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ABSTRACT

The province of Balochistan has the worst educational attainment in Pakistan, which has low educational attainment compared to countries with similar income levels. In light of several factors constraining the Balochistan government's ability to expand school supply in poor areas, private schools were thought to offer potential benefits for increasing enrollment. Two pilot "fellowship" projects were undertaken in 1994: a voucher system for girls from poor families in Quetta, the capital city of Balochistan, and a similar voucher system for girls in rural villages. The subsidies were short-term, and the schools used various financial strategies to become self-sustainable. The projects had success in urban areas and relative failure in rural areas. Between 1994 and 1996, enrollment of girls in urban fellowship neighborhoods increased 26 percent, while enrollment of boys (who were not subsidized) rose 20 percent. Enrollments continued to rise after subsidies ended in 1997. In addition, the program was replicated in other neighborhoods and cities. Rural fellowship schools, however, were unsustainable, and only one appeared likely to survive. Factors contributing to the relative success of the urban schools were higher demand for girls' schooling in urban areas, greater ability of urban parents to pay, the presence of more children in urban neighborhoods, greater availability of experienced school operators and good teachers in urban areas, and higher government subsidies for urban schools. (SV)



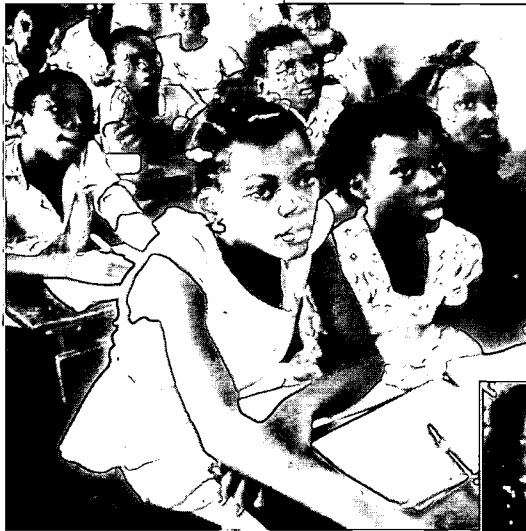
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The Urban and Rural Fellowship School Experiments in Pakistan Design, Evaluation, and Sustainability

Peter F. Orazem



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**The Urban and Rural Fellowship School Experiments in Pakistan:
Design, Evaluation, and Sustainability**

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June 2000

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Abstract

Balochistan Province initiated two pilot programs attempting to induce the creation of private schools for the poor. This study reviews the factors which led to the success in urban areas and relative failure in rural areas. These factors include the larger supplies of children not served by government schools, the better availability of teachers, and more educated parents in urban than in rural communities. The use of experienced school operators in the urban pilot was another critical difference. All urban schools appear self sustaining or else require a modest subsidy, whereas only one rural school may survive as a private school.

The Urban and Rural Fellowship School Experiments in Pakistan: Design, Evaluation, and Sustainability

Introduction

The Province of Balochistan has the worst educational attainment levels in Pakistan, which has some of the lowest educational attainment levels among countries with similar income levels. In urban areas of Balochistan, primary completion rates for the population aged 10 years and over are 51 percent for males and only 19 percent for females. The primary school completion rates are even lower in rural Balochistan: 38 percent for males and 6 percent for females. In other countries, improvements in educational attainment have been strongly correlated with rising per capita income, and improvements in female education specifically has been associated with rising health status and slowed population growth. In Pakistan as well, donor-supported efforts to encourage economic development have emphasized improvements in educational attainment with an extra emphasis on raising female enrollments.

Several factors complicate efforts to effect these improvements. First, there is the need to motivate parents to send their children to school. A child's probability of enrolling in school is strongly influenced by his parents' income and education. Consequently, the low levels of income and educational attainment of adults in Pakistan hinder their children's educational opportunities. It had been commonly presumed that cultural taboos against exposing girls to the public further limit incentives for poor parents to send their daughters to school. Nevertheless, there is evidence that suggests that parental reticence regarding their children's education can be overcome, particularly in urban areas.

A study of enrollment patterns in Lahore, Pakistan by Alderman, Orazem, and Paterno (1996) found that while enrollment rates for poor children are lower than for children from wealthier households, enrollment rates exceeded 70 percent for the poorest households. While low income and parental education hindered educational opportunities for poor children, school fees and distance to school also reduced enrollments. Neighborhood enrollment rates were influenced by the local availability of schools, particularly so for girls' enrollment. Because schools are much more plentiful in the slum areas of Lahore than in the poor urban areas of Balochistan, it is plausible that the unusually low enrollment rates in Balochistan, especially for girls, were attributable in part to inadequate school supply.

There are several factors constraining the Balochistan government's ability to expand school supply in slum areas. First, there are the usual problems associated with raising tax revenue in a poor country. The government does not have the resources necessary to build all the schools and hire the teachers necessary to educate all its children. Second, government policy requires that a community donate the land necessary for a new school. However, urban slum areas of Quetta were settled by squatters on government land. Without clear legal title to the land, the community cannot assign property to the government, even if vacant lots were available. A third problem is that new school location may be as much a function of political patronage as of need. The poor in these squatters communities have little political power to wield.

With constraints on government expansion of schooling services to the poor, can the private sector provide an alternative solution? There is some evidence suggesting that the private

schooling supply in Balochistan is underdeveloped. In Punjab, around 30 percent of enrolled children from the lowest quintile attended private school. In contrast, only 12 percent of enrolled boys and 2 percent of enrolled girls from the lowest income quintile in Balochistan were in private school.

The private sector offers at least a partial solution to the other problems outlined above. Public-private school partnerships offer a way for the government to leverage its scarce resources. Private schools are not hindered by the property rights problem—they often open in rented buildings rather than newly constructed facilities. To attract students, private schools have an incentive to locate near underserved populations. Private schools have also been touted as a means of shifting power from the central government to the local neighborhoods to the extent that parents can vote with their feet to influence local private school quality and policy.

These potential benefits from encouraging private school expansion into poor neighborhoods led to the inclusion of two pilot projects to encourage private school enrollment of poor girls in the 1994 Social Action Program (SAP) for Balochistan. The SAP represented an effort to strengthen primary education, health care, and rural water supply and sanitation, in part, by promoting community involvement in new programs. One pilot project attempted to increase private girls' school supply in Quetta, the capital city of Balochistan. Another was designed to raise private girls' school supply in rural areas. Despite strong interest in decentralization of education in the World Bank, many in the Pakistan government were skeptical. The most obvious concern was the apparent equity issue: the poor were expected to pay to get schooling while residents of wealthier neighborhoods had access to government schools. A second concern was whether the poor could support even a subsidized private school sufficiently to enable these schools to survive or be cost-effective.

This paper reviews the planning, implementation, current status, and future sustainability of these two pilot projects. The aim is to highlight lessons that can be learned from these projects that may be applied in other contexts.

The Urban Girls' Fellowship Program

The urban girls' fellowship program was initially proposed to be a voucher system for girls from poor families in Quetta. The proposal envisioned a monthly voucher of around 100 rupees (roughly US\$3.00) that would be paid to a household for every month that a girl attended school. The infusion of funds for girls' schooling was hoped to create an incentive for new private schools to enter slum neighborhoods that previously had very limited schooling options for girls.

A World Bank mission discussed the voucher proposal with members of the Balochistan Primary Education Directorate (BPED) in November 1993. The government raised several objections to the original project design. The logistics of the voucher were viewed as too complicated. Few poor households had bank accounts or knowledge of checks, so the officials were concerned that the households would not understand the transfer process. On the other hand, cash transfers were viewed as too prone to theft or misuse. The monitoring of individual girl attendance necessary to trigger the issuance of the monthly voucher was viewed as too complicated. There was concern that potential school operators would not increase supply in response to the program, both because the new school could not guarantee that it would attract enough of the voucher students to justify entry and the fact that the pilot project would have a

limited duration after which the school could not presume continuation of voucher-induced demand. Finally, there was skepticism of the voucher idea itself; as one official expressed it, "Why should Balochistan implement a project that the U.S. was unwilling to adopt?"

The government of Balochistan and the mission team eventually shifted the program toward making payments directly to the school rather than to the households. Ten poor neighborhoods were selected for the pilot. Only neighborhoods which had no government girls' school were selected. The presumption was that these schools would have the greatest benefit if they were not taking students away from existing government girls' schools. The parents in the neighborhood were to join into a Parent Education Committee, which was tasked with developing a proposal for a new private girls' school. The proposal was to include a three-year declining subsidy of 150 rupees per month per girl in the first year, 135 rupees per month in the second year, 100 rupees per month in the third year, and zero thereafter. In addition, schools would receive an enrollment fee of 200 rupees per girl per year. The subsidy was limited to 100 girls, although additional girls could be enrolled, as could boys provided their numbers did not exceed the number of girls. One could view this as a pooled voucher program because the amount of subsidy was determined by the number of girls participating, and parents were aware that their child was considered a fellowship recipient. Unlike a voucher, however, parents never received a coupon or cash transfer directly. Also, a voucher could be used at any school, but this fellowship was limited to participation in the neighborhood fellowship school. Schools could charge tuition above and beyond the subsidy, and the tuition level would have to increase as the subsidy was reduced if the schools were to become self-sustaining.

From the beginning, an issue was what level of tuition would be necessary to induce private school entry. In 1994, the recurring cost per student in government primary schools averaged 200 rupees per month. However, there was evidence that in Lahore in Punjab province many private schools in poorer neighborhoods charged less than 100 rupees. The presumption was that the households in Quetta could not afford more than 50 rupees per month tuition, which was at the lower end of unsubsidized private schools surveyed in Lahore.

To assess the feasibility of the pilot program, scenarios were created in which the schools could become self-sustaining. One such scenario is presented in Table 1. The school was presumed to attract 160 students, 100 of whom qualified for the subsidy. The school was presumed to charge 10 rupees initially and gradually raise the fee over time. Under these conditions, the break-even tuition level after four years would be 75 rupees per month, around the lowest priced private school operating in Quetta at the time.

Table 1. Scenario for Self-sustaining Urban Fellowship School^a

| Year | Monthly Subsidy | Enrollment Fee ^b | Tuition | Revenue | Cost | | Net ^d |
|------|-----------------|-----------------------------|---------|---------|-----------------------|-------|------------------|
| | | | | | Teachers ^c | Other | |
| 1 | 15,000 | 1,667 | 10 | 18,267 | 6,000 | 7,667 | 4,600 |
| 2 | 13,500 | 1,667 | 20 | 18,367 | 6,000 | 7,667 | 4,700 |
| 3 | 10,000 | 1,667 | 40 | 18,067 | 6,000 | 7,667 | 4,400 |
| 4 | 0 | 1,667 | 75 | 13,667 | 6,000 | 7,667 | 0 |

Notes:

- The scenario assumes 160 enrolled students, 100 of whom receive the subsidy but all pay the tuition. Figures are monthly. All values are in rupees. The subsidy is 150 rupees in year 1, 135 in year 2, and 100 in year 3.
- 200 rupee annual enrollment fee prorated over 12 months, times 100 students.
- Four teachers assumed to be paid 1,500 rupees per month.
- Assuming a monthly interest rate of 0.5 percent, the accumulated savings at the end of year 3 will be 186,428 rupees. This would generate additional income of 932 rupees per month which could lower the break-even tuition by 9 rupees after year 3.

However, there were several ways the school could break even at a lower price. One way was to hold down costs during the first three years and generate an operating endowment from the savings. In the scenario presented in Table 1, the school would have built up an endowment of 186,428 rupees by the end of the third year. This endowment would generate income which could be used to lower the break-even fee by 12 percent. If the school could attract additional students without having to add teachers, the schools could save even more toward the endowment, which would lower further the tuition necessary to break even after the pilot program ended. Alternatively, the school could request a continuing subsidy of up to 25 rupees per month to keep the break-even fee at the 50 rupee level. The Balochistan Education Fund was set up to provide such subsidies to low cost schools that catered to girls and/or to the poor, so the plan for sustainability seemed sound.

All 10 neighborhoods successfully attracted a school operator, and several neighborhoods had more than one proposal to evaluate. By 1995, 11 new schools were operating, with one neighborhood having opted to open two schools. As shown in Table 2, enrollments averaged 111 girls and 123 total in the first year, lower than our projected scenario in Table 1. However, most schools charged more than 10 rupees per month tuition, and several were able to make use of property that was donated at no cost or at very reduced rates. Teacher costs were generally above 1,500 rupees. Nevertheless, most schools were able to generate savings in the first two years of the pilot program because the subsidy was more than enough to cover recurring expenses per pupil.

Table 2. Enrollment in the Urban Girls' Fellowship Schools, Quetta

| | Neighborhood | 1995 | | 1997 | | 1999 | |
|----|--------------------|---------|---------|---------|---------|---------|--------------------|
| | | Girls | Total | Girls | Total | Girls | Total |
| 1 | Kechi Beg | 116.0 | 138.0 | 116.0 | 138.0 | 119.0 | 149.0 |
| 2 | Killi Shelchan | 103.0 | 145.0 | 110.0 | 152.0 | 125.0 | 165.0 |
| 3 | Killi Shabo | 102.0 | 112.0 | 159.0 | 212.0 | 161.0 | 221.0 |
| 4 | Irrigation Colony | 103.0 | 103.0 | 161.0 | 296.0 | 179.0 | 179.0 ^a |
| 5 | Hudda | 115.0 | 115.0 | 101.0 | 152.0 | 138.0 | 197.0 |
| 6 | Hazara Town | 100.0 | 100.0 | 110.0 | 140.0 | 121.0 | 230.0 |
| 7 | Hussainabad | 125.0 | 125.0 | 135.0 | 285.0 | 194.0 | 194.0 ^a |
| 8 | Mariabad | 122.0 | 122.0 | 205.0 | 220.0 | 284.0 | 362.0 |
| 9A | Nawan Killi 1 | 121.0 | 121.0 | 128.0 | 208.0 | 184.0 | 274.0 |
| 9B | Nawan Killi 2 | 118.0 | 153.0 | 118.0 | 228.0 | 130.0 | 246.0 |
| 10 | Baradi Colony | 100.0 | 115.0 | 210.0 | 321.0 | 113.0 | 215.0 |
| | Average per School | 111.3 | 122.6 | 141.2 | 213.8 | 158.9 | 221.1 |
| | Total | 1,225.0 | 1,349.0 | 1,553.0 | 2,352.0 | 1,748.0 | 2,432.0 |

Notes:

a. Boy's school was separated off and is not included in the school total.

Average monthly fees were for girls in 1995, 1997, and 1999, respectively, 23, 44, and 45 and for boys in 1995, 1997, and 1999, respectively, 44, 73, and 90.

Schools very quickly learned that attracting more students, boys as well as girls, was critical to future sustainability of the schools. Boys were charged at least as much as girls and were usually charged more. By 1997, the last year of the subsidy, enrollments in the school had risen to an average of 141 girls and 214 total. From their 1995 levels, girls' enrollments rose 27 percent, but overall enrollments rose 74 percent as the number of boys in these "girls" schools rose tremendously. Enrollments continued to grow after the subsidy ended in all but one school. Two schools became so large that separate boys' schools were created.

There are two reasons why this enrollment growth in these schools may not indicate a successful program. It is possible that fellowship schools merely induced transfers from preexisting schools in the neighborhood or from nearby neighborhoods. If so, then neighborhood enrollments may not have increased at all. Alternatively, neighborhood enrollments may have risen due to factors other than the existence of the new school. An evaluation of enrollment rates in the fellowship neighborhoods between 1994 and 1996 found that girl enrollments rose 26 percent, and boy enrollments rose 20 percent. Enrollments in a set of comparison neighborhoods rose only 1 percent for girls and fell for boys over the same period (Kim, Alderman, and Orazem 1999a). Therefore, the schools were tremendously successful in raising the proportion of both boys and girls in school. As the subsidy was only given to the girls, the increased boys enrollments can be viewed as a zero cost collateral benefit of the government's subsidy program.

Another measure of the success of the program is that the program was quickly adopted in other cities and in other neighborhoods in Quetta. At least part of the reason for this rapid expansion was the enthusiasm on the part of the BPED for the project and its potential. This enthusiasm carried over from the original project development in which the government took a very active role in shaping the project rather than accepting a World Bank voucher project as a mandate. By investing time in the development, the government officials bought into the project and took ownership. This may ultimately be as important to the sustainability of the schools as is the parental role in managing the school or the World Bank financing itself. There are now 40 fellowship schools, 19 in Quetta and 21 elsewhere.

In the original scenario, projections were that a tuition level of 75 would be necessary for complete self-sufficiency, but that a tuition level of 50 rupees may be the upper limit on parental ability to pay. In fact, despite inflation, 1999 average tuition levels were just 45 rupees per month for girls. Boys were charged 90 rupees per month, but the average tuition per student was 58 rupees, well below the projected 75 rupee break-even level. Inflation has forced up teacher salaries, so that even 75 rupees on average may not be sufficient for break-even. In the scenarios, schools that charged below 75 rupees could still cover their costs by generating additional revenue through increased enrollments and/or income from savings. In fact, all of the original schools have managed to raise enrollments above the target and all had generated at least some endowments. The schools in Quetta average 200 students, while those outside Quetta average 137. Therefore, the schools outside Quetta may have more problems generating enough tuition income to be fully self-sustaining. Currently six of the 11 original schools are thought to be fully self-sufficient. The others would require a continuing subsidy up to 30 rupees per student per month continuing subsidy to make the schools sustainable.

Would such a policy be cost-effective for the government? The average recurring per pupil expenditure in government schools was 200 rupees per month, so a 30 rupee per month subsidy necessary to sustain the weakest of these private schools is 15 percent of the recurring cost of educating these students in a government school. While not mentioned above, the start-up costs for these private schools are also much lower than the cost of building and equipping a new government school. The nongovernment organization's (NGO) per student cost of surveying the neighborhood, assisting the Parent Education Committee in formulating a proposal and evaluating potential operators, motivating parents to enroll their children, training teachers, and monitoring enrollments averaged 1,500 rupees per student. The costs of obtaining a suitable school site (all had at least four rooms) were borne by the parents. Because the NGO had to engage in data collection activities as part of the evaluation that would not normally be required in the future, the 1,500 rupees is an upper-bound estimate of the start-up costs of a fellowship school. The average start-up cost of building a new government school is 6,000 rupees per student, four times the cost of establishing these fellowship schools. Therefore, the government's start-up costs and projected recurring costs of a fellowship school are much lower than the costs of building and operating an equivalent government school. Put another way, for the cost of a new government school, one could open between three and four new fellowship schools.

Balochistan's assessment program is in its infancy, so we have no exams with which to compare student performance in these schools against provincial norms. However, these schools were included in the pilot for the third grade assessment exam in Quetta. While small samples prevent a conclusive test, there were no significant differences in student performance between fellowship schools and government schools.

It would appear that these schools are unequivocally sustainable and worthy of replicating in other urban settings. However, the government officials that were responsible for helping design and implement the pilot program and its expansion are no longer involved in the government. The Balochistan Education Foundation, whose assistance would enable the sustainability of the schools in weaker financial positions, is being pressured to shift attention away from schools for the poor toward more affluent schools with higher fees. Government officials may have less interest in private education for the poor because the government is not involved in building the schools or picking the teachers. Construction projects and teaching assignments were once prominent sources of political patronage in the past, and recent indications are that they may be again. Reports indicate that teachers are asked to kick back up to

30 percent of their earnings to the officials responsible for hiring them. In the last round of teacher hiring in government schools, less than half were hired from the merit list.

Ironically, if the government becomes an unreliable supporter of quality primary education, these schools may be better positioned to maintain quality than could a government school. These fellowship schools have demonstrated an ability to generate resources from the community and to attract qualified teachers. Even without continuing support from the government, these private schools with active parental support may be able to generate sufficient in-kind assistance to make up for the shortfall. Government schools, which rely on public funds and teacher hiring, stand to lose both school resources and teacher quality when the government turns indifferent to primary schools.

Rural Girls' Fellowship Schools

The challenge of creating a sustainable rural fellowship school was much greater than for the urban fellowship schools. Factors typically correlated with parental interest in girls' education, especially household income and parental education levels were even lower in the rural areas than in the urban slums. In addition, an added stipulation was imposed that the rural village must not have a resident woman with at least an eighth grade education who could potentially be trained to be a teacher under an alternative school initiation system known as the Community Support Program (CSP). Consequently, the universe of rural villages that qualified for the rural girls' fellowship schools were among the least educated rural villages in the province.

The CSP program was initiated in 1992. A Village Education Committee (VEC) composed of rural parents and trained by an NGO was tasked with procuring a teaching facility and locating a qualified local woman who could serve as a teacher. The government would provide the resources necessary to pay the teacher and provide supplies. The VEC was responsible for overseeing the attendance of the students and the teacher and managing the school. If the school was operated successfully for three years, the government regularized the school by building a permanent school building and making the teacher a permanent government employee. The CSP quickly expanded so that by April 1995 there were 247 CSP schools. However, there were many villages that could not participate in the CSP because they lacked an educated woman who could serve as a teacher. The rural girls' fellowship program was an attempt to fill that gap by allowing a VEC to identify an acceptable male teacher or a female teacher from another village. Although it was not necessary to require that these schools be private, it was thought that the private school designation would give the local community more power to name an acceptable teacher as opposed to getting a teacher assigned through the government posting.

The rural girls' fellowship program offered a subsidy of 100 rupees per enrolled girl per month up to a limit of 24 girls per classroom. The salary for government school teachers at that time was 2,400 rupees per month, so the subsidy would exactly pay for a teacher paid at the government rate. Class size was set at a minimum of 15 and a maximum of 50, so a village that could not attract at least 15 students could not receive a subsidy. No additional subsidy was allowed unless the village hired a second teacher for a second classroom of minimum size 15. Thus, if the village could attract 39 students, it could get subsidies of 2,400 rupees for the first classroom and 1,500 rupees for the second, with the maximum subsidy in the second classroom

also set at 2,400 rupees per month. The government supplied all school supplies and books, and the VEC supplied the school.

As with the urban program, school sustainability was tied to an ability to generate savings in the early years that could be used as a source of endowment income when the subsidies were discontinued. There were three ways that the VEC could generate savings—by paying the teacher less than 2,400 rupees, by charging tuition, and by having class sizes above 24. The sustainability scenario in Table 3 assumed that the VEC was able to hire a teacher at 600 rupees less than the government rate and only hired the one teacher despite having the option of hiring a second teacher. As a consequence, the school is able to generate monthly savings that compound to 68,787 rupees by the end of the subsidy period. Despite this frugal budget, the school is projected to lose 456 rupees per month from year 5 on. This would necessitate an additional subsidy of 11.4 rupees per month per student to make the school sustainable.

Table 3. Scenario for Self-sustaining Rural Fellowship School^a

| Year | Endowment | | | Cost | | | Need |
|------|-----------|--------|---------|---------|---------|--------------------|-------|
| | Subsidy | Income | Tuition | Revenue | Teacher | Other ^b | |
| 1 | 2,400 | 0 | 10 | 2,800 | 1,800 | NA | 1,000 |
| 2 | 2,400 | 0 | 15 | 3,000 | 1,800 | NA | 1,200 |
| 3 | 2,400 | 0 | 20 | 3,200 | 1,800 | NA | 1,400 |
| 4 | 2,400 | 0 | 20 | 3,200 | 1,800 | NA | 1,400 |
| 5 | 0 | 344 | 25 | 1,344 | 1,800 | NA | -456 |

Notes:

- The scenario assumes 40 enrolled students, 24 of whom receive the subsidy, but all pay the tuition. Figures are monthly. All values are in rupees. The subsidy is 100 rupees in years 1 through 4 and zero thereafter.
- School received a package of books and supplies, and the community provided the building, so other costs are zero.
- Four teachers assumed to be paid 1,500 rupees per month.
- Assuming a monthly interest rate of 0.5 percent with all interest reinvested in years 1 through 4, the accumulated savings at the end of year 4 will be 68,787 rupees. This would generate additional income of 344 rupees per month after year 4.

In practice, VECs turned out not to be astute about saving. As shown in Table 4, average school enrollments were in the target range in Mastung/Kalat and Gwadar. In Chagai, two of seven schools were large enough to generate savings. However, most schools that had the opportunity to hire a second teacher did so, even when that meant that the subsidy was not sufficient to pay teacher salaries. Some were allowed to hire a second teacher even when they had fewer than 40 students. Rather than try to negotiate a lower pay scale than in the government schools, as was common in the private sector, most of the rural fellowship schools paid the government rate.

Table 4. Average Enrollment per Rural Girls' Fellowship School in Balochistan, by District

| District | 1995 | | 1997 | |
|---------------|------|------|------|------------------|
| Chagai | 39 | (5) | 30 | (7) ^a |
| Mastung/Kalat | 55 | (10) | 56 | (10) |
| Gwadar | 53 | (8) | 52 | (8) |

Note:

- The average enrollment in the five schools reporting in 1995 was 31.
- The number of schools reporting is in parentheses. Tuition ranged from 10 to 12 rupees in Chagai, 10 to 15 rupees in Mastung/Kalat, and 10 to 25 rupees in Gwadar.

The original scenario created in 1994 included a 50 rupee per month bonus that would be held back by the Balochistan Education Foundation for every month that a girl was enrolled and attended. Assuming 40 attending girls per month, this would add 2,000 rupees per month over four years, which would have accumulated to an additional endowment of 110,736 rupees by the beginning of year 5. That additional endowment would have yielded an income sufficient to make up the monthly shortfall.

The communities also ran into problems on the revenue side. Typical fee structures were 5 or 10 rupees rather than the projected 20 to 25 rupees. Many schools reported difficulties getting parents to pay. Consequently, most of the rural schools ended the subsidy period with little or no savings, implying that they also could not meet their expenses in the post subsidy period. It may be that these villages were just too poor to offer the necessary financial support of these schools.

Because the rural fellowship schools opted to pay the government scale for teachers, instructional costs in these schools were comparable to costs of operating a government school. If the operating costs of the rural fellowship school are not lower than those of a government school, and if the revenue generated from households is small, then the government saves little by subsidizing the school as opposed to operating a government school. This is in contrast to the urban fellowship program where both lower instructional costs per pupil and considerable revenue generated through tuition make it cost-effective for the government to continue a subsidy sufficient to allow the schools to remain open.

The use of experienced school operators in the urban pilot seems to have been a critical factor in explaining the relative cost-effectiveness of the urban girls' fellowship schools. The school operators knew salary structures of existing private schools and were able to attract qualified teachers at low rates. They also were able to establish savings in anticipation of the time when the subsidy would be discontinued. The complexity of the personnel and financial management decisions that the VECs had to make in order to manage a rural fellowship school may have been too great. In any event, the common mistakes of hiring a second teacher and paying too much in the first year prevented many of these schools from building up their assets sufficiently to become self-financing.

An additional complication was that many rural villagers were aware that tuition was not charged in the CSP program. Several VECs complained that they had to pay to educate their girls, whereas a neighboring village might have a CSP school with free education. Several villages began pressing to have their rural girls' fellowship schools converted to government schools as in the CSP program, and ultimately, most were converted to CSP schools after the subsidy period ran out because the schools had not become self-sustaining. Urban parents were not distracted by the CSP because that program was not operating in urban areas.

Nevertheless, most of these schools did attract and retain students. Table 5 provides information on enrollment rates before and after the rural girls' fellowship schools were opened. Girls' enrollments rose 15 percentage points in Chagai and 22 percentage points in Gwadar, but fell in Mastung/Kalat. This may seem surprising when one examines the enrollment numbers by district in Table 5, but the reason is fairly simple. Sixty-one percent of the girls were already attending school in Mastung/Kalat before the fellowship school opened—they were just going to the boys' school. If boys' schools provided adequate education for free, the for-free girls' school which may have uncertain quality will find it hard to attract students.

Table 5. Enrollment Rates before and after the Fellowship Schools Were Opened, Quetta and Rural Districts

| | Enrollment Rates | |
|------------------------------|------------------|-------|
| | Girls | Boys |
| Quetta ^a | | |
| 1994 | 45.3 | 56.3 |
| 1996 | 71.3 | 76.1 |
| Change | 26.0 | 19.8 |
| Rural Districts ^b | | |
| Chagai | | |
| 1994 | 50.3 | 73.3 |
| 1996 | 64.9 | 72.7 |
| Change | 14.6 | -0.6 |
| Mastung/Kalat | | |
| 1994 | 61.3 | 81.0 |
| 1996 | 56.0 | 60.8 |
| Change | -5.4 | -20.2 |
| Gwadar | | |
| 1994 | 21.8 | 49.1 |
| 1996 | 43.9 | 53.7 |
| Change | 22.1 | 4.6 |

Sources:

a. Kim, Alderman, and Orazem, 1999a, Table 3.

b. Kim, Alderman, and Orazem, 1999b, Table 4.

In contrast, only 22 percent of the school-age girls were enrolled in Gwadar before the fellowship school opened. The need for the fellowship program was greater in Chagai (where only local male teachers were hired) and in Gwadar (where over half the teachers hired were local males) than in Mastung/Kalat where mainly female teachers from other villages were hired. Another reason for the greater success in Chagai and Gwadar is that the male teachers showed up, whereas transportation problems often led to absenteeism of the nonresident female teachers.

At present, only one rural girls' fellowship school may survive as a private school. Fourteen have been converted to CSP schools. Three have been closed, and the fate of nine others has not yet been decided. The school in Ganz, Gwadar, finished the subsidy period with accumulated savings of 70,000 rupees. They had two local male teachers who were paid 2,400 rupees apiece. The 57 girls and one boy paid fees totaling 1,300 rupees per month. In addition, each member of the VEC contributed 50 rupees per month. The VEC was generating additional income by donating fishhooks to fishermen, getting paid in fish, and then selling the fish. They were also considering investing resources in a ship whose profits would be contributed back to the school. The monthly income without the fishing income is (assuming a 0.5 percent monthly interest rate) 1,950 rupees, a shortfall of 2,850 rupees per month. On the surface, despite this very strong performance, the school is not self-sustaining. On the other hand, the recurring government subsidy necessary to make the school break even is 50 rupees per month per girl, one-quarter of the average recurring cost the government would face if it were to convert the Ganz rural fellowship school to a government school.

With a more generous subsidy, more rural fellowships could have survived at below the government school cost of 200 rupees per month. However, there would be a need for stronger technical assistance on the budgeting and salary issues which would add cost. It may be that the more cost-effective plan would be to modify the existing CSP program, which requires less

managerial expertise of its VECs, to accommodate villages without educated women. The rural experiment demonstrated that some rural families are willing to send their daughters to a segregated girls' school taught by a male teacher, provided that the teacher is from the local village. The experience in Mastung/Kalat also demonstrated that the lack of a girls' school is not always a constraint on girls' enrollments. It is not cost-effective to build a girls' school if families are willing to send their girls to a boys' school. The caveat to both these points is that the male teacher and the mixture of boys and girls are likely to become more important as the girls get older. It may be that the acceptance of mixed school or male teacher options will only last as long as the girls are very young, and that they will be taken out of school before they attain full literacy.

Conclusions

The urban fellowship schools are sustainable, either with their current revenue stream or with a modest infusion of funds by the government. Factors contributing to their relative success in contrast to the rural school include:

- The latent demand for girls' schooling was higher in the urban slum areas, relative to the existing supply of schools. The substantial increase in both boys' enrollments and girls' enrollments indicates that the urban fellowship schools helped eliminate a significant undersupply of schooling services to all children in these neighborhoods.
- Urban parents were able to pay more than rural parents.
- There were more children in the urban neighborhoods, so schools were able to take advantage of economies of scale to reduce costs per pupil.
- The use of experienced school operators turned out to be important. A key ingredient to the urban schools' success was their ability to hire good teachers at below the government rate and to build up their savings in anticipation of the subsidy's elimination.
- The government bought into the urban experiment to a much greater degree than the rural program. Had the rural subsidy been as large as the urban subsidy, more rural schools would have been able to build up savings.
- Urban schools found it much easier to attract good teachers. The rural schools had a major problem attracting teachers, especially female teachers, and turnover was as high as three to four teachers per year.

Several questions remain. The most important is whether these schools will remain sustainable in the long run. If the Balochistan Education Foundation can continue to provide the relatively modest per pupil subsidies to the urban fellowship schools, then the schools are sustainable. If political pressure on the Foundation causes it to divert attention away from schools that cater to the poor, then some will fail. However, the cost of subsidizing these schools is a fraction of the cost of educating the students in a government school.

As the assessment capacity in the province becomes established, we will be better able to compare educational outcomes of fellowship schools to those of government schools. One might presume that the fellowship schools would be at a disadvantage in that they spend less per pupil than do government schools. On the other hand, the fellowship schools can hire and fire teachers who represent the most important input into the educational process. If government support of primary education wanes or if teacher hiring becomes more political, the private schools may be better able to maintain quality than could government schools.

Finally, it would be valuable to see what happens to the girls educated in these fellowship schools relative to those in other neighborhoods or villages. If these girls attain literacy, their children will be more likely to attend school, avoid illness, and move out of poverty.

Bibliography

- Alderman, Harold, Peter F. Orazem, and Elizabeth M. Paterno. 1996. "School Quality, School Cost and the Public/Private School Choices of Low-Income Households in Pakistan." Paper No. 2, Working Paper Series on Impact Evaluation on Education Reforms. Development Research Group, The World Bank. Washington, D.C.
- Kim, Jooseop, Harold Alderman, and Peter F. Orazem. 1999a (forthcoming). "Can Private School Subsidies Increase Enrollment for the Poor? The Quetta Urban Fellowship Program." *The World Bank Economic Review*.
- . 1999b. "Evaluation of the Balochistan Rural Girls' Fellowship Program: Will Rural Families Pay to Send Girls to School." World Bank, Washington, D.C.

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