Public Schooling System in Sindh: Empirical Insights [1]

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Ex-ante Assessment of Political Economy???

"God hid the most important things from the wise because they cannot understand what is simple"

St. Paul

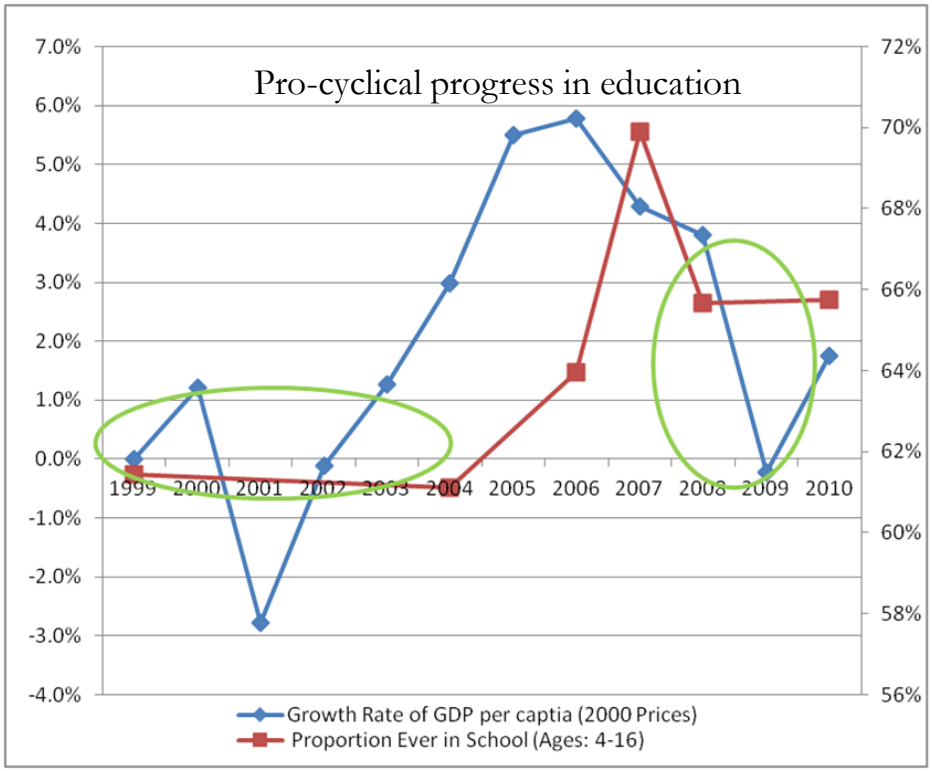
Overview of the Presentation

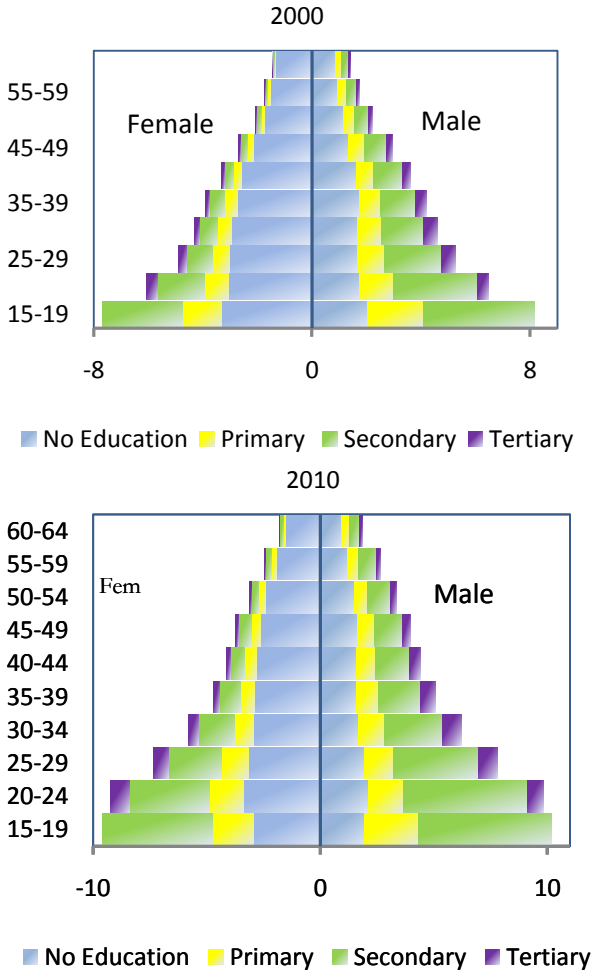
I. Motivation
II. Opportunities and Challenges in School Education System
III. Trends in Education Outcomes
IV. Evidence-based policy in the real world (interests, power and politics)

Motivation

- Lack of analytical work on Sindh and inappropriate use of examples from Punjab to motivate Sindh Education Sector Policy.
- To use simple descriptive statistics on Sindh Education System to highlight patronage model of politics capable of derailing well-intentioned reforms.
- Absence of any ex-ante assessment of political economy of the sector while making 'compelling' cases for policy interventions.

Education Sector in Pakistan





- significant reduction in proportion of uneducated females
- 27% of youth (ages 15-19) with no education

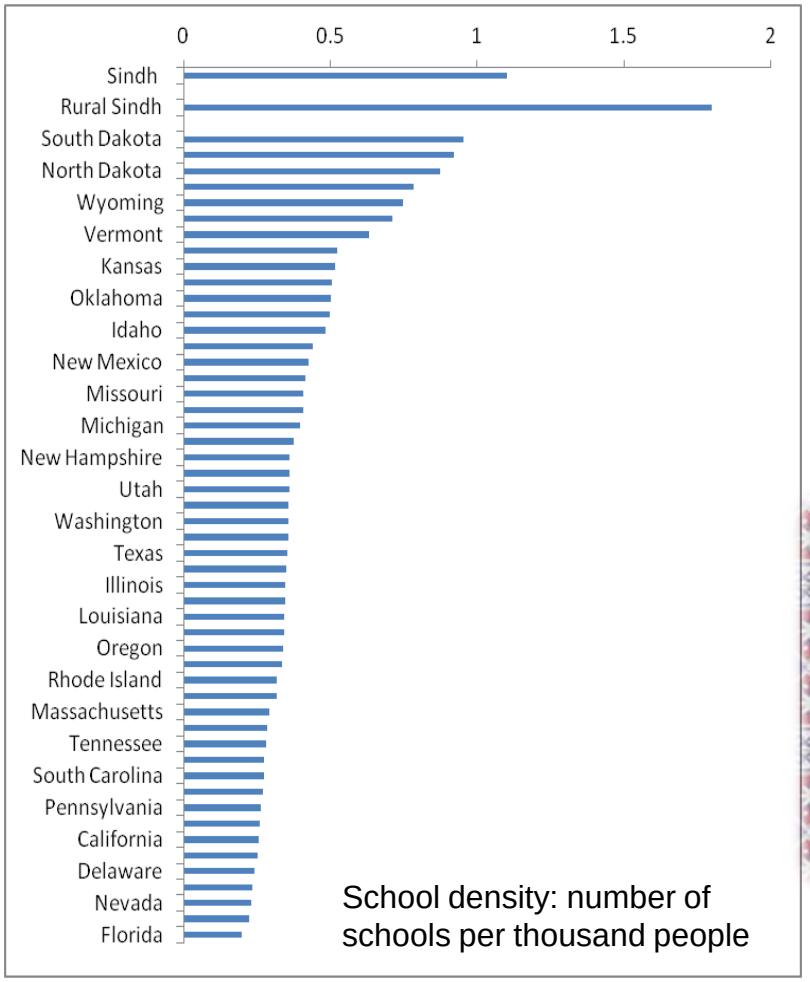
Is Sindh any different ?

- Net Enrollment Rates (2011):
  - primary level (ages 6-10: grades 1-5) is 62%[67.5%, 54.5%] that drops to 54% [63.5%, 43.5%] in rural areas
  - middle level, (ages 11-13: grades 6-8) is 35.7% [38.9%, 31.7%] that drops to 25.6% [33.9%, 14.5%] in rural areas
  - secondary level, (ages 14-15: grades 9-10) is 23.1% [26%, 19.4%] that drops to 13.6% [19%, 6.5%] in rural areas.
- Proportion of uneducated youth (ages 15-19) in Sindh is 31% compared to 27% nationally.

Mission

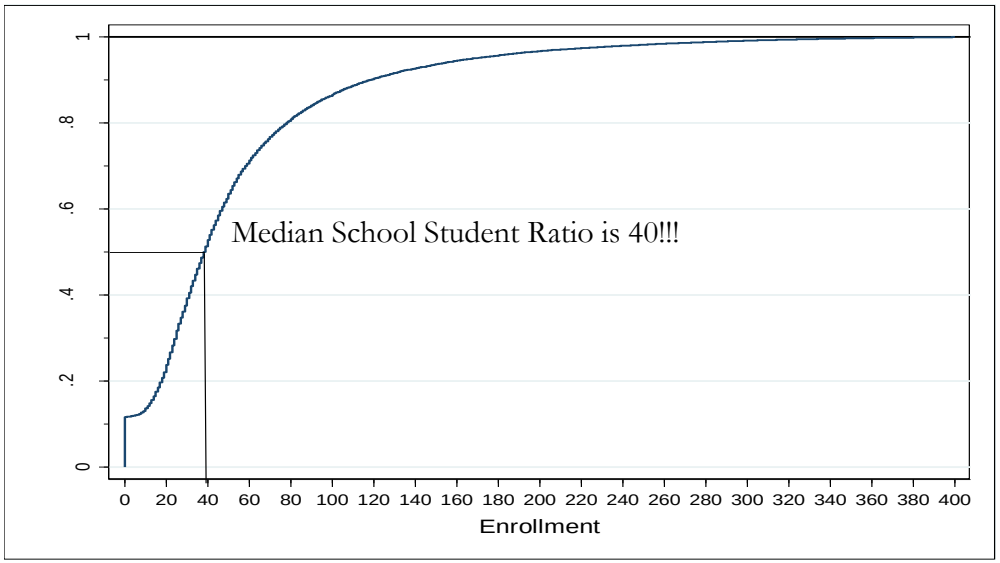
Data detective work to identify patterns and clues to strip down the complex education system in Sindh into simplified numbers to inform the discussion!!!

Sindh Public School System



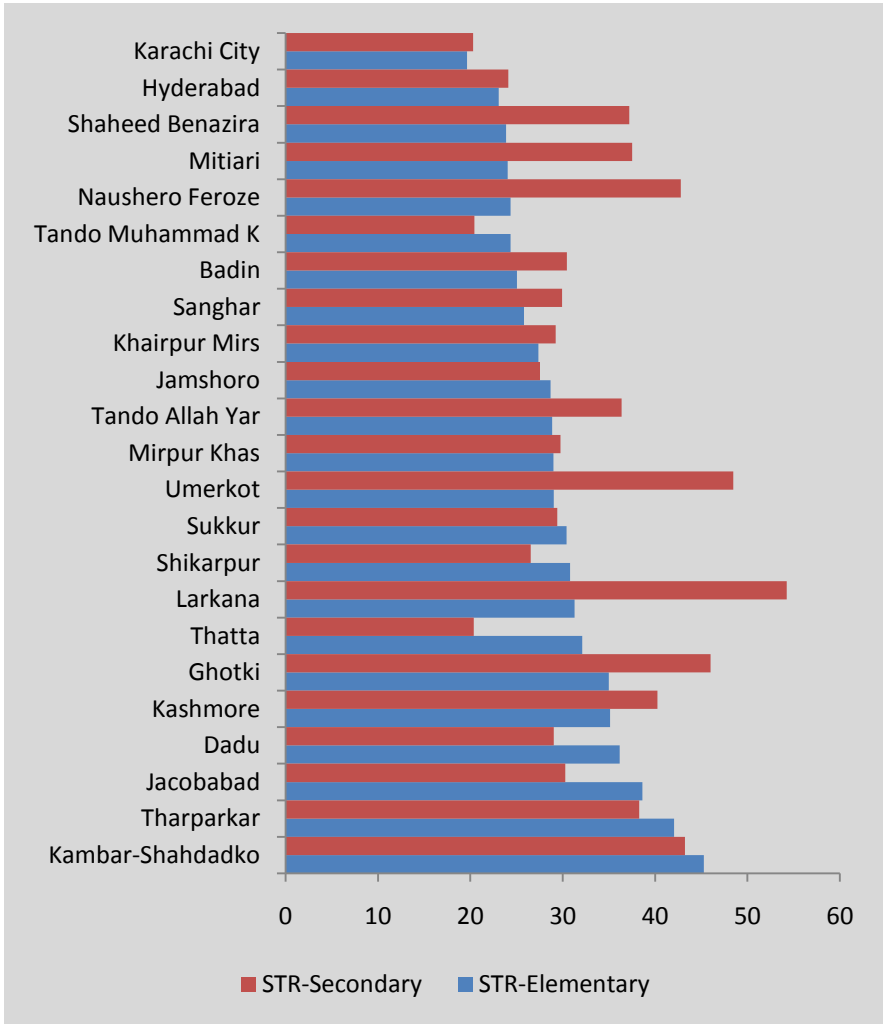
School density: number of schools per thousand people

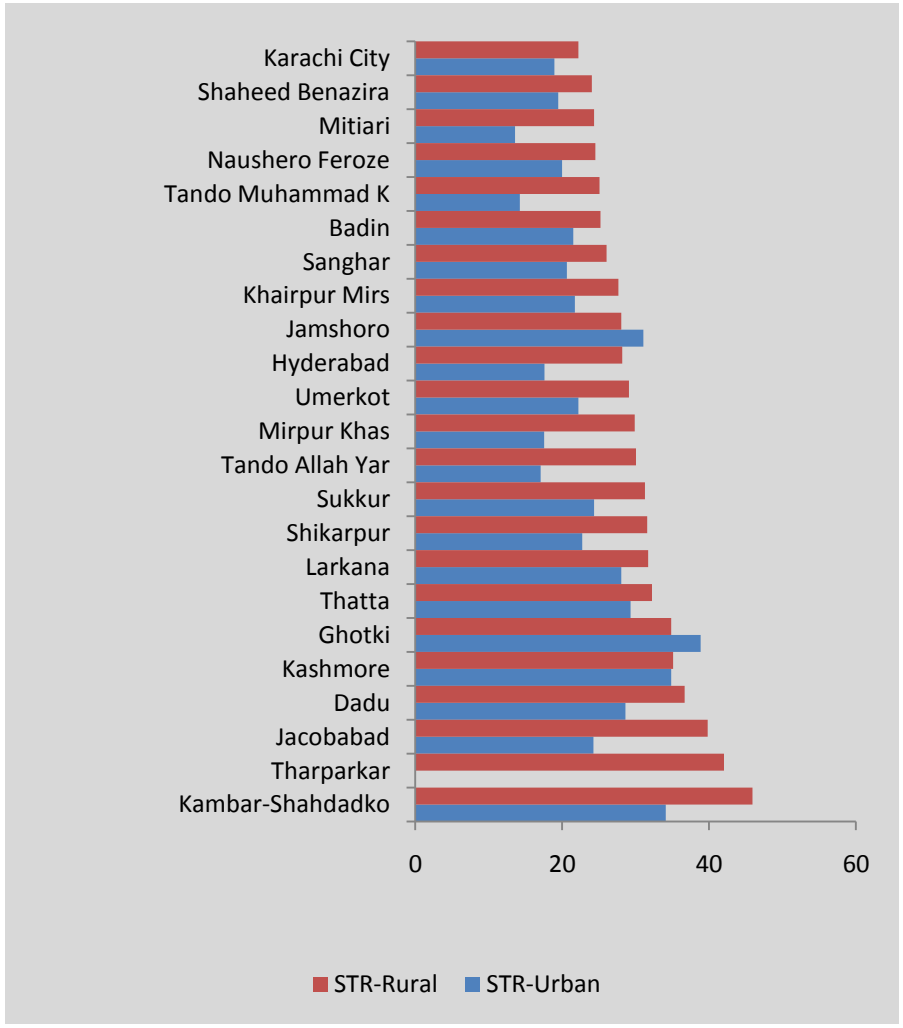
Rural Sindh: #1 in the Charts for Schools without Students!!!



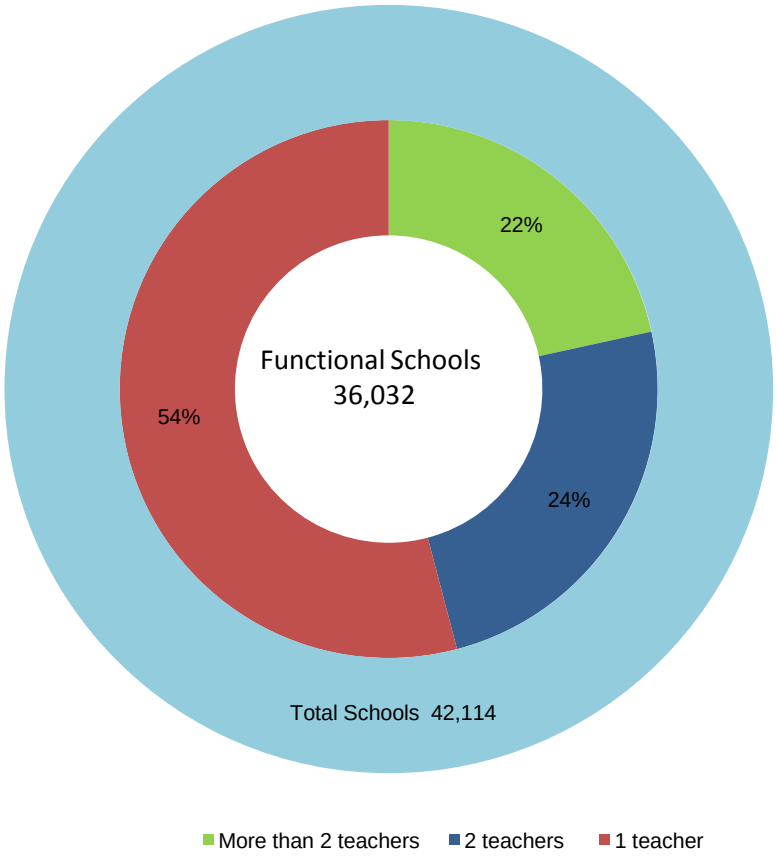
- Patronage Model of Politics at work (Keefer et. al, 2003; Cheema et. al, 2005)
  - Schools for Politicians vs Schools for students
  - Illogical expansion of public schooling system in rural Sindh:
    - 42,214 elementary schools for 23 million people.

Story of Political Patronage Continues:
Inter and Intra district variations in Student Teacher Ratios!





Teacher distribution in Functional Rural Schools



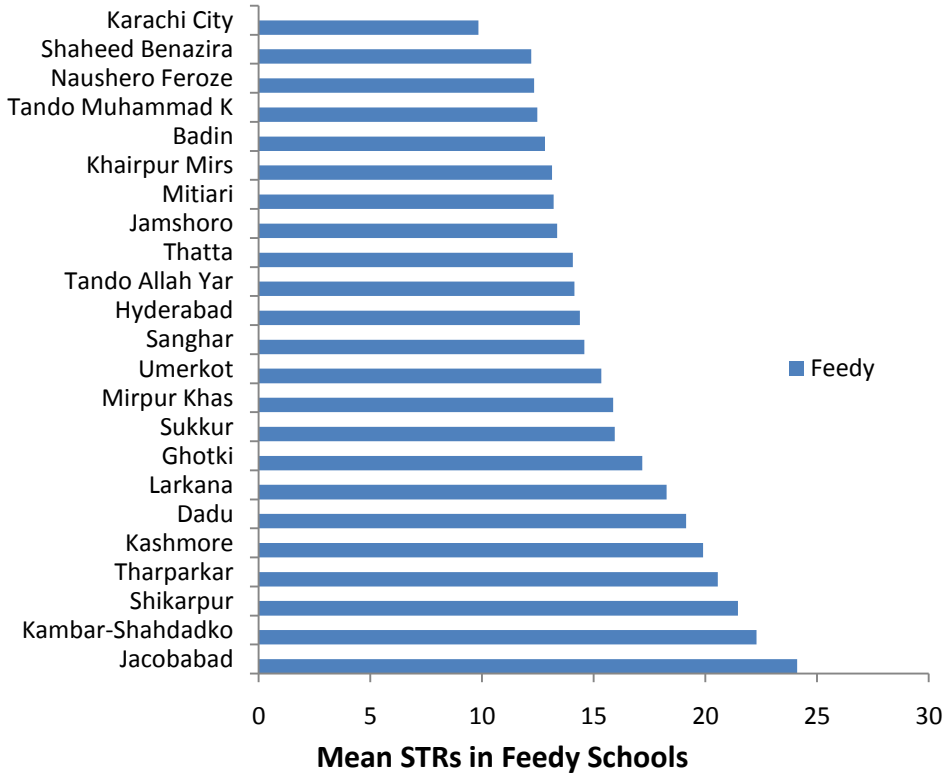
- 42,114 elementary schools in rural Sindh.
- 6082 of these schools are not functional.
- 36,032 functional schools
- 54% of these schools are one-teacher schools.

Schools for Politicians (Feedy) vs Schools for Students (Needy)

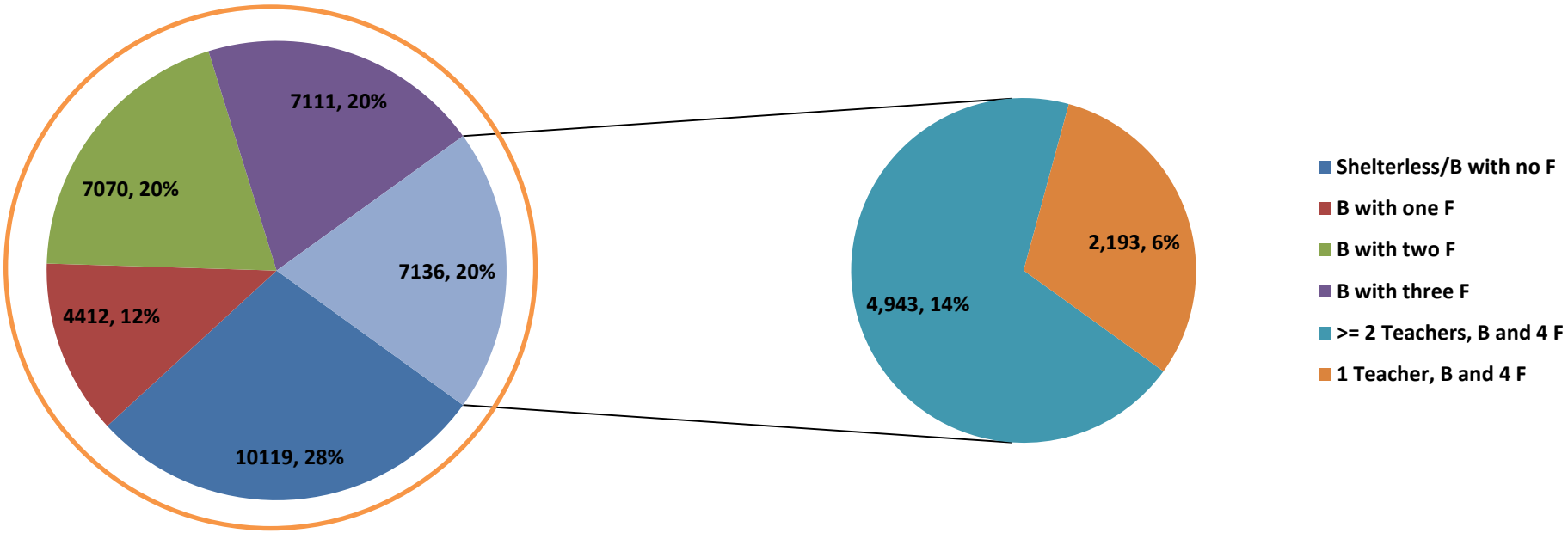
- *Any school within a district that falls in the bottom quintile of STRs in a given district is classified as 'feedy'*
- *Total of 4038 'feedy' schools in the province with mean STR (across districts) of 15.9.*
- *Total enrollment in these schools is less than 65,000*

NEEDY SCHOOLS

FEEDY SCHOOLS



School Facilities in Functional Rural Schools

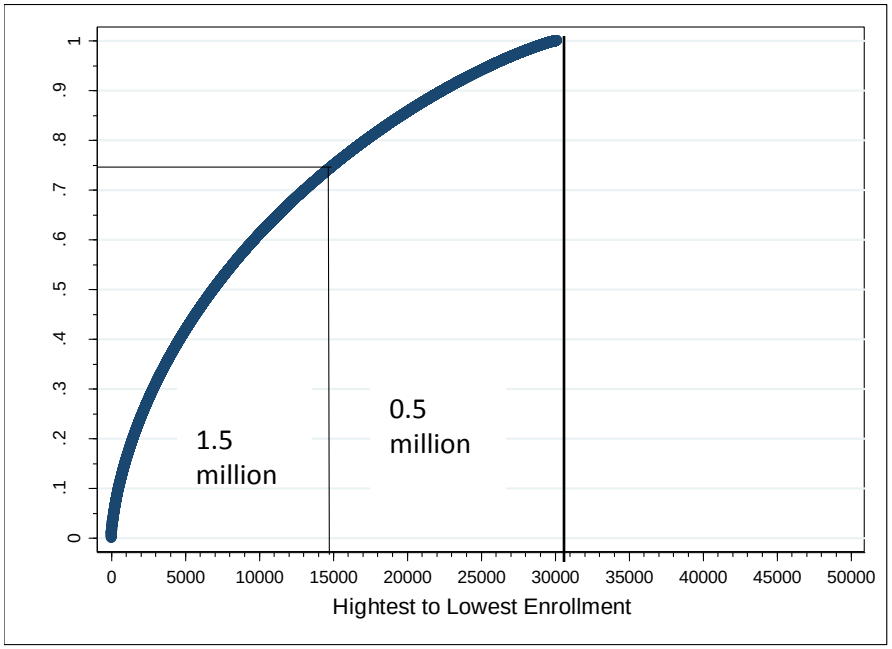


More ‘feedy’ schools???

- Schools that share the same observable characteristics as closed schools (No toilets, No electricity, No water and No boundary wall).
- Use match algorithm to identify these schools: ‘schools at risk’
- Reduce the likelihood of falsely classifying a ‘needy’ school as ‘feedy’—select only those schools in the matched list that have an STR less than of a median school.
- 1880 more ‘feedy’ schools in the province that satisfy these arbitrary cutoffs.
- Enrollment cost of excluding ALL identified

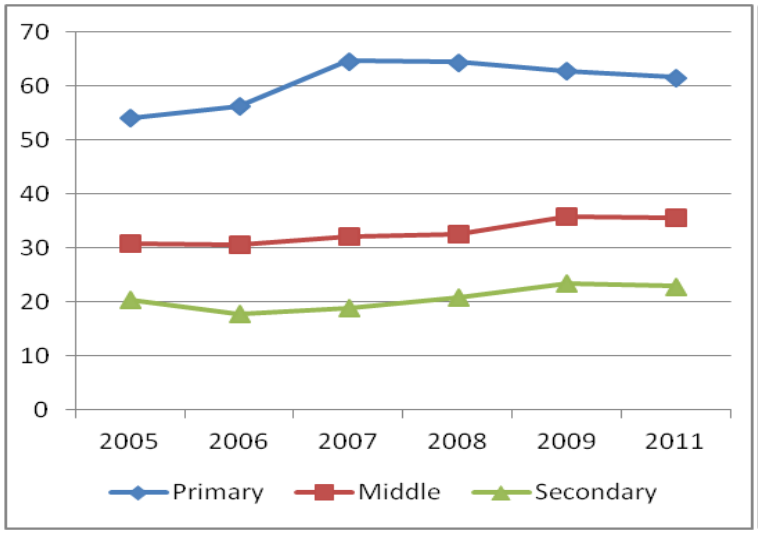
Reducing Rural Sindh Elementary Education System to 30,000 Functional Schools compared to 42,000

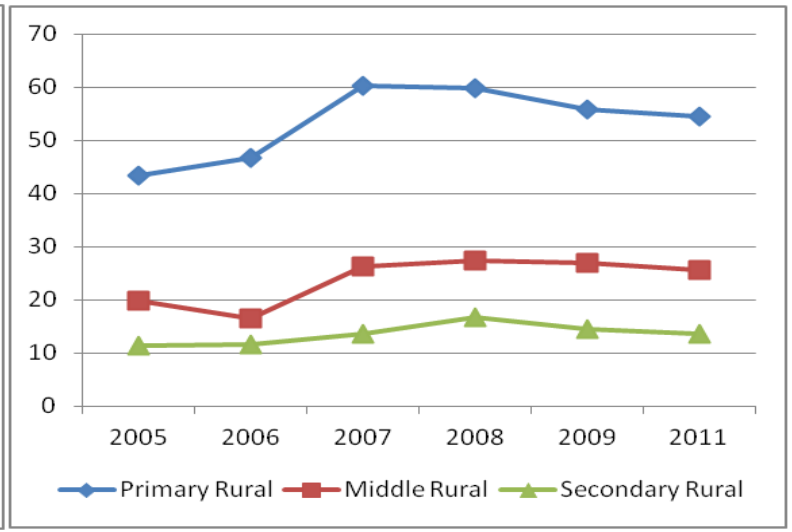
School Size Heterogeneity in Functional Schools



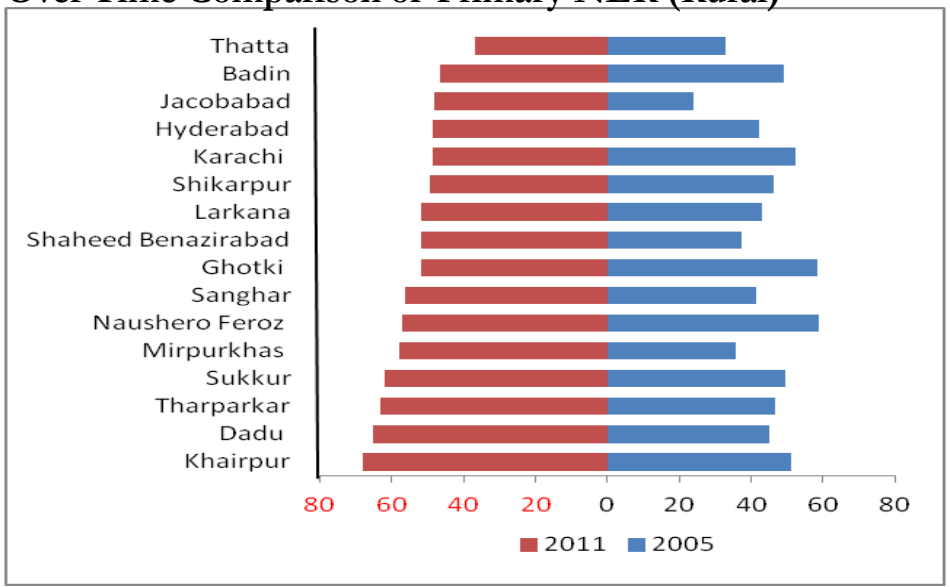
With data alone we cannot identify more 'feedy' schools!!!

Back to Education Outcomes



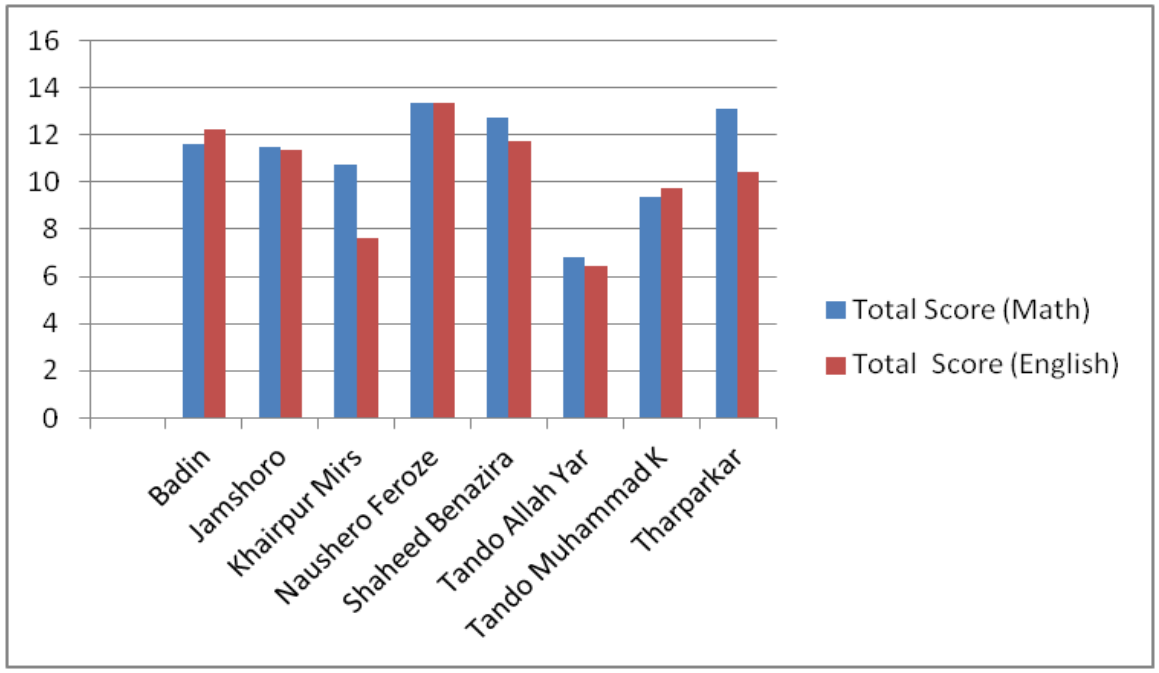


Over Time Comparison of Primary NER (Rural)



- Thatta: Highest concentration of 'feedy' schools has the lowest primary level NER
- Dadu, MPK, Jacobabad: Impressive growth rates in NERs after district bifurcations in 2004

Student Achievement in Math and English Tests (2012)



Age	Total Score (Math)	Total Score (English)
>10 years	11.61519	10.28518
<=10 years	12.24337	11.14396
Total	12.00995	10.82485

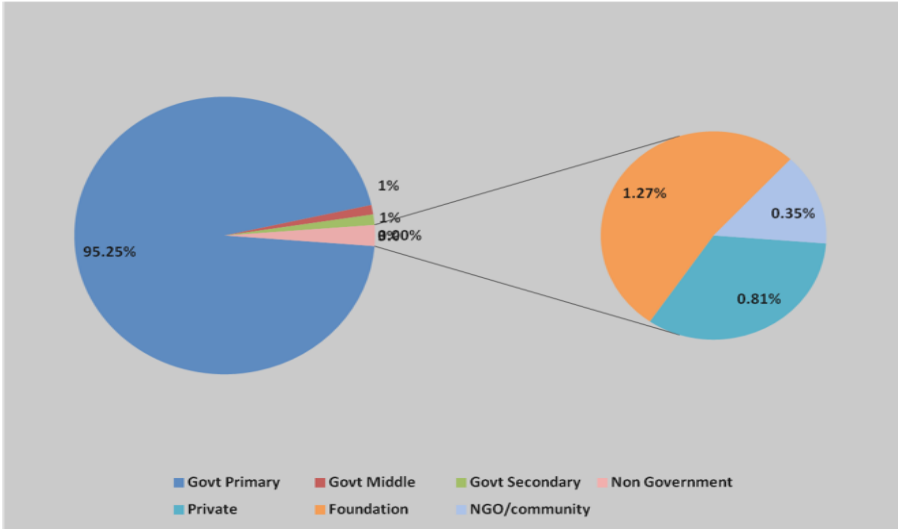
Gender	Total Score (Math)	Total Score (English)
Boys	11.98591	10.71222
Girls	12.05597	11.04046
Total	12.00995	10.82485

Robustness Checks

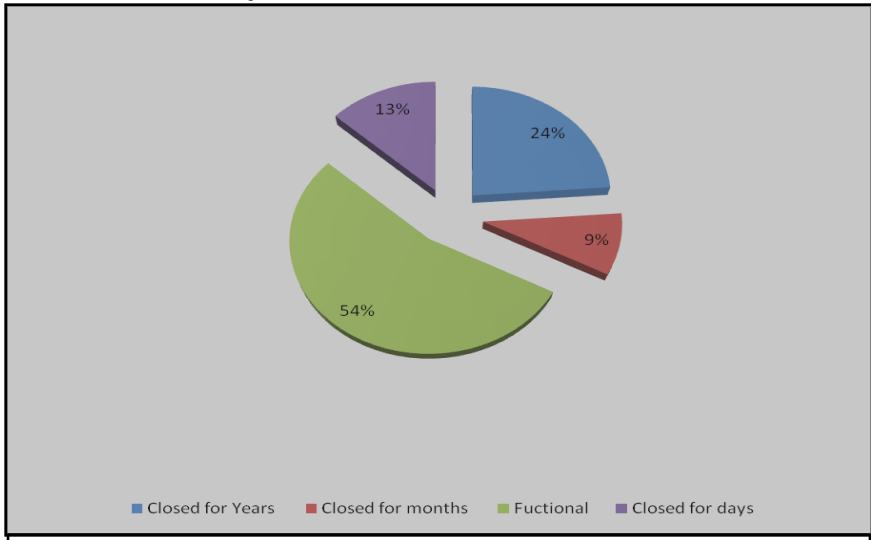
Data Source:

- 300 villages in three districts of rural Sindh, Matiari, Mirpurkhas and Sanghar.
- 181,061 households were listed and 1727 elementary schools mapped.

Level and Type Distribution of Schools

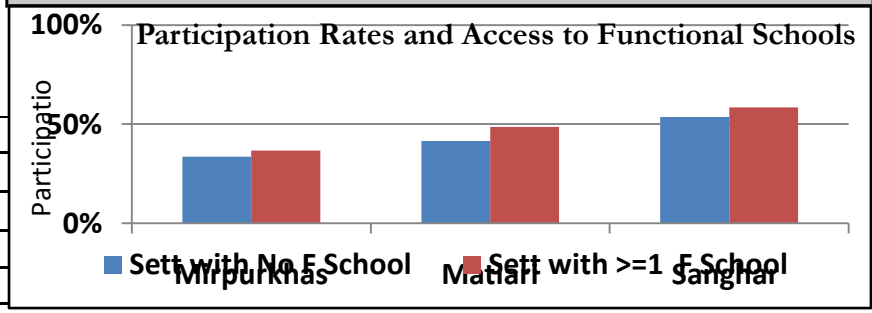


Functionality Status of Schools



Participation Rates in three districts (Ages 5-16)

	Participation Rates	
	PSLM (2011)	Census (2012)
Sanghar	47.8%	50.6%
Matiari	42.9%	42.9%
Mirpurkhas	48.8%	28.7%



Conclusion: Sindh Right to Free and Compulsory Education Act, 2013

- School Consolidation
- Teacher Rationalization
- Merit based recruitment and needs-based placement of teachers
- Targeted and needs-based CCT programs
- Active policy making for reducing size of distortion in the system: weigh the benefits of an intervention to those in the good system against the rents in the bad system.
- Rationalize administrative burdens of district management
- Incentive compatibility of policy targets and interventions with the good and the bad system.
- ACT on the body of Evidence

When the facts change,
I change my mind!!!

•Gender Parity is more of an issue in rural Sindh—the benefits of targeting gender in urban areas of Sindh are likely to be much smaller— design implications for universal targeting of CCT programs?

•Transition rates from primary to middle are equally poor for both boys and girls. Case for universal targeting of CCTs in rural areas!

THANK YOU

I am well aware, in concluding this presentation, that the task I set myself is by no means completed. I am sure, however, that there are plenty of people who will want to examine the questions that I have raised; it is time I call them in.