ACCESS TO PUBLIC SERVICES

Education, health, electricity, water & sanitation

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Introduction

- Access to public services directly improves rural welfare.
- Improves productivity, investments, labor supply, incomes.
- Multiple feedback loops: health & education, water & sanitation and health, and so on.

- Pakistan has the world's 3rd highest burden of maternal, fetal, and child mortality; in rural areas, 1 in every 9 Pakistani children does not survive to their fifth birthday.
- Only 50% of Pakistani children complete primary school.
- Only 50% of rural households access a piped drainage system, only 45% access a flush toilet, and only 9% access a piped water source.

The importance of public services for rural development - I

- RHPS, rounds 1 and 2; pooled and panel specifications.
- We show access to public services is essential to boost agricultural labor supply and machinery use, as well as rural non-farm labor and incomes.

- Education does not affect agricultural labor supply; in fact, higher secondary school and beyond reduces it.
- Education associated with increased machinery use.
- Decreasing distance to a BHU (by 5 km) increases agricultural labor supply (by 18 days/year by the HH).
- A negative health shock decreases a household's agriculture supply by 36%.
- 1 km increase in distance to water source reduces agricultural labor supply by 29%.
- Access to a piped drainage system increases agricultural labor supply by 39%.
- More hours of electricity increase machine use.

The importance of public services for rural development - II

- Men who attended secondary school have a 5% higher probability of engaging in non-farm labor, and on average earn Rs. 10285 more annually, relative to men with no schooling.
- For women, the corresponding percentage is 2%, and the increase in earnings is Rs. 2187.
- Men who attended higher secondary school or beyond have a 6% higher probability of engaging in non-farm labor, and on average earn Rs. 36640 more, relative to men with no schooling.
- For women, the corresponding percentage is 13%, and the increase in earnings is Rs. 8921.

- Results for women are in contrast to earlier research, representing a change, and an opportunity.

Access

- Urgent need for improved rural access to all five public services we examine: health, education, electricity, water and sanitation.
- Institutional architecture stretches across three levels of government -- federal, provincial and local – in the public sector, along with varied levels of provision by the private sector.
- Problems with implementation across these types of providers and levels of government result in significant gaps in access to and quality of these services.

Education I

Table 9.7: Cross-tabulations for current enrollment, by age group and gender, with HH expenditure, and education of (male) HH head in 2012

Panel 1: Current enrollment prevalence by monthly HH expenditures per adult equivalent

	Age	Bottom Quintile	Top Quintile
Girls	5-9	37.5	70.2
	10-14	42.8	60.5
	15-18	14.7	18.9
Boys	5-9	47.7	77.2
	10-14	55.8	81.8
	15-18	29.3	71.1

Panel 2: Current enrollment prevalence by HH head (male) education

	Age	Never enrolled	Primary or less	Middle (class 6-8)	Secondary (class 9) or higher
Girls	5-9	37.8	47.3	49.3	70.8
	10-14	35.9	46.7	61.5	72.3
	15-18	9.3	13.3	29.3	50.6
Boys	5-9	49.5	59.4	76.2	78.3
	10-14	56.3	62.3	86.2	92.6
	15-18	30.2	42.0	43.1	69.8

*Source:*2012 RHPS (IFPRI/IDS 2012)

Notes: All summary statistics use household weights. Panel 1 examines cross tabulations with (quintile 1 and 5) of household expenditure. Panel 2 examines cross tabulations with the education of male household heads.

Afzal et al (2015)

Education II

- Public sector accounts for 64% of all enrollment
  - National Education Census of 2006 shows that virtually every village has a public school, and 23% of villages have private schools as well.
  - In the RHPS sample, 25.5% of 5 to 9 year olds report attending a private school as their last school.
  - Private schools tend to arise in villages where a supply of educated, low-cost female teachers exists—villages where there is already a government girls' secondary school.
- Supply issues: government middle & high schools for girls, infrastructure, distance
  - In 2007-08, only 63.9% of schools had drinking water, 60.8% had toilets, and 60% had boundary walls.
- Demand issues: socio-economic constraints, especially for girls

Education III

- National Education Policy (2009) recognizes funding and implementation gap
- Small overall commitment: only 2.7% of GDP committed to education
- Unused funds: 20-30% of funds allocated to education remain unused
- Lack of coordination across levels of government (devolution)
- Policy instability
- Multiple donors involved

- Important policy innovations.
- Punjab Stipend program, Punjab Education Foundation, Sindh Education Foundation
- PEF New Schools Program; Punjab Monitoring and Implementation Unit

Health I

Table 9.4: Location of delivery in 2012

Background characteristic	Government hospital Basic health unit or Rural Health Center	Private hospital or clinic	At home
Mother's education			
Never enrolled	9.0	22.4	68.6
Primary or less	16.8	35.7	47.5
Middle or higher education	20.4	45.7	33.9
Monthly HH expenditures per adult equivalent			
Bottom Quintile	9.0	19.9	71.2
Top Quintile	10.2	29.5	60.3
Total	12.2	21.2	66.6

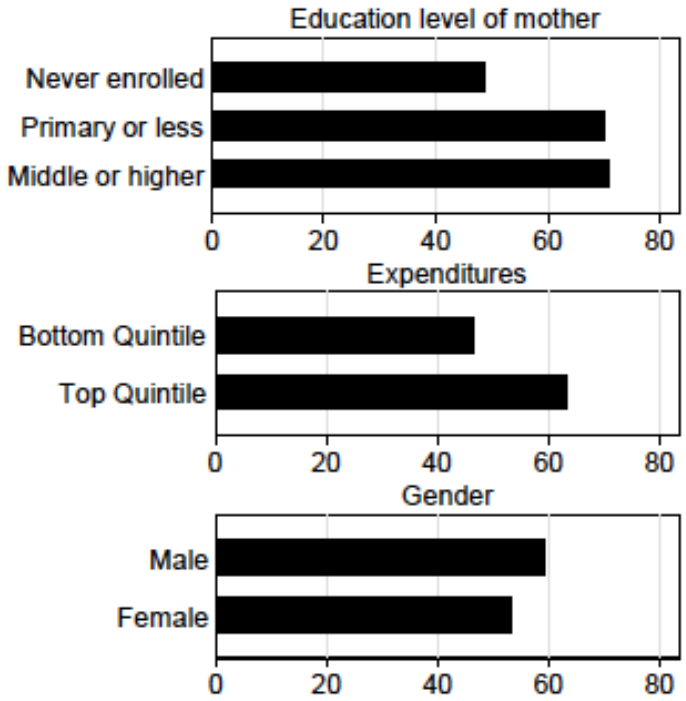
Source: 2012 RHPS (IFPRI/IDS 2012)

Notes: The table concerns delivery of the most recent pregnancy of married women 14-49 years using. All summary statistics use household weights. The sample size is 1,434 women.

Afzal et al (2015)

Health II

Figure 9.2: Immunization rates



Source: 2012 RHPS (IFPRI/IDS 2012).
Notes: Data from 2012 and 2013 are pooled for the analysis. Children 12-23 months of age are considered fully immunized if they have received the BCG vaccine, three doses of the DPT vaccine, three doses of HBV vaccines, and one dose of the measles vaccine. All summary statistics use household weights. The sample size is 613 children.

Afzal et al (2015)

Health III

- Socio-economic status poses high barriers to accessing even the most basic maternal care.
- Unregulated, low-quality private sector has filled in for a public sector that is unable to provide adequate delivery care to pregnant women.
- Government healthcare facilities are under-utilized by women due to a lack of female staff, staff absenteeism, undersupply of medication and equipment, and long distances to reach them.

- Devolution.
- Maternal, Newborn, and Child Health Program (MNCH), Lady Health Workers (LHW) program, Expanded Program on Immunization (EPI) all vertically integrated – lack of integration into system.

Electricity, water, sanitation

Table 9.9: Share of households with access to electricity, water, and sanitation services, by education level and expenditure in 2012

	Education level of HH head			Monthly HH expenditures per adult equivalent	
	Never enrolled	Primary (class 1-5)	Middle or higher (class 6+)	Bottom quintile	Top quintile
Dummy - HH has electricity	0.85	0.84	0.96	0.84	0.91
Hours per day that HH with electricity has it	9.6	9.7	11.2	10.8	9.7
Dummy - HH's main source of water is piped	0.07	0.07	0.13	0.07	0.06
Distance to HH's main water source (km)	0.15	0.15	0.09	0.23	0.07
Dummy - HH has a piped drainage system	0.40	0.48	0.69	0.39	0.55
Dummy - HH has a latrine (flush or dry pit)	0.55	0.63	0.83	0.61	0.71
Dummy - HH has a flush latrine	0.38	0.43	0.59	0.38	0.55

Source: 2012 RHPS (IFPRI/IDS 2012)

Afzal et al (2015)

Policy insights I

- Considerable attention must be paid to ensuring access for vulnerable populations such as women and girls, and those with low education and low incomes.
- Low access to all five services derives in no small measure to policy and program instability across changing political regimes, which has led to implementation and accountability gaps.
- In addition, the responsibilities across the three levels of government are inadequately defined, and the private sector insufficiently regulated, resulting in both limited access to, and poor quality of, these services.

Policy insights II

- Increased supply of government girls' middle and secondary schools will yield multiple dividends by increasing the future supply of female school teachers
- Engaging private sector where lack of government provision
- Improving infrastructure will also increase enrollment
- To improve health services for rural women: integrate standalone programs that have worked, like LHW, with BHUs
- Increase public utility efficiency, reduce theft, move toward a competitive market structure (including tariff reform), explore cheaper energy sources
- 18th amendment presents both an opportunity and a challenge