at the schools. Another encouraging sign is the continuous decrease (per child cost) in EMOs bid values in each cycle of school management outsourcing through RFPs.

The government should treat EMO and SEF as different models. The SEF model targets low cost private sector providers and ensures efficiency of delivery through its own monitoring mechanism. The EMO model has been designed to attract high end private sector providers. In addition to enhancement of learning outcomes and other outputs they also bring in innovations on school management. These can then potentially be scaled up into other models, including, schools run by SELD.

Based on the above, the report recommends continuation of EMOs and SEF PPP models. It is also recommended that research should be made an integral part of PPP models to bring quality and improvement in PPP initiatives.

1 INTRODUCTION

Countries around the world continue to lack services that meet the basic needs of their people such as education, healthcare, as well as water supply and sanitation (UN DESA, 2016). Traditionally, the state has been the primary actor in extending these services to the entire population. However, in recent decades, a consensus has been reached amongst the developing and developed countries, together with the international institutions that the state on its own cannot fulfill all these obligations on its own. In the early 90s, the idea of an increased capacity of the private sector for the enhancement of social development processes, including education, became part of the mainstream international framework. With time, these frameworks have begun to translate into state policies in the developing countries.

Public-Private Partnerships (PPPs) have emerged as a powerful policy tool in social development. Under the PPPs framework, the Government acts as a regulatory body that focuses on developing policies, identifying service needs and providing required finance while the private sector becomes key in delivering those services efficiently and effectively.

The reason behind the development of PPPs in education is to enhance the prospects of providing greater access to education, and for improving the results of education, especially for underrepresented groups (SELD, 2017). E-PPPs encompass wide range of contracts, where private sector can be engaged in management and/or financing of education. These programs can be in form of subsidies to private schools, private management of public schools, adoption of public school by the private sector, voucher schemes etc.

Over the years, Pakistan has also experienced a shift towards PPPs in education. This shift started as early as the '90s, with the Education Policy of 1992 declaring government's intent in forming "viable partnerships" with the private sector (Govt. of Pakistan, 1992). E-PPPs came to the frontline of Pakistan's education policy after 2001-4 Education Sector Reforms strongly emphasizing their need.

Increased role of private sector in social development is reflective of the government recognizing its constraints in delivering quality education to all. According to the Pakistan Education Statistics 2016, the Net Enrollment Rate (NER) in primary education was only 77.78% with a survival to grade 5 of only 66%. Among the children of ages, 5-16, staggering 22.64 million are out-of-school. Pakistan's literacy rate, though having improved marginally over the years, remained considerably short of the MDG target of 88% by 2015, at 60%; and closer inspection reveals large gender and rural/urban disparities. In these conditions, Pakistan has seen a rise in private educational delivery, with private sector accounting for 37% (112,381) of educational institutions (Pakistan Education Statistics, 2016).

Within Pakistan, large scale e-PPP programs have been conceptualized and implemented by the governments of Punjab, Sindh and recently, Khyber Pakhtunkhwa. There has been an increased interest by the private and not-for-profit sector to engage in partnerships with the public sector. International donor/development agencies are also a part of this agenda and subsequently, large financial resources are being allocated on this front.

In such an environment, leaning towards an increased role of PPPs in education, there is an immediate need to learn from past experiences and programs and identify best practices in PPPs from international and national projects. However, there is very limited documented information and even fewer thorough impact assessments of e-PPPs, especially for projects that have been implemented in Pakistan. Working with these limitations, this report uses primary and secondary data sources to analyze different international and national level projects to identify good practices in e-PPPs. It also presents recommendations for Sindh Education and Literacy Department (SELD) on program improvements and way forward.
This study is commissioned by the Sindh Capacity Development Project (SCDP), which is part of Sindh Basic Education Program (SBEP). SCDP aims to support the sustainability of SBEP by working on Policy

and Strategy Formulation, Capacity Building of Policy makers and implementers, Research and ICT's. One of the components of SCDP is to 'Strengthen capacities, systems and policies of the SELD to improve the education services in conjunction with the education reforms in Sindh' under which the Task 4-a-6 is to 'Support provided to ELD to institutionalize PPP best practices in education'. This report is one of the steps to achieve this agenda.

In this report, Chapter 1 highlights the various meanings attached to PPPs and outlines the debate surrounding the different models of e-PPPs. Chapter 2 presents the Research Methodology. The framework for identification and analysis has been adopted from the 'Commonwealth Secretariat's guidelines for the submission of the Good Practice Award in Education'. Chapter 3 lays down prominent e-PPP programs that have been implemented internationally, and analyses them using the Commonwealth guidelines. Model dynamics and lessons learnt from individual cases are presented from Latin America and Asia. Chapter 4 specifically focuses on Pakistan; presenting a snapshot of the state of education in Pakistan and its main challenges. Chapter 5-7 analyze prominent e-PPP models from Khyber Pakhtunkhwa, Punjab and Sindh, specifically looking into model design, relevance of program to socio-cultural and economic context, sustainability of projects and its impact in terms of creating access, improving quality of education and governance structures. Balochistan and Gilgit-Baltistan (GB) have been excluded from the study as large scale e-PPP programs have not been introduced in these provinces yet. In the last chapter, the way forward for Sindh is elaborated, in addition to policy recommendations.

2 PPPS IN EDUCATION

Participation of the private sector in education has seen an exponential rise over the past few decades across the world. Although the public sector remains the financier of education at large, in many countries private sector is now seen as the main education provider. The spectrum and extent of PPPs may vary ranging from the provision of subsidized education in private schools to handing over management and education delivery of public schools to private entities.

This chapter starts with defining PPPs and e-PPPs. It then lays out the debate surrounding PPPs and rationale for adopting PPPs. Finally, it presents different e-PPP models and details their key features, analysis, impact and limitations.

2.1 DEFINITION

Public-private partnerships have always existed in different forms and under different legal and organizational structures, but since the term PPP has come into the global limelight, the debate about its proper definition has also gained importance. However, scholars to date do not agree on a single definition of PPPs. Broadly speaking, "PPPs are arrangements between public and private actors for the delivery of goods, services and/or facilities" (Verger & Moschetti, 2017). In these arrangements, three elements i.e. responsibility, control and decision-making, which were primarily controlled by the state, are transferred (to varying degrees) to the private actor (Allan, 1999).

A more detailed definition, as adopted by PPP Knowledge Lab of the World Bank (2018) is "a long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance."

Pakistan Policy on Public Private Partnerships (2010) defines PPPs as: "The financing, development, operation and maintenance of infrastructure by the private-sector which would otherwise have been provided by the public sector. Instead of the public sector procuring a capital asset and providing a public service, the private sector creates the asset through a dedicated standalone business and then delivers a service to the public sector entity/consumer in return for payment that is linked to performance"

With the expansion of PPP's in the social sector, the International Financial Institutions and the UN have moved towards a softer and more amorphous definition of PPP's: "the pooling and managing of resources, as well as the mobilization of competences and commitments by public, business and civil society partners to contribute to the expansion and quality of education" (Draxler, 2008).

2.2 THE DEBATE

With the rise of private participation in social development sector, the debate of whether such involvement brings about beneficial outcomes has also become of interest. Extensive theoretical literature exists for both sides of the argument. While arguments in favor of PPPs propose this approach as the way forward in social development, counter-arguments do not necessarily condemn PPPs as an approach but provide a broader context to the debate. The debate is summarized in the table below:

TABLE 1: DEBATE ON E-PPPS

BENEFIT	RATIONALE	AREAS TO CONSIDER
Create competition in the education market	Private & Public sector compete for students; competition leads to better quality of education	Require effective regulatory mechanism to improve quality of education
Contracts can be more flexible than most public sector arrangements	Better balance between the supply and demand for education: flexibility in teacher contracting, budget allocation	Private provider should have adequate capacity to identify and employ best resource
Private providers can be chosen by means of an open bidding process	Qualifications listed in the contract measure the quality of education of the private provider	Government should have adequate capacity to measure performance of private providers and market should have adequate supply of such providers
Optimal risk-sharing between the public and the private sector	Risk diversification leads to efficiencies	Calculation of Optimal risk-sharing require intensive quantitative data; is not always available
All actors focus on functions where they have a comparative advantage	More efficient use of resources	Might lead to privatization of education and reduced control of government
Promotes stakeholder participation	More involvement of community in education delivery	Efficient mechanism need to exist where citizens, service providers and government are accountable to each other

Source: Adapted from Patrinos, Barrera-Osorio & Guáqueta (2009) & Verger & Moschetti (2016)

The debate highlights two key pre-conditions for a successful PPP: a strong regulatory framework of the State and its ability to manage large-scale contracts. (Star ,1988)

2.3 DIFFERENT MODELS OF E-PPPS

There are many types of PPP arrangements that are in operation around the world. A wide array of amenities can be contracted from private providers (Table 2.) An e-PPP model can also involve outsourcing more than one service under the same program.

TABLE 2: TYPES OF CONTRACTS UNDER E-PPPS

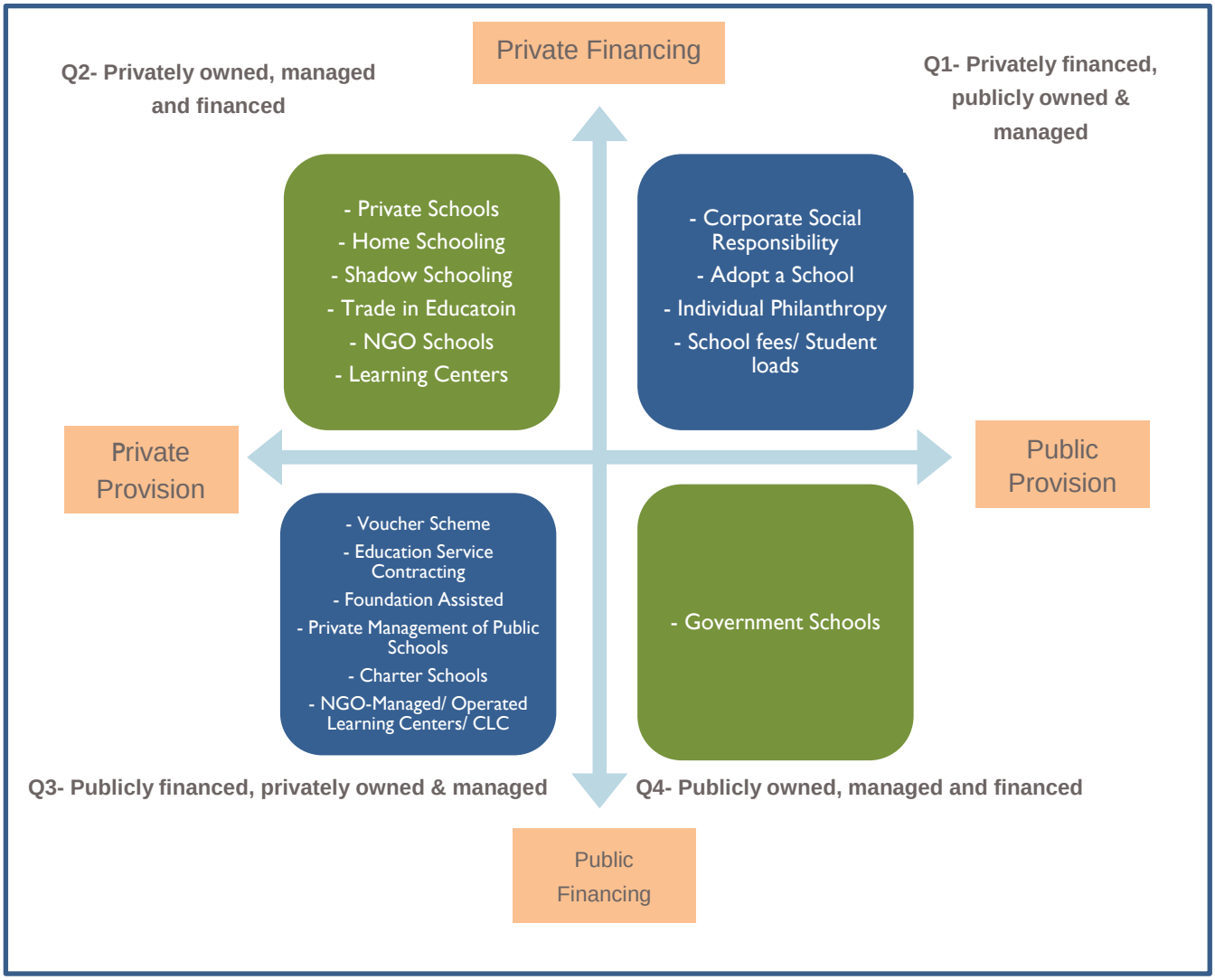
TYPE	WHAT IT INCLUDES
Management Services	Government contracts with private sector to manage an existing public service using public infrastructure
Operational Services	Government contracts with a private provider to operate an existing public service using public infrastructure
Service Delivery	Government contracts with a private provider to deliver a specified service/set of services using private infrastructure
Provision of Infrastructure	Government contracts the private sector to design, build, finance and operate educational infrastructure such as classrooms and school hostels
Professional Services	Government contracts the private sector to undertake functions such as school review, schooling improvement or curriculum development

Source: LaRocque (2007) & World Bank (2006)

The following matrix, adapted from Verger (2012) and Patrinos et al. (2009), categorizes PPPs according to manner of provision and type of financing. The four quadrants represent the pure public

domain, pure private domain and an overlap of operations and services that constitutes the PPP zone. Quadrants 1 and 3 list the activities of the PPP zone.

Figure 1: Types of Privatization & PPP in Education

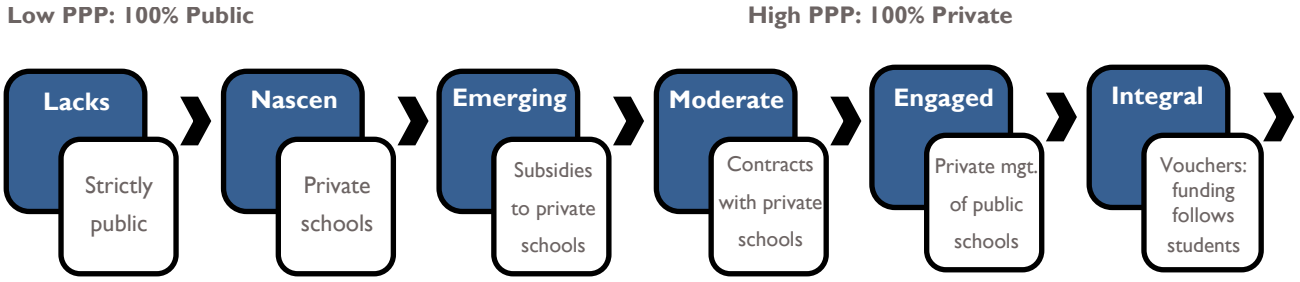


Source: Adapted from Verger (2012) and Patrinos et al. (2009)

2.4 THE PUBLIC PRIVATE PARTNERSHIP CONTINUUM

The World Bank (2009) compiled a PPP continuum, which is helpful in identifying the extent of a country's engagement in e-PPPs. Each stage of the continuum depicts a higher degree of private involvement in education. This framework is widely cited and used in PPP studies to analyze a country's orientation towards PPPs.

Figure 2: The World Bank PPP Continuum



Source: Patrinos, H., F. Barrera-Osorio and J. Guaqueta (2009)

3. RESEARCH METHODOLOGY

This study's methodology is a combination of desk research and qualitative interviews conducted to explore and understand different e-PPP models implemented internationally and in Pakistan. The programs have been assessed using indicators as outlined in the Commonwealth Secretariat's guidelines for the submission of the 'Good Practice Award in Education, 2018' to identify good practices in e-PPPs.

3.1 OBJECTIVES

The broader objective of the report is to highlight best practices in e-PPP by reviewing the strategies, initiatives, procedures and behaviors which have generated good results. More specifically, it is envisioned that findings may function as:

- a tool for identifying, sharing and promoting proven solutions in the field of e-PPP
- a documentation of lessons learnt from replicable and sustainable projects/programs implemented internationally and in the three provinces studied
- a guide to PPP Node, PPP Unit and SELD to design and implement successful e-PPPs
- a guide to private and not-for-profit sector to design and implement successful e-PPPs
- encourage a debate among organizations and enable them to join their efforts in improving the state of basic education in Pakistan through the PPP model

3.2 SCOPE OF THE STUDY

The study presents and analyses e-PPP models implemented internationally and in Pakistan. International case studies have been chosen to represent latter three stages of PPP continuum, namely moderate, engaged and integral. PPP models from first three stages of PPP continuum, namely, lacks, nascent and emerging have not been included due to low private sector involvement and low monitoring by public sector in these stages. Studies from Venezuela, Colombia, Malaysia and Bangladesh have been included.

In Pakistan, the province of Sindh and Punjab have been the leaders in implementing e-PPP programs, but there have also been noteworthy projects in KP, Baluchistan and GB. Every province has worked under a different set of laws and policies which makes the experiences of every province unique and essential to study. However, due to time and financial restraints, only models from Sindh, Punjab and KP have been included in this study.

3.3 PROPOSED MODEL TO STUDY BEST PRACTICES

To identify and analyze best practices, an identification criterion has been adopted using the Commonwealth Secretariat's guidelines for the identification of the 'Good Practice in Education, 2018', as shown in the table below.

The exhaustive guidelines capture vast aspects of education models and have been widely used in literature as a measuring stone for education projects. These guidelines are also relevant to e-PPPs as they capture: accountability, learning outcomes, innovation and efficiency, which are the three major features addressed by PPPs (Verger and Moschetti, 2017).

Table 3: Proposed Model to Study Best Practices

Relevance	Contextual, socio-cultural and economically appropriate responses to the challenge of education delivery
Replication & scalability	The extent to which the initiative is replicable and can advance practice within the sector and/or influence policy agendas
Measurable Impact	Evidence that it has been independently evaluated and its impact assessed e.g. through qualitative and quantitative indicators
Sustainability	Demonstrates capacity or potential in delivering sustainable benefits
Innovation	Displaying innovation in its approach, methods or outcomes.
Knowledge exchange and participation	How the program contributes to knowledge exchange, successfully communicates its objectives, approaches and findings to stakeholders, and encourages community and civil society participation
Efficiency & Cost Effectiveness	Demonstrates efficient and cost effective use of resources in its implementation

Source: Commonwealth Education Good Practice Awards guidelines, 2018

3.4 RESEARCH QUESTIONS

All the Commonwealth guideline indicators, as mentioned above, apart from Efficiency and Cost-Effectiveness, have guided the research and analysis. Efficiency and Cost-Effectiveness has been dropped as relevant information could not be obtained within the limited time available for the study. Further, for Pakistan's case studies, a gender based analysis indicator has also been added. This indicator focuses on whether the program includes any gender specific policies, specifically in terms of female enrollment, as OOSC among girls is a major issue in Pakistan. Lastly, the indicator of Knowledge exchange and participation has been captured through Community & Stakeholder Participation and M&E.

Table 4: Research Questions to Study Best Practices

RELEVANCE
• What specific education issue is the intervention addressing or has it addressed? • How does it take into account socio-cultural and economic factors and constraints?
• Replication & scalability
• Can the essentials of the intervention be repeated? • Has any aspect of the intervention been copied, replicated or identified for replication by another organization? If not, what issues/elements of the intervention be easily replicated?
• Measurable Impact
• Did the intervention have a positive impact on any of the outcome indicators? • Did the intervention have a positive impact on student enrolment and drop out ratio?
SUSTAINABILITY
• Is and will the intervention be in operation e.g. 10 years from now? • How is the sustainability of the intervention ensured?
INNOVATION
• What are the innovative factors of the intervention? • How has it added value (input, process, and/or output)?
COMMUNITY & STAKEHOLDER PARTICIPATION
• Which key stakeholders were part of the design and implementation of the intervention? • What methods were used to ensure participation?

MONITORING & EVALUATION
• Does the M&E system measure inputs, processes and outputs? • Is the M&E system able to measure the impact of the intervention?
GENDER BASED ANALYSIS
• What gender specific practices, policies or procedures were followed in design and implementation of the intervention

3.5 STAGES OF RESEARCH

The study was conducted with a combination of Primary and Secondary data sources. It was initiated with a literature review that helped build conceptual understanding of e-PPPs. A review of theories and case studies from across the globe also served as secondary research data.

The second stage entailed studying e-PPP programs in Pakistan through desk research and qualitative interviews with relevant authorities and representatives that served as primary data sources. For each province, key stakeholders and organizations were identified followed by organizational visits, interviews, and focus group discussions. Cumulatively, through the literature available and data collected from the field, best practices of national and international models have been identified.

3.6 LIMITATIONS

Some limitations and restrictions of the study are as follows:

- In-depth analysis on Commonwealth guideline indicators could not be done for some studies due to limited availability of data. The data restrictions were as follows:

    a) e-PPP programs in Pakistan lack thorough documentation. This gap could not be filled even through interviews with concerned authorities

    b) Very few third party impact evaluations of e-PPP programs have been conducted internationally and in Pakistan. This puts a limitation on understanding the extent to which the program has been successful

    c) In Punjab, school visits were not carried out due to schools being closed at the time of field visit. Moreover, Punjab Education Foundation refused to provide Assessment Results of the students in their schools and their monitoring reports. Hence, an assessment of these indicators could not be made
- The recommendations at the end of the study are specifically customized only for Sindh province

3.7 DELIMITATIONS

- PPP in education also exist in non-formal education but these do not form a part of this study
- e-PPP models from countries that do not follow similar education structures as Pakistan have not been included in the study.
- Due to resource constraints, international models have only been studied through the secondary data.
- Not all PPP practices in Pakistan could be covered due to time and other resource constraints. Only the most publicized practices were picked from each province. From Punjab and KP, only the PPP practices being implemented by the education foundations were studied. Whereas in Sindh, the EMO model has also been studied, in addition to the work being carried out by Sindh Education Foundation.

4. INTERNATIONAL PPP PRACTICES

Although a primary responsibility of the government, the delivery of education is increasingly being leased out to the private sector in various arrangements around the world. As each country is facing its own unique challenges in the Education sector, various context-specific e-PPP models are being implemented in different countries and new arrangements are being conceptualized to increase the access, improve the quality and in some cases improve the governance of education.

This chapter will discuss e-PPP case studies from different countries. The studies have been chosen to represent the latter three stages of the PPP continuum, namely; moderate, engaged and integral Examples of professional and support services such as the management of public schools by private entities, public grants and allowances to private schools, and vouchers programs have been discussed. These studies have been chosen from different countries, each highlighting unique policy lessons, as shown in the following table.

Table 5: International Case Studies on the PPP Continuum

	CONTINUUM	TYPE OF PPP	CASE STUDIES	PURPOSE
Low PPP	Moderate	Contracts with private schools	Fe y Alegría network, Venezuela	Public financing and decentralization of school management of private schools to increase access and quality of education to poor communities
↓	Engaged	Private Management of Public Schools	Trust School Program, Malaysia	School Transformation by creating leaders, innovation and better management of schools
			Concession Schools, Colombia	Private management of school to increase access, reduce drop- out rates and improve quality of education
High PPP	Integral	Vouchers: Funding follows student	Female Stipend Program, Bangladesh	Voucher and stipend on per child basis to increase enrollment and retention of girls in Secondary Schools

Adopted from Patrinos, Barrera-Osorio & Guáqueta (2009)

4.1 Case Study I: Fe y Alegría network, Venezuela

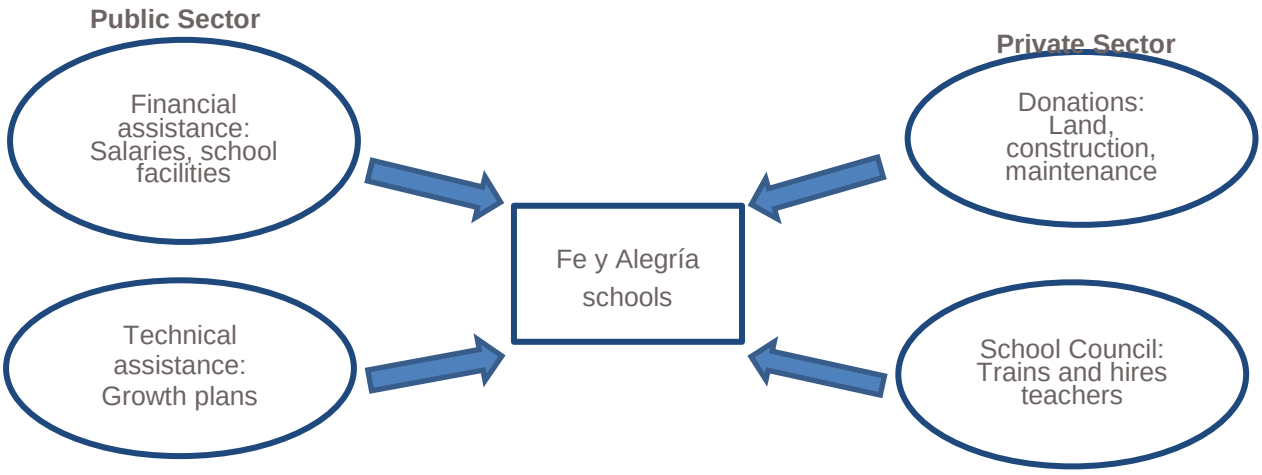
Program Inception: 1955
Geographical scope: Venezuela
PPP Model: Contracts with private schools
Target: E2conomically disadvantaged
Purpose: Improve quality of Education to economically disadvantaged

4.1.1 BACKGROUND

Fe y Alegría (Faith and Joy) is a federation of Jesuit schools serving about 1,500,000 children in 21 countries. It imparts free education to under-represented and low-income communities in underprivileged areas and sustains funding from the government through an arrangement between the Ministry of Education and the Venezuelan Association of Catholic Education. Fe y Alegría schools accounts for 8 percent of total enrollments in Venezuela and is a movement among the rural poor, a well-known description being: "Fe y Alegría starts where the street ends" (Allcott and Ortega, 2007).

4.1.2 MODEL

The model follows a management and service delivery design where the government has contracted a private provider to manage school and deliver set of educational services using private infrastructure.



4.1.2.1 KEY FEATURES:

- Decentralized school system with public funding (85% of the operational costs funded by govt.)
- Operates preschool, primary, secondary, and technical education
- Schools are established for underrepresented communities in urban areas and in isolated rural settings
- Fe y recruit, coach and oversee principals and teachers. The principal and the school council are given the power of local decision-making and the national government deals with essential issues related to expansive plans and public grants/allowances.
- The principals have the budgetary authority and the ability to hire and fire teachers
- The government pays teacher and principal salaries, while external donors pay for land, construction, and maintenance of schools.

4.1.3 ANALYSIS

4.1.3.1 RELEVANCE:

The crisis in Bolivarian Venezuela – which resulted from the Bolivarian Revolution – caused a large decline in education, with nearly 58% of children in Venezuela dropping out in 2018. Despite an increase in average educational attainment of the labor force from 6.1 years to 8.2 years and an increase in literacy rate (for people aged 15 and up) from 85% to 93% between 1981 and 2001, the average results of aptitude test scores remain unsatisfactory. An in-depth study shows that average aptitude test scores for high school seniors dropped from 21 to 6 for verbal tests and 11 to 3 in math between 1987 and 2003 (Osario & Wodon, 2014). Fe y Alegria schools aim to improve these conditions, especially among the most disadvantaged groups.

4.1.3.2 REPLICATION AND SCALABILITY:

By 1964, the program started to expand to other countries and is now operational in 21 countries.

4.1.3.3 IMPACT:

A World Bank evaluation of the program was conducted in 2009 (Allcott and Ortega) through an econometric estimation of average treatment effect (ATE). The evaluation showed a comparison between Fe y Alegria graduates and a control group consisting of Venezuelan public school students using the results of Prueba de Aptitud Academic (PAA): a math and verbal test. The results showed consistency among different estimation methods and it was found that Fe y Alegria students score 16% higher on PAA than the control group.

4.1.3.4 SUSTAINABILITY AND COST EFFECTIVENESS:

- Fe y Alegría cost per student is the same as public schools
- Fe y Alegría schools, being run by the faith-based organization, have a long-term dedication to serve their communities (Belshaw, 2005).

4.1.3.5 INNOVATION:

- More flexibility in the management of resources than public schools: Principals have the authority to recruit and dismiss teachers, acquire supplies, and sign maintenance contracts, among other things. Schools have the autonomy to plan, budget, procure funding for, and execute infrastructure investments. (Allcott and Ortega 2009)
- Through links to sister organizations in other countries, the schools benefit from external funding and expertise (Osorio and Wodon, 2014)
- High community engagement

4.1.3.6 COMMUNITY AND STAKEHOLDER PARTICIPATION ANALYSIS:

Community is an integral part of the program implementation. School building and its maintenance are donated by the community. Furthermore, parents must attend schools for sessions, volunteer activities, academic follow up meetings, classroom committees and school general meetings to give inputs on improvements in school management. Also, the community helps in fund raising through a number of social events.

4.2 CASE STUDY II: TRUST SCHOOL PROGRAM, MALAYSIA

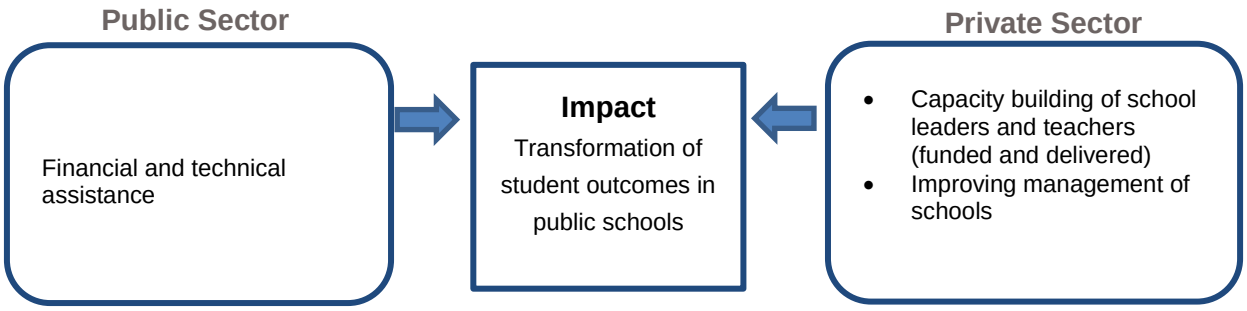
Program Inception: 2011
Geographical scope: Malaysia (nation-wide)
PPP Model: Private Management of Public Schools
Target: Public Schools
Purpose: School Transformation

4.2.1 BACKGROUND

The Trust School Program is a PPP between the Education Ministry and Yaysan Amir, a non-profit foundation that aims to boost accessibility and quality education by the introduction of new approaches towards teaching and learning, combined with improved management practices. The Trust schools are managed jointly by the Yayasan Amir organization and by School Principals, under the umbrella of the Ministry of Education, where the schools are handed over to Yayasan Amir for a period of five years.

4.2.2 MODEL

The model follows an operating and management design where the government has contracted a private provider to provide management and operational support to public school.



4.2.2.1 KEY FEATURES:

Their mandate is to build capacities of school leaders and teachers. This is entirely funded by donations from private and voluntary sectors.

The entire school ecosystem is involved in the school transformation through 4 Strategic Trust School Goals:

- Develop High Quality Leadership & Management
- Improve the Quality of Learning & Teaching
- Strengthen Engagement of Parents, Community & Other Stakeholders
- Maximize Student Achievement & Potential

The program is designed as a 5 Years School Transformation. After 5 years, the school is accredited if it meets certain set standards and is handed back to the government.

Year	Phase	Implementation	Transformation
1st Year	Transformation Phase	Introduction of Theory and demonstration of new system	Embedment of innovative culture in whole school
2nd Year			Development of 21st century learner
3rd Year	Solidifying Phase	Trust Schools Culture	Empowering School Leadership Team and Maximizing value through in-school support
4th Year	Transition Phase	Monitor and support for accreditation	Making education a community responsibility
5th Year			Creation of change makers in the education system – 1 school to influence 20 schools

4.2.3 ANALYSIS

4.2.3.1 RELEVANCE:

Malaysia has enjoyed considerable success in expanding access to education, which is evident by the fact that less than 10 percent of Malaysian adults now have no schooling. However, despite spending heavily on education (roughly between 5 and 6% of its GDP), Malaysian pupils perform poorly in international tests (Jeffery, 2015). The Trust Schools take a holistic approach towards improving the quality of education.

4.2.3.2 REPLICATION AND SCALABILITY:

The program started in 2011 with a cohort of 10 schools and by 2017 it had expanded to 83 schools. According to the Hashanah Report 2017, the program will be expanded to 220 schools nationwide by 2020, and will include minority, special needs and the rural schools.

4.2.3.3 IMPACT:

According to the Hasanah Report (2017), the Trust School Program has resulted in improved student achievement and holistic student development at the intervention schools:

- 3.1% average increase in the primary school achievement examination passing rate for schools that have completed the 5-years TSP cycle

- 102.8% average increase in TSP measure for holistic development of students through co-curricular activities for schools that had completed the 5-years TSP cycle

4.2.3.4 SUSTAINABILITY AND COST EFFECTIVENESS:

- The target at the end of 5 Years School Transformation model is to build a sustainable platform to support the development of a holistic child

- The financial sustainability of capacity building exercises entirely depends upon funding from private sector

4.2.3.5 INNOVATION:

- One of the key strategies is to transform school staff into better managers and giving them more of a voice and responsibility in making decisions including how their syllabus is taught and how to spend their budget
- 5-year School Transformation Plan is based on regular assessment of school on meeting all targets set out by the plan. If it fails to achieve so, the plan is adjusted accordingly as per requirement of each school

4.2.3.6 COMMUNITY AND STAKEHOLDER PARTICIPATION ANALYSIS:

The community is actively involved in the funding of the project. Parents also actively participate and provide support in school activities. In addition, local communities and businesses are increasingly engaged to support students by providing insights into future career possibilities.

4.2.4 LIMITATIONS:

- The program faces sustainability risk as it relies on private funding for all capacity development activities

- Private sector partners advise school leaders and teachers but have no direct authority or line management responsibility for school staff, this has slowed down the rate of school transformation (Hamilton, 2014)

4.3 CASE STUDY III: CONCESSION SCHOOLS, COLOMBIA

Program Inception: 1999
Geographical scope: Bogota, Colombia

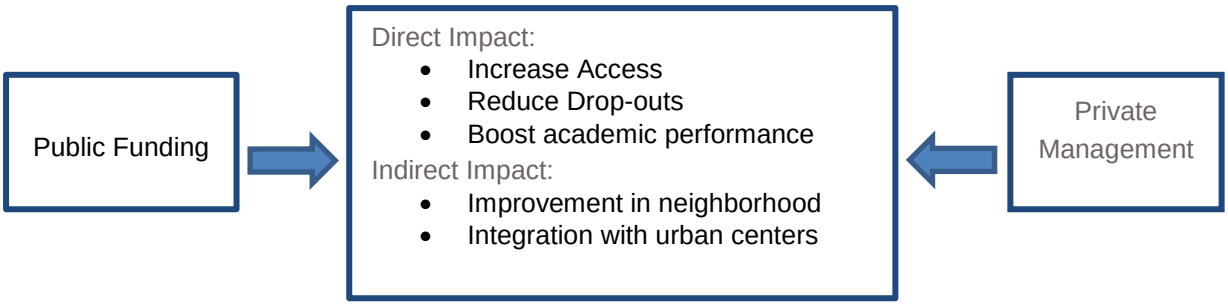
PPP Model: Private management of Public Schools
Target: Low-income groups
Purpose: Increase access, reduce drop-out rates and improve quality of education

4.3.1 BACKGROUND

In 1999, the government launched an educational program designed as a partnership between the public and private sector. Concession School Program mandates the provision of public education to low-income students through private entities.

4.3.2 MODEL

The model follows a management contract where the government has contracted a private provider to manage public schools.



4.3.2.1 Key Features:

- Publically financed, privately managed government schools
- Private management: Teacher management, resource acquisition
- Selection of Schools: The schools had to be built in extremely low-income areas and areas where the demand for primary and secondary education was higher than the supply by public schools (World Bank, 2006)

Contracting & Operation:

- The process of contracting involves open competitive bidding and requires a public invitation to tender as a prerequisite, to ensure transparency in the allocation of resources and recruitment
- The term of the contract is 15 years
- Contracts are subject to conditions and monitored closely on pre-determined dimensions
- The provider has full control over the school's management and is assessed based on results. Contracts with providers are performance-based. Failure to meet educational outcome targets, such as standardized test scores and dropout rates for two consecutive years can result in the cancellation of the contract. (LaRoque, 2008)

4.3.3 ANALYSIS

4.3.3.1 RELEVANCE:

Bogota is the capital and the largest city of Colombia. It is a segregated city, with marginalized sub-urban areas. A large majority of these areas are characterized by illegal settlements, poor

socioeconomic conditions, and weak infrastructure (World Economic Forum, 2014). In late 90's, a strategy was developed to uplift and integrate these areas with other urban neighborhoods. Part of the strategy included measures to provide these areas with social services. It was in this spirit that the Concession School Program was launched.

4.3.3.2 REPLICATION AND SCALABILITY:

By 2003, the Concession Schools totaled 25 and stood at that number until 2015, when three were closed. In 2016, the Bogotá City Council authorized the opening of 15 new CECs. With approximately 1,300 students in each school, CECs now account for 5.5 percent of the nearly 1 million students in the capital's primary and secondary public schools (Edwards and Hall, 2017).

4.3.3.3 IMPACT:

World Bank's findings (data from 2004) show lower dropout rates in Concession schools compared to city-run public schools (Barrera, Felipe 2006). There is also some evidence of an indirect impact of Concession schools on the dropout rates in nearby regular public schools due to the community work in nearby schools. Juan Bonilla (World Economic Forum, 2015), using data from 2008, confirms the positive impact of concession schools on student learning, especially in mathematics, where they display results up to 6% better than the traditional public schools.

4.3.3.4 SUSTAINABILITY AND COST EFFECTIVENESS:

The design of the project addresses the sustainability aspect.

- The contract involves open bidding which encourages competition among private sector firms
- The project is fully funded by the government
- Per child cost is at par with the cost in the public schools (World Economic Forum, 2015)

4.3.3.5 INNOVATION:

- These schools were built with outstanding architecture and these facilities have become the catalyst and beacon for the integration and improvement of their communities

- They were planned as comprehensive institutions, providing education from preschool to secondary level (World Economic Forum, 2014).

4.3.3.6 COMMUNITY AND STAKEHOLDER PARTICIPATION ANALYSIS:

Community involvement is encouraged in this project. This is done through using school building as community centers in evenings. Some Concession Schools even work with community leaders to implement small scale initiatives in the community, such as trash cleanup (Edwards and Hall, 2017).

4.4 CASE STUDY IV: FEMALE STIPEND PROGRAM (FSP), BANGLADESH

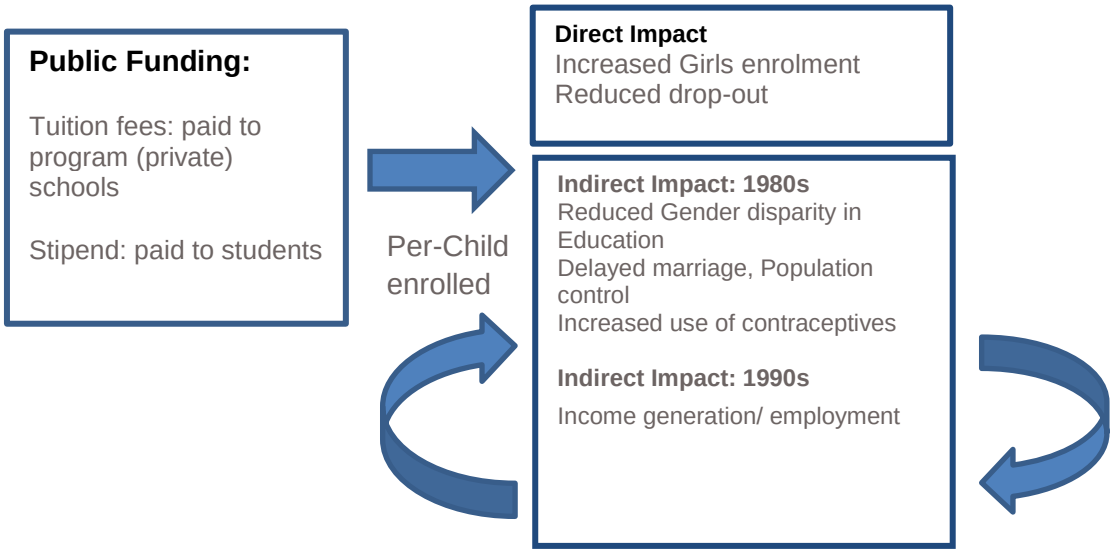
Program Inception: 1982
Geographical scope: Bangladesh
PPP Model: Targeted voucher and stipend
Target: Girl's in secondary school (especially in rural areas)
Purpose: Increase enrollment and retention of girls in Secondary Schools

4.4.1 BACKGROUND

The Female Stipend Program (FSP), launched in 1982, aimed to help increase enrolment and retention of girls in secondary schools in Bangladesh. Implemented initially in six sub-districts, the pilot's success resulted in its extension nationwide in 1994.

4.4.2 MODEL

In this model, money follows the child; the government allocates per child funding to the school where child is enrolled and also extends stipend directly to the students to cover their educational cost.



4.4.2.1 KEY FEATURES:

- Eligibility for Stipend: The program introduced a uniform stipend and tuition subsidy program for each girl attending a secondary school in rural areas, satisfying the following eligibility criteria:
- A minimum of 75% attendance rate,
- At least a 45% score in annual school exams
- Staying unmarried until sitting for the Secondary School Certificate (SSC) or turning 18
- Once a school participates in the program, all female students satisfying this criterion receive a specified amount of stipend and other allowances as prescribed for each grade. The girl's school is directly paid all of her tuition by the project.
- The stipend covers 50 percent of the costs of textbooks, uniforms, stationary, transportation, exam fees, and miscellaneous direct educational expenses. The stipend is paid directly to an account in the girl's name in the nearest Agrani Bank, a state agricultural bank with branches all over rural Bangladesh (Khandker, Pitt & Fuwa, 2003)
- FSP has been complemented by the government with other components such as curriculum reforms and instructional materials development, teacher training, recruitment of female teachers, improvement of school infrastructure, awareness programs at the community level, and institutional capacity building (ibid).

4.4.3 ANALYSIS

4.4.3.1 RELEVANCE:

At the time of the launch of the program, Bangladesh experienced high gender disparity in education. The national literacy rate for females was 20 percent in 1990 (age 5+) while that for males was 35 percent. Gender disparity in education access, while present throughout the education system, widened significantly between primary and secondary levels. In 1991, 75 percent of girls aged 6 to 10 were enrolled in primary school but only 14 percent of girls aged 11 to 16 were in secondary school (Khandker, Pitt & Fuwa, 2003).

The FSP was designed to reduce the gender disparity and was also based on population literature suggesting that secondary education would delay marriage, increase the use of contraceptives and reduce fertility (Raynor & Wessen, 2006). Access to secondary education would act as a form of population control to a specific age-group.

4.4.3.2 REPLICATION AND SCALABILITY:

The pilot FSP yielded positive results: girls' secondary enrolments increased from an average of 7.9% to 14% in some project areas and dropout rates fell from 14.7% to 3.5% (Raynor & Wessen, 2006). The pilot project was the basis for launching the nationwide FSP in 1994.

4.4.3.3 IMPACT:

Enrolment & Retention: UNDP (2005) figures show that girls' net primary enrolment had risen to nearly 86% by 2002/3 compared to 48% in 1996 (Banbies, 1999). Secondary Gross Enrolment Rate was 45% for boys and 47% for girls. Multiple studies attribute this increase in enrollment to FSP. (Raynor 2006; Muzaffer Ahmed & Ahmed, 2002)

Delayed Marriage & Fertility Control: A survey conducted mid-term in one project cycle indicates that 9.3% of stipend girls left school to get married, a drop from 12.3% in 1994 (World Bank, 1997). However, in another study, Abadzi concludes that program's effect on delayed marriage is 'unknown and hard to estimate', as even though recorded dropouts might be low in the program schools but the program only targets secondary students and so does not address drop outs due to marriages in primary school (World Bank, 2003).

4.4.3.4 SUSTAINABILITY AND COST EFFECTIVENESS:

The program design lacks financial sustainability, especially after completion of donor funding. This issue was recognized even at the design stages of all projects (ADB 2003). Furthermore, with increased female enrollment in secondary schools, the government has less funds to invest in efforts to improve the quality of secondary education (Mahmud, 2003)

4.4.3.5 INNOVATION:

The FSP had several innovative features:

- Stipends paid into girls' personal accounts opened in nearby branches of Agrani Bank.
- The amount of stipends in line with rising educational costs (Liang, 1996)

4.4.3.6 COMMUNITY AND STAKEHOLDER PARTICIPATION ANALYSIS:

Community based School Management Committees (SMCs) of private schools played a vital role in the enrolment campaigns.

4.4.4 LIMITATIONS:

- The eligibility criteria of the program discriminate against the poorest families, making the Program closer to a scholarship than a stipend (Raynor & Wessen, 2006)

4.5 POLICY LESSONS FROM INTERNATIONAL PROGRAMS

The chapter presented international case studies of e-PPP models covering a range of low to high level of private sector involvement.

The analysis conducted reveals that increasing the level of private involvement does not necessarily result in efficiency gain; rather it is the underlying factors such as regulatory framework of the government, its ability to manage large scale contracts and level of decision making autonomy transferred to school which highly contribute towards success of the models.

The policy lessons learnt from these models are categorized as following:

- Decentralization of Education System: Case studies on Venezuela and Colombia programs indicate a positive correlation between decentralization of management and resource allocation decisions and improved performance of e-PPP. Decentralization results in decision making carried out using market-based factors, which further results in efficiency gain (Allcott and Ortega 2009). The situation works best when the public sector is responsible for policy and strategic issues and the school and community is responsible for localized decision making

- Financial Sustainability: Large scale e-PPP models are very costly to implement and sustain. Case studies from Venezuela and Colombia show that models where per child cost of education in PPP schools is at par with the cost in public schools are sustainable in long term

- Regular Assessments and Feedback: Malaysia's Trust School Program follows a five-year school transformation model, where KPI targets are defined for each year and school is evaluated upon achieving these standards. The plan is then adjusted according to the findings. Such a design makes assessments and feedback an integral part of the program
-
- Community Involvement: Programs from Venezuela, Colombia and Malaysia show that e-PPP programs can become a means to integrating communities and involving them in education. In Venezuela's program, school building and its expenses are donated by the community and VECs are central in managing schools, these factors then result in increased community ownership and sustainability of the project. In Colombia, school buildings are used as community centers to better engage communities in education of their children. In Malaysia, the program builds capacities of school leaders and teachers who are then encouraged to influence community and other schools to take up best practices in education management and delivery.

5. EDUCATION & PUBLIC PRIVATE PARTNERSHIPS IN PAKISTAN

The education sector in Pakistan has historically been characterized by low participation rates and severe deficiencies in imparting quality education to learners (Ministry of Education, 2017). Public confidence in the government's ability to provide quality education to children is rather low as evident by the exponential rise in private schooling. In order to improve the conditions, policymakers and development partners in Pakistan have stepped into the domain of public-private partnerships.

Each provincial government has introduced PPPs to a proportion of its education service delivery, manifested through different models for both formal and informal education. Among the provinces, Punjab has the largest e-PPP program under the Punjab Education Foundation (PEF) for formal education. In case of non-formal education, the largest models have been run by the Federal government under Basic Education Community Services (BECS), National Education Foundation (NEF) and the National Commission for Human Development (NCHD). While PPP mode comprises the bulk of services provided in non-formal education, in formal education it still remains a relatively small player. Support of international development partners and increased conviction of governmental leadership also continues to add to the scale and scope of PPPs, especially in formal education.

5.1 STATE OF EDUCATION IN PAKISTAN

The education system of Pakistan consists of 303,446 institutions which facilitate 47,491,260 students with the help of 1,723,790 teachers. The institutions are further sub-divided into 191,065 public institutions and 112,381 private institutions; the public sector is serving 27.69 million students while the remaining 19.80 million students are enrolled in the private sector (PES, 2015-16).

It has been estimated that out of the 51.17 million children between the ages of 5-16; 55.8% are enrolled in schools while the remaining 44.2% are out of school. Although the dropout rate is a serious concern, enrolment still remains a major challenge (Amin, 2016). According to the Pakistan Education Statistics 2016, the Net Enrollment Rate (NER) in primary education was only 77.78% with a survival to grade 5 of only 66%. Pakistan's literacy rate has remained static and not improved despite significant increase in spending on education.

According to the EFA Development Index published in EFA Global Monitoring Report 2015, Pakistan ranks at the bottom along with Bangladesh. Moreover, the Global Competitiveness Index (GCI) shows Pakistan's performance as weak on health and education related elements of competitiveness when compared with other countries in the region.

The main factors behind Pakistan's weak performance in education are poor regulatory mechanisms of the state, low quality of teaching and lack of basic facilities in schools. Issues such as poor curriculum, lack of appropriate textbook reform, teacher absenteeism, delays in transfer / recruitment and firing processes in the government, frequent transfer postings of teachers and education managers, quality of teacher training institutions, teachers' familiarity with education standards, absence of innovative teaching methods and teaching in languages other than mother tongue, are all contributing factors to the poor student learning outcomes in the country (Bari, 2015).

5.2 RISE OF PRIVATE SECTOR IN EDUCATION

Pakistan has seen an exponential rise in private schooling with private educational institutions serving or facilitating 42% of students (PES, 2015-16). The private educators serve all strata of the society from the high income to the low income groups. Several studies find that private schools positively affect learning outcomes (Aslam 2009; Andarabi et al. 2010; Amjad and Macleod, 2011; Akmal, 2016).

Table 6: Three Year Comparison of education indicators of public and private sector 2015-16

	Enrollment			Institutions		
	2013-14	2014-15	2015-16	2013-14	2014-15	2015-16
Public Sector	26,191,734	26,625,342	26,919,177	174,142	175,196	185,740
Private Sector	15,987,430	17,048,183	19,801,519	81,544	87,659	112,381

5.3 EVOLUTION OF PPPS IN EDUCATION & E-PPP POLICIES IN PAKISTAN

The role of private sector in Pakistan has been recognized differently through the decades and across various education policies. The first formal move towards public-private partnerships in education in Pakistan came in the 1992 policy. It recommended creation of education foundations to harness the potential of the private sector. The 2001-4 Education Sector Reform calls for adoption of PPPs as a key strategy to enhance access and quality of education. Accordingly, provincial governments and the federal government started to operationalize and implement e-PPPs. With time, each province has launched its own policy to better engage private sector in PPPs (Table 7).

Table 7: Provincial PPP Legal Structure

Sindh	Sindh PPP Act, 2010: Main objectives of framework: ✓ to create an enabling environment for effective involvement of private sector in infrastructure development ✓ to ensure policy consistency and timely implementation of PPP projects Key components of framework: ✓ PPP Policy, VGF Guidelines, and PDF Guidelines ✓ PPP Policy Board, PPP Unit, Risk Management Unit, and PPP Nodes
KP	Khyber Pakhtunkhwa PPP Act, 2014: Main objectives of framework: ✓ Promote and facilitate the implementation of privately financed projects ✓ Enhance transparency, fairness and long term sustainability ✓ Remove undesirable restrictions on private sector participation Key components of framework: ✓ PPP Committee, PPP Unit, and PPP Nodes
Punjab	Punjab PPP Act, 2014: ✓ Foster an enabling environment for private sector participation in development in the Punjab through public private partnership ✓ Incorporate principles of fairness, competition and transparency in the procurement of public private partnership Key components of framework: ✓ PPP Steering Committee, PPP Cell, and Risk Management Unit
Baluchistan	No PPP specific Act e-PPPs initiated and monitored under Baluchistan Education Sector Plan (2013-17)

Following chapters gives details of e-PPP programs operational in three provinces of Pakistan, namely; Khyber Pakhtunkhwa, Punjab and Sindh. For each of these provinces, a brief background on educational challenges faced and reforms introduced have been laid out before going into details of e-PPP programs. The information presented in the chapter has been collected through desk research and interviews conducted with the concerned authorities.

6. KHYBER PAKHTUNKHWA

Khyber Pakhtunkhwa has witnessed a major shift in education reform as a high priority area, along with health, by the government elected in 2013. Given the massive challenge in the education sector, policy options have included the institutionalization, and expansion, of Public Private Partnerships as an instrument of policy.

6.1 THE CHALLENGE

Education indicators of Khyber Pakhtunkhwa rank second in the country, after Punjab. However, given the generally poor condition of education in Pakistan, the relative position has limited consequence and many typical problems prevail in the education sector. According to estimates, 2.3 million children in KP are still out of school, out of which 1.7 million are girls (Pakistan Education Statistics 2016-17). Data also shows that most of these OOSC have never been enrolled in a school. This points to the issue of limited 'Access to education'. Indicators on quality of education also do not show encouraging results. ASER 2016 report indicates that only 42.5% children in Class 5 are able to read a sentence in Urdu/Pashtu/English in the province. This rate is much lower for girls and stands at 34%. Cumulatively, the government faces an enormous challenge in terms of creating access, reducing gender gaps, and improving the quality of education across the public and private domains.

6.2 EDUCATION REFORMS

The government of Khyber Pakhtunkhwa has placed education as a high priority on their agenda. On 14th April'17, the 'Khyber Pakhtunkhwa Free Compulsory Primary and Secondary Education Act, 2016' was passed. The government also placed special emphasis on improving governance, access and quality of Education in the province in their 'Integrated Development Strategy 2014-18'. After the induction of the new government in 2013, there were widespread reforms. Some of the major reforms with respect to Education are highlighted below:

- Overall increase in Education budget has been 113.84% over the last 5 years (Tariq, 2017)
- In 2017, KP became the first province to conduct a 'Household survey of OOSC'. This is a vital initiative, as the last census in Pakistan was conducted in 1998 and there is a dearth of accurate data in Pakistan
- Revision of Textbooks: A thorough revision of textbooks is being carried out. By 2017, text books till grade 5 have been reviewed
- English Language: All schools were made to follow an English language curriculum

6.3 PPP LEGAL FRAMEWORK AND PROGRAMS

The Government of Khyber Pakhtunkhwa enacted 'Khyber Pakhtunkhwa PPP ACT 2014' on 7th April, 2014. The Act "provides for the participation of the private sector in the financing, construction, development, operation, or maintenance of infrastructure or development projects or other related services of the Government through Concession Contracts in Public Private Partnership mode and the establishment of institutions to regulate, monitor and supervise the implementation of Public Private Partnership contracts." KP has created the following entities as an integral part of the PPP framework:

i- A Public Private Partnership Committee: promoter, facilitator and coordinator of all PPP infrastructure and development projects

ii- A PPP Unit: technical, legal and financial expertise to the PPP Committee

iii- PPP Nodes: as focal points for specific PPP projects in line departments

In Khyber Pakhtunkhwa the Elementary & Secondary Education Foundation (E&SEF), established in 2003, is the main implementing body of PPPs. E&SEF is currently implementing four models of PPPs in education with varying degrees of private sector involvement (Annex I).

This report analyses following two significant E&SEF models:

i- Girls Community Schools

ii- Tameer-e-School Program

6.4 CASE STUDY I: GIRL'S COMMUNITY SCHOOLS (GCS)

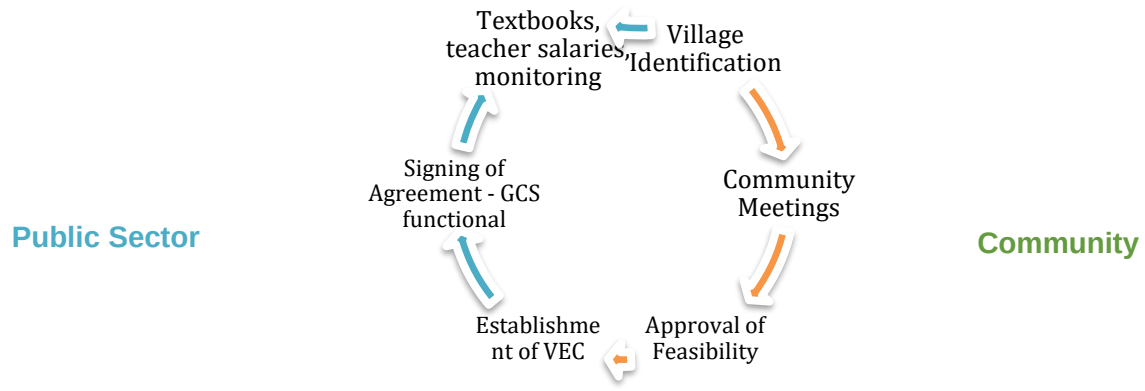
Program Inception: 2004
Geographical scope: KP (All districts)
PPP Model: Financial and technical assistance
Target: Out of School Girls
Purpose: Providing a temporary facility to the most disadvantaged communities before formal school opens in area.

6.4.1 BACKGROUND:

Girls Community Schools were first established in 2004 in collaboration with the local communities. The project holds the largest share in E&SEF's portfolio and has expanded substantially from 200 schools in 2004 to 1407 schools in 2017. Current enrolment stands at 70,163 students.

6.4.2 MODEL:

The model follows a service delivery contract where the government has contracted a private provider to deliver set of educational services using private infrastructure.



6.4.3 ROLES AND RESPONSIBILITIES:

- The Community is responsible for providing 2-3 rooms for the school to function. A Village Education Committee (VEC) is formed for each school, which identifies teachers, manages school, monitors school activities, mobilizes community and conducts enrolment campaigns
- E&SEF provides school supplies, text books and pays the teachers' salaries and conducts regular monitoring of schools. Formal schools are to be established in the area.

6.4.4 OTHER KEY FEATURES:

- Temporary set-up schools that cater to primary education in areas where there is no government girl's primary school; these schools to be merged into formal schooling once primary school is functional

- Selection of village: Needs analysis is conducted by District Program Officers (DPOs), where EMIS data is used to find locations without government primary schools. DPO then meet with community to seek approval to open/operate such schools

- Hiring of teachers: Community identifies all available candidates with at least Higher Secondary School Certificate in the village. E&SEF then hires as many teachers as needed from this pool and gives them 10-14 days teaching training. This training is given every year.

- Students who complete Grade-V, receive primary school certificates for admission to middle schools

6.4.5 ANALYSIS

6.4.5.1 RELEVANCE:

Out of School girls are the main target of this program. According to latest estimates, 1.7 million out of the 2.3 OOSC in KP are girls, hence, making this project relevant to the needs of the community.
6.4.5.2 Replication & Scalability:

The project has expanded from 200 schools to 1407 schools with an enrollment of 70,000 children.

6.4.5.3 IMPACT ON STUDENT LEARNING OUTCOMES:

In 2016, an external firm contracted by E&SEF, carried out an assessment of GCS schools. The results show that GCS schools performed better than government schools, with GCS students scoring 46% in the tests as compared to 42.38% scored by other non-program government school students.

6.4.5.4 SUSTAINABILITY:

- The program is funded under PC-1 of the government budget

- GCS facilities were envisioned to be temporary set-up till a formal school was established in the area. However, till date only 30 GCS have been replaced by formal public schools

6.4.5.5 INNOVATION:

- A quick and cost effective solution to enrolling OOS girls in areas with no formal schools

- Involves the community in the design and implementation of the program

- GCS program has launched 'TeleTaleem', an application which aims to transmit subject specific material to schools through ICT and provide online teacher assistants to on ground teachers during lessons. Considering that these schools have only one teacher, who might not be highly qualified, such an ICT based application helps in maintaining quality of education

6.4.5.6 COMMUNITY & STAKEHOLDER PARTICIPATION ANALYSIS:

This model has a strong element of community participation and ownership- the community provides land/building for the school and manages the school through the Village Education Committee's (VEC's)

6.4.5.7 MONITORING & EVALUATION:

E&SEF conducts monthly monitoring and evaluation assessments of the schools. The tools measure: Enrollment (Gender bifurcated); Infrastructure: Boundary Wall, Classrooms, Drinking Water, Toilets, Electricity, Playground; Furniture; Qualifications of the Teaching Staff

6.4.5.8 GENDER BASED ANALYSIS:

The schools were conceptualized to cater to girls only, but the program has a considerable male enrolment, as in most cases boys' schools are also absent in the vicinity. However, out of 70,163 students currently enrolled, 50,614 (72%) are girls.

6.4.5.9 LIMITATIONS:

i. To date only 30 of the 1407 schools have been replaced by government primary schools

ii. Quality of education: Due to limited qualification of the teachers, quality of education imparted in GCS is a major concern of the community. TeleTaleem is still in its initial launch phase with only 200 teachers and its impact is not felt by many schools as yet.

iii. Process monitoring is missing from the Monitoring and Evaluation framework. Indicators such as teaching methodology, teacher training, process of hiring of teacher, regular quality assurance tests of students should be integral part of M&E strategy

In this program, partnership is being formed between public sector and the community rather than public sector operator. It is recognized that such a design is not strictly under PPP domain, but has been included in this study as it provides important policy lessons.

6.5 CASE STUDY II: TAMEER-E-SCHOOL PROGRAM

Program Inception: 2014
Geographical scope: KP (All districts)
PPP Model: Financial and technical assistance
Target: All schools
Purpose: Rehabilitation of dysfunctional schools

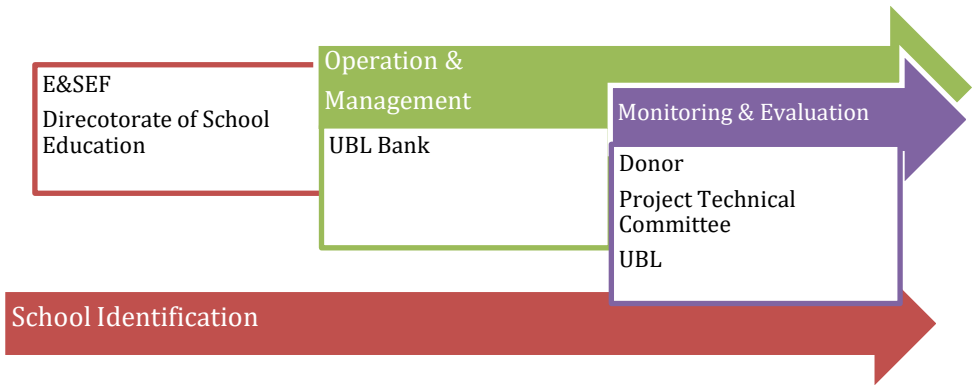
6.5.1 BACKGROUND:

Tameer-e-School started in 2014 and is a unique program that mobilizes citizens, philanthropists, civil society and entrepreneurs to contribute to the rehabilitation of dysfunctional schools in KP. The improved infrastructure facilities in schools will contribute to a more conducive learning environment.

6.5.2 MODEL:

The model works under provision of infrastructure contract type, where government contracts private sector to contribute/ build towards infrastructure improvements in the school.

Multi-Partner - Distribution of Responsibilities



6.5.3 ROLES AND RESPONSIBILITIES:

This is a partnership model being implemented through the coordination between donors, Directorate of Schools, United Bank Limited and E&SEF, each with its own set of defined responsibilities and roles to play.

- Donors: Responsible for monetary contributions and M&E through online system
- UBL: Operations and management of infrastructure projects is outsourced to UBL. UBL is also responsible for the development of web portal with school specific information and M&E information
- Project Technical Committee: Responsible for on ground M&E of the project
- Public Sector: carries out survey to identify schools where the funds will be invested

6.5.4 KEY FEATURES:

- Web portal available with school specific information and missing facilities. Donors can view this information and select school and amount to fund
- The website is maintained by UBL to ensure transparency
- Donations can be made online or through cheque to UBL
- PTC (Project Technical Committee) is formed for every school
-
- PTC selects vendor for execution of work
-
- As work progresses, PTC shares evidence such as photos of work with UBL bank and subsequently UBL releases fund for next phase of construction. Hence, release of funds is based on milestones

6.5.5 ANALYSIS

6.5.5.1 RELEVANCE:

Prior to the launch of the project, an extensive survey was carried out by E&SEF staff in collaboration with District Education Officers (DEOs), to identify dysfunctional schools and schools with missing facilities across KP. The schools were further selected on the basis of student enrolment, functional 'Parent Teacher Council' and space available for further improvement. After the survey, 1069 schools were identified and estimated cost of rehabilitation was calculated at PKR 2 billion.

6.5.5.2 REPLICATION & SCALABILITY:

Till date, PKR 26 million have been collected through various donors and missing facilities in 68 schools have been rehabilitated.

6.5.5.3 IMPACT ON STUDENT LEARNING OUTCOMES:

No study conducted on impact of the program on SLOs.

6.5.5.4 SUSTAINABILITY:

The project is entirely dependent upon private funding, most of which is contributed by overseas Pakistanis. This puts a strain on the sustainability of the project as the contributions are neither regular nor guaranteed.

6.5.5.5 INNOVATION:

Use of web portal not only to collect funds but also as a monitoring forum gives the program an innovative edge.

6.5.5.6 COMMUNITY & STAKEHOLDER PARTICIPATION ANALYSIS:

Implementation and M&E of the program involves the donor community.

6.5.5.7 MONITORING & EVALUATION:

A transparent and effective M&E mechanism has been established for transparency of funds and to track work in progress. UBL is in charge of regularly monitoring on ground work done by Project Technical Committee. This information is then made available to the donor through the web portal. Donors can access information about fund utilization and progress of work through a tracking code. The donor can also inquire about the transaction of his/ her donation at any stage.

6.5.5.8 GENDER BASED ANALYSIS:

The program does not target schools based on gender criteria.

6.5.5.9 LIMITATIONS:

- The program was launched in 2014 and soon after was discontinued. In 2016, the program was re-launched, however even this time it failed to take off.
- Project's sustainability entirely depends upon donations by private individuals/corporations
- The project did not have strong on-ground monitoring and evaluation system.

7. PUNJAB

Punjab is Pakistan's second largest province according to geographical area, and the most populous. Punjab also has one of the most elaborate administrative structures in the country, including for education. However, the province still faces massive challenges in the education sector. To address these, policy options have included the institutionalization and expansion of Public Private Partnerships as an instrument of policy.

Tameer-e-School Program did not gain much success due to implementation and political issues. However, it has been included in this study because of its technologically innovative technique of engaging private sector to fund needed improvements in infrastructure, including missing facilities, in government schools.

7.1 THE CHALLENGE

Punjab has the highest participation rates among school-age children among all the provinces of Pakistan. However, considering the resources and elaborate administrative structure that the province is famous for, the education sector still faces many problems.

According to Pakistan Education Statistics 2015-16 estimates, out of the 22.6 million children between aged 5-16 years in Punjab, staggering 9.9 million are still out of school. This implies that approximately 52% of the OOSC in the country are from Punjab. Literacy rate in the province is marginally better than other provinces. However, it is still not up to the optimal state with female literacy rate of only 55% (PSLM 2014-15). The primary NER (aged 6-10 years) is at 70% but the gap is widened and the situation becomes alarming in higher education with the Matric NER (aged 14-15) years at only 29% (ASERR 2016).

The biggest challenge for Punjab is enhancing access and accommodating 9.9 million OOSC while simultaneously improving the quality and governance of the school system.

7.2 EDUCATION REFORMS

The educational reform process was initiated in the early '90s with the development of SAP-I and since then has undergone various schemes and initiatives. One of the current initiative is the Chief Minister's Punjab Schools Reform Roadmap which was launched in 2010, and till date is the most extensive reform process that drives education in the province. In 2014, the Punjab government enacted 'The Punjab Free and Compulsory Education Act, 2014', the mandate of which was to 'provide free and compulsory education to all children of the age of five to sixteen years'. The Chief Ministers Roadmap, through a series of initiatives, is also working towards fulfilling this monumental task.

7.3 PPP LEGAL FRAMEWORK AND PROGRAMS

In Punjab, the first PPP related law was enacted in 2010 called the **'The Punjab Public-Private Partnership for Infrastructure Act 2010'.** Later, it was repealed by **'The Punjab Public-Private Partnership Act 2014'** passed to 'foster an enabling environment for private sector participation in development in Punjab through public-private partnership'

The Government has set up the following entities as an integral part of the PPP framework:

i. PPP Steering Committee: To promote, facilitate, coordinate and oversee projects

ii. PPP Cell: Established in the Planning and Development department to promote and facilitate projects in the province

iii. Risk Management Unit: Established in the Finance department to act as a fiscal guardian of the projects

Public-private partnerships have been at the forefront of Punjab's educational policy. The Punjab Education Foundation (PEF) is the main vehicle for the delivery of e-PPPs in the province and has the largest portfolio of children studying under a PPP arrangement in the country. Annex I provides details of all PEF e-PPP programs. This chapter presents two most prominent e-PPP programs implemented in Punjab.

i. Education Voucher Scheme
ii. Foundation Assisted Schools

7.4 CASE STUDY I: EDUCATION VOUCHER SCHEME (EVS)

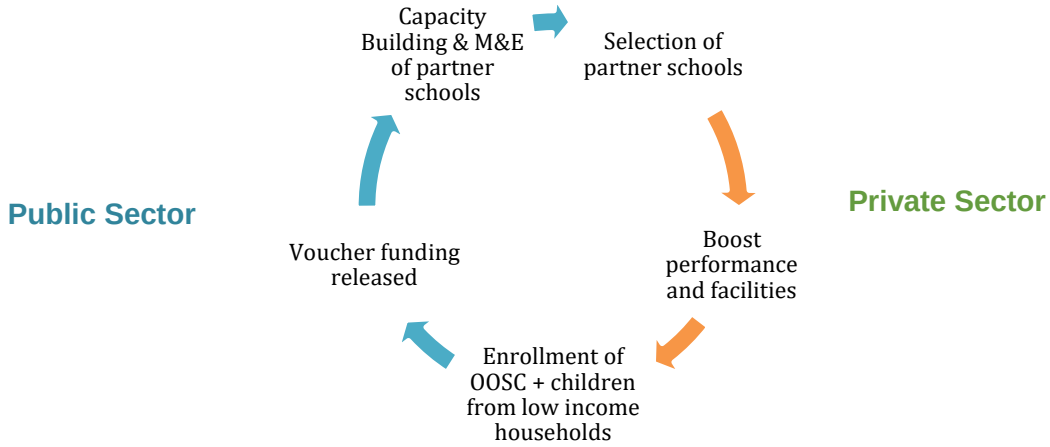
Program Inception: 2006
Geographical scope: Punjab (36 districts)
PPP Model: Voucher funding to enroll in PEF selected schools
Target: Low income households, Low cost Private Schools
Purpose: Enrolling OOSC and improving quality of education in low cost private schools

7.4.1 BACKGROUND:

Punjab Education Foundation launched the EVS program in 2006 to enroll out-of-school children between the ages of 5-16 years living in the poorest areas of Punjab. Over the years, the program has expanded to all 36 districts of Punjab, with approximately 500,000 children registered in more than 1665 partners school across the province.

7.4.2 MODEL:

The model follows a service delivery contract where the government has contracted a private provider to deliver set of educational services using private infrastructure. In this model, funds follow the student rather than being directly allocated to the school.



7.4.3 ROLES AND RESPONSIBILITIES:

- Low cost private schools, that satisfy selection criteria set out by PEF, apply for PEF partnership. Once selected, schools have to put in effort to boost academic performance and facilities so as to attract voucher students.

- The public sector, under PEF, identifies low income households. Eligible children are issued vouchers to study free of cost in PEF partner schools. In addition to this, PEF also carries out periodic reviews of student learning outcomes of PEF partner schools. Based on school's performance, PEF may also extend additional investment and support to bring about improvements in school

7.4.4 KEY FEATURES:

- This model is designed to create competition in the low-fee private school market

- Children are issued vouchers by the foundation to study free of cost in PEF partner schools. The value of vouchers is set according to the educational level

- Low income households are defined as per the following criteria: monthly family income should not be more than Rs. 20,000 for a family with three children; this income can only increase by a maximum of Rs. 3,000 for each additional child

- The partner schools are selected according to a pre-defined selection criteria including tuition fee charged, number of rooms available for teaching, curriculum followed etc.

- The voucher duration is for 5 years

7.4.5 ANALYSIS

7.4.5.1 RELEVANCE:

EVS has twofold agenda: to enroll OOSC and to improve quality of education in partner schools. Both these are pertinent issues in education in Punjab.

7. 4.5.2 REPLICATION AND SCALABILITY

The program has expanded at a fast pace over the years: in 2006 it was designed to only cater to children living in slums or katchi abaadis of Lahore, in 2007/08 onwards it was expanded to all 36 districts of Punjab. The reason for fast expansion has been adequate availability of low-cost private schools across Punjab.

7. 4.5.3 STUDENT LEARNING OUTCOMES:

The Academic Development Unit (ADU) in PEF was established in 2005 to plan and conduct Quality Assurance Test (QAT) for all partner schools. Students of each partner school have to appear for annual QAT. Assessment reports have not been made available by PEF to comment on the SLOs of EVS children.

7. 4.5.4 SUSTAINABILITY:

- Performance and expansion of PEF has been part of disbursement linked indicators of the Direct Budgetary Support (DBS) provided by the World Bank and DFID. A part of the funds for the program are provided through DBS. The rest is provided by the Government of Punjab's own funds.

- The program has survived successive governments, which shows continuity of political support

7. 4.5.5 INNOVATION:

In January 2017, PEF started a pilot project for inclusion of special children in their schools. Through this program, an amount of PKR 40,000 is initially given to the school for infrastructural changes and then an additional PKR 600 per child per month is given to the school for adequate instructional facilities. Currently, 151 EVS schools are implementing this scheme in 7 districts of Punjab.
An online complaint cell has been established by PEF. This facilitates parents, students and community members and any other stakeholder to submit their complaints and concerns about the working and management of any EVS school.

7. 4.5.6 COMMUNITY & STAKEHOLDER PARTICIPATION ANALYSIS:

Stakeholders and community were not involved in the design of the project. In the implementation phase, community mobilization is carried out by the private school to gather support among parents/community to enroll their OOSC into school.

7. 4.5.7 MONITORING & EVALUATION:

PEF conducts M&E of the EVS schools. The results of annual QAT determine school's continuation with the program. The criterion for assessment of the results is: 50% students must secure an average of 40% marks. A warning is issued to the school if it fails to meet this benchmark. If the same performance continues, then in second year 50% payment is withheld and in the third year the school is disqualified from the system.

7. 4.5.8 GENDER BASED ANALYSIS:

According to PEF Annual report (2016) 47% of the enrolled students are girls.

7. 4.5.9 LIMITATIONS:

i. Punjab Education Foundation did not provide Student Assessment Results of the program. Hence, an assessment of student learning outcomes cannot be made.

ii. Criteria for selection of school into the program is not dependent upon the quality of education provided in the school

7.5 CASE STUDY II: FOUNDATION ASSISTED SCHOOLS (FAS)

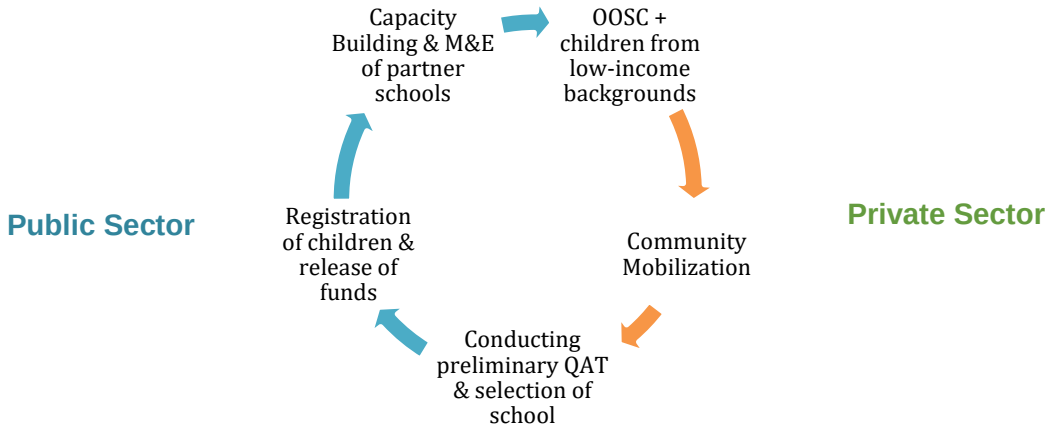
Program Inception: 2005
Geographical scope: All 36 districts of Punjab
PPP Model: Technical and financial support to private schools
Target: Low cost private schools
Purpose: Increasing access and improving quality

7.5.1 BACKGROUND:

Foundation Assisted Schools (FAS) is the flagship and the largest program of the Punjab Education Foundation, with the aim to improve quality of education in schools that cater to the marginalized sections of the society. Schools are provided with technical and financial assistance on a per-child basis, where the funding is provided directly to the school rather than the child.

7.5.2 MODEL:

The model follows a service delivery contract where the government has contracted a private provider to deliver set of educational services using private infrastructure. In this model, funds are directly allocated to the school.



7.5.3 ROLES AND RESPONSIBILITIES:

- Low cost private schools, that satisfy selection criteria set out by PEF and qualify pre-QAT, can become part of the program. Once selected, the schools have to impart quality education so as to continue being part of the program

- Public sector, under PEF, extends technical and financial support to FAS. It is also responsible for continuous monitoring of these schools

7.5.4 KEY FEATURES:

- Partner schools are selected according to a pre-defined selection criteria including tuition fee, infrastructural requirements, student teacher ratio, minimum enrollment etc. Partner schools should also be located at least 1 km away from other PEF or public schools.

- Schools also have to qualify pre-QAT to be selected into the program: 66.67% of tested students of the applicant school should secure 35% marks in English and 40% marks in remaining all subjects

- Once part of the program, the quality of education is monitored by PEF through annual QAT. In order to qualify for QAT, 75% of tested students of the partner school are required to secure 40% marks in all subjects; failing to do so for two consecutive years results in disqualification of school from the program

- Financial assistance per child is set according to the educational level

- All students in the school are part of the program
- PEF is also involved with teacher training and M&E activities

7.5.5 ANALYSIS

7.5.5.1 RELEVANCE:

There is a large percentage of poorly performing private schools in Punjab, especially in rural areas. This program gives them an incentive to improve quality of education in their schools.

7.5.5.2 REPLICATION & SCALABILITY:

The pilot phase began in 2005, across 6 districts of Punjab. Over the years, PEF has launched 10 different phases, supporting more than 1.77 million students in more than 3500 partner schools across all districts of the province.

The replicability and scalability of the project depends upon the availability of low-fee private schools that have been operational for at least 1 year and meet all selection requirements of the program.

7.5.5.3 STUDENT LEARNING OUTCOMES:

The Academic Development Unit (ADU) of PEF was established in 2005 to plan and conduct Quality Assurance Test (QAT) for all partner schools. Students of each partner school have to appear for annual QAT, the results of which then determine school's continuation with the program.

Collated assessment reports have not been made available by PEF to comment on the SLOs of students.

7.5.5.4 SUSTAINABILITY:

The program has survived successive governments, which shows continuity of political support

Performance and expansion of PEF has been part of disbursement linked indicators of the Direct Budgetary Support provided by the World Bank and DFID. While the funds are ostensibly disbursed by the government of Punjab, the question remains of continuation if DBS is stopped.

7.5.5.5 INNOVATION:

In January 2017, PEF started a pilot project for inclusion of special children in their schools. Currently, 161 FAS are implementing this scheme in 7 districts of Punjab.

The project is also aiming to introduce Early Childhood Education in all its schools. Currently, it has been introduced only in 1 district.

FAS also maintain a Student Information System (SIS). This is web-based application designed to collect and store information for integrating students, parents, teachers and the administration of FAS schools.

7.5.5.6 COMMUNITY & STAKEHOLDER PARTICIPATION ANALYSIS:

Community mobilization is carried out by the private school to gather support among parents/community to enroll their children in the school.

7.5.5.7 MONITORING & EVALUATION:

PEF conducts M&E of the FAS schools. It carries out class-wise random inspections of partner school to check/verify the accuracy of the reported enrolment, improvements made in the infrastructure and standard of cleanliness and hygiene. Students and teachers of the school, being supported under the PEF-FAS program, are also interviewed during these visits.
Student learning outcomes are monitored annually through Quality Assurance Test (QATs).

7.5.5.8 GENDER BASED ANALYSIS:

The program does not specifically target female enrollment. As of 2017, out of the 1777,551 students enrolled in the FAS program, 45% were girls.

7.5.6 LIMITATIONS:

Punjab Education Foundation did not provide Student Assessment Results of the program. Hence, an assessment of student learning outcomes cannot be made.

8. SINDH

In 2013, the Government of Sindh passed the "Free and Compulsory Education Act" to tackle the issue of access to education. Since then, various reforms have been initiated in the province. Reforms on PPPs in education, ranging from strengthening of the PPP framework to establishment of PPP nodes in government service delivery departments, are especially occupying the policy plane.

8.1 THE CHALLENGE

Sindh is the second largest province in the country in terms of population, home to Pakistan's largest urban center and the hub of high economic activity. However, it lags far behind other provinces in terms of Education and other social indicators. Sindh has the second highest number of out-of-school children in Pakistan, after Punjab. Out of the 12 million children of age 5-16 years in the province, approximately 6.6 million (approx. 55%) are out of school (Pakistan Education Statistics, 2016). This is an enormous challenge for the government to overcome.

In terms of access, the Net Enrolment Ratio (NER) has increased by only 7% in the last ten 10 years, which is even less than half of the increase in population ratio that is approximately 2.2 percent per year (SELD, 2017). In addition to this, Sindh has another major problem of an extremely uneven ratio between primary, secondary and high schools. According to Sindh School Education Management Information System (SEMIS), 91% of the schools in the province are primary schools. This highly affects the transition and drop-out rates in secondary education.

Quality of Education has also been a major concern in Sindh. In an effort to capture learning levels, the government introduced standardized testing in the province. The first Scholastic Aptitude Test (SAT) was conducted by Sukkur Institute of Business Administration (SIBA), in 2012-13 for Class-V. Comparison of the baseline results with that of 2015-16 show an overall score improvement of only 5% over the four years. Moreover, according to ASER (2016), in Sindh only 34% boys and 25% girls aged between 5-16 can read a sentence in Urdu/Sindhi. Although these trends have been improving marginally over the years, but the rate of progress is very slow.

Furthermore, high percentage of government schools lack basic facilities: 49% of government primary schools lack toilets, 53% lack drinking water, 44% do not have complete boundary wall and 66% are without electricity (Pakistan Education Statistics, 2016).

Cumulatively, the government of Sindh faces an enormous challenge in terms of creating access, improving governance and quality of education across the province.

8.2 EDUCATION REFORMS

The educational arm of the Government of Sindh has initiated various initiatives towards revamping the education sector and its strategies. In 2014, Sindh developed its first five-year Education Sector Plan (SESP). SESP is the guiding umbrella document for the various programs and policies being developed and implemented in the province. SESP strategy specifically focuses on access, quality and governance of education.

A major reform, focused on improving the management and quality of education through PPP in Sindh is the Education Management Organizations (EMOs) Reform. Under the EMOs reform, launched in 2014, the PPP Node at School Education and Literacy Department designs, contracts, and administer partnerships with credible EMOs from the private sector to manage and improve the functioning of public schools. The agenda of such partnerships is to introduce innovations, modernize the education system, address management gaps, maintain and upgrade the school building and facilities, and

cooperatively work along with teachers, schools' staff, school management committees, surrounding communities and local tiers of the School Education and Literacy Department.

8.3 PPP LEGAL FRAMEWORK AND PROGRAMS

The Sindh PPP Act was enacted by the Government of Sindh in 2010. The Sindh PPP Act defines PPP as: "a partnership carried out under Public Private Partnership Agreement between the public sector represented by an Agency and a private party for the provision of an infrastructure facility, management functions and/or services with a clear allocation of risks between the two parties."

The Sindh government has also included a separate chapter for PPPs in the Sindh Public Procurement (SPP) Rules, 2010. Moreover, for effective and efficient implementation of PPPs, the Government has created the following entities as an integral part of the PPP framework:

i- A high-level Public Private Partnership Policy Board, headed by the Chief Minister of Sindh, to formulate PPP Policy based on strategic goals and implementation in the Province;

ii- A central PPP Unit established in the Finance Department to assist the PPP Policy Board in formulating and implementing PPP policies;

iii- PPP Nodes as focal points for specific PPP projects in line departments, like the PPP Node established in the School Education and Literacy Department

Sindh, as compared to all other provinces in Pakistan, has the most well-developed PPP legal structure and framework and is implementing second largest portfolio of public private partnership projects. This includes the expansion of the Sindh Education Foundation (SEF), which is the main vehicle for the delivery of e-PPPs in the province. The Sindh Basic Education Programme (SBEP) is another major player in e-PPPs in Sindh.

SEF handles the second largest Public Private Partnership portfolio under education sector in Pakistan after Punjab Education Foundation. It operates four e-PPP programs including Adopt-a-School Program, SEF Assisted Schools, Promoting Private School in Rural Sindh (PPRS) and Existing School Support Program (ESSP). Brief description of all these programs is provided in Annex I.

This chapter presents three most prominent e-PPP programs implemented in Sindh.

i- Promoting Private School in Rural Sindh (PPRS) being implemented by SEF

ii- Adopt-A-School Program (AASP) being implemented in coordination of SEF

iii- Education Management Organizations (EMOs) being implemented by SELD

8.4 CASE STUDY I: ADOPT-A-SCHOOL PROGRAM (AASP)

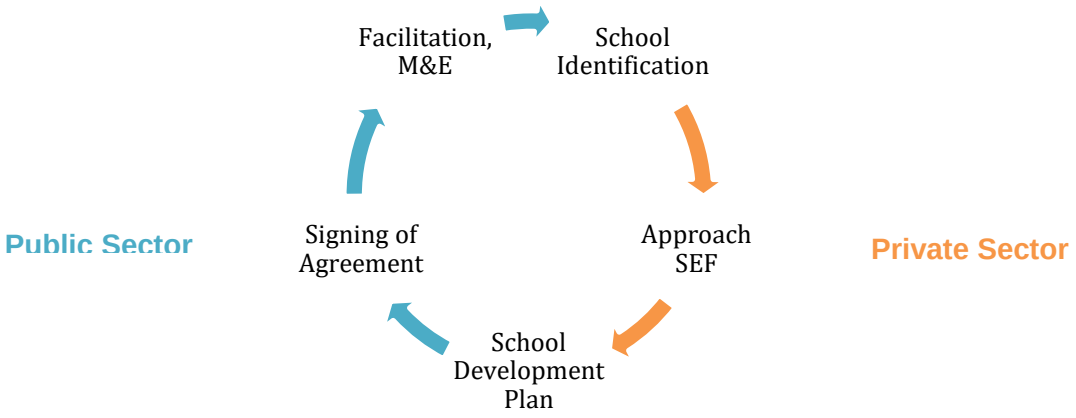
Program Inception: 1997-8
Geographical scope: 18 districts of Sindh
PPP Model: Adoption of public school by private entities
Target: Public schools
Purpose: Improving educational services

8.4.1 BACKGROUND:

The program facilitates private sector and civil society to adopt public run schools, in order to add value in any way possible. Adopters represent a varied mélange of individuals, organizations and groups including educationists, concerned citizens, local CBOs, NGOs, and members of the armed forces. SEF plays a facilitating role between the school and the adopter, providing technical assistance and monitoring for school improvement.

8.4.2 MODEL:

The model follows management and operation contract where the government contracts private sector to manage/ operate an existing public service using public infrastructure.



8.4.3 ROLES AND RESPONSIBILITIES:

- Private operator: is responsible to identify the school. In cases where it is unable to do so, it seeks SEF's help. Once part of the program, the adopter is required to develop and implement a School Development Plan and monitor progress against the established targets.

- Public sector, under SEF, plays the role of facilitator and is the central agent in the adoption process. It is responsible for all critical decisions in the program, ranging from selection of school/ adopter, review and approval of School Development Plan, Performance Review, monitoring etc.

8.4.4 KEY FEATURES:

- A Steering Committee has been formed for the AASP which is chaired by Secretary SELD and MD SEF. The Steering Committee is responsible for carrying out all SEF functions for this project

- SEF monitors the school on an annual basis

- School Development Plan is formed in consultation with School Management Committee and includes the level of engagement of the adopter including the exit strategy

- The adopter cannot interfere in the recruitment or firing of public teachers, however, if need be can hire private teachers in the school at their own cost

8.4.5 ANALYSIS

8.4.5.1 RELEVANCE:

There is a large percentage of poorly performing public schools in Sindh, especially in rural areas. Adding managerial and operational value will be beneficial to the school.

8.4.5.2 REPLICATION & SCALABILITY:

Currently, the program has 582 schools under adoption from 102 adopters in 18 districts. These school cater to 131,000 students and have 4,981 teachers. More than a 1000 of these teachers have been privately hired.

However, the replicability and scalability under the current model is limited due to limited availability of adopters with education experience and financial resources, especially in rural areas.

8.4.5.3 STUDENT LEARNING OUTCOMES:

SEF does not monitor the SLOs.

8.4.5.4 SUSTAINABILITY:

The School Improvement Plan is entirely dependent upon funds by the adopters. However, adopters either lose interest or do not have financial resources to sustain the adoption of the school, especially in later years of the contract.

8.4.5.5 INNOVATION:

This was the first program in Sindh that engaged with the private sector and communities for improving public schools across Sindh.

8.4.5.6 COMMUNITY & STAKEHOLDER PARTICIPATION ANALYSIS:

The School Development Plans (SDP) are formulated in collaboration with School Management Committees (SMC). SMCs are also involved in monitoring the progress made against SIP.

8.4.5.7 MONITORING & EVALUATION:

Adopter is responsible for measuring performance against target set in SDP. SEF also monitors the school once a year. The main responsibility of the M&E falls on the district education officers (as in case of regular public schools).

8.4.5.8 GENDER BASED ANALYSIS:

The program does not target schools based on gender criteria.

8.4.6 LIMITATIONS:

- No thorough criteria for selection of adopters
- Roles and responsibilities of both public and private parties not clearly defined
- Lack of any monitoring and oversight structure.
- Lack of clear ownership and accountability; between SELD and SEF, who is responsible for adopted schools.

8.4.7 RECOMMENDATION:

- There is significant number of public sector schools that have been adopted by private parties for oversight and management. This mode of public private participation has the potential of improving learning outcomes of such schools, provided government takes more interest in such arrangements. It is proposed that government / SELD should develop more structured framework for such arrangements, together with enhancing oversight, monitoring and some investment to support such arrangements.

- Selection criteria or minimum eligibility criteria for adopters should be implemented (like the technical criteria being used for the EMO Schools)

- Roles and responsibilities of the contracting parties and other stakeholder should be clearly defined that includes the adopter, the school staff, Head Teacher, community and the DEOs. This will be possible by involving all parties at the time of formulating school development plan and clearly defining each party's role in achieving this plan.

- Even though the management responsibility of the school is transferred to the adopter, the government should retain its role as a monitor, and treat the school as other public schools with same M&E frameworks as applicable to other schools.

8.5 CASE STUDY II: PROMOTING PRIVATE SCHOOL IN RURAL SINDH (PPRS) IMPLEMENTED BY SINDH EDUCATION FOUNDATION (SEF)

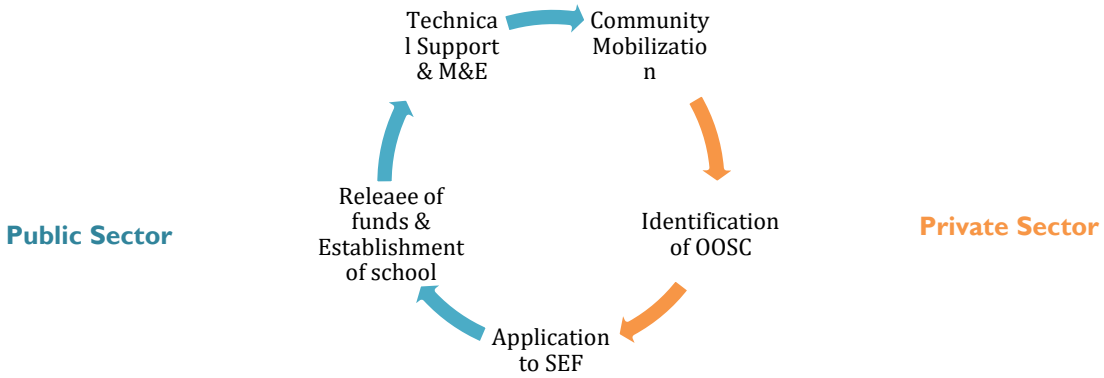
Program Inception: 2008
Geographical scope: Sindh (18 districts)
PPP Model: Voucher funding to private entities for establishment of new schools
Target: OOSC
Purpose: Enrolling OOSC

8.5.1 BACKGROUND:

PPRS was launched in 2008-09 by SEF in collaboration with the Education and Literacy Department and the World Bank. The program has expanded from 143 school in 2008-09 to 1179 schools in 2018 with 9000 teachers delivering education to over 303,405 students across 18 districts of Sindh. As per the latest web site update, SEF is currently delivering education to over 555,000 children in the entire Sindh through more than 2300 schools under different programs.

8.5.2 MODEL:

This model follows a provision of infrastructure and service delivery contract where the government contracts private sector to develop infrastructure and deliver educational services.



8.5.3 ROLES AND RESPONSIBILITIES:

- The private operator is responsible for community mobilization and identification of OOSC in the vicinity. It then sends proposal to SEF and if accepted establishes and manages the school and provides educational services

- Public sector, under SEF, gives funds to the operator on a per child basis. After the establishment of the school, SEF provides technical support to the school in the form of teacher training, strengthening managerial capacity of private operator, M&E and administer SLOs

8.5.4 KEY FEATURES:

- The school can only be established if it is at a distance of 1.5 km radius from other public or private school. The schools have to be established within a period of 3-6 months

- Per-child subsidy amount is set according to the educational level

- To ensure standard of education, the performance of school is measured under set criteria. This is based 60% on SLOs and 40% on the school environment which includes student/ teacher ratio (30:1), classroom ratio student (30 students: class) and the operator's capacity

- To improve quality of education, Oxford University Press books are issued

- Early Childhood Care Education (ECCE) has been made mandatory in PPRS schools

- SEF also carries out a number of trainings with teachers and management of the schools

8.5.5 ANALYSIS

8.5.5.1 RELEVANCE:

In Sindh, approximately 6.67 million (approx. 55%) are out of school. Nearly 70% of these children live in rural areas. This program is specifically focusing of enrolling OOSC and mainstreaming them into regular schools.

8.5.5.2 REPLICATION & SCALABILITY:

The program has expanded from 143 school in 2008-09 to 1179 schools in 2016. This is SEF's fastest growing program and the current mandate plans to add 500-1000 schools to the portfolio every year.

It is a quick and efficient method of increasing access to education in rural areas while ensuring a certain standard of education.

8.5.5.3 IMPACT ON STUDENT LEARNING OUTCOMES:

SEF conducts annual Quality Assurance Tests (QATs) to measure students learning outcomes from Grade III to Grade VII. Results from 2017 test indicate an overall average score of this program is 44.10%. There is no significant difference between the scores of males (44.50%) and females (43.70%) of this program. Subject wise scores show that students performed better in Sindhi as compared to other subjects. IBA Sukkur report suggests that one of the reasons for the low performance in the test could be the design of the exam questionnaire, as it is an MCQ format which most students are not used to.

However, another study by Osorio et. al (2017) evaluates short-term impacts of the program and finds an increase in test scores of 0.63 standard deviations in the treated villages as compared to control.

8.5.5.4 SUSTAINABILITY:

The program is fully funded by the government of Sindh.

8.5.5.5 INNOVATION:

- The program is a quick and efficient solution
- To improve the quality of education, "Teach for Change" initiative is being implemented in these schools. Under this initiative, well-qualified graduates are hired as Associates to teach in PPRS program schools
- SEF has also launched an android based e-learning application, called INSTAL. The e-learning application has digitized the syllabus (currently till Grade 5) and concept based lessons are developed for students and teachers
- Under another initiative, SEF is establishing Science labs in their Elementary and Secondary schools. Currently, 90 labs have been set-up
- Electricity is a major issue in rural Sindh. to overcome this, solar panels are installed in nearly 60-70% schools

8.5.5.6 COMMUNITY & STAKEHOLDER PARTICIPATION ANALYSIS:

In the implementation phase, community mobilization is carried out by the private school to gather support among parents/community to enroll their OOSC into school.

8.5.5.7 MONITORING & EVALUATION:

Regular M&E is carried out every month which checks compliance against student and teacher attendance, teacher qualification, infrastructure and basic facilities compliance. M&E activities are carried out by an Independent Monitoring Evaluation Cell that reports directly to the Managing Director of SEF.

Annual student QATs are used to measure the school and operator performance and if the students don't perform as per set criteria for two years straight, then the school is shutdown. The criteria school performance is: 60% students should take 40% marks & 10% are allowed to take less than 20% marks.

8.5.5.8 GENDER BASED ANALYSIS:

Out of the 303,405 students enrolled in the program, 123,352 (40%) are girls.

8.5.6 LEARNING OUTCOMES OF SELD AND PPRS

The learning outcomes of PPRS managed by SEF compared to the schools under SELD, based on third party tests are as under:

Subject / Class	PPRS		SELD Schools	
	V	VIII	V	VIII
Language	Sindhi- 73.6% English- 45.8%	Sindhi- 54.6% English- 46.0%	32.80%	39.9%
Math	36.70%	25.00%	25.41%	20.9%
Science	25.00%	28.00%	21.40%	25.9%
Overall	39.20%	43.00%	26.55%	30.3%

The attendance record shows that the attendance in schools under SELD is just 43%. While the average attendance in SEF schools is about 70%.

8.5.7 RECOMMENDATION:

Keeping in view the success of above program, it is proposed that SEF should expand its program to cover larger number of children, considering huge segment of young people who are out of school in Sindh. In this context, SEF should also initiate voucher / per child subsidy for low cost existing private schools on the pattern of PEF, to enhance its outreach to reduce out of school children as well as to improve the quality of such private schools.

8.6 CASE STUDY III: EDUCATION MANAGEMENT ORGANIZATIONS (EMOS)

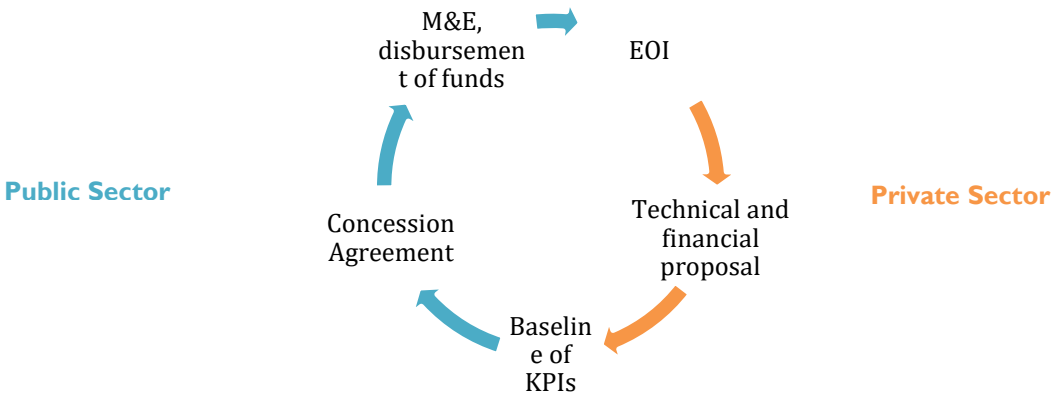
Program Inception: 2015
Geographical scope: Sindh
PPP Model: EMO, Outsourcing of management of public schools to private entities
Target: Public schools
Purpose: Improving management of schools and improve quality of education

8.6.1 BACKGROUND:

Under the EMO reform, the School Education and Literacy Department outsources management and administration of the selected public schools in Sindh to NGOs/ school systems/ individuals with a background in education and experience in school management. The Government enters into a Concession Agreement with EMOs to run the selected public schools for specified number of years.

8.6.2 MODEL:

The model follows management and operation contract where the government contracts private sector to manage/ operate an existing public service using public infrastructure.



8.6.3 ROLES AND RESPONSIBILITIES:

- Private operator is responsible for submission of 'Expression of Interest', where the school has been identified by the public sector. It then has to participate in competitive bidding, and if successful has to sign a Concession Agreement with the government for taking over the management of the school. The Concession Agreement sets KPI targets to be achieved by EMOs.

- Public sector, under SELD, sets KPI targets to be achieved by EMO for each school. It then conducts competitive bidding for the selection of EMOs. Once the school has been handed over to EMO, the public sector monitors their progress and disburses funds accordingly.

8.6.4 KEY FEATURES:

The EMO model aims to improve quality of education through innovations, modernizing the education system, addressing management gaps, maintaining and upgrading the school building and facilities, and cooperatively working along with all levels of schools' staff and all relevant tiers of the School Education Department.

- EMOs are selected by SELD through a competitive bidding process in accordance with the Sindh Public Procurement Laws
- Management of the schools is handed over to EMOs for a period of 10 years

- Baseline for KPIs is conducted by the public sector and disbursement of funds is linked to KPI targets achieved by EMO

- Independent Expert monitors performance and Independent Auditor disburses funds to EMOs

- EMOs can charge fees for their service

- EMOs management works alongside to the school Head Master

- Government prescribed curriculum is taught in these schools

8.6.5 ANALYSIS

8.6.5.1 RELEVANCE:

There is a large percentage of poorly performing public schools in Sindh. The model recognizes the need to improve upon these through bringing better private sector management.

8.6.5.2 REPLICATION & SCALABILITY:

So far, Concession Agreements for 23 schools have been signed and the management of these schools has been transferred to private partners. Expected total number of schools to be covered is 106. Owing to significantly higher additional cost, the program can only be expanded significantly if per child cost is reduced significantly.

8.6.5.3 STUDENT LEARNING OUTCOMES:

No external assessment of the SLOs has been conducted so far

8.6.5.4 SUSTAINABILITY:

The budget line of education PPPs, including EMOs, is set out under the re-current budget of SELD; whereby, the funds are routed through the Viability Gap Fund (VGF) Account. The VGF Account is established in the Finance Department, Government of Sindh, which provides funding for any and/or all PPP projects in Sindh. In future, it is expected that the budget for EMOs will reflect under the VGF, instead of a recurrent budget line under SELD.

EMO contracts are for 10 years, allowing for management reforms to be fully implemented and sustained by the school even after it graduates from the program

The program appears to be sustainable, initially, for SBEP schools. It is expected that the EMO cost will be further rationalized owing to the "group of schools" model.

8.6.5.5 INNOVATION:

- Use of third party to conduct M&E activities and disbursement of funds so as to bring transparency in the system.

8.6.5.6 COMMUNITY & STAKEHOLDER PARTICIPATION ANALYSIS:

Stakeholders and communities are actively involved and engaged with the EMO in the implementation phase. Community engagement has played a vital role in the enrolment campaign, especially for girls. Also, EMOs constantly engages with parents to improve upon student performance and get input on areas of improvement etc.

8.6.5.7 MONITORING & EVALUATION:

An Independent Expert, contracted by the government, is responsible for monitoring against the KPIs set in the contract and Independent Auditor then disburses funds accordingly. The reports of the 'Independent Auditor' feeds back into the system for further evaluation of EMOs by the government.

8.6.5.8 GENDER BASED ANALYSIS:

The model takes into account gender gap in enrollment and encourages policies to be implemented in EMO schools which are sensitive to the cultural context of the region in order to encourage female enrollment. For example, to address concerns of parents over co-education system, one such policy is to schedule school closing time for girls' section to be ten minutes before boys' section.

8.6.6 LIMITATIONS:

- Limited number of private operators with adequate capacity to operate EMOs on large scale. Strict criteria applied to short list only large and more experienced organizations makes the bidding process restricted to reputable organizations only. The scaling up of the reform will require review of the eligibility requirements for the bidding process.

- Currently, the PPP Node is understaffed and does not have the capacity to manage and support required support and oversight to ensure that learning outcomes and other related outcomes of this program are being achieved.

8.6.7 RECOMMENDATIONS:

In order to ensure sustained success of this program, following recommendations may be considered by SELD.

- PPP Node within the SELD needs to be made effective by filling the vacant positions and proper leadership at the top to ensure effective oversight of EMO schools.

- Proper web-based PPP-MIS system should be implemented for effective management and oversight of EMOs to ensure better learning outcomes?

- Effort should be made to significantly reduce the cost of EMOs through greater competition, allowing more organizations to compete and the criteria for selection of EMOs should be appropriately modified to create room for more private sector organizations.

- EMOs should be authorized greater autonomy to manage government teachers in such schools to ensure their productivity and accountability.

- As major investment has been made in SBEP-EMO schools and have outstanding architectural structures, the buildings should also be used for other purposes in the evening: such as ICT/adult literacy schools, Non-formal education centers, computer literacy centers, etc.

- The Five Year School Transformation Plan being implemented by the Malaysian government can also be applied to EMO schools to further broaden their scope and add value to the education field and the communities. The school managers at EMO schools can be trained to become 'change makers' in the education field and every EMO school can influence and create change in vicinity also.

9. COST COMPARISONS

Costing of education delivery systems is a tricky area. Simple cost comparisons can be misleading without considering the quality of learning outcomes. Ideally, the analysis should also consider return on the rupee spent: a value for money analysis. An exact value for money analysis is not possible within the scope of this study. This chapter compares costs of the various models with the proviso that a more appropriate comparison will only be possible if outputs like students learning outcomes, drop outs, gender inclusion and other variables are included in the model.

For most of the national and international models included in this study, we could not find sufficient information on the cost per child of such schemes. However, we have estimated the costs of three in country PPP programs as well as the cost of education department schools, both in Punjab and Sindh. Such cost estimation is by no means accurate, owing to limitations on information, but they do provide broader perspective for decision making.

This chapter compares cost for two PPP models from Sindh (SEF and EMO model and one from Punjab (PEF) compared to the cost of pure public sector managed schools in Punjab and Sindh. The assumption is that in terms of learning, the three systems perform nearly at the same levels, although no study has been performed to measure this. The three systems for which costs have been compared are the PPP programs of Sindh and Punjab education foundations and the EMO model in Sindh.

9.1 PUNJAB

Punjab Education Foundation, as the largest and oldest model, costs the least. As can be seen in the tables below the PEF spends less money per child than the School Education Department of Punjab. According to the 2017 results of the Punjab Examination Commission (PEC), the gap between SED and PEF children is 3% in favour of the latter. This has reduced from 26% over a period of five years. The reduction has been the result of improved learning in public schools.

PEF's cost is Rs. 683.6 per child per month for the year 2017-18. It provides funds ranging from Rs. 550 per student to Rs. 1150 per child per month for higher classes.

The lower averages in the table on PEF have two possible explanations. The bulk of support is at primary level so the average payment per month reduces.

Average Monthly Expenditure of School Education Department Punjab (FY 2016)			
	Direct Cost	**Indirect**	**Monthly Average**
Primary	818	84	902
Elementary	2,154	76	2,230
High/Higher Secondary	2,366	91	2,457
Average	1,247	83	1,330

Source: Study by Bank of Punjab for SED

The primary level expenditure of School Education Department increases to 902 and the numbers increase at elementary (middle) and secondary and higher secondary levels. These numbers are significantly higher than PEF figures.
A major reason for the difference appears to be teachers' salaries. Government teachers are paid significantly higher than the average salary of teachers of PEF sponsored private school. Starting salaries

for primary teachers in the government are around Rs. 20,000. These increase over the years with senior secondary teachers earning up to Rs. 150,000 per month. Most average private schools pay 20,000 to only some of the highest paid teachers. However, more significantly the learning outcome gaps between PEF and SED schools' standards at 3% in favor of the former.

9.2 SINDH

For Sindh, the comparisons have been made of the two main PPP models: SEF and EMOs, with cost of schools managed by SELD. The EMO clearly emerges as the costlier option, while SEF model seems to be the most economical.

The cost per child by regular Sindh Education and Literacy department for FY 2016-17 is as under:

Sub-Sector	Sub-Sector Expenditure	Development	Total Expenditure	Enrollment	Cost per child per month
Primary	56,848,392,603	446,395	56,848,912,464	2,735,156	1,732
Elementary, Secondary and H. Sec	53,548,494,944	4,446,756	53,552,981,259	1,203,531	3,708
Total/Average cost	110,396,887,547	4,893,152	110,401,893,723	3,938,687	2,336

Source: PDF wing of SELD

9.2.1 SINDH EDUCATION FOUNDATION

Sindh Education Foundation, estimates per child cost of Rs 791 per child per month in fiscal year 2016-17, down from Rs. 827 for fiscal year 2015-16. The cost has mainly come down due to increased enrolment, which is now estimated to be over 555,000. The cost per child of PEF is the lowest in the country at Rs.634, even lower than SEF, primarily because of much larger enrolment of around 2.8 million children.

9.2.2 EDUCATION MANAGEMENT ORGANIZATIONS

The average cost per child per month under EMO model comes to Rs. 4,000 (including the salaries of government staff). As the newest model that still needs to optimized marginal costs are still evolving. Among other things, the student learning outcomes and gender inclusion of these schools (for which there are positive early signs) need to be considered over time. While evaluating the cost impact of EMOs reforms considerations should be given to the fact that EMOs are required to work with the government staff posted at the schools. Another encouraging sign is the continuous decrease (per child cost) in EMOs bid values in each cycle of school management outsourcing through RFPs.

Irrespective, per child cost can be reduced, by making this model more competitive and enhancing the use of buildings through their use for NFE or other learnings in the evening.

9.2.3 COST BENEFIT ANALYSIS:

In the context of Sindh and Punjab, the PPP models of Punjab through PEF and Sindh through SEF are more efficient as compared to the regular schools under education departments. SEF result assessment shows that children are learning much better and at very low cost as compared to the regular schools at primary level. If attendance is also considered, the effectiveness of SEF model is much better. EMOs,

being the only hybrid PPP model, has the potential to bring private sector's efficiency to public sector schools.

9.3 SUMMARY

The summary of costs under various models are shown as under:

Model	Cost per child per month	Remarks
Sindh Education & Literacy Department (SELD)	2,336	Average cost
Punjab Education department Government	1,330	Average cost
Punjab Education. Foundation	684	Average cost
Sindh Education Foundation	791	Average cost
Sindh-Edu. Mgt. Org.	4,075	Average, with salary, administration and building cost.

*The estimated costs are based on the available data from relevant budget and finance wings.

Above table clearly reflects that the cost of education under PEF and SEF are the lowest in Punjab and Sindh Provinces. Overall, the cost of education in Punjab is much lower than Sindh owing to larger number, and relatively large occupancy / enrollment per school, as Punjab has relatively lesser number of schools compared to Sindh. In Sindh, SEF cost per child is significantly lower compared to other models, and it has relatively much better learning outcomes compared to SELD schools. However, it cannot be compared to the EMO model. The latter is still in early days and has a very different philosophy. SEF model targets low cost private sector providers with limited human resource capacity. The Foundation enhances their efficiency through strict monitoring. EMO model is based on attracting high end private sector providers who already have proven capacity and can bring in their own expertise and innovation to the improve education outcomes. Part of the value of these organizations is the learning possible for others on successful school management. There are early indicators that things may be happening differently.

These will, by default, cost more. There eventual value will be determined by their impact on student learning outcomes, gender inclusion, community engagement and scalable innovations.

10. RECOMMENDATIONS

It is clear from the analyses presented in the preceding paragraphs that the learning outcomes, under both major public private partnership models, i.e., PEF and SEF, are better than the School Education Departments of the two provinces, while the cost per child is also significantly lower. In Punjab, PEF cost per child is almost half of the Punjab School Education Department, while in the case of Sindh, SEF cost per child is almost one third of the Sindh School Education Department. Based on initial studies, although no formal testing has, been done, EMO learning outcomes are also expected to be far better than those of SELD. Its per child cost is significantly higher than other options but it must be seen as a different model with a separate set of expectations.

1) A value for money analysis of all models should be undertaken to develop a more objective criterion for assessment of the impact of these models.

2) The government will have to view EMO and SEF as different models and optimize the benefit of both as per the respective expectations from each:

    a. Government should aim to further enhance its focus on per child based subsidy models being implemented by SEF, expand its scope to cover additional programs on the pattern of PEF for enhancing enrolment, improving learning outcomes and covering maximum number of out of school children at relatively lower cost.

    b. Government should obtain assessments for EMO schools through a third party such as IBA to be able to assess the impact of this program on learning outcomes on other critical outputs from the model. Most importantly successful innovations by different partners should be documented and ways to scale them up should be explored.

3) SELD should strengthen PPP Node's capacity for effective oversight and monitoring of EMO schools including oversight of IEs and IAs to ensure effective implementation and documentation of the work of these schools.

11. ANNEXURE-I

PPP Model	Program	Purpose
KHYBER-PAKHTUNKHWA		
Voucher	Iqra Farogh-e-Taleem Voucher Program (IFTVS)	Enrolling Out-of-School Children (Drop outs + Children who have never attended school)
Financial + Technical Assistance to Private Schools	Girls Community Schools	Enrolling Out-of-school Girls
	Rokhana Pakhtunkhwa Taleemi Program	Increase enrolment (Middle & High) & Improve Quality by having private schools compete with each other
Private Finance for Infrastructure	Tameer-e-School Program	Improve infrastructure & basic facilities of public schools
SINDH		
Private Management of Public School Financial + Technical Assistance to Private Schools	Adopt-A-School Program	Improving Management and quality of education in government schools
	SEF Assisted Schools	Increasing access and quality of education through providing financial assistance and quality inputs
	Promoting Private School in Rural Sindh (PPRS)	Increasing access and quality of education through establishment and management of public funded private schools
	Existing School Support Program (ESSP)	Regulate and strengthen existing private schools; extend financial, technical and managerial support
PUNJAB		
Private Management of Public School	Public School Support Program (PSSP)	Improve quality of education in low performing public schools
Financial + Technical Assistance to Private Schools	Education Voucher Scheme (EVS)	Increasing enrolment, especially of OOSC
	Foundation Assisted Schools (FAS)	Improve access but especially quality of education in low-fee private schools
	New School Program (NSP)	Improve access to education in rural / remote areas

12. ANNEXURE-II EMO COST ANALYSIS

The EMO model so far has been the most expensive. Based on different projections its cost appears to be the highest. Per child cost has been calculated on the basis of the running expenditure of schools. Analysis have been undertaken through two different approaches: without factoring in the building cost and with the building cost factored. Where building costs have been considered the value of annual depreciation has been included in the estimates. The running costs have been calculated at the following four time periods:

1. Before Handing over to EMO/ Only Government for the year 2016
2. Current (after 2 years) for the year 2018
3. In 5 years (2021)
4. In 10 years (2026)

The model makes assumptions about increased enrolments over the simulated period.

1. Government budget is 10% per anum increase with base budget of FY 2016
2. Enrollment estimates are 2.5% increase per anum
3. IE and IA costs for 10th year are the 10% increase of 5th year cost.
4. Enrollment of GBHS Kolab Jial and GHS Bozdar Wada for 2018 was not available, so estimated figures used.

ANALYSIS WITHOUT BUILDING COSTS

With increased children per capita cost reduces in real terms (adjusted for inflation). However, this assumption may not hold due to two main reasons. Firstly, the capacity of school buildings to hold children and secondly, the number of children in the catchment area of each school.

S. No	School Name	District	Govt. Cost per Child/ month 2016	Current EMO Cost per Child per month 2018	Estimated 5th year Per Child / month	Estimated 10th year Cost per Child per month
RFP # 1						
1	GHS Kouro Goth	Khairpur	1,287	2648	2935	
2	GHS Arain	Sukkur	1,880	3706	4128	5024
3	GHS Jhajh Regulator	Khairpur	1,879	3628	4441	6261
4	GHS Tando Mir Ali	Khairpur	1,998	3597	4414	6238
RFP # 2						
5	GGELS Bedil Bekas	Sukkur	983	4110	3011	4318
6	GBHS Karoondi	Khairpur	1,811	3020	3703	5233
7	GBPS Abad Lakha	Sukkur	529	936	1177	1675
8	GBHS Kolab Jial	Khairpur	3361	5259	6415	8716
9	GHS Bozdar Wada	Khairpur	5858	6855	8232	11123

This can be rectified, at least to an extent, if the buildings use double shift schools. Where the number of regular children is limited the buildings can be utilized to target out of school children and adult literates. Without adequate use of the buildings the model will remain expensive. In a value for money analysis also the EMO model will have to perform much higher than other PPPs to be considered feasible.

ANALYSIS WITH BUILDING COSTS

The modern school buildings constructed under the Sindh Basic Education Program have been an important attraction for quality management organizations to run these schools. They have also induced a positive community response.

In Table xx below the costs increase when depreciation cost of buildings is added in each year. A 25-year depreciation period has been considered.

Cost of EMO with Construction								
S. No	School Name	District	Estimated 5th year Per Child / month (Including Construction)	Estimated 5th year Per Child / month	Increase in 5th year cost Per Child / month	Estimated 10th year Cost per Child per month (Including Construction)	Estimated 10th year Cost per Child per month	Increase 10th year Cost per Child per month
1	GHS Kouro Goth	Khairpur	3338	2935	12.07%	3855	3501	9.2%
2	GHS Arain	Sukkur	4475	4128	7.77%	5332	5024	5.8%
3	GHS Jhajh Regulator	Khairpur	4714	4441	5.80%	6502	6261	3.7%
4	GHS Tando Mir Ali	Khairpur	4646	4414	4.98%	6442	6238	3.2%
5	GGELS Bedil Bekas	Sukkur	3596	3011	16.26%	4834	4318	10.7%
6	GBHS Karoondi	Khairpur	3903	3703	5.13%	5410	5233	3.3%
7	GBPS Abad Lakha	Sukkur	1422	1177	17.25%	1892	1675	11.5%
8	GBHS Kolab Jial	Khairpur	6843	6415	6.26%	9095	8716	4.2%
9	GHS Bozdar Wada	Khairpur	8511	8232	3.28%	11370	11123	2.2%

The percentage increase at 5 years and 10 years, after addition of construction costs through depreciation, is not very high. At 5 years, the highest increase is of 17% but for most schools it remains below 10%. Lowest addition is for Bozdar Wada but given that this is already at a high cost the small increase is not representative of how the costs will evolve. Over the long term cost of building is not the most significant consideration. The routine running expenditure will have to be reduced through greater and more efficient use of the premises. This will include better quality education and also inclusion of concepts like double shifts. This may also be noted that the additional cost of administration (which covers the Secretariat, regional directorate and district administration) per child is approximately Rs. 350 per month.

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