Simmons, Ruth; Koenig, Michael A.: Contraints On Supply and Demand For Family Planning: Evidence From Rural Bangladesh. Social Change. Sept-Dec 1994. 24(3&4) .p.133-146.

Constrains on Supply and Demand for Family Planning: Evidence from Rural Bangladesh

Michael A. Koenig
Ruth Simmons

An extensive literature exists on the determinants of fertility behavior in developing countries, and how these determinants may constrain demand for family planning services. Comparatively little is known, however, about how many of these same factors influence the supply of family planning services in such settings. In this paper, we outline how a series of socioeconomic, cultural, and institutional factors that have been commonly posited to constrain demand for family planning, also impede programmatic capabilities to organize and deliver family planning services in rural Bangladesh. The paper concludes with a discussion of the policy implications of these findings for achieving fertility reductions in unfavorable socioeconomic settings.

Over the last three decades, an extensive literature has accumulated on the social, economic, and cultural determinants of the demand for family planning and fertility in developing societies. More recently, there has been growing recognition that family planning programs are themselves also significantly affected by the sociocultural and institutional environment in which they operate. Measures of family planning program strength, for example, have shown a consistent relationship between social setting and program effort. Freedman and Berelson concluded more than a decade ago that"... the social setting seems to an effect on the infrastructure itself--on how much of a family planning program a country support..." [A] Recognition of the influence of sociocultural and institutional factors on family planning programs is also clearly evident in theoretical frameworks articulating the determinants of family planning program effectiveness (Simmons et al. 1983), (Lapham and Simmons 1987)

Some limited evidence is available on the specific mechanisms and pathways through which socioeconomic development influences family planning program performance. In their study of the family planning program in northern India, (Misra et al. 1982) described the constraints that cultural expectations imposed upon the functioning of female workers, and traced the politicization of personnel and employment issues. (Phillips et al. 1985) analyzed how politics,

social structure, and the nature of government bureaucracies in general influenced the family planning program in Bangladesh. And (Warwick 1988) conducted a broad review of the social and structural factors that constrain effective functioning of bureaucratic institutions in underdeveloped settings. On the whole though, analyses remain rare of how the sociocultural setting affects program implementation.

Our objective in the present paper is to complement existing knowledge with a microanalysis of socioeconomic and cultural constraints to the effective organization and delivery of family planning services in a developing setting. Drawing upon the experience of an experimental family planning project, the MCH-FP Extension Project at the International Center for Diarrhoeal Disease Research, Bangladesh, together with other published and unpublished materials from Bangladesh, we examine how factors commonly identified as constraints to demand may represent constraints to the delivery of family planning services at the field level as well. As there is already a comparative wealth of knowledge on the determinants of demand, we devote primary attention to constraints on effective supply. Our concern lies in understanding how these constraints affect the proximate operational determinants, i.e., the interactions between service providers and the client population, as well as the immediate administrative context within which such client transactions are organized.

The roles of four variables are examined--the status of women, female education, low levels of development, and community institutions--in shaping both demand for family planning and its supply. A subsequent section of the paper discusses the cumulative nature of these effects upon service delivery. Analysis of the sociocultural and institutional constraints on both demand and supply touches upon one of the most fundamental policy issues in the population field: How much can programmatic action accomplish in constrained socioeconomic settings? The findings that emerge will suggest to some observers the importance of a policy focus on the determinants of demand. To others, it will suggest the importance of program strategies that recognize both the opportunities and constraints implied in such sociocultural settings.

Constraints on Supply and Demand for Family Planning

The Status of Women

A prominent feature of patriarchal societies like, rural Bangladesh is gender inequality and the subordinate status of women. A growing literature describes the linkages between patriarchy, women's status, and fertility behavior (Mason 1984). Patriarchy and the subordinate status of women have been hypothesized to contribute to high fertility in two main ways. First, patriarchy generates strong

preferences for offspring, especially for sons. By limiting women's nonreproductive roles and by fostering an almost complete dependence of women upon men for protection and economic support, patriarchy enhances the value of sons to the family as a whole, and to female members in particular (Cain 1984); (Mason 1984). Second, by relegating women to a subordinate role in familial decision making, patriarchy limits the autonomy of women and thus their willingness to engage in innovative behavior such as that required for the adoption of contraception (Dyson and Moore 1983); (Koenig and Foo 1985)

Much less has been written about how patriarchal systems that characterize societies such as rural Bangladesh may impair the delivery of family planning services. A primary consequence of patriarchy and women's subordinate status is the constraints it places upon women's autonomy and mobility. The system of purdah results in the effective seclusion of women, severely curtailing their geographic mobility. Adult women spend most of their time in their immediate household compound (called a bail). They seldom venture outside of their village, and almost never do so if unaccompanied by their husband or a male relative. Reaching most women with family planning services therefore requires intensive outreach programs that deliver services at or near the client's household. Static clinic sites, even if located relatively close to clients' residences, will for the most part remain underutilized; given the impediments to women travelling alone to obtain such services (Simmons et al. 1988a)

Purdah constrains the movements and activities not only of female villagers, but of female service providers as well. Service outreach programs frequently require female workers to venture into distant and unfamiliar territory, and into what has traditionally been defined 'as 'male space'. The nature of their work in family planning, together with the fact that it involves outreach work, may expose female workers to harassment and abuse from community members who perceive them to be violating norms of behavior for women.

Interviews with Matlab community health workers illustrate the formidable obstacles these women faced when they began their work over a decade ago (Simmons et al. 1988b) Many community members viewed these workers' travelling on their own to outlying areas, and interacting with male supervisors, as affronts to established norms of purdah. The community's response to them was initially one of outrage and hostility. As one worker recounted: " If I went to a bari all of the women of that bari would gather together and would pinch each other and say: who is she, is she a woman or a man, going from this village to that. We never saw a woman doing such sort of dirty job. [B]

To a young woman who has traditionally been sheltered and is unlikely to have ventured unescorted outside of her village before, travelling to distant and

potentially inhospitable territory can be an intimidating prospect. Dominating her thoughts is concern for her personal safety and the prestige of her family, an understandable priority in light of the frequent lawlessness in rural Bangladesh. Not surprisingly, studies have shown that female fieldworkers tend to work more frequently and most effectively close to their own residence. Consequently, the more distant villages are less likely to receive outreach services regularly (Phillips and Koblinsky 1984) While the use of transport could substantially ameliorate the problems of distance and travel time, cultural norms that consider the riding of bicycles by women as immodest preclude this option. Other forms of transport appear too costly; thus walking remains the only means for female workers to deliver outreach services.

Cultural norms also strongly discourage interaction between women and unrelated males, particularly on issues as personal and sensitive as family planning and reproductive health. These norms necessitate a work force of female service providers to assure that interaction with female clients occurs in a culturally appropriate context. A consequence of women's low status, however, is the limited numbers of trained females in key professional positions such as physicians, nurses, and paramedical staff. The problem is often one of distribution as much as of overall numbers, since female professionals tend to concentrate disproportionately in urban areas and often are extremely reluctant to relocate to isolated rural areas. This is especially true if they are unmarried, given concerns for their security as well as the greater restrictions placed upon unmarried women in rural areas.[C]

In a setting of pervasive underemployment and unemployment, it is perhaps understandable that pressures to employ males can be powerful. Moreover, in the politically uncertain environment of Bangladesh, a large male government work force represents an important base of rural political support. The problems associated with a female work force--difficult recruitment, their reluctance to reside in rural areas, and the logistical problems they experience in carrying out their fieldwork-mesh conveniently with the strong political pressures for reserving jobs for males. In the case of family planning service delivery, however, the logic of this argument breaks down, since in this setting males are inappropriate for the delivery of s most family planning and maternal and child health services.

Female Education

Low levels of female education have been frequently cited as a primary factor behind high fertility and low demand for family planning in many developing countries. In general, it has been argued that increased education contributes to demand for smaller families by raising the costs of children and simultaneously

lowering the actual or perceived benefits from childbearing that accrue to parents, and by altering the balance of relationship within the family (Cochrane 1979); (Caldwell 1980). [D] While these pressures operate for both sexes, the relationship between education and fertility has generally been stronger for females than for males.

Low levels of female education also represent an important impediment to family planning service delivery. The Bangladesh program places heavy reliance upon female outreach workers. Evidence suggests that these female workers are often instrumental in rural women's decision to adopt contraception (Simmons et al. 1988a); (Koblinsky and Phillips et al. 1986). In recognition of their importance, and of their large work areas and populations to be served, the Bangladesh government decided to recruitment of an additional 10,000 female outreach workers during the 1985-90 period. Current government requirements mandate that female fieldworkers possess a minimum of ten years of schooling to qualify for these positions. However, since only an estimated 16 percent of adult females in Bangladesh are literate, and since a much smaller percentage have completed ten years of schooling, [E] it is not surprising that large numbers of female fieldworker posts have remained unfilled during the subsequent recruitment phase.

Low female educational levels affect the service program not only in terms of vacancies, but also in terms of the women who are recruited, since they are likely to represent a highly select group. They are likely to be urban, and thus reluctant to relocate to remote and isolated rural areas. Or they are likely to come from prestigious families who are part of the rural power elite, and are thus less responsive to administrative and managerial control. Moreover, the commitment by many of these women to their job is often weak, since many aspire to employment more 'suitable' to their status, given the frequently arduous nature of family planning outreach work. [F]

Low Levels of Development

Income has been commonly used as a measure of the overall level of social and economic development of a society, but empirical studies of the relationship between income and fertility have reached very mixed conclusions. At the macroeconomics level, negative relationships have typically been observed, with low fertility in the richest countries and high fertility in the poorest, When analyzed in terms of individual fertility, however, where income is an indicator of resource constraints within the family, the effects have been less clear. In some instances the relationship has been positive, and in others it has been negative or has yielded no relationship at all (Simmons 1985) Recent work on Bangladesh and Indonesia suggests that there may be cases where deteriorating economic

conditions, when combined with rising aspirations, produces a phenomenon that has been referred to as 'poverty-led' demand (Freedman and Freedman 1986)

The relationship between low levels of development and supply is more clear-cut, with poverty adversely affecting the service program at all levels. At the macro level, the importance of basic infrastructure such as roads, electricity, water, and communication systems for effective service delivery is so obvious as to be often overlooked. The absence of this infrastructure greatly complicates the exercise of administrative control over the program. Significant portions of rural Bangladesh remain largely inaccessible due to the absence of roads or bridges. Senior program managers are often reluctant to visit remote areas, which can require up to several days travel from the capital, and even a day's trip from local headquarters. Even when areas are accessible, the nonavailability of appropriate transportation provides a strong deterrent to supervisory field trips. The absence or inadequacy of telephone systems in all but the most advanced parts of rural Bangladesh means that most program-related work and supervision can only be accomplished through face-to-face contact. This in turn limits the ability of supervisors to productively use their time, as well as their potential for resolving field problems in a timely manner. As a result, large sections of the rural service program are isolated and essentially immune from administrative overview and control.

The absence of amenities such as electricity or running water complicates almost all aspects of day-to-day operation of the service program-from refrigeration to sterilization of equipment, to needs as basic as sufficient lighting for the insertion of an IUD. These shortcomings severely impede the government's ability to decentralize family planning services-- particularly those for --clinical methods-- from central, static service points, outward to the community. The absence of such amenities has other, indirect effects upon the program. One example is the reluctance of female paramedics to relocate to rural areas, particularly more remote areas, given the absence of electrical lighting and legitimate concerns about their personal safety and security.

From the microperspective of the worker, low salaries and the inability to offer employees a living wage upon which they can support their families contribute significantly to low staff morale. While low salaries affect all employees, their impact is particularly strong for male workers, given their responsibilities as breadwinners for the family. To adequately support a family, it becomes almost imperative for a male worker to augment his earnings through additional outside sources of income. At the very least, these alternative sources of employment are likely to detract from the time and energy that program staff are able to devote to their job. Under conditions of weak administrative control, however, workers frequently direct the bulk of their time and effort toward these

additional sources of employment, while viewing their government job as a guaranteed source of supplemental income. While such practices have to some degree always been present, it is possible that they have become more widespread in recent years, as a result of increasing poverty and economic adversity. [G]

Evidence from the Extension Project field sites illustrates the extent to which male employees are engaged in outside activities. An informal survey revealed that only one out of 18 mid-level male family planning supervisors limited his employment to his government job. The other principal occupations in which they were engaged were as diverse as farming, homeopathic practice, private tutoring, and petty businesses. The estimated amount of time spent on these other business interests ranged from no less than 30 percent to as high as 95 percent of their scheduled work hours, with a typical supervisor estimated to spend 60 percent of his time on outside interests. Clearly, for many of these workers, employment in the family planning program represents a convenient and dependable source of supplemental income to their main sources of livelihood.

Poverty also results in insufficient resources to effectively support a service program. Available resources are often diverted for personal benefit rather than used for their intended purpose. Under conditions of extreme poverty, almost all resources have monetary value, even items that in less impoverished settings would be too insignificant to merit attention. Thus, officially sanctioned drug supplies are never adequate for client needs; the fact that both drugs and contraceptive supplies have resale value in private markets exacerbates these shortages. Basic but essential supporting equipment such as vehicles and motorbikes (for supervisory personnel); bicycles, bags, and umbrellas (for outreach fieldwork); flashlights and batteries (for examinations and IUD insertions); alcohol and kerosene (for sterilizing equipment); and even papers and pens (for record keeping) have a limited life expectancy in the field, largely because of their value for non work purposes.

Shortages of equipment and supplies due to misuse or attrition contribute to a cycle of further shortages. A standard administrative response to this problem is to restrict or ration valued items. Programs usually ration kerosene and petrol, and they rarely provide essential drugs in sufficient quantities to meet existing demand. Contingency funds seldom contain adequate amounts to pay for field equipment repairs. The net effect of diversion of resources and rationing is that equipment and peripherals, essential for the effective functioning of the service program and largely taken for granted in more affluent settings, are in chronically short supply.

Low living standards often encourage abuse of supervisory control to generate income for personal gain. Transfer orders to desirable posts--or conversely, the cancellation of transfer orders to undesirable locations--is often arranged through payments to supervisors. Similarly, administrative sanctions for poor performance can be averted through payments; even when performance is satisfactory, payments to superiors often represent the accepted cost to 'unfreeze' wages duly earned.

To a considerable extent, the service delivery program rests on the quality of its work force. The recruitment of additional staff, however, is viewed by program officials not in terms of its potential to enhance the service program, but as a means of generating additional income. In a setting with limited employment opportunities, it is often standard practice for candidates to pay bribes in order to enhance their chances of selection for employment, particularly long-term, generally secure employment, such as government positions. At the very least, this practice leads to a noncompetitive recruitment process, whereby the best candidates are frequently bypassed; at its worst, it can result in the selection of staff who fail to possess even the basic minimum qualifications for the position. Thus, evidence pointed to major irregularities in the initial recruitment of female fieldworkers in 1976, primarily through falsification of candidates' qualifications.

These field realities, imposed by conditions of resource scarcity, produce an administrative quandary. The decentralization of administrative authority would give field managers greater autonomy, but the potential for the abuse of that authority discourages such decentralization. As a result, well-intentioned program managers are left without leverage over subordinates, and, the highly inflexible, inefficient, and generally overextended system of centralized authority remains unchanged.

Community Institutions

In recent years, considerable work has focused on the role of community institutions in influencing fertility and the demand for family planning. Among the most notable examples are China and Indonesia, where strong community organization has played a major role in the rapid declines in fertility that have recently been evident (McNicoll 1980). Conversely, in other settings, weak and diffuse community structures have contributed to high fertility, most notably in rural Bangladesh (Arthur and McNicoll 1978) It has been argued that while high fertility may be in the interests of individual families and therefore act as a rational strategy for parents in this setting, the same may not hold for the community at large, which must shoulder most of the costs of unrestricted childbearing. However, where rural society is organized predominantly upon kinship and patronage, community institutions may be incapable of exerting

pressure on families to restrict childbearing. In such circumstances, high fertility continues unchecked by institutional forces, to the detriment of the broader community.

Less is known about how community institutions influence service delivery programs. Under conditions of weak community institutions limited village cohesiveness--clearly the situation prevailing in rural Bangladesh-expectations remain limited regarding what nonfamilial institutions, such as the government family planning program, can or should provide. Thus, program staff and managers feel little community pressure to carry out mandated service activities, and the impetus for service delivery lies almost entirely with the service program. [H] At the same time, the concepts of broader public service and obligation may carry little weight with program personnel, who similarly see their responsibilities as resting primarily with their family and kinship group.

Weak community structures also may lead to institutional arrangements where valued resources are concentrated in the hands of a selected few and sustained by a well-defined and extensive system of patronage. Such structures represent a very powerful impediment to development programs. [I] As Arthur and McNicoll note in describing the implications of weak community structures in rural Bangladesh: "Government attempts to impose outside Organization and direction have for the most part been taken over by traditional forces, which have diverted them to their own ends."[J] In a poor society such as Bangladesh, the jobs--especially long-term, secure jobs--represents one of the most powerful and highly valued forms of patronage. In such situations, the process of employment becomes politicized; selection is predicated more upon political allegiances or financial inducements than upon merit. Workers generally are drawn from the more prestigious village families who represent the local power elite. [K] When selected in this manner, workers tend to view their employment as something awarded rather than earned, and thus unrelated to subsequent work effort. Unproductive workers often have little fear of administrative sanctions, since their ties to local power sources effectively buffer and protect them. This is likely to be especially true for male workers, who are often closely allied with the local power and political structure.

The administrative rules and regulations that govern the family planning program further complicate effective management. While fieldworkers and midlevel staff usually come from the local area, supervisors function under a system of regular transfer from one post to another. One consequence is that upon transfer, supervisors enter into an environment of an entrenched, highly connected work force, while they themselves are usually outside of the local power elite. Program managers are frequently incapable of exerting effective administrative control over their employees, since the latter are often in reality

more powerful than their supervisors. And they are also administratively limited in terms of their ability to confront and deal effectively with the consequences of local political processes. The termination of unproductive workers is virtually impossible under existing government rules; the authority of program managers to transfer most non-performing staff to other areas, while often an effective administrative sanction, is also precluded under current rules. [L] Thus, a commonly heard characterization of an effective supervisor in rural Bangladesh is that "he has good control over his staff", implying a degree of uncertainty over a process that most developed countries have come to take for granted. A weak administrative system is usually no match for a well-entrenched local power elite, meaning that the status quo will usually prevail. [M] Program managers are understandably reluctant to challenge this system, in the face of weak administrative support and the possible risk of personal harm.

Covariance of Demand and Supply Constraints

Extensive intersection and overlap in demand and supply constraints lead to considerable geographical clustering and covariance. Areas where demand constraints are pronounced are also likely to have significant constraints upon the supply program. In the following sections, this issue of covariance is examined for the two Extension Project field sites as well as for Bangladesh as a whole.

Variation Between Field Sites

A comparison of the two Extension Project intervention areas provides a clear illustration of this point. The Project's two field sites, situated in the southwestern (Jessore) and northwestern (Sirajgonj) sections of Bangladesh, represent two contrasting regimes in terms of demographic, socioeconomic, and service delivery conditions (Table 1).

Table 1: Summary Statistics for the ICDDR, B Sirajgonj and Jessore Field Sites

	Sirajgonj	**Jessore**
Contraceptive Prevalence Rate	22.8	42.5
Demographic Rates (1988):		
Crude Birth Rate	41.4	28.6
Total Fertility Rate	5.5	3.2
Crude Death Rate	14.6	7.8
Infant Mortality Rate	165.5	102.4
1-4 year Mortality Rate	21.4	8.0
Socio-Economic Status/Demand for Family Planning	%	%
Percentage of women who can travel on their own:		

Outside of their village	3.6	28.1
To take a sick child for treatment	22.2	63.2
Female Education:		
Some Schooling	23.0	33.5
5+ years	6.6	14.9
Own < 1 acre land	70.7	57.8
Want no more children	47.7	56.5
Believe family size 'Up to God'	24.7	14.1
Service Outreach Program		
Visited by FWA Program	46.9	13.6
Time spent during last visit < 5 minutes	53.1	36.3
Ever experienced problem in contraceptive supply	22.2	8.7

The contraceptive use level in the Jessore site 1988 was almost twice that in the Sirajgonj area (42 vs. 23 percent), where fertility levels remain substantially higher. A total fertility rate of 5.5 prevailed in Sirajgonj compared to a rate of 3.2 in the Jessore area. Mortality levels-as measured by overall crude death rates, infant and child (ages 1-4) mortality--were also, significantly higher in the Sirajgonj field site.

Differences between the two areas in terms of socioeconomic development and the demand for family planning are also evident. By all available indicators of socioeconomic conditions--female autonomy, maternal educational attainment, and land ownership--the Jessore field site appears less disadvantaged. Small but consistent differences between areas in the demand for children are also evident, with women in Jessore more likely to want no, more children and less likely to be fatalistic regarding such decisions.

Prominent differences between the two areas in the strength and intensity of the family planning service delivery program are also evident. A far higher proportion of women in Sirajgonj report having been visited irregularly or not at all by government female family planning fieldworkers (47 vs 14 percent). Among women who were visited by workers, women in Sirajgonj were also more likely to receive brief, cursory visits of limited duration. Moreover, a significantly higher proportion of women in the Sirajgonj field site report past problems in receiving contraceptive supplies (22 vs 9 percent).

The Sirajgonj area lies adjacent to and is partially bisected by the Jamuna, one of the major rivers of Bangladesh, impeding regular and close linkages with many outlying areas. A poor and incomplete system of roads and highways, caused in part by annual flooding during the monsoon season, limits effective outreach programs for a significant part of the year. Absenteeism among senior program officials, while common in much of rural Bangladesh, is a particularly chronic

problem in Sirajgonj. The difficult conditions and harsh quality of life combine to make this area an unattractive environment for families. The absence of good schools and poor infrastructure--impure water, frequent power outages, insufficient lighting--deter senior program officials from relocating their families when they are transferred there.

Rather, program managers maintain their families and principal households elsewhere, and remain regularly absent from their field posting. This lack of sustained and effective program leadership, further complicated by a highly organized and politicized work force, is a primary factor behind the weak program performance observed in Sirajgonj. In addition, low female educational levels and an extremely conservative cultural environment interact to limit the pool of women qualified and willing to undertake family planning outreach work, with the result that significant numbers of posts remain unfilled. The overall picture in Sirajgonj is thus one of an environment in which none of the key elements--socioeconomic conditions, demand for family planning, or the service delivery program--is conducive to fertility control.

The Jessore area, in contrast, represents a more favorable environment for fertility regulation and effective service delivery. Female literacy rates are higher and female autonomy--as reflected by indicators such as the proportion of women who feel free to travel unaccompanied-appears high by rural Bangladesh standards. The Jessore area is relatively prosperous for rural Bangladesh, characterized by little malnutrition and relatively low infant and child mortality rates. It has been largely free from natural disasters in recent years. The service delivery system is recognized as one that function reasonably well, with static clinics well-attended, more regular health and family planning outreach services and generally strong leadership by program managers. These conditions jointly help to explain why Jessore has the lowest fertility rates recorded for rural Bangladesh (Table 1).

Variation within Bangladesh

A similar clustering of demand and supply constraints exists within Bangladesh as a whole. The eastern division of Chittagong is characterized by very low levels of development, even by rural Bangladeshi standards. Contraceptive use levels are also considerably lower in this division than in the rest of the country. As the results of a 1989 national survey show (Table 2), contraceptive prevalence averages 35 percent in the other three divisions of Bangladesh, but remains below 20 percent in the Chittagong Division.

This area tends to be isolated and culturally conservative, with a female population that is even less autonomous and mobile than in other parts of rural

Bangladesh. Travel to and within this division remains difficult, and many areas are largely inaccessible, owing to an absence or limited number of paved and passable roads, and repeated flooding for significant portions of the year. [N] These areas have lagged far behind many other parts of Bangladesh in progress towards development--as reflected by modem transportation networks, electricity, communication systems, and educational facilities. Demand for family planning, as measured by the proportion of women who express a desire for no more children, also appears considerably lower in Chittagong than in the other three divisions (Table 2).

Equally serious programmatic impediments are apparent. For the reasons outlined above, logistical barriers to effective outreach activities are often formidable. Vacancies in key program positions, while a problem throughout rural Bangladesh, are especially severe in these low-performance areas.

Table 2: Percentage of Currently Married Women Aged <50 Years Currently Using Contraception by Division

Division	% Currently using Contraception	% Wanting no more children	% Reporting visit by female field worker during last 3 months
Rajshahi	34.7	60.6	45.5
Khulna	36.6	59.4	45.4
Dhaka	34.5	55.7	38.2
Chittagong	19.8	42.6	35.2

In the recent national recruitment of female fieldworkers, 48 percent of the new positions in the Chittagong Division have remained unfilled; this compares with an overall vacancy rate of 24 percent in the three other divisions. Overall, over one-fourth of all new and old government female fieldworker positions in this division continue to remain vacant.

This high vacancy rate is attributable to low female education, which restricts the pool of potential applicants with the requisite educational qualifications, as well as to the high degree of conservativism, which acts as a deterrent to female employment outside the home. High vacancy rates mean that many of these areas lack effective service outreach programs; this is borne out by the finding from Table 2 that Chittagong has the lowest reported levels of household visitation by female fieldworkers among the four divisions. Such outreach has been a key component of successful programs throughout rural Bangladesh, and it has much potential in highly conservative areas like Chittagong, where restrictions on women's mobility are most pronounced.

Senior program management positions in this division also tend to remain unfilled, and to be vacant for extended periods. [O] Program managers view these positions as hardship or 'punishment' posts; attempts to reverse transfer orders are common to these areas. Even when positions are filled, the overall lack of infrastructure, coupled with a more conservative, less receptive client population, often acts to deter, field visits by both fieldworkers and their supervisors. [P]

Conclusions

Our objective in this paper has been to show how factors commonly recognized, as constraints to demand are equally likely to constrain the effective delivery of family planning services. The constraints we have considered are an illustrative rather than an exhaustive selection; many other impediments affect both demand and supply. [Q] Our analysis has underscored the strong interrelationships between demand and supply, and their determinants. It is noteworthy, however, that analyses of poor program performance have tended to focus almost exclusively upon weak demand. Given that these dimensions are influenced by many of the same factors, and that a strong tendency exists for the clustering of constraints, explanations for program success or failure must logically take into account both supply and demand.

An issue of central policy relevance concerns the implications of our findings for achieving fertility reductions in unfavorable socioeconomic settings. Given the high degree of covariance between weak demand and weak supply, it could be argued that it is impossible to organize effective programs in countries like Bangladesh. Improvements in socioeconomic conditions could certainly be expected to result in increased demand for family planning, and in improved capabilities for effective service delivery. However, it must be recognized that interventions directed at socioeconomic development are themselves adversely affected by the same societal factors that constrain the effective delivery of family planning services (Simmons 1979) The structural impediments to other development programs in rural, Bangladesh--from agrarian reform (Jannuzi and Peach 1980), to increased female schooling and. literacy (World Bank 1988), to improved maternal and child health (Peters 1987); (Simmons et al. 1990) are well documented. [R]

Does all of this imply that little can be accomplished in the absence of broader socioeconomic development? In our view, programmatic choices and options to improve family planning service delivery do exist. Program effort, while undoubtedly shaped by sociocultural determinants, is also influenced by the political-administrative system within which policy decisions are made. Programs are implemented by formal institutions, which are capable of rational

adaptations; they are not just captives of their environment. Successful adaptation requires above all a detailed understanding of how sociocultural constraints interact with programmatic activities, the subject of the present analysis. The myriad constraints we have outlined in this paper are not just 'dirty linen' which must be kept out of the public eye, but rather the basis for understanding why programs and policies are not working, or are working less effectively than desired.

The possession of realistic knowledge of the impediments that programs face in settings such as rural Bangladesh is thus a prerequisite to improving service delivery. Such knowledge helps make it possible to structure programs to maximize the possibility of their operating effectively under such constraints. The composition of the service program can be gradually restructured toward a female-based work force that adapts to the norms of purdah; smaller, more realistic work areas can be established and services further decentralized as much as possible to counter the restrictions placed upon travel by female workers and clients; educational requirements can be lowered to adapt to low female literacy rates; quantities of medicines, supplies, and equipment can be increased to help workers provide meaningful services to clients; management information systems and independent assessments of program performance can be introduced to increase individual accountability for program success or failure; service delivery by nongovernmental organizations can be targeted to more difficult, low prevalence areas since these organizations are generally more flexible and organizationally more robust against local patronage pressures; and outside third party intervention can help deflect local patronage pressures that act upon the recruitment of new staff. These initiatives represent just a few of the numerous interventions that have been implemented or are under consideration within the Bangladesh national family planning program.

The supply side cannot be expected to remedy all of the described constraints nor fully compensate when demand for family planning services is weak or absent. The potential for programs to contribute to contraceptive adoption in unfavorable settings nevertheless remains considerable. The extent to which service programs are able to fulfil this potential hinges in large part upon their ability to recognize sociocultural constraints, and to address them in service design and implementation.

Notes

[A]. (Freedman and Berelson 1976) J, p. 15.

[B]. Simmons et al. 1988b, p. 11.

[C]. For an account of similar constraints faced by female service providers in rural Nepal, see Justice 1986

[D]. It should be noted that education can also lead to higher fertility, primarily through increasing the supply of children as a consequence of improved fecundity.

[E]. World Bank 1988.

[F]. The experience of successful pilot projects such as Matlab suggests that basic literacy may be sufficient for workers to effectively deliver family planning services.

[G]. For a discussion of this issue, see Phillips et al. 1985.

[H]. Although generally detrimental to effective delivery of services, weak community institutions may also be beneficial in some situations. Weak community cohesiveness may result in little organized opposition to programs such as family planning and permit a tendency towards compliance by villagers. See Simmons et al. 1986) for a discussion of this issue.

[I]. For a case study of institutional constraints to development in rural Bangladesh, see Hartman and Boyce 1983

[J]. Arthur and McNicoll 1978.

[K]. That such hiring practices are not limited exclusively to Bangladesh is suggested in articles by (Ronaghy and Solter 1974); (Skeets 1984)

[L]. As noted earlier, limitations on the administrative authority of supervisors is due in large part to concern that this power will be abused.

[M]. For a case study of this, see Bangladesh Rural Advancement Committee 1990

[N]. For a description of the logistical problems of movement in one such area in northeastern Bangladesh, see Chen 1983

[O]. Until a recent recruitment in 1989, a high proportion of senior program manager positions in the Chittagong division had remained vacant for an extended period.

[P]. For a description of parallels in the family planning program in the North Indian state of Bihar, see Blaikie 1975

[Q]. For example, certain environmental conditions have repeatedly harmed Bangladesh and have been hypothesized by some observers to contribute to a climate of risk that encourages families to maximize their fertility (Cain 1977) These have obvious implications for the disruption of the service delivery program.

[R]. For a discussion of impediments to development programs in general in Bangladesh, see Arthur and McNicoll 1978. For a broader discussion of the limitations of development programs as instruments for achieving fertility reduction, see Simmons 1979.

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