SUPPLEMENT TO
India’s Family Welfare Program
Moving to a Reproductive and Child Health Approach

ANTHONY R. MEASHAM
RICHARD A. HEAVER
Editors
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The World Bank
Washington, D.C.
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Preface

This is a companion volume to *India's Family Welfare Program: Moving to a Reproductive and Child Health Approach*. The Supplement consists of edited versions of the background papers on which the main volume was based.

Both published volumes resulted from extensive collaboration between the government of India, the states, and the World Bank team which drafted them. Government of India officials chaired a number of meetings to discuss successive drafts of the report, in which state secretaries of family welfare, academics, representatives of non-governmental organizations, and other experts participated. Written comments and suggestions on the drafts from the government of India were incorporated into the final version.

The authors wish to express their gratitude to the Ministry of Health and Family Welfare, to the state ministries of health and family welfare, and to all the many persons who contributed to this review of India's Family Welfare Program. We hope that it will contribute to improved reproductive and child health in India and elsewhere.

The authors wish to acknowledge in particular the important contributions to this work of the following colleagues: Catherine Fogle, Keith Hinchliffe, Tawhid Nawaz, Indra Pathmanathan, and Anne Tinker of The World Bank; Harry Cross of The Futures Group International; and Gillian Foo and Sudhir Mehra, Consultants. Finally, our thanks go to Sarah Brijnath, who provided excellent support, word processed many versions, and desktopted the final text.
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Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>AIDS</td>
<td>Acquired immunodeficiency syndrome</td>
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<tr>
<td>ANM</td>
<td>Auxiliary nurse-midwife</td>
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<tr>
<td>CBR</td>
<td>Crude birth rate</td>
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<td>CPR</td>
<td>Couple protection rate</td>
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<td>CSSM</td>
<td>Child Survival and Safe Motherhood Program</td>
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<tr>
<td>DALY</td>
<td>Disability-adjusted life year</td>
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<td>FP</td>
<td>Family planning</td>
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<td>FWP</td>
<td>Family Welfare Program</td>
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<tr>
<td>GOI</td>
<td>Government of India</td>
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<tr>
<td>HIV</td>
<td>Human immunodeficiency virus</td>
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<td>ICDS</td>
<td>Integrated child development services</td>
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<td>IDA</td>
<td>International Development Association</td>
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<tr>
<td>IEC</td>
<td>Information, education and communication</td>
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<td>IFA</td>
<td>Iron folic acid</td>
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<td>IMR</td>
<td>Infant mortality rate</td>
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<td>ISM</td>
<td>Indian systems of medicine</td>
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<tr>
<td>IUD</td>
<td>Intrauterine device</td>
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<td>LHV</td>
<td>Lady health visitor</td>
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<td>MCH</td>
<td>Maternal and child health</td>
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<td>MMR</td>
<td>Maternal mortality rate</td>
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<td>MOHFW</td>
<td>Ministry of Health and Family Welfare</td>
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<tr>
<td>MPW</td>
<td>Multi-purpose worker</td>
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<tr>
<td>MPW(M)</td>
<td>Multi-purpose worker (male)</td>
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<tr>
<td>NFHS</td>
<td>National Family Health Survey</td>
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<tr>
<td>NGO</td>
<td>Nongovernmental organization</td>
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<tr>
<td>ORS</td>
<td>Oral rehydration salt</td>
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<td>PVO</td>
<td>Private voluntary organization</td>
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<td>UNPF</td>
<td>United Nations Population Fund</td>
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<td>UNICEF</td>
<td>United Nations International Children's Education Fund</td>
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<td>UIP</td>
<td>Universal Immunization Program</td>
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<tr>
<td>UT</td>
<td>Union territory</td>
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<td>VHG</td>
<td>Village health guide</td>
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<td>WHO</td>
<td>World Health Organization</td>
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A. Action Plan for Revamping the Family Welfare Programme in India

MINISTRY OF HEALTH AND FAMILY WELFARE

Demographic Scenario

According to the 1991 census, the country's population is 843.93 million—a substantial rise from 342 million in 1947 and 684 million in 1981. The annual addition to the population is 16 million. The All-India average annual growth rate during the 1981-91 decade has been of the order of 2.11 percent marginally lower than 2.22 percent during the preceding decade.

The latest available Sample Registration System (1989) estimates indicate All-India birth rate of 30.6, death rate of 10.3 and infant mortality rate of 91. Two important parameters influencing fertility behaviour are female literacy and age at marriage for women. Couple protection rate (CPR) also indicates the level of efforts made for birth control.

The long term demographic goals as laid down by the National Health Policy (1983)¹ are to achieve the birth rate of 21 per thousand, death rate of 9 per thousand, natural growth rate of 1.2 percent, infant mortality rate below 60 per thousand live births and couple protection rate of 60 percent by the year 2000 AD. It has already been recognised that given the current level of achievements, the goals may not be achievable at the National level before 2006-2011 AD.

Future Strategies

Faced with grim prospects of population explosion, it is necessary to devise innovative strategies for imparting new dynamism to the Family

¹ See India, MOHFW, 1982.
Welfare Programme. While the population control programme has to essentially evolve as a multi-sectoral programme comprising many aspects which go beyond family planning, a result-oriented action plan has been developed. The broad framework is summarised below:

**National Consensus and Efforts**

The population control programme should emerge as a national consensus with willing participation of all segments of the society cutting across political, religious and cultural barriers. It has to be backed by strong political commitment and will not only at the national level but also at the level of States/UTs, which are primarily responsible for implementation of the programme. Political leaders, religious leaders and other opinion leaders at different levels will have to be approached for their active involvement in moulding public opinion.

**Improvement of Quality and Outreach of Services**

A vast network of institutions has come up in the country for delivery of health and family welfare services over the successive plan periods. It has, however, been recognised that the quality of service delivery extended to the people is not satisfactory. Besides, the outreach of services is also not adequate for the people in remote rural areas and urban slums. The following steps would be taken:

a. Keeping in view the general constraint of resources (financial, administrative and managerial) for pushing the Family Welfare Programme, the thrust during the Eighth Five-Year Plan would be first to consolidate the existing infrastructure. There is no point in going for opening of new subcentres, etc. in the future, if the existing sub-centres are not functioning properly. However, keeping in view the norms fixed during the Seventh Five-Year Plan, new institutions will be sanctioned if adequate funds are made available. Special attention will be paid to creation and strengthening of infrastructure in the urban slums where these are particularly deficient.

b. Integrated training modules for training and re-training of medical and para-medical personnel involved in the delivery of family welfare services will be developed and adequate funds made available for organising different training programmes in the institutions already set up for the purpose.

c. As motivation is a key factor in improving the quality of delivery of services, it will form a key element in the training modules for medical and para-medical personnel at all levels.

d. Special attention shall be paid by the State Governments/UT administrations to have a proper organisation for maintenance of
equipment, vehicles and buildings and, wherever possible, train even
the existing family welfare workers for doing small repairs. This
would ensure proper utilisation of vital equipment and valuable
assets created under the programme.

e. The supervision at all levels will have to be vastly improved. This
will primarily focus on identification of problems, finding solutions
thereto and improving understanding and capabilities of key
functionaries involved in the delivery of services.

f. Special attention shall be paid to the construction of buildings for
Primary Health Centres and sub-centres through Area Development
Projects and under the Minimum Needs Programme of the States
Plans.

g. The State Governments and UT administrations would look into the
practical problems of the workers like ANMs in the field conditions
such as their place of stay, mobility and travelling expenses etc. as
inadequate attention to these problems seriously hampers the
working of the main propagators and service providers of the family
welfare programme at the grass root level.

Special Strategy for 90 Districts

The demographic and health profile of the country is not uniform.
Examination of the state-wide data regarding behaviour of the important
demographic and health indicators shows very clearly that any
operational strategy, to be successful, will have to be based on
disaggregated approach. The four States of Bihar, Madhya Pradesh,
Rajasthan and U.P. which constitute about 40 percent of the country's
population, have IMR and MMR levels distinctly higher than the
national average. These are also the States where female age at
marriage, female literacy and share of women in non-agricultural
employment are distinctly lower than the national average. Unless
special efforts are made to bring up the profile and performance of these
States in regard to health and family welfare, it would be well-nigh
impossible to accelerate the achievement of demographic and family
welfare goals at the national level. Special area development projects
have already been launched in these States with the help of World Bank,
UNFPA and other funding agencies. The pace of the implementation of
these projects primarily designed to strengthen the infrastructure and to
improve the training of their staff needs to be speeded up with due
attention to quality of implementation.

The relevance of the disaggregated approach does not stop at the
identification of the four States. An analysis of demographic indicators
at the district level indicates that there are 90 particularly bad districts
where the CBR is above 39 per thousand (1981 census). A list of these
The following steps would need to be taken to improve the programme performance in these districts:

a. Micro-level planning by the States to identify the needs on a realistic basis for reduction in birth rate in these districts. Resources will be allocated for strengthening of infrastructure and provision of other essential inputs after taking into account the inputs already provided in these districts through area development projects and other special projects, if any.

b. All posts at grass root level of family welfare workers and supervisory officers would be filled up and only motivated officers with excellent record in these districts would be posted.

c. Priority for construction of subcentres and buildings for other health institutions would be given in these districts under the area development projects.

d. Intensive training of medical and para-medical personnel would be organised.

e. Since many of the low performance districts have large minority populations, minority community leaders at local levels would be involved in launching imaginative IEC programmes designed to increase family planning acceptance by all sections of the society through methods best suited to individual needs.

f. In order to improve the inter-personal communication efforts at the grass root level, a scheme of link volunteers would be tried out in some of the districts on a pilot basis. The Department of Women and Child Development would be requested to cover all the 90 districts with ICDS programme and suitable linkages developed at the delivery level with ICDS functionaries to deliver health, nutrition and family welfare services as a package.

g. The District Collectors would be fully involved in coordination/supervision of family welfare programme related activities in these districts.

Package of Incentives/Disincentives

The present scheme of compensation for loss of wages to acceptors of sterilisation/IUD, places great emphasis on target achievement with the result that the quantity has taken precedence over quality and some specific methods seem to have over-shadowed others. It has increasingly been recognised that we should get rid of "tyranny of targets" altogether. Targets based on micro-level planning suit the
local specific needs may, however, continue to be fixed for monitoring of the programme.

The above scheme will be modified to provide for greater flexibility to the States and to cover younger age couples with greater fertility potential under spacing methods. The resources meant for the purpose would be provided to the States/UTs in relation to their overall birth rate reduction efforts. In order to work out a suitable formula for devolution of resources under the scheme, a Committee under the chairmanship of Shri S.B. Mishra, Joint Secretary in the Ministry of Health and Family Welfare will be constituted which will have four State Health Secretaries as its members—two from good performing States and two from poor performing States. The committee will finalise its recommendations within three months of its constitution.

No more incentive to Government employees will be considered. A suitable package of disincentives will be developed for this section of the society for adoption by the State Governments as well. It will also be recommended to the employers in the organised sector.

The motivators fee presently being paid to service providers will not be paid any more as it also leads to emphasis on achievement of specific methods of contraception.

States Award Scheme already decided to be scrapped retroactively with effectiveness from the financial year 1988-89, would not be revived as it had been leading to falsification figures and unhealthy competition. However, suitable incentives to encourage good performance shall be built in the proposed modified scheme of compensation.

An innovative package of incentives/disincentives would be formulated with emphasis on community based incentives and social security measures for individuals adopting small family norm. The community based incentives would be linked to various benefits being made available to the public under different socio-economic development plans of the Government.

Promotion of Different Contraceptive Methods/Devices

Sterilisation procedures were the mainstay of the programme in the past. However, acceptors have generally been the higher age and the high parity couples who have already completed the desired family size. The contribution of sterilisation to the fertility decline, therefore, has been less than anticipated. While sterilisation would continue to play an important role in the population control efforts, it would be ensured that the profile of the acceptors would be of the right quality in terms of age and number of children already born.

Spacing methods will be vigorously pushed for adoption by the younger age couples with high fertility potential. This would require good follow up services for acceptors of IUD insertions to bring down
the drop out rates, improvement in the distribution arrangements of conventional contraceptives and oral pills in rural areas and urban slums through strengthening of schemes for social marketing of contraceptives and launching of community based distribution of contraceptives. The free distribution schemes which are somewhat wastage-prone would be gradually curtailed and limited only to such areas where these are actually needed for economic reasons or for lack of outreach of social marketing/community based distribution programmes.

The quality of contraceptives would be improved. In this regard supply of dry condoms under the free distribution scheme would be gradually phased out and only lubricated condoms made available.

The production arrangements for weekly oral pills (Centchroman) and oral contraceptive pills (Mala N and Mala D) shall be gradually improved so as to make these easily available across the length and breadth of the country in greater numbers.

In order to give a wider choice of contraceptives to the acceptors, new contraceptives such as Norplant-6 and injectibles shall be introduced under the programme, initially under controlled conditions and gradually on a wider scale.

**Universal Immunisation Programme and MCH Programme**

Consistently high coverages are being reported from most of the States in the Universal Immunisation Programme (UIP). However, there still remain areas where the coverage levels are low. Special attention would be focused on such areas during the coming years, while sustaining the high level of coverage achieved elsewhere.

All such cases where reported coverages are more than 100 percent of the target fixed, the reasons for high coverages would be routinely investigated to ensure that no over-reporting is allowed as this would otherwise lead to a sense of complacency leading to outbreak of the vaccine preventable diseases.

The ultimate objective being reduction of vaccine preventable diseases the priority in the coming years would be to concentrate on the quality aspects of the service delivery and on documenting reduction in disease incidence. The following activities in this context would be strengthened:

a. Initiate active surveillance in areas where low incidence has been recorded in the last two years. List of cases, particularly of polio and neo-natal tetanus would be the lead diseases under monitoring.

b. Set up network of Polio Virus Isolation Laboratories while increasing the number of field samples of Oral Polio vaccine to ensure that at least one full sample is lifted from every Primary Health Centre area in a year.
c. Time-bound investigation of all adverse reactions following vaccination.

For overall improvement in the management of the programme, all supervisory posts created so far, particularly that of the District Immunisation Officers and Refrigeration Mechanics, would be filled up by the States/UTs.

All States/UTs would also take priority action to take over the maintenance of the cold-chain created over the last four-five years and further planned to be strengthened in the coming years.

About 1.5 million children below five years of age die because of diarrhoea in the country every year. Even though the Oral Rehydration Therapy Programme has been implemented for quite some time now, it has met with only partial success. There are still many medical practitioners who are not propagating it or prescribing ORS. The programme would be more vigorously promoted through the training of medical and para-medical personnel and through health education to people, particularly mothers.

Keeping in view the Health for All goal by 2000 a new Child Survival and Safe Motherhood Programme is proposed to be implemented with IDA/UNICEF assistance in a phased manner. It would provide for universalisation of IFA to cover all pregnant mothers, universalisation of vitamin A to all children up to the age of three years, expanding the pilot project on control of acute respiratory infections and strengthening primary health care infrastructure coupled with an intensified training of traditional birth attendants in the higher IMR/MMR states of Assam, Bihar, Orissa, Madhya Pradesh, Rajasthan and U.P. It is expected that this project would not only help in lowering the IMR/MMR and child mortality rate but would also contribute significantly to improve the family welfare services.

Urban Area Schemes

The Schemes like post-partum centres, urban family welfare centres, and health posts are designed to provide Family Planning and Maternal and Child Health Care services to populations living in the urban areas including slum areas. While the post-partum centres have generally become hospital based programmes and are not effectively catering to the areas/population attached to them, the quality and outreach of services being provided by the urban family welfare centres/health posts are also not satisfactory. This has resulted in a situation in which the F.P. and MCH services are not effectively reaching the urban slums population which is an area of major concern. The following steps would be initiated:
a. With a view to strengthen infrastructure and services, Urban Revamping Schemes covering towns with two lakh population and above with special focus on slum areas are already being developed. The operationalisation of these schemes would be expedited with adequate funding support from central budget and external agencies.

b. The involvement of voluntary organisations in catering to the needs of slum population will be enhanced. Preference would be given to voluntary groups already active in such areas.

c. The urban institutions whether under the Government or in the voluntary sector will be closed down or shifted elsewhere in case an optimum level of performance is not recorded. It would be ensured through proper monitoring and supervision mechanisms that these institutions do seriously endeavour to meet the respective programme objectives, particularly those related to serving the target population assigned to each. Adequate flexibility would be given to States/UTs to meet these objectives.

d. Suitable coordinating mechanisms would be developed to ensure that the urban institutions function in an integrated manner and not in total isolation of each other and the overall programme objectives.

**Village Health Guide Scheme**

There is a general impression that this important scheme designed to provide for the basic linkage between the community and the Health and Family Welfare service delivery system, is not working well. VHGs are presently getting only Rs. 50/- per month as honorarium and in most parts of the country, they are not rendering much service to the community. Some States (Jammu & Kashmir, Tamil Nadu, Kerala) did not implement the scheme from the very beginning and some others like Assam and Haryana have scrapped it. The decision to replace male health guides with female health guides has also led to a plethora of writ-petitions in different High Courts. The general experience has been that wherever female health guides are in position, the ground situation of service delivery is much better. The following steps would be taken:

a. All the pending court cases would be effectively followed up and decided on a priority basis.

b. The existing number of village health guides shall be fully utilised by States/UTs with reduced functions, if necessary. Their services may primarily be utilised as motivators and depot-holders for contraceptives, oral rehydration salts, IFA tablets, etc.

c. The possibility of revitalisation of the scheme to make it more effective or alternatively of disbanding it would be examined further
taking into account the varied implications including from the legal angle.

**Continuation of ANM/LHV Training Schools**

There are a large number of ANM/LHV/MPW (M) training schools in different parts of the country. As regards ANM/LHV training, many States/UTs have already fulfilled targets of recruitment and basic training of workers. In so far as the scheme of training of Health Worker (Male) is concerned, most States have stopped training as fresh recruitment is not taking place. There are a large number of vacancies of MPW(M) in different States/UTs which has caused serious concern. The following steps would be taken:

a. The existing infrastructure of ANM/LHV training schools would be thoroughly reviewed for each State/UT to ensure its proper and effective utilisation. Schools without buildings and those being run through voluntary organisations shall be closed down gradually. The remaining schools will be utilised for running integrated training modules for para-medical workers, including of voluntary sector, and for continuing education programmes.

b. States/UTs would initiate action to create posts of MPW(M) to meet the existing gaps in a phased manner and effectively utilise the available training infrastructure.

c. Networking arrangements of training institutions at different levels would be developed with a view to ensure uniformity in training modules, avoid duplication and bring about effective coordination.

**Information, Education, Communication**

Information, Education and Communication (IEC) inputs need to be revitalised not only to propagate the Family Welfare Programme but also to bring about attitudinal changes so as to cover a part of the ground which should be normally prepared through education and social work. The new IEC strategy would have the following key elements:

a. The IEC message would be to associate family welfare with planned parenthood and not just with the adoption of contraception.

b. The messages would be positive with thrust on quality of life issues and removal of ignorance, apathy and misgivings about the Family Welfare Programmes.

c. In order to involve the community in generating demand for family welfare services, the scheme of Mahila Swasthya Sangh which has
been recently introduced in some selected districts would be further strengthened in case the results are found to be encouraging.

d. The messages through the mass media would be of a balanced nature so that these do not harm sensibility in our sociocultural ethos.

e. In order to cover 40 percent of the population which is not covered by any mass media presently, special attention shall be paid on traditional art forms, folklore, field publicity and interpersonal communication. Feature films with entertainment value would be developed for being shown on 16 mm projectors for conveying the required messages in a suitable manner.

f. Increased emphasis would be laid on development of media material in a decentralised manner so that these are produced taking into account the regional diversities in the country and local specific needs.

g. Regular training of IEC staff at different levels would be undertaken to expose them to latest IEC techniques, improving their motivation and administrative/managerial abilities.

h. The funds provided for media activity would in no case be diverted as is happening in some States presently. The importance of IEC activities in achieving the desired goals would need to be fully realised by the States/UTs.

i. IEC efforts would increasingly focus on the need for participation of males in adopting contraception with a view to remove misgivings about the vasectomy, which is a much simpler procedure than the female sterilisation.

j. The Rajasthan experiment of integrating the IEC activities of the entire Health and Family Welfare sector and developing linkages with other sister departments for a coordinated IEC effort has been noted to be leading to better achievements. Other States/UTs may like to study this experiment for possible replication.

Involvement of Non-Governmental Sector

For supplementing the efforts of the Government, it is necessary to involve the non-Governmental organisations and voluntary agencies in a very big way. Even though the need for this has been realised for quite some time with a view to make the Family Welfare Programme a people's movement, harsh reality is that so far the contribution from the non-Governmental sector is rather limited and the programme is perceived by the people as the Government's programme. Voluntary sector and NGOs cannot only supplement the family welfare services provided by the Government but also it is expected that they would have a better understanding of how to bridge the communication gap
with the people and take the message of small family and Maternal and Child Health to them in the language they understand.

Instead of waiting for a voluntary agency to approach the Government for assistance, it would be necessary to identify local level individuals (youths in the villages, panchayat level leaders, private medical practitioners including ISM practitioners, ex-servicemen, retired Government servants with a social conscience etc.) to motivate them to participate in the Family Welfare Programme, impart training to them and involve them either individually or collectively for generation of demand for the family welfare services and propagation of small family norm.

The network of cooperative sector institutions, organised sector, trade unions, Zilla Parishads, municipal corporations, and panchayats, would be fully involved in the implementation of family welfare programmes in a systematic manner.

Increased powers to sanction schemes for non-Governmental sector would be delegated to the States/UTs which may further be delegated to the district level with a view to expedite the sanction of schemes and also because the actual work of identifying and encouraging the voluntary workers at grass root level, necessarily will have to be done by the district officers and other officers of the State Governments in this field.

In view of the fact that the NGOs in some States/Areas have achieved exceedingly good results, visits of NGO workers from the poor performance States/Areas would be arranged to a good performance State/Area. Further, the available infrastructure would also be utilised for training of voluntary sector workers to improve their administrative, financial and managerial abilities.

In order to have the desired impact of eliciting participation of voluntary and NGOs, a suitable organisation would be evolved at central level which will have the desired degree of flexibility in sanctioning schemes and ensuring smooth flow of funds.

Increased allocations would be made in the central budget for implementation of Family Welfare Programme through NGOs/voluntary sector and receipt of external assistance for this sector would be considerably stepped up.

Inter-Sectoral Coordination

One of the key points which always needs to be kept in view is the distinction between the family welfare activities and the population control programme. Control of population is dependent on a variety of factors, many of which go beyond the sphere of the family welfare sector, but which have an equal and perhaps even more important bearing on the birth rate. In fact, the Family Welfare Department in the
Centre and the Health and Family Welfare Departments in the State Governments are organisations which should be essentially viewed as supply departments for making available the family welfare services, but the demand for these services and the motivation for population control comes from factors such as female literacy rate, age at marriage of girls, the status of women, position of employment of women, social security and general level of economic development. These are well beyond the pale of activities of Department of Family Welfare.

There is need to have an institutional mechanism at the centre for inter-sectoral coordination particularly between the Ministry of Health and Family Welfare, Ministries of Human Resources Development, Finance, Information and Broadcasting, Environment and Forests, Labour, Department of Women and Child Development and the Department of Rural Development. A suitable institutional mechanism would be evolved at the central level to achieve the desired level of inter-sectoral coordination and similar mechanisms would be developed at the State level.

At the State level, the Chief Secretaries would be involved personally in making the Family Welfare Programme a success. At the district level, Deputy Commissioners, Chief Executive Officers of the Zilla Parishads, would be involved in a greater way not to push the target achievements in a routine manner but to achieve inter-sectoral coordination of different departments whose activities have a direct bearing on family welfare programme performance.
B. Family Welfare Policy Issues

THOMAS W. MERRICK

Population policy development has a long history in India, which launched its national Family Planning (later Family Welfare) Program in 1951. India has been a leader in calling for broad integrated approaches to population, as it did during the first United Nations World Population Conference, which was held in Bucharest in 1974. India continues to affirm its commitment to slowing population growth - a priority area in the eighth five-year plan (1992-97) and in its statement to the International Conference on Population and Development in September 1994. (India, Planning Commission, 1989; India, MOHFW, 1994).

India's population policy and program have evolved over the past four decades. During the 1960s, massive efforts were made to recruit acceptors of intrauterine devices (IUDs) and to promote the use of condoms. This was followed during the early 1970s for a year or so by even more forceful efforts to enlist both male and female candidates for surgical sterilization. The excesses of these campaigns generated a widespread backlash that set the program back several years. In the late 1970s, the country renewed its commitment to voluntary family planning, and the 1980s witnessed a rebuilding of public support for the program.

Despite many successes, including a doubling in contraceptive prevalence from around 20 percent in the early 1970s to more than 40 percent by the early 1990s, the Family Welfare Program (FWP) continues to suffer from long-standing problems of implementation, many of which have their roots in policy. These problems have been addressed in the “Action Plan for Revamping the Family Welfare Programme in India,” which was drawn up by the Ministry of Health and Family Welfare in 1992 (see section A).

The action plan recommended a twelve-point strategy for improving the effectiveness of the FWP:

1. Generate a national consensus and policies for the FWP
2. Improve the quality and outreach of family welfare services
3. Implement special initiatives for ninety backward districts in Bihar, Madhya Pradesh, Rajasthan, and Uttar Pradesh.
4. Modify the system of targets and incentives and devolve more responsibility to the states
5. Promote a broader range of choice of methods, including those for spacing
6. Upgrade and improve the performance of immunization and maternal and child health services
7. Improve family welfare services in urban slums
8. Revitalize community-based support systems for family welfare workers
9. Revitalize training
10. Improve information, education, and communication efforts
11. Involve nongovernmental organizations
12. Strengthen intersectoral coordination between the FWP and other relevant government agencies by creating a high-level population commission and corresponding state- and district-level bodies.

The government has already begun implementing many of these recommendations, with major support from operations financed by the International Development Association, including the Child Survival and Safe Motherhood, the Social Safety Net Credit, and several area projects. Projects were designed to strengthen the overall package of services and to address the specific improvements called for in the strategy, such as the training of fieldworkers, strengthening of community links, upgrading of facilities, expansion of information, education, and communication efforts, and involvement of private voluntary organizations.

At the policy level, a high-level population committee was set up as a subcommittee of the National Development Council, which comprises all chief ministers of the states. The committee submitted recommendations to the National Development Council for formulation of a national policy and establishment of mechanisms for its implementation. The committee constituted a group of experts to draft the policy. The reports of these two bodies have been widely circulated and are under consideration by the government of India.

In May 1994, the group of experts submitted to the Ministry of Health and Family Welfare a draft report with recommendations for a new national population policy (India, Planning Commission, 1994). The report proposes establishing population and social development committees at the national, state, district, and local levels of government to promote a participatory political environment for and community involvement in addressing family welfare issues. This and other recommendations, including mechanisms for implementing the policy, which involve establishing a Population and Social Development Fund to replace the Department of Family Welfare, are
still under discussion.

The World Bank takes a positive view of the basic principles and directions for population policy that are being articulated in India. It also recognizes that the institutional and organizational roles and structures for their implementation need to be worked out among the many stakeholders represented in the democratic processes of the country.

New Direction in Population Policy

There is broad support in these policy discussions for taking a holistic approach to population that closely links population issues to broader agendas of poverty reduction and human development. This approach also recognizes the crucial need to address gender inequity and the many forms of discrimination against women that persist in India, including dowry, unfavorable property rights, female feticide and infanticide, and unequal access to education and economic opportunity.

There are many parallels between the approach being articulated in India and the program of action adopted at the 1994 International Conference on Population and Development (United Nations Fund for Population Activities 1994). The conference document further elucidates and guides policy discussions in India, and its program of action represents a major departure from conventional thinking on population and development. The international community has, for the first time, gone beyond emphasizing numbers of human beings and demographic changes to place human beings explicitly at the center of all population and development activities. Investing in people - in their health and education - is seen as the key to stabilizing the population and sustaining economic growth and development. The population dimension is no longer seen in isolation, but in conjunction with overall development strategies, in particular with efforts to eradicate poverty, achieve sustained economic growth, and empower women to participate fully in the development of society (see United Nations Fund for Population Activities 1995).

The program of action has specific implications for policy and program orientation. First and foremost, population programs should be based on the needs and desires of individuals rather than on demographic targets and should place paramount importance on ensuring quality of care. Both must be translated into actions that respect the principles of free and informed choice. This requires, among other things, improving the quality of training in reproductive counseling, health information, and related areas; expanding the range and quality of services and contraceptive methods; and promoting greater involvement of national and subnational private
voluntary organizations and women's groups in the design, implementation, and monitoring of programs. In addition, it calls for using more client-focused research and evaluation to develop and improve training as well as information, education, and communication programs.

The concept of a reproductive health approach is central to the new vision of population policy articulated at the conference. In the past, a program's success or failure was defined in terms of its contribution to a decline in fertility and population growth rates. Although concerns about reducing fertility can and should be addressed at the level of broad social policy, the main focus of the design and management of reproductive health programs should be on satisfying the needs of actual and potential clients (as identified through research and feedback mechanisms) rather than achieving a specified demographic impact.

Correspondingly, performance should be measured by effectiveness in helping clients to realize their reproductive intentions and improving their reproductive health status, through indicators that demonstrate (a) effective use of temporary methods by couples who want to space births, (b) male or female sterilization for couples who choose this method to limit births, and (c) reduced maternal and child mortality and morbidity. The World Bank encourages its borrowers to adopt the recommendations of the International Conference on Population and Development because they represent a more effective way of achieving the overarching objective of population policy - reduction of poverty and improvement of human welfare, in addition to stabilization of population - and are also more acceptable on humanitarian grounds than the previous approach.

Delinking programs from demographic objectives does not imply that slowing population growth should cease to be a goal of population policy. It does mean that demographic objectives should be pursued simultaneously through a broad range of social policies, including efforts to improve education, the status of women, and health, including reproductive health and family planning. The implementation of social policy should also focus on the specific human development needs that each program area serves, paying attention to synergies that increase individual as well as community well-being - for example, keeping girls in school, which delays childbearing, empowers women, and increases their productivity. Population objectives can inform the broader development strategy through such mechanisms as the timing and allocation of investments among particular social sectors that affect and are affected by demographic changes.

Policy and program issues are entwined, and it is not enough to deal with only one set of issues. Some observers have expressed
concern that focusing on programmatic issues in reproductive health and family planning will fail because doing so deals narrowly with a subset of issues about the health delivery system and does not confront the fundamental social issues that engender high fertility as well as persistent poverty. This section now turns to key steps needed to translate this new vision of population policy into effective actions that operationalize the reproductive health approach in the Family Welfare Program. Three areas of policy implementation are outlined below.

**Moving from Targets and Incentives to Client-Centered Program Management**

An important first step toward implementing the new policy agenda is to move away from targets and incentives and toward a client-centered approach in program design and management. Monetary incentives and demographic targets are now recognized as impediments to the reproductive health approach. The government of India is reconsidering the issue of targets and incentives and is discussing alternative indicators of program performance. This is an important sign of its commitment to implementing a reproductive health approach in its population program.

Provider and motivator incentives have been standard FWP practice for several years. The record on these incentives is problematic, because they have been tied to targets for specific methods of contraception. In addition to high costs, administrative problems and potential mismanagement, and distorting effects on program performance, ethical issues and possible infringement on individual reproductive rights give cause for concern. Providers and motivators who seek monetary rewards that are tied to the target for a particular method may not attend to the client's needs. Both method-specific targets and provider and motivator incentives for specific methods need to be phased out.

Incentive payments to clients have also been employed to motivate the use of specific methods. Currently these incentives are being paid for sterilization and insertion of IUDs. Proponents of client incentives argue that they are needed to motivate clients and to compensate them for the loss of work time and other personal costs incurred when visiting clinics. Critics, however, ask why such compensation should be paid for one reproductive health service (sterilization) and not for others. They are concerned that even when the cash payments to clients are small, the risk of coercion for impoverished individuals is real. They doubt that the perceived societal benefits warrant coercion or actions that may harm the reproductive health of individuals. They also question the
psychological impact of these incentives in the long term, noting that paying clients for only one service may send a message that sterilization and, possibly by association, other family planning methods are not desirable in and of themselves.

Observers who are not concerned about human rights or about creating a negative image of the program may think that resources could be used more effectively in other ways. For example, more funds could be allocated to improving the quality of and access to services or to educating clients about how services could meet their own reproductive health needs. A growing body of research verifies that people are more likely to use and even pay for services that are of good quality and respond to their needs. Reallocating incentive funds for program improvement might motivate use more than incentives themselves. Research shows that many potential consumers do not use contraception for reasons such as fear of side effects, cultural or religious objections to certain methods, or concerns about the reactions of their spouses and other relatives, reflecting limitations in the program’s communications and counseling efforts and in the choice of contraceptive options. Because much of the unmet need for fertility regulation reflects poor services, improving access and quality may be a far more effective way to achieve both demographic and reproductive health goals than paying individuals to use a specific method.

Although India’s 1992 Action Plan calls for eliminating targets and incentives for individuals and providers, these practices continue and remain a key aspect of the program, especially for sterilization (India, MOHFW, 1992). Many program managers fear that removing targets and incentives will undercut program performance and interpret calls for eliminating them as calls to shift program emphasis away from sterilization. That is not the message, which is that sterilization should be available to couples who wish to stop bearing children. In all likelihood, the need for sterilization will expand rather than shrink, so that added effort will be needed to improve the access to and quality of sterilization services.

Moreover, eliminating targets must be accompanied by alternative measures for program management and performance that reflect the new orientation. The Ministry of Health and Family Welfare is encouraging states to experiment with alternative approaches to setting program objectives and measuring accomplishments. Population-based indicators of coverage could serve as benchmarks for measuring progress at the level of blocks and districts; however, performance of field staff should be measured by whether workers provide clients with services and information that address the expressed reproductive health needs of the community served.
Expanding the Range of Consumer Choices in Reproductive Health Services

Implementing the reproductive health approach also means that the Family Welfare Program must offer consumers a wider range of choices. This includes a broader range of safe and effective contraceptive methods as well as the incorporation of reproductive health services that are not yet available, such as management of reproductive tract infections, services that address the special needs of adolescents (including married adolescents), and services that recognize the special needs of males.

Although the mix of methods has been broadened to include a range of spacing methods, including condoms, pills, and IUDs, surgical sterilization of women is still the dominant method and the one to which Indian women are most likely to be referred. Sterilization at low parity is an effective method from a demographic perspective and provides clients who want to limit births with the safest and most cost-effective way of achieving that goal - as long as services are provided under proper conditions. It accounts for nearly four-fifths of the modern methods used in India and is clearly a major factor contributing to the decline of India's total fertility rate.

Given the very early age at which Indian women marry and begin bearing children, efforts to delay marriage or the initiation of childbearing and to expand the use of spacing methods could bring important demographic and reproductive health benefits. Emphasizing vasectomy for men who want no more children and expanding the menu of temporary methods (female barrier methods, affordable injectables, and so on) would address a broad range of consumer needs in family planning.

This point is illustrated in data from the 1992-93 National Family Health Survey for the state of Uttar Pradesh (International Institute of Population Sciences, 1994b). The median age of sterilization is just below thirty, whereas the median age of marriage is just over fifteen, leaving fifteen years of exposure to the risk of pregnancy. Only a small fraction of married adolescents use a temporary method to delay or space births. Overall, about half the women surveyed wish to delay or limit further childbearing, but fewer than 40 percent of these women actually practice family planning, with sterilization accounting for two-thirds of total contraception. That leaves an unmet need for family planning in Uttar Pradesh of 30 percent of all currently married women of reproductive age. Nearly 17 percent (more than half of total unmet need) are women who would prefer to delay the birth of their next child for at least two years. Although efforts are needed to convince a higher proportion of women in Uttar
Pradesh to use family planning to space or limit their births, much could be achieved by expanding access and improving the quality of services for both spacing and limiting. The need for improvement is particularly acute in the case of spacing methods, which account for only one-third of overall use of contraceptives.

The mix of method offers a good example of the compatibility of demographic and individual reproductive health goals and illustrates the importance of making sure that demographic objectives at the policy level do not govern the implementation of efforts to improve the mix of methods. Indeed, given the general agreement about the need to increase individuals' contraceptive choices and reduce the current dominance of sterilization, many observers are surprised that the introduction or reintroduction of hormonal contraceptives is so controversial in India.

Some reproductive health advocates in India have opposed efforts to expand the use of pills and to introduce injectables and implants. Their concerns revolve around two issues: (a) potential abuses with methods that put most of the control over use in the hands of providers; and (b) the safety and efficacy of user-controlled methods under conditions in which screening, counseling, and follow-up for potential side effects and contraindications are inadequate. Their concerns are heightened by the perception that the FWP is guided by demographic rather than reproductive health objectives.

Indian experience with overly aggressive promotion during the 1970s provides ample evidence of the abuses that can arise with provider-controlled methods in a demographically driven program. Such abuses are particularly likely when methods are delivered in "camps" that bring medical personnel and users (acceptors) together for a one-time encounter in which there is little likelihood that clients will receive individual counseling or be able to choose a method based on their specific needs and even less likelihood that there will be follow-up if side effects or other problems occur.

These concerns are not limited to hormonal methods. The IUD is also becoming more prevalent. IUDs (particularly the CuT-380a) are an effective long-term method when properly inserted and monitored. However, they can also cause severe problems when inserted under unsanitary conditions and (with the possible exception of the CuT-380a) when the client suffers from a reproductive tract infection.

Improving the quality of manufacturing, distribution, and delivery is critically important if hormonal methods are to play a greater role in fertility regulation in India. Although India can produce hormonal methods locally, the quality of manufacturing is poor. Problems include substandard manufacturing and poor shipping and storage, which have contributed to the deterioration of
supplies (see United Nations Fund for Population Activities 1992). Similar problems also affect the local production and distribution of other temporary methods, including condoms and IUDs.

The solution to these problems is not to prohibit specific methods but rather to correct inadequacies in the current system of procuring, distributing, prescribing, and monitoring their use. Delinking implementation of the mix of methods from demographic objectives is a necessary, but not sufficient, condition for this to happen. Other actions are also required, including revitalized systems for the development, testing, manufacture, and introduction of new methods; competency-based training and encouragement of providers to conduct better counseling and follow-up; and improved systems for supporting, managing, and evaluating the performance of providers.

Hormonal contraception as well as IUDs are safe and effective methods of regulating fertility in many settings worldwide, when their introduction and delivery conform to recognized standards. Groups such as the World Health Organization and International Planned Parenthood Federation have developed and are continually updating guidelines for the distribution of contraceptives. Recent guidelines address many of the issues raised by reproductive health advocates in India. The Bank encourages the government of India and reproductive health advocates to address specific issues regarding contraceptive safety that are relevant to the Indian context. The World Health Organization has also developed guides to the introduction (or reintroduction) of specific methods that emphasize the user's perspective. They recommend involving the community in articulating user concerns and note that this is as important as dealing with technological issues for bringing a method into widespread use. Involving reproductive health advocates in every phase of development and field-testing of new methods will go a long way to allay fears and build trust.

Building Partnerships That Strengthen the Client Focus of the FWP

Implementing the reproductive health approach requires increasing the community’s involvement in and ownership of population issues at all levels of program design and implementation. India’s proposed policy approach emphasizes the opportunity provided by the Panchayati Raj to decentralize program design and management by placing responsibility with the panchayats, the nagarpalikas, and the zilla parishads, thereby developing locally relevant approaches for program implementation. Local planning and implementation of policy through the Panchayati Raj also provides an opportunity for taking an integrated approach to population, health, education, and gender issues. Sociodemocratic charters are proposed as a mechanism
for improving the quality of life of the community under the direction of grassroots, democratic organizations that would form the building blocks for state- and national-level development plans.

This change would address one of the major shortcomings of the present system: the FWP 's overly centralized system of decision-making and control. One consequence of this centralization is that outcomes are extremely uneven across the states and territories of India. Significant amounts of the central and state budgets are spent on a recurring basis to run facilities that are poorly used because they do not provide the quality of services and information that local communities want and trust. Responding to local needs and perceptions must become a high priority.

There is substantial state-to-state variation in experiences with the Panchayati Raj system. In Karnataka, where it was first introduced in 1988, 80 percent of health expenditures are under the control of the zilla parishads. An evaluation of this experience reports overall improvement in the management of public health facilities, but substantial differences in administrative capacity. Since the 1993 act, other states have begun implementation. Encouraging examples of community involvement schemes include the mahila swasthya sangh, under which local health workers form committees of fifteen village women to discuss family welfare issues.

The Panchayati Raj legislation reserves one-third of the positions on the various councils for women and represents a unique opportunity to bring the women's perspective to family welfare programs. While there is anecdotal evidence that women are beginning to take an active role in deliberations, there are also concerns that traditional attitudes toward women in India will prevent poorer women from voicing their needs and concerns in the Panchayati governance process. More and more community-level women's groups (mahila mandals) are training women to be effective advocates in the panchayats, an initiative that should be supported.

It is still too early to judge the effectiveness of the Panchayati Raj and related movements. It is safe to say that they will require substantial nurturing (such as the initiative now being tested in Madhya Pradesh) if they are to play a genuine and constructive role. Community involvement in management clearly involves risks related to trust and responsible decisionmaking. The new law, which includes family welfare in the Panchayati governing process, represents both an opportunity and a challenge to work effectively for the benefit of the community.
Conclusions

India has long been a world leader in the articulation of population policy. Its recent national policy efforts along with the new vision of population and development provided by the Cairo conference have opened a window of opportunity to make India's Family Welfare Program even more effective in serving the national objectives of social and demographic policy and the individual reproductive health needs of its population. Eliminating targets and incentives in program management, broadening the range of contraceptive choices and other services provided by that program, and involving the community in population policy and programs are key changes needed to move India's program toward adoption of an effective reproductive health approach.

The new vision of population in India challenges the current system to put the interests of the individual at the center of policy and program. This is the heart of the vision that emerged at the International Conference on Population and Development. It is taking hold in a variety of ways among decision makers and stakeholders in India's population program, but the full commitment and cooperation of all parties involved are required to make it universal.

None of these issues represents a major departure from the policy directions being discussed in India. Rather, this analysis emphasizes the actions required to move the Family Welfare Program toward full and effective implementation of the reproductive health approach. These actions must recognize the diversity of conditions in different states, districts, and localities. This calls for implementing the changes in phases so that states have wide latitude to experiment with alternative approaches to program management and community involvement along with the financial and organizational support and flexibility they need to try new approaches. The government of India has taken an admirable step toward implementing its new policy vision.
C. Estimates of Unwanted and Wanted Fertility in India

The major objective of the family planning component of the reproductive health program is to assist couples to avoid unwanted pregnancies and to have the number of children they want, when they want them. Although debate persists about the precise levels, there is a growing consensus that a significant portion of childbearing is unwanted in developing societies such as India.

The purpose of this section is to estimate unwanted and wanted fertility in India. The primary source of data is the National Family Health Survey (NFHS) conducted in 1992-93 (International Institute for Population Sciences 1994a), which provides national and state-level data on demographic variables, as well as assessments of the use of family planning and health services. The survey measured demographic variables such as fertility, nuptiality, preferred family size, knowledge and practice of family planning, the potential demand for contraception, and the level of unwanted fertility. It also collected socioeconomic information.

The NFHS covers a sample representing 99 percent of the population of India in twenty-four states and Delhi. In total, 89,777 ever-married women between the ages of thirteen and forty-nine years were interviewed and 88,562 households were covered.

Unwanted Childbearing

Indirect estimates of the demand for fertility regulation at the national level for the 1970-92 period are shown in table C.1. The figures in this table illustrate a primary reason why unwanted childbearing is so prevalent. A substantial number of women who desire no more children are not using contraceptives. Even though contraceptive use increased during the period of the studies, so did the proportion of women who want no more children. The percentage of women who say they want no more children (and who thus represent the demand for limiting births) increased from 50 percent in 1970 to 67 percent in 1992. The proportion of women who are using contraception
(excluding traditional methods) also increased substantially between 1970 and 1988 but declined between 1988 and 1992. The percentage of women who say that they want no more children but are not using contraception (perhaps because of unmet demand for methods that limit childbearing) decreased from 40 percent in 1970 to 31 percent in 1992, following a U-shaped trend. Although the validity of the estimates and trends of contraceptive use and unmet need are subject to question, primarily due to an unexpected decline in prevalence for 1992, a significant proportion of women in each survey clearly have an unmet need to limit their fertility.

The NFHS collected information on women's preferred family size; from these it is possible to estimate the demand for methods that regulate fertility and the unmet need for methods that space births and limit family size. These estimates are shown in table C.2. The demand for limiting family size refers to the percentage of women who want no more children, excluding persons who are sterilized. The demand for spacing births refers to the percentage of women who want to delay the birth of their next child for two or more years. The percentage of women who use reversible methods is also shown. The total unmet demand for fertility regulation is estimated by the sum of the demand for limiting and spacing births minus the use of reversible and traditional methods of contraception.

Table C.1. Desire for More Children, Contraceptive Prevalence, and Unmet Need in India, 1970-92

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage of women who want no more children</th>
<th>Percentage of women who use modern methods of contraception</th>
<th>Percentage of women who want no more children but do not use contraception</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>50</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>1980</td>
<td>50</td>
<td>28</td>
<td>28</td>
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<tr>
<td>1988</td>
<td>58</td>
<td>39</td>
<td>19</td>
</tr>
<tr>
<td>1992</td>
<td>67</td>
<td>36</td>
<td>31</td>
</tr>
</tbody>
</table>


The numerator of unmet need for spacing births includes (a) pregnant women whose pregnancy is poorly timed, (b) amenorrheic women whose last birth was poorly timed, (c) women who are neither
<table>
<thead>
<tr>
<th>State</th>
<th>Demand for limiting</th>
<th>Demand for spacing</th>
<th>Percentage of women using reversible methods ( ^a )</th>
<th>Total unmet demand for fertility regulation</th>
<th>Unmet need for limiting</th>
<th>Unmet need for spacing</th>
<th>Total unmet need for fertility regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>13.6</td>
<td>12.8</td>
<td>2.2</td>
<td>24.2</td>
<td>4.1</td>
<td>6.3</td>
<td>10.4</td>
</tr>
<tr>
<td>Assam</td>
<td>47.8</td>
<td>22.7</td>
<td>28.4</td>
<td>42.1</td>
<td>10.7</td>
<td>11.0</td>
<td>21.7</td>
</tr>
<tr>
<td>Bihar</td>
<td>24.0</td>
<td>24.0</td>
<td>4.5</td>
<td>43.5</td>
<td>10.6</td>
<td>14.4</td>
<td>25.1</td>
</tr>
<tr>
<td>Gujarat</td>
<td>-</td>
<td>17.2</td>
<td>-</td>
<td>-</td>
<td>5.5</td>
<td>7.6</td>
<td>13.1</td>
</tr>
<tr>
<td>Haryana</td>
<td>29.3</td>
<td>17.3</td>
<td>14.9</td>
<td>31.7</td>
<td>7.6</td>
<td>8.8</td>
<td>16.4</td>
</tr>
<tr>
<td>Jammu</td>
<td>35.6</td>
<td>17.5</td>
<td>19.7</td>
<td>33.4</td>
<td>8.6</td>
<td>8.9</td>
<td>17.5</td>
</tr>
<tr>
<td>Karnataka</td>
<td>20.6</td>
<td>16.7</td>
<td>6.6</td>
<td>30.7</td>
<td>6.4</td>
<td>11.8</td>
<td>18.2</td>
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<tr>
<td>Kerala</td>
<td>19.3</td>
<td>16.1</td>
<td>15.0</td>
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<td>4.5</td>
<td>7.2</td>
<td>11.7</td>
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<td>19.6</td>
<td>25.3</td>
<td>5.0</td>
<td>39.9</td>
<td>7.4</td>
<td>13.1</td>
<td>20.5</td>
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<td>Maharashtra</td>
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<td>13.5</td>
<td>7.6</td>
<td>26.3</td>
<td>6.8</td>
<td>7.3</td>
<td>14.1</td>
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<td>Orissa</td>
<td>18.1</td>
<td>25.9</td>
<td>4.7</td>
<td>39.3</td>
<td>12.7</td>
<td>9.7</td>
<td>22.4</td>
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<tr>
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<td>37.8</td>
<td>13.3</td>
<td>24.7</td>
<td>26.4</td>
<td>6.5</td>
<td>6.5</td>
<td>13.0</td>
</tr>
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<td>Rajasthan</td>
<td>24.2</td>
<td>20.3</td>
<td>4.1</td>
<td>40.4</td>
<td>9.0</td>
<td>10.8</td>
<td>19.8</td>
</tr>
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<td>Tamil Nadu</td>
<td>27.1</td>
<td>14.6</td>
<td>10.3</td>
<td>31.4</td>
<td>6.7</td>
<td>7.8</td>
<td>14.6</td>
</tr>
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<td>25.6</td>
<td>6.7</td>
<td>50.4</td>
<td>13.4</td>
<td>16.7</td>
<td>30.1</td>
</tr>
<tr>
<td>West Bengal</td>
<td>34.5</td>
<td>20.5</td>
<td>26.8</td>
<td>28.2</td>
<td>8.0</td>
<td>9.4</td>
<td>17.4</td>
</tr>
<tr>
<td>All of India</td>
<td>25.9</td>
<td>19.6</td>
<td>9.8</td>
<td>35.7</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

- Not available.

^a^ Refers to the percentage of women who want to delay or limit additional births who are using reversible methods of contraception.
pregnant nor amenorrheic and say they want to delay the next birth for at least two years but are not using contraception, and (d) women who are unsure whether they want another child or who want another child but are unsure when to have the birth. The numerator of unmet need for limiting births includes (a) pregnant women whose pregnancy is unwanted, (b) amenorrheic women whose birth was unwanted, (c) women who are neither pregnant nor amenorrheic and say they want no more children but are not using contraception. The total unmet need is estimated by adding unmet need for limiting and for spacing.

The figures presented for demand for limiting underrepresent actual demand, because they exclude women who are sterilized. Those for met need are correspondingly understated, because they include only persons who use reversible methods.

Nevertheless, these data clearly demonstrate that a substantial proportion of women in all states want to delay or limit their future childbearing. At the national level, 20 percent of married women want to delay the next birth, and 26 percent want to limit their childbearing. In other words, 46 percent of currently married women want to delay or limit their future childbearing. This is in addition to the 31 percent who are sterilized and the 4 percent who are infecund. Thus, only 19 percent of women want to have another child within the next two years or are undecided about whether or when to have another child (this includes those who feel that the decision is “up to God”). Of the 46 percent who definitely want to delay or limit additional births, only 10 percent are using reversible or traditional methods, leaving a level of unmet demand for fertility regulation of 36 percent.

The percentage of women who definitely want to postpone or delay their future childbearing varies substantially among states. The percentage of women who want to space their births varies between 13 percent in Punjab to 26 percent in Uttar Pradesh. The percentage of women who want to limit their childbearing varies between 19 percent in Kerala and 48 percent in Assam. The estimated unmet demand for fertility regulation varies from 28 percent in Kerala to 50 percent in Uttar Pradesh. At least 40 percent of women in the Hindi belt express a clear desire to regulate their fertility but are not using any method of contraception.

The estimated percentages of women who have an unmet need for contraception for spacing or limiting births, however, are lower than the corresponding percentages of women who want to postpone or limit their childbearing but are not using contraception. The differences are mainly due to the fact that the estimates of unmet need exclude amenorrheic women whose last birth was wanted and pregnant women whose pregnancy is wanted. Those who are
currently pregnant cannot use contraception and, therefore, need to be excluded from the estimate of unmet need. It is debatable whether or not women who are amenorrheic should be excluded, especially from the design of services. Although these women are not currently exposed to the risk of pregnancy, they could get pregnant unless they start using contraception prior to or immediately following the resumption of menstruation.

The estimates of unwanted fertility by states are shown in table C.3. These estimates are based on the fertility experience of women during the three years prior to the survey and through a comparison of ideal versus actual family size. A birth is classified as unwanted if the number of children who are alive at the time of conception is greater than or equal to the ideal number of children.

Stated fertility preferences are subject to considerable rationalization; for example, respondents are reluctant to characterize previous births as unwanted or to express an ideal family size that is smaller than their existing family size. For this reason, actual levels of unwanted fertility may be substantially higher than those estimated here.

The level of unwanted fertility varies from about 0.2 births per woman in Kerala to 1.2 births in Haryana. The level of unwanted fertility even in three of the four Hindi-belt states - Bihar, Rajasthan, and Uttar Pradesh - is close to 1 birth per woman. Unwanted fertility as a percentage of the total fertility rate indicates that in all states, except Kerala, at least 20 percent of fertility is unwanted. Close to 30 percent of the total fertility rate is accounted for by unwanted childbearing in Assam, Haryana, Jammu, Punjab, and Tamil Nadu.

Wanted Fertility

Replacement fertility is reached when women on average have 2.1 births. The total fertility rate in India is estimated to be about 3.4 births per woman; this means that women are having approximately 1.3 births more than what is required to achieve replacement fertility. In India, 20 to 30 percent of the total fertility rate is accounted for by unwanted fertility. How close is wanted fertility to the replacement level?

The level of wanted fertility varies among states from about 1.8 births in Kerala to 3.8 births in Uttar Pradesh (table C.3). The level of wanted fertility is close to 2.1 - the level of replacement fertility - in ten states: Andhra Pradesh, Gujarat, Jammu and Kashmir, Karnataka, Kerala, Maharashtra, Orissa, Punjab, Tamil Nadu, and West Bengal. In these states, replacement fertility can be reached if unwanted childbearing is eliminated. The level of wanted fertility is between 2.5
### Table C.3. Unwanted and Wanted Fertility Rates in India, by States, 1992-93

<table>
<thead>
<tr>
<th>State</th>
<th>Total fertility rate</th>
<th>Wanted fertility rate</th>
<th>Unwanted fertility rate</th>
<th>Unwanted fertility as a percentage of total fertility rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>2.59</td>
<td>2.09</td>
<td>0.50</td>
<td>19</td>
</tr>
<tr>
<td>Assam</td>
<td>3.53</td>
<td>2.52</td>
<td>1.01</td>
<td>29</td>
</tr>
<tr>
<td>Bihar</td>
<td>4.00</td>
<td>3.18</td>
<td>0.82</td>
<td>20</td>
</tr>
<tr>
<td>Gujarat</td>
<td>2.99</td>
<td>2.33</td>
<td>0.66</td>
<td>22</td>
</tr>
<tr>
<td>Haryana</td>
<td>3.99</td>
<td>2.81</td>
<td>1.18</td>
<td>30</td>
</tr>
<tr>
<td>Jammu</td>
<td>3.13</td>
<td>2.21</td>
<td>0.92</td>
<td>29</td>
</tr>
<tr>
<td>Karnataka</td>
<td>2.85</td>
<td>2.18</td>
<td>0.67</td>
<td>23</td>
</tr>
<tr>
<td>Kerala</td>
<td>2.00</td>
<td>1.82</td>
<td>0.18</td>
<td>9</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>3.90</td>
<td>3.21</td>
<td>0.69</td>
<td>18</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>2.86</td>
<td>2.13</td>
<td>0.73</td>
<td>26</td>
</tr>
<tr>
<td>Orissa</td>
<td>2.92</td>
<td>2.32</td>
<td>0.60</td>
<td>20</td>
</tr>
<tr>
<td>Punjab</td>
<td>2.91</td>
<td>2.15</td>
<td>0.76</td>
<td>26</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>3.63</td>
<td>2.78</td>
<td>0.85</td>
<td>23</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>2.48</td>
<td>1.76</td>
<td>0.72</td>
<td>29</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>4.82</td>
<td>3.80</td>
<td>1.02</td>
<td>21</td>
</tr>
<tr>
<td>West Bengal</td>
<td>2.92</td>
<td>2.20</td>
<td>0.72</td>
<td>25</td>
</tr>
<tr>
<td>All India</td>
<td>3.39</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

— Not available.


To 3.0 in Assam, Haryana, and Rajasthan; it exceeds 3 births per woman in Bihar, Madhya Pradesh, and Uttar Pradesh. In these six states, the achievement of replacement fertility would require simultaneous efforts to reduce both unwanted and wanted fertility.

**Conclusions**

The data in this section suggest that a substantial proportion of women do not want another child for at least two years but are not doing anything to prevent it. At least 20-30 percent of the total fertility rate is accounted for by unwanted births, and the actual levels of unwanted fertility may be substantially higher. A detailed analysis is required to understand the reasons for unwanted childbearing and for unmet need for contraception. The Family Welfare Program clearly needs to do much more than it has done to help its clients to avoid unwanted childbearing. It is also clear that a substantial portion of fertility is due to wanted births, especially in the northern states. Improvements in reproductive health must be coupled with broader efforts to reduce the demand for large families.
D. Addressing Gender and Poverty Concerns in a Reproductive Health Program

MEERA CHATTERJEE

In most communities in India, prevailing social attitudes and practices result in women having lower social and economic status than men. This means that women have less access than men to goods and services that affect health, including food, health care, education, employment, and income. Clearly, poor people also have less access to these items than persons who are better off. Both the absolute deprivation facing poor families and the differential access within families between women and men undermine the power of poor women to make decisions, including decisions about preventive health and family welfare measures and about seeking curative care.

Some important behaviors result from the physical, social, and economic constraints that women face in obtaining health and family welfare services:

- Women bear their health problems in a "culture of silence" and do not seek timely health care.
- They often cannot travel beyond the area of their normal activities to obtain services.
- They usually cannot approach male health providers.
- In general, families, including the women themselves, spend less time, effort, and money seeking health care for women and girls than for men.

In addition to gender, poverty also limits access to the health service delivery system. The areas of the country with the most poor people also have the worst health conditions, least-developed health services, and poorest support systems, such as roads and communication networks. The poor also use fewer services, because constraints on their time heighten the opportunity costs of seeking services, and they often cannot meet the direct costs. The correlation of poverty with illiteracy may mean that they are unaware of the benefits of
preventive care or family welfare services. Surveys and studies indicate that the poor perceive that they are badly treated by service providers, because they are poor and illiterate. They are often neglected by outreach services, because they live in miserable conditions or in hamlets far from village centers. And, because they are not organized, they cannot demand services or service conditions that meet their needs. In short, social and physical distance between the poor and the providers of services constrains the reach and effectiveness of health services for this group.

The dual handicap of being female and of being poor renders many poor women powerless in other health- and fertility-related areas as well, such as their age at marriage, patterns of childbearing, or the care of infants and children. Furthermore, gender relations in Indian society also determine the sexual behavior of men and women. Patterns of socialization and the resultant sexual behavior are starkly different for boys than for girls, for young men than for young women, and for adult men than for adult women. Decisions about reproduction and contraception are made in this context. Indian women in the early reproductive years play a limited role in decisions about their own childbearing and family building. Male family members and mothers-in-law often make these decisions. Sexual behavior also affects the spread of sexually transmitted infections. The lack of control over sexual activity and poor access to health care expose women unfairly to reproductive tract morbidity and its serious consequences for reproductive health, well-being, and survival.

Over the years, the Family Welfare Program's concern with meeting demographic goals and targets has resulted in the service delivery system viewing women primarily as reproducers rather than as important producers in the Indian economy. This has led to two major lacunae in health and family welfare efforts. First, because the roles of women that are not related to reproduction have been obscured, inadequate emphasis has been placed on ensuring that women have access to general health services. This reflects the familial and societal constraints on women's access to health services and the limited attention paid to their morbidity and mortality from causes not related to reproduction. Furthermore, because women are viewed not as productive members of society but rather as reproducers only, health and family welfare efforts ignore women who are not in the reproducing category. These women include adolescent, unmarried, infertile, and postmenopausal women. This is important, given the high rates of morbidity, malnutrition, and mortality among females in India throughout the life cycle. While this greater burden of disease may stem from gender biases in household provision of nutrition and health goods, it could be addressed if the
The health system would provide services that are designed and implemented in ways that give all women ready access to them.

Although the Family Welfare Program (FWP) provides services related to maternity, an imbalance exists between the provision of maternal and child health services and family planning. Concerned with meeting immunization and contraceptive targets, personnel who provide maternal care as well as immunization and contraception pay the least attention to it. Although child health services such as immunization and oral rehydration have improved during the past decade, maternal health care is still weak. The Child Survival and Safe Motherhood (CSSM) Program has sought to rectify this, but the safe motherhood components still lag behind the child survival strategies. Thus, there is a need to strengthen maternal care services.

Indeed, even women who have physical and social access to health services may not use them because they are perceived to be poor quality, meaning that medicines are scarce or ineffective, that doctors, particularly female doctors, are not available, and that staff are rude, pay inadequate attention to the health needs of their clients, and pressure clients to accept family planning. In addition to being poor quality, health centers are located far from rural clients and have inconvenient hours of operation. Hence, supply-side improvements - better quality services - are necessary in order to improve use and effectiveness. Implementing the provider perspective of the reproductive health approach, which emphasizes individual needs and well-being, could bring about some of the necessary change.

Furthermore, the disjunction between family planning efforts and maternal care or other health services has diminished the potential of family planning to be delivered in a gender-sensitive and socially sensitive way that considers the needs of women and the aspirations of families, especially poor families. The constrained role of women in family planning decisions also has repercussions. In some cases, while family members may not wish to limit the number of children or to space births, women may yet see the benefits of these strategies. Hence, they may wish to seek contraceptive services discretely, to use methods without the knowledge of other household members or the involvement of their male partner, or to obtain an abortion. Health services thus need to be readily accessible to women, to be private, and to be safe.

Both women's health advocates and family planning policymakers point to the unmet demand that exists among Indian women for family planning. However, the two groups interpret this demand somewhat differently. Population planners view it largely as a programmatic gap that needs to be filled to meet population control objectives. This approach fails to emphasize the issue of choice. The
prevalent belief has been that women are not capable of making contraceptive choices and that the doctor or health worker knows what is best for them. This may be one reason underlying the paucity of choice and information provided by the FWP to women and the poor. In particular, although sterilization is a popular contraceptive method, more information is needed, and contraceptive methods other than surgery should be more widely available. The concept of reproductive choice, now being advocated by population planners as well, is central to a more client-oriented program. Given the unmet demand among Indian women for family planning, services that respond to the client's needs would go a long way to achieving the reproductive and health goals of individuals as well as the nation.

In contrast, advocates of women's health aver that women have a right to contraception in keeping with their right to control their bodies and their lives. They see women's need or demand for contraception in the context of India's prevailing sexual relations in which men have the dominant rights of sexual access to women. The FWP has not paid adequate heed to this context. Over time, the program has begun to focus on women, but it continues to pay inadequate attention to the appropriateness of this targeting given the weak social status of women and their often desperate economic and physical conditions. Following the "excesses" of the Emergency in 1975-76, which largely affected men, and the advent of mini-laparotomy and laparoscopic sterilization, the program has emphasized female sterilization over other methods. Although the next most favored method among family planning acceptors is the male condom, the program promotes female methods exclusively beyond this, namely the intrauterine device (IUD) and oral pills. Because the vast majority of family planning services have targeted women, women have been the main acceptors of family planning, which often has made them vulnerable to the inducement of incentives and to coercion. Over the past fifteen years, the program has neglected men by failing to motivate them to adopt male methods of contraception and, more generally, failing to provide them with reproductive health information and education. The reproductive health approach aims to rectify this imbalance between men and women by addressing, among other issues, gender roles and relationships and the development of sexuality and sexual relations.

Because the health system is part of society, many social biases affect the provision of services and women's use of them. Gender issues arise in the relationship between different groups of service providers and between providers and clients. The paucity of female doctors, which has the effect of limiting women's access to health care, is in part due to gender biases operating within the health system. The
medical profession and health administrations have been dominated by men, another factor contributing to the neglect of women's health and to the targeting of women for family planning. Coupled with the desire of medical systems to control technology, male domination has led to the system's preference for provider-controlled methods of family planning (sterilization, IUDs, and recent interest in implants and injectables) rather than user-controlled ones (condoms and female barrier methods). These aspects reinforce the health system's need to strengthen its orientation toward clients.

Another aspect of gender bias within the health system concerns the situation of female workers (mostly auxiliary nurse-midwives, female multipurpose workers, lady health visitors, health assistants, and health supervisors), who are mainly responsible for providing services to women. These workers have diverse job descriptions and shoulder the major burden of providing or supervising outreach care. Yet they are poorly supported in terms of mobility, security, and logistics. Their training is inadequate for the difficult tasks of motivation and systematic provision of the range of services that are within their ambit. They are sometimes too young to act as role models or even to deliver services with conviction. At the bottom of a hierarchy dominated by male doctors and administrators, they often lack an appropriate professional role model and may be socially or sexually vulnerable themselves. With greater professional and social support, auxiliary nurse-midwives could indeed reach their enormous potential to deliver sensitive and skilled services to the majority of needy women in the country. One way to increase support for these women workers would be to have more women managers in health administrations.

Policy Emphases Needed

These issues underscore the point that family welfare policy that targets women without considering the broad social relations within which they live will be unable to achieve family welfare goals. More socially aware policy would focus on creating conditions that improve women's access to health services. In addition to expanding reproductive choice, a larger gamut of measures is necessary to enhance women's well-being and their rights over their bodies and their lives. This range of strategies encompasses efforts to address the social conditions in which reproductive choices are made and to increase gender awareness in health and family planning programs. It involves addressing gender relations within society.

Furthermore, policies that only recognize women as reproducers will not promote a positive social perception of women. Even family
welfare policy must view women as the important producers they are in the Indian economy. The same women whose reproductive choice is the focus of family welfare policy are also key actors in development and, hence, clients of other development programs. Women's multiple roles make demands on their time, energy, and health, which often prevent them from using services. Thus, their health needs must be dealt with in an efficient and integrated manner. It is worth noting that the family welfare strategy laid out in the Action Plan focuses efforts on the ninety poorest performing districts in the country (India, MOHFW, 1992). These districts also have low female literacy, low sex ratios, high infant mortality rates, and high maternal mortality and general morbidity. Thus, an approach that integrates development provisions for women is desirable. Greater intersectoral coordination would help to meet health and development goals more effectively in these districts as well as elsewhere. Several government documents, including the recent Swaminathan committee report and India's country paper for the Cairo conference, cover the issue of intersectoral action (India, Planning Commission 1994; India, MOHFW 1994).

Three overarching issues will need to be dealt with by a reproductive health program. First, women's poor access to health and family welfare services (demonstrated by unmet demand and low use of health facilities) must be addressed by actions both on the demand and on the supply sides. Second, the role of men in reproduction and in decisions concerning health and family welfare must be enhanced. This includes the need to socialize adolescents and youth to achieve more equitable gender relations and roles in the longer term. Third, gender dynamics within the health system need to be developed to improve the system's responsiveness to the gender needs of clients and to achieve a more equitable participation of women service providers and managers at all levels. Indeed, the health system could be a role model for society in matters of gender equality.

Improving Women's Access

The majority of services in the package of essential reproductive and child health services will be delivered at the community level. Two sets of workers are critical to achieving this: (1) village-level workers such as dais, community health guides (where these exist), and anganwadi workers in areas covered by the Integrated Child Development Services scheme and (2) female multipurpose workers at subcenters. It is essential for the health and family welfare system to take stock at the local level of the availability of the different cadres
of workers and to rationalize their work so that all needy women receive the essential services. Where village-level workers exist, female multipurpose workers (or auxiliary nurse-midwives) could provide logistic support and supervision for services that could be rendered by basic health workers, while in other areas, auxiliary nurse-midwives would need to carry out more village-level tasks (with the possible assistance of women's groups). In either case, there is need to streamline the auxiliary nurse-midwife's own job description and routine. Along with this, her training and supervision need to be improved so that she can readily identify the most needy women and ensure that they receive the essential services in the appropriate sequence. Table D.1 provides details on the priority actions required.

Similarly, efforts need to be made to increase women's use of facilities at higher levels of the health and family welfare system, including primary health centers, community health centers, and subdistrict and district hospitals. In addition to improving the quality of services by ensuring adequate staffing, supplies, and equipment and by training providers to be sensitive to gender issues, a few other actions would facilitate women's use of these health centers. These include ensuring that health centers are open at times that reflect the local patterns of female activity, ensuring that female medical staff are available, and ensuring that women's health problems are handled in a holistic way.

The health and family welfare system should stress the need to ensure that reproductive health services are available and accessible to the poor in rural and urban areas, to the socially vulnerable, and to persons in remote habitations. This is essential to improve equity, including gender equity. Outreach services are required to provide care to women as close to their homes as possible and to provide families with information about health care and available services. Information and education efforts addressing health and reproductive matters must be directed at both men and women, in order to facilitate family decisions about seeking preventive or curative care. Workers should refer their clients to secondary or tertiary services whenever necessary and help them to reach these higher-level facilities. Providing women with good-quality services at all levels will motivate other women to use them as well.

An important approach to achieving wider coverage and increasing women's access to information and services is the formation of women's groups. Various women's groups in India have used the group approach to improve the reach and sensitivity of
services to women and their needs and problems. The Family Welfare Program has also initiated the formation of *mahila swasthya sanghs* for these purposes. The group approach can empower women to express their needs, enable providers to interact with large numbers of women simultaneously, and facilitate the sharing of information among members and thus the wider community. In addition to acquiring and sharing information about health needs and services, groups can help members to dispel their fears, to decide what is best for them, and to receive the social support and assistance they often need to go to health centers, particularly in times of emergency. Women's groups can also increase their members' awareness of their reproductive health rights and help them to exert those rights. They can play a role in eliminating violence against women, including domestic violence, rape, and prostitution. The groups and networks can also be the nuclei of community-based care, using village *dais*, village-level health workers, link workers, mobile clinics, and so on to provide additional support to the educational and referral activities of the health system.

It is important to recognize that by forming women's groups, health workers such as auxiliary nurse-midwives can work more efficiently. However, to keep their groups active, auxiliary nurse-midwives need to be trained in group formation and to receive educational materials and aids and supervision. In the formation of groups, an auxiliary nurse-midwife must receive the assistance of her supervisor (lady health visitor or health supervisor) and possibly also of other extension workers in the health and family welfare system (for example, block extension educators and male multipurpose workers) as well as the assistance of staff of other programs that foster the group approach (for example, the rural development or education departments). Alternatively, in areas where viable groups have been formed, the efforts of auxiliary nurse-midwives may follow those of other rural development workers. Establishing and continuing groups will require infusions of financial and material resources. In short, the formation of women's groups should not be seen as a luxury of service delivery. Instead, it has the potential to be an important strategy to tackle critical problems that afflict health and family welfare services, specifically their low use by and coverage of women.

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1 Because the patterns of formation and the number of groups vary in different programs, the spread of women's groups in the country is not known. This would need to be assessed for each area. Furthermore, the composition of these groups would need to be reviewed to see whether they include the women who most need reproductive health services.
It can also help to improve program efficiency. Although it is low cost in terms of inputs, the approach nevertheless requires careful planning, training, and managerial support in order to be effective.

By now, India has adequate experience with state-managed programs (such as the four-state mahila samakhya program and the Women's Development Program in Rajasthan) to be able to devise appropriate field approaches and training programs. Women's health groups can be expanded through cooperative structures and other networks. Their development can be fostered, or their functioning facilitated, by the "hybrid" approaches of private voluntary organizations involving voluntary link workers. Participatory approaches can be developed to monitor and evaluate services to make programs more responsive to users' needs, incorporating gender-related indicators to measure the equity and effectiveness of the reproductive health program. Indeed, women's groups are promising monitors of the proposed reproductive and child health program, because they are the main beneficiaries of its services. Furthermore, mobilizing women around their collective needs and interests is a way to promote gender equity. By fostering group formation and supporting innovative efforts to address women's health, development, and rights more broadly, health policymakers can play an important role in women's empowerment.

Enhancing the Role of Men

The Family Welfare Program has downplayed the role of men in the recent past, although they are key actors in the activities and decisions affecting family welfare. The family welfare system needs to address this gender imbalance in a number of ways. First, it needs to give men information about family health needs, their wives' health needs, the reproductive health of both men and women, child health care, and so forth. Second, it must motivate men to take responsibility for obtaining preventive and curative care, including family planning. Third, in the arena of family planning, it needs to propagate male methods more actively and systematically, making services widely available and accessible to men. Additional male methods need to be developed and made available. Fourth, and perhaps most important, the system needs to focus on young males in an effort to inculcate responsible sexual behavior and improve gender relations.

A basic tenet of the reproductive health approach is that reproduction should be based on joint decisionmaking between husband and wife. Even though the costs of pregnancy are borne by women, responsibility for planning or averting births and for parenthood should be shared by men and women. Hence, couples
<table>
<thead>
<tr>
<th>Issues to address</th>
<th>Area of action</th>
<th>Desired outcomes</th>
<th>Priority actions</th>
<th>Feasibility</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need to improve the access of women to health and family welfare services, as</td>
<td>Subcenter services management of auxiliary nurse-midwives' outreach, training,</td>
<td>Higher coverage of poor women (measure improvements continuously)</td>
<td>Develop criteria and method for client prioritization</td>
<td>High</td>
<td>Zero</td>
</tr>
<tr>
<td>demonstrated by unmet need and low use of health facilities</td>
<td>and supervision</td>
<td></td>
<td>Streamline work routines (task prioritization)</td>
<td>High</td>
<td>Zero</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Train auxiliary nurse-midwives to manage their work (preservice training and supervision)</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Develop supervision system based on the above</td>
<td>Medium</td>
<td>Zero</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Train auxiliary nurse-midwives in client orientation and in communications (preservice and in-service training)</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Train auxiliary nurse-midwives and lady health visitors on group formation, with reproductive health topics, calendar, and so forth</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Train and motivate auxiliary nurse-midwives and lady health visitors to form groups</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Primary health center and community health center services (beyond basic staffing,</td>
<td>Greater use of facilities by women (continuous measurement)</td>
<td>Revise clinic hours of operation to suit local patterns of female activity</td>
<td></td>
<td>High</td>
<td>Zero</td>
</tr>
<tr>
<td>equipment, and supplies)</td>
<td></td>
<td>Ensure availability of female medical staff</td>
<td></td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Take a holistic approach to women's health and reproductive health needs</td>
<td></td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Community organization: formation of women's groups</td>
<td>Formation of women's groups and their interaction with health and family welfare personnel and wider village community</td>
<td>Develop and disseminate basic materials for auxiliary nurse-midwives and lady health visitors on group formation, with reproductive health topics, calendar, and so forth</td>
<td></td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Train and motivate auxiliary nurse-midwives and lady health visitors to form groups</td>
<td></td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Issues to address</td>
<td>Area of action</td>
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<td>Priority actions</td>
<td>Feasibility</td>
<td>Cost</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Increased knowledge among women members and community and action for health (use</td>
<td>Increased coverage, work achievement, and efficiency</td>
<td>Form groups and provide appropriate material and financial support</td>
<td></td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>of auxiliary nurse-midwives</td>
<td>of auxiliary nurse-midwives</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Need to improve the participation of men in family planning and their knowledge</td>
<td>Male worker roles, management, training, and supervision</td>
<td>Greater male acceptance of vasectomy and effective use of contraceptives</td>
<td>Train male multipurpose workers, health supervisors, block extension educators, and doctors (1) to perceive and communicate men's responsibilities and roles, (2) to provide information to men on family planning, reproductive health, women's health, and so forth, (3) to motivate men for responsible sexual behavior and acceptance of family planning (their own or their wife's), and (4) to provide services with choice, access, and hygiene</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>of reproductive health and women's health</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Greater male knowledge of reproductive and women's health</td>
<td></td>
<td>Increase the provision of vasectomy and contraceptive choice</td>
<td>Increase the provision of vasectomy and contraceptive choice</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Shared decisionmaking between husbands and wives</td>
<td></td>
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<tr>
<td>Lower unmet demand among women</td>
<td></td>
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</tr>
<tr>
<td>Issues to address</td>
<td>Area of action</td>
<td>Desired outcomes</td>
<td>Priority actions</td>
<td>Feasibility</td>
<td>Cost</td>
</tr>
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<td>-------</td>
</tr>
<tr>
<td>Prevention of transmission of HIV</td>
<td>Information, education, and communication</td>
<td>Preclude messages that emphasize male roles and responsibilities and acceptance of family planning</td>
<td>Convey messages that emphasize male roles and responsibilities and acceptance of family planning</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Use a range of media</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Need to socialize male and female</td>
<td>Information, education, and communication</td>
<td>Early intervention for the development of sexuality, sexual relations, responsible sexual behavior, gender relations, prevention of sexual abuse, reproductive health, unsafe abortions, use of family planning, responsible parenthood</td>
<td>Aim messages at educating youth about the development of sexuality, sexual relations, responsible sexual behavior, gender relations, prevention of sexual abuse, reproductive health, unsafe abortions, use of family planning, responsible parenthood</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>adolescents</td>
<td></td>
<td></td>
<td>Use a range of media</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Need to sensitize the family welfare system to gender</td>
<td>Training</td>
<td>Improved knowledge and positive perceptions among health and family welfare workers and managers and better ability to carry out actions listed above</td>
<td>Develop gender training modules for different cadres of health and family welfare personnel and managers at all levels to change attitudes by (1) informing them about the situation of poor and female clients, (2) creating a positive image of women, (3) perceiving roles of males and females (gender roles) and differential status, and (4) appreciating the situation of women workers and seeking ways to rectify imbalances</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Issues to address</td>
<td>Area of action</td>
<td>Desired outcomes</td>
<td>Priority actions</td>
<td>Feasibility</td>
<td>Cost</td>
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</tr>
<tr>
<td>Management and support of auxiliary nurse-midwives</td>
<td>Improved status and efficiency of auxiliary nurse-midwives</td>
<td>Offer courses for all cadres</td>
<td>Medium</td>
<td>Medium</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Rationalize workload</td>
<td>High</td>
<td>Zero</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Improve mobility (transport) and security (residence)</td>
<td>Medium</td>
<td>High</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Enhance status</td>
<td>Medium</td>
<td>Zero</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improve training (preservice) and supervision</td>
<td>Medium</td>
<td>Medium</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Remove targets and provide incentives</td>
<td>Medium</td>
<td>Zero</td>
<td></td>
</tr>
<tr>
<td>Recruitment and career structure of doctors</td>
<td>Greater access of female clients to female doctors</td>
<td>Actively recruit more female doctors</td>
<td>Low</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td></td>
<td>More women in management positions to accelerate gender sensitization in the long term</td>
<td>Provide perquisites for rural postings (housing, transport) preferentially to women</td>
<td>Low</td>
<td>Medium</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ensure promotion through affirmative action to achieve a critical mass of female managers at intermediate and senior levels</td>
<td>Low</td>
<td>Low</td>
<td></td>
</tr>
</tbody>
</table>
should be in a position to select the most appropriate method for them at different stages of their reproductive and family lives. This entails giving information about male as well as female methods and dispelling fears about male methods such as vasectomy. This effort could be undertaken by the large number of male workers in the health and family welfare system - male multipurpose workers, block extension educators, male health assistants and supervisors, and doctors. Furthermore, men must receive appropriate services. Male sterilization is cheaper, simpler, and safer than female sterilization. Although the use and effectiveness of condoms is lower than that of most other methods, they help to prevent sexual transmission of the human immunodeficiency virus (HIV) and other infections. The approaches to reaching men with services are analogous to those for reaching women: men require choice, accessible services (in terms of location, timing, and cost), and information about them. Vasectomies must also be done in hygienic conditions and be more widely available at health centers, rather than at camps. Additional research on male methods is required to expand the range of services available for men.

Information, education, and communication efforts can play an important role in increasing the participation and responsibility of men in the family planning arena, thus helping to achieve greater gender equity. A major problem underlying unmet demand has been men's resistance to family planning, both for themselves and for their wives (rather than women's lack of motivation). Efforts need to stress that men share responsibility for family planning, for reproductive health, and for women's health. They must promote the principle of responsible fatherhood. Because male sexual patterns are often established before marriage, including their use of contraception, educational programs should be launched for young people, particularly males, to encourage responsible sexual behavior and the use of measures to prevent the spread of HIV and sexually transmitted infections. Adolescents should receive information and counseling on human sexuality, gender relations, prevention of sexual abuse, reproductive health, unsafe abortion, and responsible parenthood, including family planning information and services for persons who are sexually active.

Increasing Gender Sensitivity

In order to carry out the wide mandate of the reproductive health approach, workers in the health system - both women and men - who
are most in touch with families should be trained in communication and counseling. They should also be sensitized to gender issues so that they can deal effectively with the needs of women clients and with sensitive matters such as sexual behavior, reproductive infections, and family planning. This entails educating workers about gender and poverty issues: the needs of poor women, the problems they face, and the differentials that exist in health and survival between men and women and between social and economic groups. The workers themselves must have a positive image of women and be trained in how to deal with their women clients sensitively. Health staff, including male and female doctors and managers at all levels, need to have a fuller appreciation of gender issues in society. This includes a sociocultural appreciation of women’s health (not just a medical one) and an understanding of the social context of motherhood.

It is also necessary for health managers to appreciate the needs of women workers in the health system itself. In particular, auxiliary nurse-midwives in the field and lady health visitors at health centers need to be treated with dignity and given a status that encourages them to deal with their clients sensitively. Improving the working conditions of women workers who are at the bottom of the health system hierarchy - including rationalizing their workloads, increasing their mobility and security, enhancing their skills, and removing the burden of targets - would enhance the overall effectiveness of the health and family welfare system. Furthermore, staff assigned to work together at health centers or in the field (for example, male and female multipurpose workers) must be trained and motivated to work in ways that support and mutually reinforce each other and thereby maximize coverage of their clients.

For the Family Welfare Program to understand women’s views about choice, accessibility, or program responsiveness, to integrate reproductive health into women’s lives, or to sustain improvements in the conditions of women workers, many more women are needed in vital decisionmaking roles at every level. Currently, besides being clients, women are represented in the health and family welfare system primarily at the field level (lady health visitors and auxiliary nurse-midwives). Female doctors, and some women are also present at the intermediate levels, especially the district level where much program planning occurs. To increase institutional responsiveness to women’s needs, many more women must be recruited as doctors, promoted to managers, and involved in decisionmaking at the program level and
in policymaking. States could give female doctors perquisites on a preferential basis if they agree to work in rural areas or could recruit them from the private sector on part-time contracts. An affirmative action approach needs to be followed to ensure adequate and not just token numbers of women, because critical mass is important to bringing about change for gender equity.
E. Reproductive and Child Health Services

SAROJ PACHAURI

The table on the following pages presents the package of essential services needed at different levels of India's system of health services.
Table E.1. Essential Reproductive and Child Health Services at Different Levels of the Health Service System in India

<table>
<thead>
<tr>
<th>Health interventions</th>
<th>Community level</th>
<th>Subcenters</th>
<th>Primary health centers</th>
<th>First referral units and district hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevention and management of unwanted pregnancy</td>
<td>1. Sexuality and gender information, education, and communication</td>
<td>No. 1 as in Community level</td>
<td>Nos. 1 - 7 and</td>
<td>Nos. 1 - 10 and</td>
</tr>
<tr>
<td>2. Community mobilization and education for high-risk adolescents, newly married youth, men, and women*</td>
<td>2. Providing oral contraceptives (Ocs)* and condoms</td>
<td>8. Performing tubal ligation by mini laps on fixed dates*</td>
<td>11. Providing services for medical termination of pregnancy in the second trimester (up to 20 weeks) where indicated</td>
<td></td>
</tr>
<tr>
<td>4. Motivating referral for sterilization.</td>
<td>4. Counseling and referral for medical termination of pregnancy.</td>
<td>10. Providing first-trimester medical termination of pregnancy up to 8 weeks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Social marketing of condoms and oral pills through community sources (oral pills to be</td>
<td>5. Counseling/management/referral for side effects, method-related problems, change of method where indicated</td>
<td>* PHC should have facilities for tubal ligation and mini laps including OT</td>
<td></td>
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<tr>
<td></td>
<td>6. Add other methods to expand choice.</td>
<td></td>
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<tr>
<td></td>
<td>7. Providing Treatment for minor ailments and referral for problems.</td>
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</tr>
</tbody>
</table>
Table E.1 (Continued)

<table>
<thead>
<tr>
<th>Health interventions</th>
<th>Community level</th>
<th>Subcenters</th>
<th>Primary health centers</th>
<th>First referral units and district hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>distributed through health personnel including GPs to women who are starting pills for the first time).</td>
<td>condoms through ANM may be explored by permitting her to retain the money.</td>
<td></td>
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<tr>
<td>6. Free supplies to health services.</td>
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<tr>
<td>7. Motivating referral for sterilization.</td>
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<tr>
<td>* to be piloted</td>
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<td></td>
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<tr>
<td>** Panchayats to distribute only condoms</td>
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<tr>
<td>Maternity care</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>*Prenatal services</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Health interventions</td>
<td>Community level</td>
<td>Subcenters</td>
<td>Primary health centers</td>
<td>First referral units and district hospitals</td>
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<tr>
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</tr>
<tr>
<td>support for transport referral and blood transfusion.</td>
<td>6. Early detection of high risk factors and maternal complications and prompt referral.</td>
<td>necessary</td>
<td>* Training for laboratory technicians, equipment and reagents required.</td>
<td></td>
</tr>
<tr>
<td>3. Counseling/education for breast-feeding, nutrition, family planning, rest, exercise, and personal hygiene, etc.</td>
<td>7. Referral of high risk women for institutional delivery</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Delivery planning</td>
<td>8. Treatment of malaria (facilities including drugs to be made available at subcentres)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* The need for IEC support and establishment of FRUs.</td>
<td></td>
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</tr>
</tbody>
</table>

**Delivery services**

1. Early recognition of pregnancy and its danger signals (rupture of membranes of more than 12 hours duration, prolapse of the cord, hemorrhage)
2. Conducting clean deliveries with delivery
3. Nos. 1 - 4 and
4. Supervising home delivery
5. Nos. 1 - 7 and
6. Modified partograph
7. Nos. 8 - 10
8. Treatment of severe sepsis
9. Repair of episiotomy and perineal tears
10. Delivery of referred cases
11. Nos. 11 and
12. Treatment of high-risk cases
<table>
<thead>
<tr>
<th>Health interventions</th>
<th>Community level</th>
<th>Subcenters</th>
<th>Primary health centers</th>
<th>First referral units and district hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>kits by trained personnel.</td>
<td></td>
<td></td>
<td></td>
<td>13. Services for obstetrical emergencies, anesthesia, cesarean section, block transfusion through close relatives, linkages with blood banks and mobile services</td>
</tr>
<tr>
<td>3. Detection of complications, referral for hospital delivery</td>
<td></td>
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<tr>
<td>4. Providing transport for referral.</td>
<td></td>
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<tr>
<td>5. Resuscitation for asphyxiated new born.</td>
<td></td>
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</tr>
<tr>
<td><strong>Postpartum services</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Breast-feeding support</td>
<td>Nos. 1 - 5 and</td>
<td>Nos. 1 - 5 and</td>
<td>Nos. 1 - 5 and</td>
<td>6. Management of referred cases *</td>
</tr>
<tr>
<td>2. Family planning counseling</td>
<td>6. Referral for complications</td>
<td>6. Referral to FRUs for complications after starting an I.V. line and giving initial dose of antibiotics (Equipment for resuscitation of new born)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Resuscitation for asphyxia of the newborn</td>
<td></td>
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</tr>
<tr>
<td>5. Management of neonatal hypothermia</td>
<td></td>
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</tr>
<tr>
<td>6. Early recognition of post partum sepsis and</td>
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</tr>
<tr>
<td>Health interventions</td>
<td>Community level referral.</td>
<td>Subcenters</td>
<td>Primary health centers</td>
<td>First referral units and district hospitals</td>
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<tr>
<td><strong>Child survival</strong></td>
<td></td>
<td></td>
<td></td>
<td>and hypothermia. These include a resuscitations bag and mask and radiant warmers</td>
</tr>
<tr>
<td>1. Health education for breast-feeding, nutrition, immunization, utilization of services, etc.</td>
<td></td>
<td>Nos. 1 - 6 and</td>
<td>Nos. 1 - 8 and</td>
<td>Numbers 1 - 9 and</td>
</tr>
<tr>
<td>2. Detection and referral of high-risk cases such as low birth weight, premature babies, babies with asphyxia, infections, severe dehydration, and acute respiratory infections (ARI), etc.</td>
<td></td>
<td>7. Treatment of dehydration and pneumonia and referral of severe cases</td>
<td>9. Management of referred cases</td>
<td>10. Handling of all paediatric cases including encephalopathy</td>
</tr>
<tr>
<td>3. Immunization by ANM</td>
<td></td>
<td>8. First aid for injuries, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Vitamin A supplementation by</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Health interventions</td>
<td>Community level</td>
<td>Subcenters</td>
<td>Primary health centers</td>
<td>First referral units and district hospitals</td>
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</tr>
<tr>
<td><strong>ANM</strong></td>
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<tr>
<td>5. Detection of pneumonia and seeking early medical care by community and treatment by ANM</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Treatment of diarrhoea cases and ARI cases.</td>
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<tr>
<td><strong>Management of RTIs/STIs</strong></td>
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</tr>
<tr>
<td>2. Condom distribution</td>
<td>4. Partner notification/referral</td>
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</tbody>
</table>
F. Management of Reproductive Tract and Sexually Transmitted Infections

SAROJ PACHAURI

The management of reproductive tract infections, including those that are sexually transmitted, is related to the management of key health programmes, such as those concerned with family planning, child survival, women's health, safe motherhood, and prevention of human immunodeficiency virus (HIV). Reproductive tract and sexually transmitted infections affect the success of each of these initiatives, and conversely, these initiatives present an opportunity for including interventions that address their control.

Although the management of reproductive tract and sexually transmitted infections has been the traditional responsibility of the Department of Health, it makes good programmatic and epidemiological sense to include their prevention and control in family planning and maternal and child health services. First, these services require access to the same client groups: sexually active populations. Second, providers of these services require similar skills for addressing the needs of their clients. Third, both aim to modify sexual behavior. Fourth, spermicides, condoms, and other barrier methods are common technologies presently available for the prevention of both sexually transmitted infections and unwanted pregnancies. And finally, since such infections can seriously affect the health of the mother and the newborn child, their diagnosis and management during pregnancy are particularly important. The Department of Family Welfare has included the management of reproductive tract and sexually transmitted infections in the Family Welfare Program in an effort to improve reproductive health.

Prevalence in India

Based on a number of prevalence surveys and a review of the available scientific literature, the annual incidence of reproductive tract and sexually transmitted infections in India is estimated at 5 percent or approximately 40 million new infections every year. Although research data are limited, studies show that the presence of
positive syphilis serology among women attending antenatal clinics ranges from 1 to 5 percent in different cities. In a study in Jaipur of women attending antenatal clinics, 14 percent had candidiasis, 13 percent had trichomoniasis, 2 percent had gonorrhea, and 2 percent had syphilis (van Dam, personal communication, 1995).

In India, awareness of reproductive and sexual health is generally low among women, whose access to nonstigmatizing health care services is severely restricted. This is particularly relevant, since the burden of direct and long-term morbidity related to reproductive tract and sexually transmitted infections is borne largely by women: women suffer most of the complications, many more women than men suffer infections, and women frequently suffer asymptomatic or mildly symptomatic infections. As many as 50 percent of women with gonococcal infection are asymptomatic, and for infections with chlamydia, this percentage is even higher (van Dam 1994).

Reproductive and Child Health

While HIV infection is fatal, other infections may cause infertility, chronic pelvic inflammatory disease, cervical cancer, ectopic pregnancy, and other serious problems. Reproductive tract and sexually transmitted infections can cause fetal death or affect child survival by causing preterm deliveries of low birthweight infants or by passing on infection during delivery. For example, the most serious consequence of gonorrhea and chlamydia in pregnant women is the occurrence of ophthalmia neonatorum, a severe eye infection that can cause blindness in newborns. The prevalence of gonococcal infection in pregnant women in developing countries is reported to be between 0.5 and 22 percent. At least 30 percent of infants exposed to the infection during birth develop gonococcal eye infections if prophylaxis is not given (World Health Organization 1984). When the mother is infected with both gonococcus and chlamydia, the gonococcal transmission rate to the newborn is significantly higher—68 percent compared with 31 percent (Schultz, Schulte, and Berman 1992). Routine antibiotic prophylaxis for this condition in the newborn, which costs only $1.40 per case averted, is recommended rather than screening and treating all pregnant women (Schultz, Schulte, and Berman 1992).

There are many areas of strategic interdependence between initiatives concerned with morbidity caused by reproductive tract infections and family planning programmes. Reproductive tract infections may decrease acceptance and continuation of contraceptive methods, either directly, as when the client believes that the symptoms of infection are a side effect of the method used, or indirectly, as when the client becomes afraid to limit or delay fertility because frequent complications from infections prevent healthy
childbearing. As a result, by compromising fertility, pregnancy outcome, and child survival, reproductive tract infections may decrease the demand for contraception. Real or perceived association between infections and contraceptive methods, particularly in settings where women suffer from high levels of morbidity from reproductive tract infections and where family planning programmes do not have the facilities for screening and treating them, can seriously jeopardize the use of methods such as the intrauterine device (IUD). Although screening potential IUD acceptors for reproductive tract infections is recommended for all programmes and is routinely carried out in industrial countries, it is not part of family planning services provided in resource-poor settings where the risks are high and where such screening is most needed. As India's government has recognized, programmes addressed to the care of reproductive tract infections may be essential to the success of family planning programmes.

HIV/AIDS

The acquired immunodeficiency syndrome (AIDS) epidemic has emphasized the urgent need for policy, research, and education for the prevention and control of reproductive tract and sexually transmitted infections. It has highlighted the importance of sexual transmission in the spread of infection as well as the absence of programmes for management and prevention of such infections in many parts of the world (Piot and Rowley 1992). During the past decade, research on the relationship between HIV and other reproductive tract and sexually transmitted infections produced several important findings. Studies show that the presence of other reproductive tract and sexually transmitted infections may facilitate the sexual transmission of HIV, which partly explains why HIV is spreading at different rates around the world (Piot and Rowley 1992). Moreover, HIV may alter not only the natural history of reproductive tract and sexually transmitted infections but also their response to treatment (Laga 1992).

The Syndromic Approach for Managing Sexually Transmitted Infections

The World Health Organization has developed a simplified syndrome-based approach to managing patients with sexually transmitted infections that provides health workers with a tool to improve the diagnostic process (World Health Organization 1991a). Syndromic management identifies consistent groups of symptoms and easily recognized signs - syndromes - and provides treatment that deals with the majority of organisms responsible for producing each
syndrome. The process has proved to be both valid and feasible, resulting in adequate treatment of infected cases of urethral discharge in men and genital ulcers in men and women. Further, it is inexpensive, simple, and very cost-effective. The World Health Organization has also developed syndromic case management for women with or without symptoms of vaginal discharge. Trials are under way to determine the sensitivity and specificity of such an approach, which is based on assessment of the risk that the patient is infected.

Cost-Effectiveness of Interventions

In the past, because of the complexity of diagnosis and the expense of treatment, interventions for sexually transmitted infections appeared to be beyond the reach of the majority in developing countries. However, recently proposed alternatives that simplify case management of sexually transmitted infections, such as using a syndromic approach for diagnosis and algorithms for treatment (World Health Organization 1991a), could make selected interventions feasible and affordable at the level of primary health care, particularly if the cost of early diagnosis and treatment is compared with that of attempts to treat complications and sequelae of sexually transmitted infections (Piot and Rowley 1992).

The World Health Organization convened a working group to examine cost-effective interventions for reducing maternal and infant morbidity. It concluded that five cost-effective interventions are available for handling infectious morbidity related to reproductive tract infections: prophylaxis against gonococcal ophthalmia neonatorum (eye infections in the newborn), prenatal screening and treatment for maternal syphilis, training of traditional birth attendants, hepatitis B immunization of infants, and immunization of mothers with tetanus toxoid to prevent neonatal tetanus (World Health Organization 1991b).

Treating sexually transmitted infections costs $1 to $3 per disability-adjusted life year (DALY) saved. Managing a case of syphilis results in "purchasing" a DALY for $0.10 to $40, depending on the prevalence of disease and the strategy used to detect the infection. Case management of chlamydial infection and gonorrhea is also highly cost-effective, especially if the intervention is targeted at a high-prevalence group, with costs per DALY saved ranging from $10 to $40 (World Bank 1993). Over and Piot (1993) conclude that a program of treatment can be highly cost-effective if it is targeted at high-prevalence groups. They recommend that outside such groups, case management strategies should focus on improving the diagnosis of cases in order to reduce the cost per case identified. Women who attend family planning and maternal and child health clinics or
primary health care facilities should be a prime target group for such case-finding programmes.

Schultz, Schulte, and Berman (1992) have estimated the cost of testing 1,000 pregnant women at 10 percent seroprevalence to be $600. If the intervention is perfectly effective, it could prevent seventeen spontaneous abortions, nineteen perinatal deaths, and fourteen births of syphilitic infants for every 1,000 pregnant women. The cost of testing 1,000 pregnant women at 1 percent seroprevalence is $420,000, and in this case, the intervention would prevent two spontaneous abortions, two perinatal deaths, and two births of syphilitic infants (Schultz, Schulte, and Berman 1992). However, such a program cannot be expected to be perfectly effective, because women may attend prenatal clinics late in the pregnancy, sporadically, or never, and also because some women and their spouses may not be treated. Moreover, the screening test is not 100 percent sensitive and specific.

Schultz, Schulte, and Berman (1992) compare the seriousness of problems caused by reproductive tract infections in developing countries with that of infectious diseases currently addressed by donor agencies. They conclude that not only are the problems caused by reproductive tract infections at least as serious as those caused by the immunizable diseases currently addressed, but several interventions to treat them are also more cost-effective. The cost per child of achieving full immunization in developing countries is estimated to vary between $5.00 and $15.00 (EPI 1985). The cost-effectiveness of preventing immunizable diseases is estimated to range from $40.00 to $150.00 per adverse outcome averted. By comparison, in many locations in the developing countries, $1.40 would avert one case of gonococcal neonatorum and $12.00 would avert an adverse outcome associated with syphilis during pregnancy. Although women's health benefits are not computed in these cost-effectiveness analyses, benefits to the woman would enhance the attractiveness of the interventions proposed (Schultz, Schulte, and Berman 1992).

Recommendations for Managing Reproductive Tract and Sexually Transmitted Infections

Reproductive tract and sexually transmitted infections are currently treated in health centers in urban areas as well as at district and subdistrict hospitals and at community health centers in rural areas. In most cases, in government and private clinics, these diseases are treated symptomatically by physicians. With the serious threat of AIDS, the Health Department of India’s Ministry of Health and Family Welfare has recently begun to strengthen programmes for the prevention and management of sexually transmitted infections. Because similar strategies are used to manage both types of infections,
it is recommended that reproductive tract infections be included in the government program. What is now required is to organize these services more systematically, to upgrade laboratory diagnosis and treatment facilities, and to establish effective referral linkages with primary health centers and subcenters. The objective is to interrupt the transmission of reproductive tract and sexually transmitted infections and prevent their occurrence and consequences. Strategies for control include health education, counseling, disease detection through screening, case finding, and diagnosis through clinical and laboratory procedures, treatment of cases, and management of sexual contacts.

Because the training of service providers at various levels of the health delivery system is essential to implementing these services successfully, the need for training should be assessed and training programmes should be designed. Health workers at all levels should be trained to recognize the symptoms of reproductive tract and sexually transmitted infections and to use appropriate treatment and referral protocols. Health workers should also be trained to counsel clients on the use of condoms, to identify sexual contacts, and to assist clients to notify partners. The National AIDS Control Organization has developed some training modules, and training programmes for service providers have recently been initiated. These training programmes should be systematically assessed and expanded, and outreach services should be strengthened.

Service providers at various levels of facility will require different skills. For example, an auxiliary nurse-midwife at the sub-center could be trained to screen clients for various family planning methods, recognize contraindications, refer clients for the diagnosis and management of specific problems, and provide counseling and follow-up services. Although an auxiliary nurse-midwife would not be trained to diagnose specific reproductive tract and sexually transmitted infections, she could be trained to suspect the presence of an infection given the client's history and a clinical examination (such as the presence of a vaginal discharge) and then to refer suspected cases for diagnosis and treatment. In some private programmes, auxiliary nurse-midwives and even traditional birth attendants have been successfully trained to treat the symptoms of reproductive tract infections (Bang 1994). Pilot projects should be undertaken in government programmes to assess the feasibility and effectiveness of training auxiliary nurse-midwives to use the syndromic approach for the diagnosis and management of selected infections at the subcenter level.

Routine screening and treatment of syphilis during prenatal care is recommended. The cost-effectiveness of treating syphilis varies greatly, depending on its prevalence, assumptions about the risk of transmission, and the case-detection strategy used. Nevertheless,
screening for syphilis using the rapid plasma reagin test, which provides immediate results, followed by treatment with penicillin (where indicated), is a simple and inexpensive approach that has significant payoffs for infant health (Schultz, Schulte, and Berman 1992).

It is recommended that services for sexually transmitted infections be provided initially to symptomatic women, but, depending on the availability of simple diagnostic tools, eventually to asymptomatic women as well (van Dam 1994).

Management of sexually transmitted infections using the syndromic approach should be tested and evaluated at primary health centers and sub-centers. Syndrome-based treatment of both urethral discharge (most commonly caused by gonorrhea and chlamydia) and genital ulcers in symptomatic men is recommended. Symptomatic women with genital ulcers or suspected pelvic inflammatory disease should also be diagnosed and treated using clinical algorithms. By following the step-by-step guidelines developed by the World Health Organization, health workers can match patients symptoms with those for locally prevalent reproductive tract and sexually transmitted infections and provide treatment accordingly. In the better developed regions and states, it is recommended that primary health centers be upgraded to provide laboratory services for the diagnosis and treatment of selected infections such as syphilis, gonorrhea, trichomonas vaginitis, candida albicans, and bacterial vaginosis and that the experience be carefully evaluated. At present, the World Health Organization recommends that protocols for managing sexually transmitted infections be provided at the level of the primary health center (World Health Organization 1991a).

Comprehensive services for diagnosing and managing reproductive tract and sexually transmitted infections should be organized at district hospitals and referral centers including medical colleges and other selected institutions. Drugs for treating sexually transmitted infections should be included in the national list of essential drugs, and drug distribution should be subsidized and encouraged through commercial channels. There is an urgent need to implement pilot projects to assess the feasibility, effectiveness, and cost of adopting the syndromic approach in different settings.
During the past two decades, the field of information, education, and communication with respect to family planning and health has evolved from presenting general information to presenting information on specific services and behavioral changes. Today information, education, and communication may be defined as the process of formulating and disseminating messages that make individuals and communities aware of health and reproductive issues and of the strategies and behaviors that can enable them to attain related goals.

Although information, education, and communication activities have been a component of India's Family Welfare Program (FWP) for several decades and have generated awareness of both modern contraception and immunization, they have done little to change behavior, which is separated from knowledge by a substantial gap. The National Family Health Survey (NFHS) found that in 1992-93, although 96 percent of currently married women knew of modern contraceptive methods, only 42 percent of couples used modern methods and that 31 percent of women who did not want any more children were not using contraception (International Institute for Population Sciences 1994a). Similarly, in spite of a high level of awareness of childhood immunization, full coverage rates are relatively low.

Funding for information, education, and communication constitutes between 2.8 and 3.2 percent of the total national budget for family welfare. Effective interventions, especially those involving community groups at the district and village levels, and intensive area-based activities are difficult to implement given the inordinately low budget. Thus enhanced funding is one prerequisite for more effective efforts to introduce reproductive health services and encourage their use.

If the FWP is to adopt a reproductive health approach and expand the range of services, information, education, and communication will
have to play a central role. This section reviews the information, education, and communication program of the Ministry of Health and Family Welfare, identifies its limitations, and discusses how to strengthen its support of reproductive health.

Limitations of Information, Education, and Communication Activities

The plans of the Ministry of Health and Family Welfare articulate broad goals such as increasing public acceptance of the norm of small families. Although they identify the channels of communication to be used (radio, television, print, folk media, interpersonal communication) and the general content of messages to be disseminated (family planning, maternal and child health, the status of women, adolescent fertility), they are nevertheless an inadequate guide for implementing communication activities (India, MOHFW 1993, 1994).

A major problem in reviewing the effectiveness of information, education, and communication is the paucity of client-based evaluation of the program (Bhushan 1991). However, an analysis of program documents suggests fundamental, persistent areas of weakness. First, target audiences are not defined with clarity and specificity (Podol and others 1993). Second, FWP communication strategies adopt a top-down approach. Third, messages are not monitored systematically to determine whether they are acceptable to target audiences (Bhushan 1991). Fourth, there is no system of tracking changes in knowledge, attitudes, beliefs, and practices to provide feedback to persons implementing the program. Lacking routine communication needs assessments, communications programmes have no way to take into account the knowledge, attitudes, beliefs, and practices of target audiences. Consequently, activities do not address the specific needs of different types of audiences (adolescents, for example). Without a tracking system, opportunities are also lost for correcting the content of messages, the channels used, and the strategies for dissemination once a program is under way.

Even in Bank-supported projects, only limited attention has been given to technical aspects of specific components of information, education, and communication. Government program managers have concentrated on disseminating centrally produced informational materials to the periphery rather than on facilitating change in knowledge, attitudes, beliefs, and practices.
Moving the FWP toward a client-oriented reproductive health approach will have major implications for information, education, and communication. As is evident from the essential reproductive health package proposed in chapter 3 of the main volume, the range of communication activities that must be addressed are considerably broader in scope than before. In addition to the prevention of unwanted pregnancies and the promotion of childhood immunization, the issues of safe abortion, medical termination of pregnancy, safe motherhood, prevention and management of reproductive tract and sexually transmitted infections, child survival, as well as health, sexuality, and gender must all be addressed. The challenge is to provide fuller information and to reinforce appropriate behaviors that contribute to the prevention and treatment of reproductive health problems.

These goals require a strategic approach that identifies meaningful segments of the target audience, promotes new behaviors that are closely linked but varied, identifies messages that reflect the perceived benefits to be gained from each of these behaviors, and uses a mix of communication channels to reach various audiences.

It is also necessary to identify barriers - both external (for example, lack of access to services) and internal (normative) - to the adoption of these new behaviors and to develop strategies to deal with them. Because behavioral change is a long-term process, the organizational structures for information, education, and communication should have the capacity to maintain high-quality work that responds to the audience's needs. Therefore, organizational issues at national, state, district, and block levels that hamper the effectiveness of information, education, and communication need to be addressed.

Within the information, education, and communication activities of the FWP, three needs should be addressed:

- The need to devise a well-defined, area-specific, focused communication strategy
- The need to decentralize the planning process to the district level, which includes building the program's capacity to communicate with the target audience
- The need to track changes in knowledge, attitudes, beliefs, and practices to provide feedback to program implementors.
Reproductive Health Communication Strategy

A health communication strategy is essential to ensure that efforts are based on solid, up-to-date information on audience and client needs; that messages are appropriate, adequate, well coordinated, and sufficiently frequent; that they go beyond creating awareness to facilitating behavioral change; and that they use a mix of appropriate communication channels and facilitate changes in behavior that are mutually reinforcing.

The components of a communication strategy are (a) to segment the audience and identify specific behavioral changes, (b) develop message concepts, and (c) plan a mix of media based on patterns of media use.

A discussion of the issues affecting these various components follows.

Target Audiences and Behaviors

Communication needs assessments are not a routine feature of information, education, and communication activities in most states, because the need for such assessments is not recognized, no in-house capacity exists for employing rapid assessment techniques, and no funds are earmarked for this activity. Where communication needs assessments have been conducted in relation to donor-funded projects, the information obtained has not been used sufficiently to define segments of the local target audience (Shekar and Mukharji 1994; STEM 1993a, 1993b).

The purpose of audience segmentation is to identify an audience whose behavioral change will affect public health and to determine the best means of reaching such an audience with relevant messages. Target audiences need to be segmented according to their knowledge, attitudes, beliefs, and practices; incidence and severity of the health problem; potential to receive messages as measured by media reach and social networks; geographic location; and likely responsiveness to program elements.

Audiences can be placed on a continuum of behavioral change. This continuum portrays their readiness to change: being unaware of a health issue; becoming aware, concerned, and knowledgeable; and, finally trying, adopting, and sustaining a new behavior. Health communicators develop a strategy that helps people to move from one stage to the next. A communication strategy that generates awareness is different from one that promotes behavioral change. As the FWP strengthens its reproductive health approach, it will have to review each component of the program and identify priority target audiences.
Message Concepts

Message concepts have been aimed at generating awareness rather than at achieving specific goals for changing behavior (Khan and Patel 1993). In family planning, for example, messages have focused on promoting the norm of small families and paid less attention to method-specific information on the correct use and management of side effects.

The potential role of information, education, and communication in increasing contraceptive use is underscored by the results of two recent surveys. The NFHS found that more than 60 percent of the reasons for not using contraception among women who could be using family planning are related to perceptions, misinformation, and poor understanding of methods. Only 6 percent of these women were not using contraception because they found it difficult to obtain methods. Findings from the district-level baseline survey of the family planning program in Uttar Pradesh are similar (SIFPSA and the Population Council, India 1995). In Jhansi District, 70 percent of women were not using family planning because they had concerns about contraceptive methods and their side effects. Only 7 percent stated that it was hard to obtain family planning services.

General messages need to play a role in campaigns to generate awareness; they are less useful for promoting a specific behavioral change. Global experience in the last decade has shown that information about logistics, such as source of supply, correct use, and benefits, are directly linked to changes in behavior.

Materials need to be pretested among the intended audience and not based only on the perceptions of program staff and managers. Pretesting would ensure that materials and messages are relevant to the specific needs of each target audience and that communication efforts have a higher probability of success.

Patterns of Media Use and Mix

Effective programs use a mix of communication channels (interpersonal, group, mass media, traditional theater) to reach audiences. The goal is to find a mix of channels that can reach large segments of the audience with adequate frequency.

The FWP uses interpersonal communication in three ways: (a) through frontline health workers, male and female multipurpose workers, anganwadis, and auxiliary nurse-midwives, (b) through the mahila swasthya sangh scheme, and (c) through link workers.

It is recognized that inadequate counseling produces clients who are dissatisfied with the services provided at health facilities and who do not understand key messages or receive adequate information (Khan and Patel 1993). Several factors contribute to this situation. First,
frontline workers have inadequate training in counseling skills. Second, for a variety of reasons, workers have limited contact with clients and little motivation to spend time on counseling. Third, information, education, and communication activities and inputs are not monitored during supervision visits when priority is placed on determining the number of family planning acceptors, cases immunized, and cases treated rather than the quality of services provided (including counseling) and the level of client satisfaction.

Recognizing that mass media have a limited reach for key target audiences such as remote rural and poor audiences, the government has begun to emphasize the use of interpersonal communication channels such as frontline workers in the health and related sectors, the use of community-based link workers (public sector as well as nongovernmental organizations) and rural women's groups (*mahila swasthya sangh*), and the use of folk media including street theaters. To date, the effectiveness of such large-scale approaches is questionable, and the effectiveness of interpersonal communication channels clearly needs to be improved.

The *mahila swasthya sangh* scheme, which attempts to improve interpersonal communication at the village level by developing a network of community leaders who discuss welfare issues with villagers, has not fully succeeded in its mass education and media activities. Married women have reported low levels of exposure to the various communication activities that members of the *mahila swasthya sangh* are expected to undertake. It has been suggested that increasing the frequency of home visits is one way to improve the quality of these efforts.

In India, there is conflicting evidence regarding the reach of mass media campaigns for conveying social messages. However, the private sector in India has used mass media extensively to promote its products and services. It has developed a functioning mechanism for planning, buying, and monitoring the media, which the government should access to complement its existing in-house capacity for disseminating a wide range of social messages through the Ministry of Information and Broadcasting.

**Decentralized Planning of Communication**

In order to move away from the current top-down nature of communication activities, it will be necessary to redefine the role of the information, education, and communication unit at the central Ministry of Health and Family Welfare and to strengthen the capacity at the state, district, and block levels. There is a shortfall in staff at state, district, and block levels: almost 10 percent of the sanctioned positions have remained vacant; for example, only one in four blocks has a block extension educator (*India, MOHFW 1993*).
Role of the center. Nevertheless, the central government could play an important role in improving the quality of work in a number of critical areas. First, it could take the lead in developing national programmes aimed at changing normative behavior such as age at marriage, the value of female children, and attitudes toward women's health. Second, it could provide technical support at the state level to improve communication planning. Third, it could serve as a national clearinghouse for research data and project experiences. Fourth, it could provide training, technical assistance in materials development, and pretesting to officers at the state and district levels.

Role of the state. The states should be primarily responsible for developing an overall communication strategy and for ensuring district-level participation in its formulation and implementation. The state-level officer should ensure that communication planning and implementation involve the following steps: (a) assessment of current health and family planning practices and their underlying causes, (b) assessment of the reach of possible channels of communication, (c) development of a health communication strategy and budget, (d) pretesting and dissemination of materials, (e) implementation and monitoring of health communication activities, and (f) evaluation and refinement of the program.

Role of the district. District extension and media officers should serve as the focal point for implementing the state-level communication strategy in the field. They therefore need to understand the communication planning and implementation process and be able to develop ways to translate these strategies into meaningful and effective activities at the district level. For example, the state-level communication plan would identify a mix of communication channels (both interpersonal and mass media), and the district extension and media officer would identify the specific interpersonal channels that are effective in his district.

Role of the block. The block extension educator serves as the field coordinator for the group activities needed to implement the communication strategy. This person organizes communities for meetings, film shows, and orientation camps, facilitates access to printed materials, and assists auxiliary nurse-midwives in gaining access to target groups who need health information and services.

In order to improve supervision of the technical work undertaken by branch extension educators, activities should be supervised by the district and deputy district extension and media officers. However, the block extension educator should remain under the administrative control of the primary health center medical officer.
Tracking of Changes in Knowledge, Attitudes, Beliefs, and Practices of Key Audiences

There is no mechanism at any level of the health system for regularly tracking the changes in knowledge, attitudes, beliefs, and practices of key audiences. As a result, it has been difficult to adapt activities to the changing needs of target audiences, and information, education, and communication tend to flow in one direction, from provider to client.

Tracking may be done in two ways: first, through routine monitoring that incorporates exit interviews with clients who visit the health facilities or are contacted by a health worker and, second, through small sample surveys of targeted segments of the population. The first approach provides feedback on how communication inputs are flowing through the service delivery system, while the second provides information based on the perceptions, experiences, and expectations of clients. The central- and state-level units should work closely with directors of family welfare to establish a network of tracking stations in each state for improving the quality of program implementation.

Social Marketing

While information, education, and communication create health-seeking behavior, social marketing facilitates the practice of such behavior by promoting, distributing, and selling socially beneficial tangible products at prices affordable to low-income groups and accessible through a wide range of private outlets. For example, whereas information, education, and communication seeks to create a demand for temporary contraceptive methods, social marketing promotes the use of specific brands of condoms or oral pills by advertising, establishing distribution channels and easily accessible sales outlets, and selling contraceptives to target groups.

Achievements of Social Marketing in India

The Family Welfare Program has used a social marketing approach since 1968 to promote the use of condoms and pills nationwide by distributing them through commercial outlets at subsidized prices. Its goal is to increase access to contraceptives among the segment of the population that can afford to purchase them, though not at full commercial prices.

India has the oldest and largest social marketing program in the world, and its major achievements include the following (Operations Research Group and Family Health International 1993):
Annual sales grew from fewer than 16 million condoms in 1968-69 to 320 million in 1990-91. Sales increased more than 13 percent annually over the past twenty-three years.

Condoms distributed through the social marketing program represent one-third of all condoms distributed annually in India. Further, adjusting for likely wastage in the free distribution program, condoms provided by the social marketing program represent up to 50 percent of actual use, implying 3.2 million current users. These users constitute about 3 percent of the couples of reproductive age.

Condom buyers spend an average of Rs65 ($2.60) a year on condoms. In fiscal 1990-91, the users of social marketing brands spent an estimated $8.3 million on condoms.

Approximately 525,000 outlets including pharmacists, general stores, grocers, paan-bidi shops, bangle shops, and bakeries are involved in the social marketing of condoms.

Nirodh, which is the brand name of the condom distributed through social marketing, has become a generic name for condoms in India. Awareness of Nirodh is nearly universal, even in rural India.

**Limitations of the Social Marketing Program**

These achievements notwithstanding, the Indian social marketing program has not significantly increased the use of modern temporary methods. Only 9 percent of the 150 million eligible couples use modern temporary methods: 1.7 percent use oral pills and 5 percent use condoms (according to the 1991 census). The National Family Health Survey (1992-93) suggests that use is even lower: 1.2 percent for oral pills and 2.4 percent for condoms. Furthermore, condom use is inconsistent: only 40 percent of persons who have ever used condoms are current users, and only 70 percent of persons who use condoms do so every time they have intercourse. (International Institute of Population Sciences, 1994a).

Not only is the base of users small relative to the potential, but social marketing is confined almost exclusively to condoms. Its potential for distributing products such as oral contraceptives, oral rehydration solutions, and safe delivery kits has not been explored. The social marketing program is also primarily urban. In spite of the program's overwhelming focus on condoms, retailers appear embarrassed to stock, display, and sell condoms: 71 percent of retailers, such as grocers, general stores, pharmacies, confectioneries, and other outlets in Haryana, Rajasthan, and Uttar Pradesh have never stocked condoms.

Social marketing of condoms is complemented by a parallel system that distributes free condoms through the public sector infrastructure.
In this system, health workers have to meet annual targets for condom distribution, and there is reason to believe that distribution figures are much inflated and that wastage occurs even before the condoms reach potential clients. Respondents have reported using only half the supply of condoms given to them. Despite the substantial expenditure on distributing free condoms and the distribution machinery of the large companies that have entered into partnership with the government to conduct social marketing, spacing behavior has not been established among the rural or the poor strata of India’s population.

The reasons for the lackluster performance of social marketing include the following: (a) weak central management of the social marketing program, (b) poorly coordinated geographic allocation of market territories, (c) competition from the free distribution of condoms by the government, (d) low volume of sales for condoms, which makes it financially unattractive for retailers to stock and sell in rural outlets, and (e) reluctance of retailers to stock condoms because of perceived lack of demand. Furthermore, information gaps about users’ perceptions, attitudes, and behavior about pills and condoms make it difficult to change the program as client needs change.

**Future Directions for Social Marketing**

To attain the full benefits that well-designed and well-implemented social marketing can bring to the FWP, several key issues have to be addressed. First is the need to redefine goals. India’s demographic imperatives and policy perspectives have changed, and social marketing needs to be reshaped keeping these changes in view. The shift from family planning to family welfare and the current emphasis on reproductive health need to be acknowledged. Second, the needs of defined target groups have to be recognized and identified in order to change behavior. This requires a broader understanding of the client system than has been available thus far. Third, the response strategies - the social marketing program’s basket of products offered within a reproductive health framework and its pricing policy, distribution, and logistical and communication support - will have to change. The transition from a program oriented toward condoms to one oriented toward a wider set of concerns will be the most significant challenge for managers of the social marketing program in the future.

**Defining social marketing goals.** With the shift of the FWP to a reproductive health approach, this is an opportune time to review the goals for social marketing. The following issues should be considered. Is the social marketing program primarily concerned with increasing access to reproductive health’s basket of goods? Or should it focus on penetrating markets that are not currently reached by the public system of health service delivery? Is the issue of equity an important
consideration? In the past, equity considerations led the government to subsidize condoms distributed by social marketing agencies to ensure that they were affordable to low-income groups. Resolving these issues will help the social marketing program to determine the products it can offer, at what prices, and through which distribution channels.

Managing social marketing at the national level. Considering that the FWP has neither the staffing nor the administrative procedures to manage the day-to-day activities of the social marketing project effectively, a number of options have been discussed with government officials. The goal is to establish the management capacity to orchestrate technical inputs in four areas: product procurement, distribution and logistics management, communication support, and financial management. This capacity should be sufficient to coordinate the efforts of the private sector and of social marketing agencies to ensure that reproductive health products are made available to the hard-to-reach groups, especially in rural areas, and are affordable to low-income groups.

The management of social marketing may be contracted out to a national private voluntary organization that has the flexibility to manage nationwide operations and to operate as a social corporation. Government will support policy through representation on the board and initial funding, which could be obtained by terminating the distribution of free condoms.

Encouraging private sector participation. Measures to encourage private sector participation should include (a) enlarging the basket of products and encouraging participation of distribution companies with compatible product lines and (b) encouraging penetration of hard-to-reach areas by providing subsidies for market development costs in addition to the normal subsidy on the sale of products. Such market development costs could include advertising, van operations, and introductory incentives to retailers. Subsidy renewal would be based on performance.

Expanding the social marketing basket of goods. An expanded basket of goods could well include products other than contraceptives - oral rehydration solutions, vitamin A supplements, iron-fortified foods, and iodized salt. While this expansion will improve the economics for some participants, such as retailers, it will also require more financial resources and managerial attention. Because a program that markets multiple products requires a more elaborate system than one that markets a single product, an expanded program would also expand the benefit to clients.

Experience from the Bangladesh social marketing program shows that adding oral rehydration solutions to the initial basket of condoms
and pills was associated with an initial decline in distribution, followed by a steady rise as the market expanded.

Emphasizing oral pills. Among spacing methods, the entire range of oral pills deserves to receive more attention. International experience has shown pills to be a more reliable method than condoms, because price-related resistance can be overcome when communication inputs are provided. The challenge is to boost the overall image of oral pills held by eligible women and service providers, both of whom are confused about short- and long-term side effects. Sharply focused user education will be needed to counter the high rate of discontinuation.

Reviewing the costs and benefits of free condoms. The costs and benefits of free condoms will have to be reviewed. The wastage reported raises questions about the real size of the market for condoms and distorts the understanding of its composition. There is no strong evidence to support the thesis that free supplies are serving the objective of equity.

Conclusions

Strengthening the capacity of the Ministry of Health and Family Welfare in the areas of information, education, and communication and of social marketing involves three initiatives:

- Strengthening organizational capacity to plan and manage activities. In the field of information, education, and communication, it is necessary to improve the development of a communication strategy aimed at facilitating behavioral change. In social marketing, there is a need to centralize management of the program and coordination of inputs in four areas: product procurement, distribution and logistics management, communications support, and financial management.
- Developing a research system that will regularly monitor and evaluate changes in knowledge, attitudes, beliefs, and practices of target audiences.
- Focusing program decisions on the needs of clients. This means defining audience segments better and providing client-focused information and services (not national standardized messages and centrally planned health delivery systems).

The development of a new five-year plan for information, education, and communication and social marketing will facilitate the translation of these ideas into operational terms. A special effort will bring these issues to the attention of policymakers and key officials at the national, state, and district levels and encourage them to put these items on their agenda for action.
H. Indicators and a Management Information and Evaluation System for a Reproductive and Child Health Program

JOHN TOWNSEND AND M. E. KHAN

This section reviews the management information and evaluation system of the Family Welfare Program (FWP) and the concomitant role of the indicators currently employed. It also proposes alternative measures of program performance based on the essential reproductive health services recommended in chapter 3 of the main volume.

Indicators

The indicators that a program uses to monitor and evaluate its performance tend to guide its strategy irrespective of the goals and strategies stated at the time of its formulation. Thus, if for example, a target system specifies and assesses the performance of workers mainly on the basis of indicators emphasizing sterilization, the program will be tailored toward those targets, irrespective of articulated policy. Therefore the system of indicators used to monitor a project should be consistent with its stated goals and strategies (Srinivasan 1994).

To understand the role of indicators, a distinction should be made between goals and objectives, on the one hand, and a set of indicators against which performance can be assessed, on the other. The goals of the FWP, in terms of both fertility and maternal and child health, have been established in policy statements and departmental documents and confirmed in international agreements. These goals include reducing birth rates as well as maternal and child mortality.

The objectives of the FWP are more specific (including the provision of contraceptives and sterilization and related information, education, and communication activities) and should guide the assessment of program performance. Rather than focusing solely on outcomes (for example, the prevalence of contraceptive use), which
are often beyond the immediate control of program staff, assessment should also consider activities under the control of the program, for example, supply-side factors, that contribute to the achievement of program goals. In this context, indicators may be used for tracking, monitoring, and evaluation. A system of indicators is not complete unless these three functions are present.

- **Tracking.** Indicators should show whether the components of a program are actually in place. For example, is the minimum equipment for the clinical provision of family planning services available and in working order?

- **Monitoring.** Indicators should measure whether program components are having the expected short-term effects. Whereas tracking verifies the presence of inputs, monitoring attempts to measure their immediate impact. For example, if prevention of reproductive tract infections is a key outcome, then monitoring indicators might look at the screening and treatment of such infections among persons using contraceptives or seeking prenatal and postnatal care.

- **Evaluation.** Indicators should show whether program services actually affect the population. Evaluation is a long-term process rather than a daily management activity and should be closely related to assessing whether the activity is achieving program goals.

Information is required at the individual level for use in monitoring and evaluating the program's responsiveness to client needs as well as for tracking inputs such as budget expenditures, commodities, maintenance, and training.

The criteria for useful indicators, whether for family planning or for broader reproductive health, are similar (Bulatao 1995). They must be:

- Defined operationally, program specific (reflecting the impacts of program effort), and sensitive to marginal changes in program effort and effectiveness. For example, indicators of political commitment to family welfare are difficult to develop. In contrast, the number of trained staff in post reflects political commitment in a way that is operationally meaningful.

- Linked to program success, with a high value reflecting success and a low value reflecting failure (or vice versa depending on the indicator). For example, high coverage for prenatal care is critical for a maternal health program; low coverage reflects problems of organization and supervision.

- Easy to measure reliably. Ease of measurement has to do both with the facility to collect valid information (for example, through...
primary health center records or external surveys) as well as the cost of doing so.

- Capable of reflecting a large range of processes.
- Balanced as a set, reflecting different aspects of the program. The indicators should reflect key processes in a number of areas, including reproductive health and child survival, among others.

The Management Information and Evaluation System

The broader role of a management information and evaluation system is to provide policymakers and program managers with information on the effective use of resources to improve the quality of care and ensure that program inputs and directions are consistent with policies and plans. Monitoring efforts in most population programs largely focus on service statistics and acceptor information. But managers also need to know where the organization is operating well or poorly, why it is operating as it is, why strategic interventions being tested work, whether they are effective or not, and what troubled components of service delivery systems need attention (Ness 1989). The development of indicators is one approach to address these issues.

The management information and evaluation system of the FWP is a central activity of the Evaluation and Intelligence Division of the Department of Family Welfare. Its responsibilities include monitoring and evaluating performance, setting targets, monitoring impacts, and conducting the concurrent evaluation and oversight of population research. It carries out these responsibilities in conjunction with the states, population research centers, special collaborators like the Indian Council for Medical Research, academic institutions, and consulting organizations. In addition, it receives periodic support and strategic assistance from the National Informatics Centre.

The current system is essentially a manual tabulation system with multiple registers and a pyramid structure. At the community level, health workers posted at primary health centers and subcenters collect and compile a variety of data from as many as twenty registers. These include a village record, family folders, records on prenatal and other maternal services, a register of eligible couples, the distribution of iron, folic acid, and vitamin A, detection of malaria, medical care and referral slips, a register of vital events, monthly reports, daily diaries, meetings with other community health workers, and stock registers for equipment and drugs.

In terms of family planning, health workers also maintain stock and issue registers for condoms, IUDs, and oral pills, sterilizations, community education, and, where available, medical terminations of pregnancy. These registers are used to prepare monthly reports from
primary health centers and subcenters, and data are consolidated at the district level. By the tenth day of each month, the data are forwarded to the state level. According to the central and state governments, about twenty-eight reports are compiled at the district level and sent to state headquarters. Monthly meetings are held at the primary health center, district, and state levels to review the data, with the greatest attention paid to progress on the achievement of targets and payments.

At the union level, based on method-wise performance figures received from the various states and union territories, performance trends as well as target achievements are analyzed and feedback is sent to the states.

The number of items and indicators reported to the state is considerable but also varies between states. In Maharashtra, for example, the monthly total is now 104 indicators, down from 168, and in West Bengal an integrated report includes several hundred items in a single eighteen-page primary health center monthly report. An advantage of the integrated report is that it includes tracking information on training, equipment, communications materials, and staff positions, making it much more useful for program management than simple monitoring indicators on users.

Other Sources of Data for Monitoring and Evaluation

Apart from the management information and evaluation system, central and state governments use a variety of other sources to monitor and program performance. These include:

- **Census reports.** These provide information on the number, age, and geographical distribution of population and generate many of the population-based denominators.
- **The Sample Registration System.** This provides data on vital rates including information on age-specific fertility rates (at the state level by rural and urban strata).
- **External surveys.** These, like the national family planning surveys, the National Family Health Survey (NFHS), baseline and endline surveys of the areas covered under various projects of the World Bank and the United Nations Fund for Population Activities, and district-level surveys conducted in the ninety priority districts (many in Uttar Pradesh), provide independent assessments of coverage and key outcome indicators. The cost and delay in publication suggest that these are better used for evaluation than for program monitoring. However, they are also useful for drawing new issues to the attention of policymakers.
- **Concurrent evaluation.** Under this, one or two districts of each state are covered every month. In the first phase, concurrent evaluation
includes both general household surveys and interviews of persons using maternal and child health and family planning services to assess the reliability of data maintained by auxiliary nurse-midwives, the follow-up services provided to the persons using family planning methods, and the satisfaction of clients with services received. It also provides information on infrastructure and logistic support. Concurrent evaluation was suspended in 1990-91 but is again being employed by the ministry in an attempt to track the availability of inputs at the primary health center and subcenter level and to monitor the effect of the program among a small sample of beneficiaries.

- Special studies. The Ministry of Health and Family Welfare and the population research centers also conduct special studies each year, for example, the field sample check of family welfare acceptors and the surveillance system for sterilization. The demand for special studies, given the problems with the management information and evaluation system and the need for better maternal and child health services, is growing rapidly.

Problems with the Current System

The consequences of the target approach, with target achievement as the principal short-term indicator, depend on how the target system is actually implemented. The Indian experience suggests the following consequences (MOHFW 1986; Townsend and Khan 1993).

- Tracking of components is rarely used as a management tool. Given the focus on users' behavior, the existing management information and evaluation system places little emphasis on identifying whether the components of the supply system that are necessary for quality service are in place. For example, even if the requisite clinical equipment is available, it may be in poor condition and unsuitable for inserting intrauterine devices (IUD) or terminating pregnancies safely. Often where equipment is available, trained personnel are lacking (CORT 1994; Indian Council of Medical Research 1989). This lack of coherence is essentially a problem of poor tracking. Nevertheless, even when this information is available, as it is in West Bengal, it receives less priority than target achievement in monthly staff meetings.

- Targets produce a skewed emphasis on specific methods. In the FWP, although workers are commonly given targets for all methods except condoms, in reality the main emphasis has always been on the achievement of sterilization targets. As a result, the provision of information on and promotion of temporary methods are neglected.
Quantity is given preference over quality. The targets for 1990-91 were computed to achieve a 60 percent couple protection rate for each state. In any given year, this is an enormous task, and the targets, particularly for sterilization, are only achieved by special drives and camps held during the last quarter of the year. Frequently targets for other methods are not met. Recent studies show that the quality of services provided is far from satisfactory (SIFPSA and the Population Council 1995). Little attention has been paid to providing counseling, follow-up, or detailed information on contraceptive options so that couples can make an informed choice.

Thus within this context, performance is measured in terms of achievement of a given target rather than the quality of coverage. Even with these quantity-oriented indicators, information is collected on the number of persons who receive a specific service rather than on the total number who need the service (for example, the number of women who receive tetanus toxoid as opposed to the total number who need to receive it). The absence of a reliable denominator hinders the assessment of effective coverage of a given service.

Large amounts of time are spent on record keeping. Because of the large number of registers, auxiliary nurse-midwives spend as much as 30 percent of their time keeping records or attending meetings to discuss records. This limits the time available for conducting home visits and other service and follow-up activities. Notwithstanding the amount of time spent on record keeping, statistical staff at district centers are often poorly versed in the reporting system.

Service registers are incomplete, incorrect, or inflated. The Indian Council of Medical Research reports that one-third of registers in a national sample of subcenters are not filled in correctly. To demonstrate performance and avoid the consequences of not achieving assigned targets, workers often inflate their performance data, particularly for IUDs and pills. Moreover, reported performance figures do not tally with monthly progress reports and registers.

Use of data is generally poor at the district level. Given the volume and frequency of data collection, it is remarkable that so little investment is made in using the data for decisionmaking at the district level. Information on coverage of vaccination, household visits, and prenatal care is often available, but efforts are rarely made to improve the performance of individual staff and to improve coverage on the basis of these indicators.

Cost issues are rarely part of the discussion. Given the major problems involved in financing family welfare services and uncertainty about the timing of payments from the state and national levels, it
is recommended that data on the cost of providing services, particularly when they are of poor quality, be analyzed with the aim of maximizing cost-effectiveness. Greater awareness and analysis of the costs of implementing, sustaining, and improving the quality of a new reproductive health approach to family planning are clearly needed. The cost of the system itself should be an issue. The cost of the paper alone needed to collect and maintain these data is more than Rs. 8 crore ($5 million) a year, while the total cost of the system is around Rs50 crore ($32.2 million; Murthy and Patel 1987).

Monitoring the Program: Options for the Future

Reorienting the FWP to a reproductive and child health approach requires changing how the program is monitored and its performance is evaluated. The most important change would be to replace the present indicators of performance, like the percentage of target achieved, with indicators showing how the program is being implemented. Such process indicators should cover all aspects of reproductive and child health rather than contraception alone. The Ministry of Health and Family Welfare has apparently initiated action in this regard and has developed a set of indicators and a reporting mechanism for target-free districts.

Box H.1 presents minimum indicators for the reproductive and child health services recommended in the report (see chapter 3 of the main volume). This list is only tentative and is included here to illustrate what indicators may be developed for a reproductive and child health program. It is neither exhaustive nor necessarily the optimum; rather it provides the basis for discussing potential indicators given the data collection mechanisms within the Ministry of Health and Family Welfare.

The most important type of information to collect is on the readiness of the health care system to provide the minimum infrastructure (for example, not only buildings but also trained personnel, equipment, and supplies) for reproductive health care and on the process of delivery of care in this new area. Managers need to have a summary of data by service delivery points. Specifically, they should know the proportion of service delivery sites that are supposed to provide clinical family planning services and medical termination of pregnancy and the proportion of sites that currently have the personnel, equipment, and training to do so safely at a given time.

Considering the large amount of data collected already, and the potential for data collection to escalate, only a limited set of indicators at the district level should be added. Some of these indicators need not be compiled at the state level; instead their utility would be in
identifying where gaps in services occur and in suggesting how these gaps may be rectified at the local level.

Because most of the services recommended in the minimum reproductive health package are not new, the fact that the current system does not cover them is particularly noteworthy. This clearly underscores the importance of developing a tracking system. Additional items could be added in the existing monthly reporting system, while others could be updated every six months. This again demands development of a computerized data base at the district level that could be easily updated and retrieved as and when required.

A tracking and monitoring system should not try to collect all information pertaining to program goals. This merely increases the cost of data collection and turns attention from delivering services to maintaining registers. Rather it should identify service areas or units that need attention and support. Managers and supervisory staff can work with providers to identify why performance is low and to develop local initiatives to overcome these problems (Ness 1989).

Client-based records, as opposed to simple registers of activity are an essential component of a client-based system. They facilitate the follow-up of individuals over time and assist in preparing population-based figures on coverage. Client-based records are equally useful for logistics planning.

One important innovation would be to replace a large number of the registers with a family-based register, which could provide detailed information on prenatal and postnatal care, reproductive intentions, use of contraception, unmet need, and immunization status of infants. The experience of the maternal and child health and family planning Extension Project of the International Centre for Diarrhoeal Disease Research, Bangladesh, with such a register has been encouraging; the community health workers use it extensively for planning their work.

In order to implement these interventions selectively at the experimental level, the participation of the Ministry of Health and Family Welfare is required. A working group should be formed to examine the experience of the states in mounting and maintaining the management information and evaluation system. The working group would assess the options for changing the system as well as propose strategies for dealing with the obstacles to an effective system. Potential areas for development include:

- **Identification of the needs of the persons and systems that use information.** The needs include both specific data and formats for presentations (for example, graphs, trend lines, rankings) that facilitate the use of data for decisionmaking.
Box H.1 Selected Indicators for a Reproductive and Child Health Approach

Against each indicator, a possible source of information is indicated in parentheses. Any new initiative required for generating the data is marked by an-asterisk.

Prevention and Management of Unwanted Pregnancies
- Percentage of users provided with contraceptive choice (concurrent evaluation*)
- Percentage of users of clinical methods receiving follow-up by auxiliary nurse-midwife (management information system, concurrent evaluation*)
- Percentage of couples achieving reproductive intentions (family register,* eligible couples register)
- Percentage of male partners using modern contraception (management information and evaluation system)

Prevention and Management of Reproductive Tract and Sexually Transmitted Infections
- Percentage of service delivery points with technically competent personnel to screen clients for reproductive tract and sexually transmitted infections (district-level data base,* management information and evaluation system)
- Percentage of IUD users who are screened for reproductive tract infections (management information system, concurrent evaluation*)
- Percentage of IUD candidates with reproductive tract infections (management information system)
- Number of partners referred and treated, among infected clients (management information system, concurrent evaluation*)

Child Survival
- Percentage coverage of children by vaccination by type and dose (family register,* management information system)
- Percentage of children with growth monitoring charts (anganwadi and auxiliary nurse-midwives)
- Percentage of parents with correct knowledge of how to use oral rehydration solutions (special surveys*)

Maternity Care
- Proportion of pregnant women receiving three antenatal visits (management information and evaluation system)

Preparation of a handbook of alternative indicators, their data requirements, units of observation, sources, purposes, and issues for use. This should include guidelines for operating the management information and evaluation system as well.

Gradual computerization of the management information and evaluation system, starting at the district level. This should include coordination with the National Informatics Centre Network on access to population data, compatible formats, staff in-service training, and the purchase and maintenance of hardware and software.

Transformation of concurrent evaluation surveys into a continuous monitoring system for assessing logistic support to the program and the quality of services provided by public clinics and their staff. The outline of the proposed concurrent evaluation and various questionnaires that are presently under consideration by the Ministry of Health
**Maternity Care (Cont'd)**
- Percentage of pregnant women receiving iron and folic acid supplements (management information and evaluation system)
- Proportion of deliveries conducted by trained birth attendants (management information and evaluation system, family register*)
- Percentage of pregnant women tested for syphilis (records of primary and community health centers*)
- Proportion of women receiving postnatal follow-up (management information and evaluation system)

**Safe Abortion**
- Existence of district-level quality assurance mechanisms for medical termination of pregnancy (primary and community health centers)
- Percentage of service delivery points having adequate equipment and staff competent in safe abortion care (district-level data base,* management information and evaluation system)
- Total number of medical terminations of pregnancy performed in sanctioned facilities (management information and evaluation system)
- Proportion of maternal mortality attributed to abortion-related deaths (records of hospitals and primary and community health centers*)

**Reproductive Health for Adolescents**
- Number of communication materials from the information, education, and communication units addressing sexuality and gender issues (district-level data base*)
- Proportion of newly married couples contacted by outreach workers with information on reproductive health (management information and evaluation system)
- Proportion of deliveries to mothers less than twenty years old (management information and evaluation system, family register,* special surveys)

**Effective Referral System**
- Existence of first referral unit in each block (district-level data base*)
- Proportion of staff (auxiliary nurse-midwives, lady health visitors, and doctors) trained in criteria of referral for reproductive health care (district-level data base*)
- Percentage of referred cases treated in referral facility (concurrent evaluation*)

and Family Welfare could provide much needed data on the quality of services.

- **Support for experimental efforts at the state level to change both the focus and organization of the system.** Examples include the use of the birth-based approach in three rural districts of West Bengal, the focus on broad indicators of program performance in Tamil Nadu, and the new initiative of the Indian Council of Medical Research on improving the integration of reproductive health services at the level of the primary health center through its network of human reproductive research centers.

- **Specification of the role and management of information from the private sector.** This information is gathered by the Operations Research Group (in shop audits), academic institutions, panchayats, and private voluntary organizations on reproductive health as well as through special studies.
Visits to countries where client-based management information and evaluation systems have been a tradition. Such tours would give senior managers confidence that such a reorientation is feasible and productive as well as help them to identify potential problems to be overcome in implementation.

The quality of program management is only as good as the information used to guide decisionmaking. Support for reform is critical to implementing the reproductive health approach to family planning. Investments in reviewing, modifying, and modernizing the system, including developing a handbook on indicators, managing and using information, and gradually computerizing the system, are clear areas for priority lending in the sector.
I. Enhancing the Role of Private Voluntary Organizations

THOMAS PHILLIPS AND PREM TALWAR

India has a rich and long tradition of voluntary action, and the potential role that private voluntary organizations (PVOs) could play in the health and family welfare sector is well recognized. PVOs are able to work in a sustainable manner to build rapport with a community by being responsive to its immediate requirements and gradually working toward broader health needs. They can build innovative, informed, and personalized solutions by working in small, localized areas, and they can even provide services in communities that have little access to government programs. Since 1982, the need for collaborating with PVOs to accelerate family welfare has been acknowledged as an important element of the Family Welfare Program (FWP) of the Ministry of Health and Family Welfare (India, MOHFW 1982, 1986, 1992, 1994a; India, Planning Commission 1984 and 1989). The objective of involving PVOs is to increase access and give a stronger client orientation to the program.

Different types of PVOs have been active in family welfare. A few large umbrella organizations provide training and technical assistance to member organizations, advocate for policy formulation, and collaborate with other organizations. The Family Planning Association of India is a prime example of such an organization. Most PVOs are medium or small size and work with populations of up to 50,000. With appropriate technical support, several such PVOs have demonstrated the ability to provide varying ranges of clinic-based contraceptive services in combination with outreach and promotional activities. Some have demonstrated their effectiveness in specialized areas such as training or information, education, and communication.

Government Initiatives and Support from the International Development Association

Several grants-in-aid schemes have been initiated by the Ministry of Health and Family Welfare whereby PVOs may obtain government funding for the provision of services and the promotion of health and
family welfare activities in the area of their operation. Agencies such as U.S. Agency for International Development and the United Nations Fund for Population Activities have supported the government's efforts to strengthen PVO involvement. A World Bank study in 1990 reviewed PVO involvement in family welfare and found that achievements were limited because (a) relatively few funds had reached the PVOs, (b) the mechanisms for transferring resources from the central government to the PVOs were fraught with bureaucratic rigidities, particularly limitations imposed by financial rules of audit and disbursement, (c) PVOs involved in family welfare were small in number, uneven in geographic spread, and had limited areas of operation, as well as weak financial management, poor accounting practices, and limited technical and managerial capacity, and (d) the government's organizational capacity to manage the interaction with PVOs was inadequate (Talwar and Goel 1990; World Bank 1990b).

The Seventh Population Project, which was funded by the International Development Association and became effective in 1991, provided the government with Rs24.59 crore (approximately $7.5 million) to address these problems and to increase the scale of grants to PVOs from 2 percent of overall expenditure to about 5 percent and to increase the involvement of smaller PVOs. This was to be achieved through (a) strengthening the central standing committee on voluntary agencies, (b) preparing a directory of PVOs that are active at the community level, (c) developing model schemes to serve as prototypes that could be replicated by PVOs, and (d) establishing rolling funds for larger PVOs to serve as mother units to facilitate the participation of smaller organizations, emulating the example set by the Family Planning Association of India. This review will assess the progress and effectiveness of the measures that have been implemented and make recommendations for further measures.

Producing a Directory of PVOs

As planned, the directory of PVOs was produced in 1993, but it is difficult to assess its distribution and usefulness.

Developing Model Schemes

The ministry designed four model schemes that PVOs can use as prototypes in designing their own projects (see box I.1 for a summary description). These are:

- Six-bed sterilization ward
PRIVATE VOLUNTARY ORGANIZATIONS

- Mini family welfare center scheme
- Encouragement of spacing methods and sterilization
- Innovative methods of promotion.

The model schemes include the provision of family welfare services and educational and motivational activities. They also allow PVOs to add a family welfare component to their ongoing activities through their own innovative approaches.

**Establishing Channels of Funding**

In an attempt to reduce bottlenecks in the transfer of resources and to decentralize decision-making, the Ministry of Health and Family Welfare established and strengthened two channels outside the ministry through which smaller PVOs could obtain support. First, state-level standing committees on voluntary action were established or strengthened in order to encourage and initiate PVO participation and to review, approve, and fund proposals and monitor their implementation. Second, in addition to the Family Planning Association of India, five large PVOs were identified to serve as mother units. Unlike the Family Planning Association of India, they have no authority to approve projects, and the projects they review are subject to approval by the ministry, which funds them directly.

The system therefore provides three channels through which smaller PVOs can apply for funding for projects: (a) the central Ministry of Health and Family Welfare, (b) state standing committees on voluntary action, and (c) six large PVO mother units.

As a result of these initiatives, the partnership between the government and PVOs has improved significantly. However, the data on actual implementation suggest that the model schemes and the channels for funding are in a very early stage of development.

The model scheme strategy was implemented in 1992, and since then only a relatively small proportion of the projects that have applied for funding have actually been funded. Of the projects reviewed directly by the central government (the Ministry of Health and Family Welfare), only about 17 percent were actually funded, and these projects only committed an amount of Rs6.8 crore. The types of proposals received and funded during specified time periods are shown in table 1.1.

The standing committees on voluntary action became fully operational during 1993-94, and data on these committees are limited and incomplete. In those states that had submitted information as of October 1994, the standing committees had committed only Rs1.1 crore (table 1.2).
Table 1.1. Funding of Projects Submitted Directly to the Ministry of Health and Family Welfare

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Period</th>
<th>Number of proposals received</th>
<th>Number of proposals funded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sterilization ward</td>
<td>July 1993 onward</td>
<td>175</td>
<td>5</td>
</tr>
<tr>
<td>Mini family welfare center</td>
<td>July 1993 onward</td>
<td>378</td>
<td>20</td>
</tr>
<tr>
<td>Encouragement of spacing and sterilization</td>
<td>July 1993 onward</td>
<td>350</td>
<td>107</td>
</tr>
<tr>
<td>Innovative schemes</td>
<td>April 1992 onward</td>
<td>51</td>
<td>31</td>
</tr>
</tbody>
</table>

Table 1.2. Number of Proposals Received and Approved by State Standing Committees on Voluntary Action, 1991-94

<table>
<thead>
<tr>
<th>State</th>
<th>Number of proposals received</th>
<th>Number of proposals funded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>116</td>
<td>28</td>
</tr>
<tr>
<td>Kerala</td>
<td>-</td>
<td>17</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>30</td>
<td>11</td>
</tr>
<tr>
<td>Mizoram</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Orissa</td>
<td>-</td>
<td>16</td>
</tr>
<tr>
<td>Punjab</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>-</td>
<td>16</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>53</td>
<td>10</td>
</tr>
<tr>
<td>West Bengal</td>
<td>126</td>
<td>4</td>
</tr>
</tbody>
</table>

- Not available.

Only about 16 percent of the proposals submitted to the committees were funded. From the limited information that is available, it appears that the states with relatively strong management systems have funded more projects. This raises the issue of the role of PVOs in relatively weak states, which have the greatest need for PVO input to supplement governmental efforts. The performance of state standing committees on voluntary action is poorly monitored, and little information is available on the actual performance of the funded projects.

During 1991-94, the mother units approved a total of 141 projects that committed about Rs3 crore. The Family Planning Association of India committed the largest amount of funds, but the amount committed each year declined. Projects funded through this channel have not been evaluated. This channel needs to be revitalized, although the process of identifying more mother units and inviting their participation has yet to occur.

In summary, of the Rs.24.59 crore available through the Seventh Population Project for supporting PVO participation, only about
Rs. 10.9 lakh were committed during 1991-94, no expenditure claims were submitted, and very little feedback was gathered on how these funds were used or on the impact of the activities supported.

Reasons for Poor Progress

Analysis of the data illustrates that (a) the number of projects submitted was low, indicating poor response from PVOs; (b) the proportion of proposals funded was low, suggesting problems in the application and approval process; and (c) the funded projects are inefficient.

If voluntary organizations had access to technical assistance, many more projects would probably be funded and considerably more money would be committed to them (Andina and others 1994). Although several workshops have provided training to PVOs, these initiatives have not been institutionalized. There has been no follow-up to the recommendations that technical and managerial support be made available through intermediary organizations.

The development of decentralized mechanisms - standing committees and mother units - are as yet in the formative stages. The state-level use of standing committees is largely hampered by the issue of bureaucratic red tape, which originally drew attention to the necessity of decentralizing the disbursement of funds. The staffing of standing committees, both at the central and at the state level, has not been strengthened. As a consequence, processing of applications is delayed, monitoring information is not available, which hampers efforts to identify and deal with bottlenecks, inadequate technical and managerial guidance is available to PVOs, and information about PVO activities is not disseminated to district-level authorities, leading to poor coordination at the ground level. The mother unit approach, which attempts to overcome the problems inherent to collaboration between the public and private sector, is still in its initial stages, and the interest of the mother units appears to be diminishing. The mechanism for monitoring progress and evaluating performance is notably weak.

The issue of whether it is feasible to activate support from PVOs in the weaker and more needy states is not fully addressed here. Informal discussions with some of the more established PVOs in Gujarat indicate that PVOs would be reluctant to mount operations in the states where they do not already have a base of operation. Similarly, there is insufficient information to assess the potential for mobilizing PVOs in remote rural areas that are poorly served by the government infrastructure.
Measures to Involve PVOs

Strategies to improve public-private collaboration in family welfare will succeed only if government functionaries begin to see PVOs as collaborators. Such a change in ethos has to be generated at higher levels in the system and systematically transmitted to lower levels. Continuous dialog between the government and PVOs could significantly improve the quality of collaboration. Three critical issues need to be addressed:

1. Mechanisms for the transfer of funds and monitoring of performance of PVOs should become more effective.
2. Strategies for the provision of technical support for smaller PVOs should be strengthened and institutionalized.
3. Specific strategies are required for expanding the role of PVOs by (a) strengthening the reproductive health approach within the PVO schemes; (b) mobilizing PVOs for reproductive health in remote, poorly served areas; and (c) exploiting the potential of PVOs to work in the organized private sector.

Mechanisms to Transfer Funds and Technical Support

There is genuine concern in the Ministry of Health and Family Welfare over the necessity to ensure that funds given to PVOs are actually spent on family welfare work and not diverted to other activities. Safeguards can best be established if a close working relationship is maintained among the standing committees on voluntary action, the PVO mother units, and PVOs. Engaging in a continuous dialog in the context of technical assistance and monitoring would ensure that funds are spent for family welfare activities. However, neither the central ministry nor the state standing committees have, at present, the organizational capacity to manage interaction with PVOs, and there is insufficient evidence to assess whether the mother unit strategy will be effective.

The Role of the Center

At the center, while the central ministry is ideally placed to develop policies and strategies, an alternate mechanism is needed for the day-to-day management of the PVO component of the Family Welfare Program. This would include coordinating the inputs from donor agencies, overseeing the efficient transfer of funds to intermediaries such as the state standing committees or mother units, monitoring and evaluating their performance, facilitating the exchange of experiences, encouraging innovation, and exploring creative avenues for
expanding the potential contribution of PVOs.

The Role of State Standing Committees on Voluntary Action

The following specific recommendations have been developed on the basis of a review of documents as well as dialog with members of a state standing committee and representatives from several PVOs.

- **Membership.** Meetings to appraise and approve proposals submitted by PVOs are not held regularly, although they should be held quarterly. If the state family welfare secretary or commissioner, who chairs the standing committee, cannot attend meetings, the state family welfare officer should be delegated as chair. The other committee members should be selected on the basis of (a) regional representation and (b) the importance of funding proposals from PVOs in poorly served areas.

- **Organizational support.** The involvement of PVOs in the program has been inadequate because many of them (a) are not able to prepare and submit satisfactory proposals, (b) are unaware of the model schemes and the possibility of receiving funds, and (c) are located far from the state capital.

- **Efficiency.** Even the organizations that collaborate with the program do not operate efficiently because the state has not been able to (a) appraise proposals in relation to the capacity of the PVO, (b) link activities identified in the proposal with the needs of the area to be served, (c) monitor progress of PVO work and thus help to solve problems, and (d) provide technical and financial guidance. Many of these limitations arise because government officers who are assigned to manage the standing committee's activities have too many other responsibilities. It is essential to delegate some staff to work full time on this area of collaboration. For this purpose, two additional positions should be sanctioned for the state standing committee: one fairly senior and requiring a background in management (in order to focus on monitoring of activities) and a middle-level position to support the senior person. These full-time members should go to the regions and districts to disseminate information on schemes, promote involvement of PVOs, provide technical assistance and training where needed, and monitor ongoing projects.

- **Involvement of district-level officers.** All district-level activities should be undertaken in close collaboration with the district-level family welfare program officers. The district-level officers should help the standing committee team to coordinate and improve collaboration with PVOs of their own district. In some cases, the collaboration of medical officers at the primary or community health center may also be useful.
• **Encouragement of reproductive and child health and innovative approaches.** All the model schemes should be broadened beyond family planning to include a reproductive and child health approach in keeping with the government's commitment to the declarations of the International Conference of Population and Development at Cairo. Furthermore, because PVOs should add family welfare to their ongoing activities, innovative approaches should be used more often to integrate family welfare with those activities.

• **Attraction of PVO proposals.** First, the effort to spread the norm of small families through innovative methods is intended to enable PVOs to make creative proposals for using their own strengths to improve family welfare. However, this intention is not clearly conveyed in the current description of the scheme. For example, PVOs who have particular strengths in training community workers or in information, education, and communication do not understand how they can submit proposals under this scheme. Second, proposals should be funded for three to seven years so as to enable projects to become adequately established.

**Measures to Strengthen Mother Units**

The experience with mother units is extremely limited. Although five mother units have been identified, the information about this channel reached states only recently. Analysis of data supplied by the Ministry of Health and Family Welfare has shown that the mother units only recommended funding for fifteen proposals in 1993-94, and 60 percent of them were funded. A constructive strategy would be to implement this scheme systematically and to monitor its progress in order to increase its efficacy. This is particularly important because this mechanism obviates many of the problems that are inherent in collaboration between the public and private sectors. Not only does it decentralize the process of project appraisal and funding, it also fills the lacunae for providing technical assistance and reaching small PVOs. Moreover, this scheme also helps the PVO sector to acquire the capacity to play an intermediary funding role.

The following recommendations are intended to strengthen the mother units:

• **Selection.** Mother units should be carefully selected so that the government can confidently delegate authority and responsibility to them. A two-step procedure is recommended for this purpose. In the first step, names and addresses should be invited from the states, and in the second step, their suitability should be appraised by a team specifically formed for this purpose. In order to identify
PVOs that could act as mother units, the states should be requested to obtain names from each chief medical officer and district magistrate. The minimum criteria for PVOs whose names are recommended should be (a) a good track record, (b) experience working in the field of health and family welfare for at least five years, and (c) an annual budget of at least Rs2.5 million for the last three years. Names of PVOs from the neighboring districts may be recommended. The committee formed to appraise the capacity of the recommended PVOs should visit the area and appraise them using the following parameters: (a) program activities (they should be strong in training, information, education, and communication, and management), (b) technical competence of their full-time staff, (c) reputation among smaller PVOs, and (d) interest in serving as mother units. A significant number of mother units spread all over the country is desirable.

- **Authority.** Mother units should have the authority to approve projects themselves and not just recommend them to the central ministry for approval.
- **The rolling fund.** The rolling fund provided to mother units should never be depleted. As a general principle, the rolling fund should be about one-third of the maximum possible disbursement in a year. When one-third of the fund has been disbursed, the mother unit should ask the central ministry for more funds.
- **Funding for mother units.** Mother units need to have sufficient funds to carry out their responsibilities, including traveling to ensure that supervision, monitoring, and evaluation are appropriate. The importance of an appraisal visit to subgrantees and regular monitoring visits cannot be emphasized too strongly. The mother unit should work with neighboring PVOs so as to minimize time spent on travel.
- **Collaboration with local officers.** Medical officers of the primary and community health centers should be involved in the appraisal and monitoring visits. It is necessary to develop a standardized procedure through which mother units and the primary and community health centers coordinate the appraisal and supervision of PVO projects.
- **Subgrants to PVO.** The Ministry of Health and Family Welfare has imposed a rule that a subgrant to any PVO should not continue for more than five years. During this period, the mother unit should make the PVO self-sufficient so that when the grant terminates, its activities will be self-sustaining. The current limit of Rs100,000 per PVO a year seems to be a reasonable way to ensure that small PVOs that want to add a family welfare component to their existing activities are attracted to apply for a subgrant. These organizations should be assisted in the development of proposals.
so that family welfare becomes an integral part of their activities on a sustainable basis.

- **Technical assistance to subgrantees.** One of the strengths of the mother unit is that it provides appropriate and timely technical assistance to subgrantees. For this purpose, the mother unit could even hire resource persons from outside its own organization. A separate line item of technical assistance should be included in the budget of the mother unit.

- **Coordination, training, and monitoring.** A mechanism should be developed to coordinate mother units at the central level. This may be achieved by holding annual meetings. Provision should also be made for orienting and training the staff of mother units. Monitoring and periodically reviewing the activities of mother units may be assigned to suitable institutions or to individual consultants.

Expanding the Role of PVOs in the Organized Sector

The organized private sector forms about 10 percent of the total work force, and the government has identified this sector as a potential area for the expansion of family welfare activities. At present, few PVOs are working in family welfare in this sector, and there is little documented evidence about their scope or effectiveness. However, it is possible to visualize several potential roles for PVOs.

First, PVOs could assume responsibility for implementing reproductive health activities in one industry, a group of industries, or employers' associations. They could seek innovative methods of working in industrial complexes and in workers' residential areas. Activities could, for example, include the provision of services and information, education, and communication activities, promotional activities, and outreach strategies such as the creation of depot holders.

Second, managers of the industry could provide reproductive health services, while PVOs could provide technical input. Thus PVOs could help an employee to plan a program, provide training, develop communication materials, and provide supervision and monitoring, while staff employed by the industry could provide the day-to-day services. Several different configurations of the collaboration between PVOs and industry are possible.

Mobilizing PVOs in Remote, Poorly Served Areas

The government has promulgated a number of schemes to attract industries to industrially backward districts. These include tax concessions, special incentives, limited grants, designation of lead
PRIVATE VOLUNTARY ORGANIZATIONS

funding organizations, and so on. Some of these schemes have been effective. Some of the lessons learned might have applicability in attracting PVOs to poorly served areas. Strategies could be developed and tested either to attract existing PVOs to set up branches in poorly served areas or to stimulate the formation of new indigenous PVOs in such areas. One supportive measure could be a government-sponsored training scheme to provide training in managerial and technical aspects, followed by an apprenticeship in a PVO. This could be supplemented with seed money to start PVO activities.

Summary and Conclusions

Despite the existence of a rich variety of PVOs, a long tradition of voluntarism, government policy support, and substantial donor funding, the potential for mobilizing PVO support for reproductive health in India remains largely untapped. Bottlenecks have hampered efforts to mobilize PVO efforts: (a) limited organizational capacity of PVOs and public sector attitudes that mitigate against the establishment of an effective collaboration with PVOs; (b) slow and inadequate transfer of resources to PVOs because of bureaucratic rigidities, limitations imposed by financial rules of audit and disbursement, coupled with weak financial management and accounting practices of smaller PVOs; (c) limited technical and managerial capacity in smaller PVOs; and (d) inadequate presence of PVOs in remote, poorly served areas and in states with weak management and financial capacity. Several steps have been taken during the past decade to address some of these bottlenecks. While many of these initiatives are moving in the right direction, the evidence to date is that they are limited in their scope and effectiveness.

The following recommendations deserve consideration: (a) develop a mechanism at the center for coordination, day-to-day management, and improved transfer of resources in support of PVO collaboration in reproductive health, (b) strengthen decentralized mechanisms at the state level and increase the role of larger or more specialized PVOs in supporting smaller ones, (c) stimulate PVOs to work in the organized private sector, and (d) attract PVOs to remote, poorly served areas.
J. Financing Requirements of India’s Reproductive and Child Health Program

V. J. RAVISHANKAR

This section compares existing levels of spending on family welfare with the resources needed to provide essential reproductive and child health services in an effort to derive the resource gap and to examine how it may be financed in a sustainable manner. It documents and develops the following observations and arguments:

- Per capita expenditure on family welfare services in India is low by international standards.
- Per capita spending on health and family welfare has declined in real terms in the majority of states since 1991.
- The government’s norms for physical and human infrastructure have not been met, and other recurring inputs such as drugs, fuel, and maintenance do not receive adequate funding.
- Providing the finance to meet the government’s norms for the existing Family Welfare Program poses a major challenge, compared to which the resources needed to obtain the additional drugs and supplies required for the essential reproductive and child health services are very small.
- The largest component of the gap is the capital component, consisting of the construction of new facilities and the provision of adequate equipment and transport for old and new facilities.
- Filling the staffing gap and providing other necessary inputs for essential reproductive and child health services would involve an 8.7 percent annual real increase in recurrent spending levels and increased commitment from all levels of government.
- The central government has not only to allocate more of its own resources but also to find ways to induce the states to ensure that adequate resources are allocated to fill critical input gaps.

This section is organized as follows. It begins by presenting a profile of the current level and allocation of resources, followed by discussion of the financing of family welfare programs and estimation of the size of major gaps between the existing and required level of resources.
This sets the stage for an examination of the aggregate resources needed to fill these gaps, under two alternative scenarios, followed by the main conclusions.

**Prevailing Level and Allocation of Resources**

Expenditures recorded under the budget for family welfare include all centrally and externally financed expenditures but generally excludes state-financed expenditures on subcenters and primary health centers. However, the states in fact finance a significant share of family welfare services, including the salaries of about one-fifth of auxiliary nurse-midwives. As a working definition, spending on the Family Welfare Program (FWP) is the sum of central expenditures on all components of the program and state-financed expenditures on the salaries of auxiliary nurse-midwives and 20 percent of the salaries of primary health center doctors and all paramedics in each state (assuming that these staff devote about one-fifth of their time to family welfare activities and that state-funded inputs other than staff are insignificant). Defined in this way, the estimated level of FWP recurrent expenditures is about Rs.19 per capita a year, which is roughly equivalent to $0.60 (table J.1). This compares unfavorably with the prevailing level of spending in many other developing countries and is less than the $0.90 recommended for family planning alone by the *World Development Report 1993* (World Bank 1993).

With the exception of the hilly northeastern states, the estimated level of spending is mostly in the range of Rs.15 to Rs.20 for the major states, reflecting the fact that most of the resources under the central program are allocated and distributed more or less in proportion to population. The level of per capita spending is lower than average in the Hindi belt for almost every component of the program, except the Child Survival and Safe Motherhood Program and area projects that receive external aid.

The system of allocating and distributing resources under the central Family Welfare Program is essentially top down. The center distributes resources to the states more or less in proportion to population size, and the states in turn distribute what they receive among their districts. At the prevailing low level of funding, the result is an even spread of insufficient resources, with the supply in each state and district having little relation to the need for funds.

The National Family Health Survey of 1992-93 shows wide variations in the degree of unmet need for services and hence in the resources required in different states and districts. For example, the total fertility rate in Uttar Pradesh is 40 percent higher than the national
Table J.1. Estimated per Capita Recurrent Spending on the Family Welfare Program, 1994-95 (rupees)

<table>
<thead>
<tr>
<th>Region and number of states</th>
<th>Salaries (state)</th>
<th>Salaries (center)</th>
<th>Other fixed costs</th>
<th>Maternal and Child Health and Child Survival and Safe Motherhood programs</th>
<th>Family planning</th>
<th>Area projects</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hindi belt (four)</td>
<td>3.77</td>
<td>6.29</td>
<td>1.26</td>
<td>1.03</td>
<td>2.13</td>
<td>4.03</td>
<td>18.51</td>
</tr>
<tr>
<td>Bihar</td>
<td>2.26</td>
<td>5.29</td>
<td>1.07</td>
<td>0.99</td>
<td>2.76</td>
<td>3.28</td>
<td>15.65</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>4.94</td>
<td>6.08</td>
<td>1.56</td>
<td>1.41</td>
<td>2.03</td>
<td>3.44</td>
<td>19.46</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>4.68</td>
<td>8.66</td>
<td>1.89</td>
<td>1.12</td>
<td>2.25</td>
<td>7.16</td>
<td>25.75</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>3.88</td>
<td>6.25</td>
<td>1.04</td>
<td>0.86</td>
<td>1.74</td>
<td>3.78</td>
<td>17.53</td>
</tr>
<tr>
<td>East (two)</td>
<td>3.96</td>
<td>7.05</td>
<td>1.17</td>
<td>0.53</td>
<td>2.32</td>
<td>3.21</td>
<td>18.24</td>
</tr>
<tr>
<td>Northeast (eight)</td>
<td>4.81</td>
<td>8.03</td>
<td>3.34</td>
<td>3.18</td>
<td>1.67</td>
<td>1.63</td>
<td>22.65</td>
</tr>
<tr>
<td>South (four)</td>
<td>4.79</td>
<td>7.35</td>
<td>1.41</td>
<td>0.58</td>
<td>3.03</td>
<td>3.17</td>
<td>20.34</td>
</tr>
<tr>
<td>West and north (four)</td>
<td>4.78</td>
<td>6.49</td>
<td>1.42</td>
<td>0.71</td>
<td>2.99</td>
<td>2.32</td>
<td>18.72</td>
</tr>
<tr>
<td>All India</td>
<td>4.19</td>
<td>6.59</td>
<td>1.41</td>
<td>0.91</td>
<td>2.46</td>
<td>3.43</td>
<td>18.99</td>
</tr>
</tbody>
</table>

Note: All categories except state-paid salaries and area projects are funded by the central government.
a. Includes training; information, education, and communication; gasoline; and maintenance.
b. Including spending under the social safety net.
Source: Central budget revised estimates; staff estimates.
average, the proportion of married women in rural areas who have ever used contraception is only 22 percent (compared with the national average of 42 percent), and only half of all women who bear children receive any trained attendance during delivery (compared with the national average of 70 percent). Considering the high number of births per capita and the number of families and children to be covered by essential reproductive health services in Uttar Pradesh, the additional resources required in this state are obviously greater than average in per capita terms. However, per capita spending continues to be lower than average in Uttar Pradesh. (International Institute of Population Sciences, 1994a).

The Child Survival and Safe Motherhood Program, initiated in 1991, provides additional resources targeted to the most needy states. However, the resources supplied under this program account for less than 20 percent of total central resources allocated for family welfare.

Financing of the Family Welfare Program

In contrast to other centrally sponsored programs, where the recurring costs of providing the service are borne by state governments beyond the first five years of the program, the Family Welfare Program has remained part of the central government's budget. This signals the central government's commitment to protect funding for the program. However, inadequacies in central financing for family welfare have led to the accumulation of arrears of central reimbursements for state expenditures. This has reduced the incentive for states to spend on the program and aggravated the problem of salaries crowding out other items in the state budgets.

The budget allocation for operating more than 98,000 centrally funded subcenters was only Rs.185 crore in 1994-95, which implies an allocation of barely Rs.20,000 ($645) per subcenter. This is less than the outdated norm of Rs.26,000 ($840) per subcenter that the central government has been using for a considerable period and that is inadequate for current needs. It is much less than what the states are actually spending on these subcenters. The annual recurring cost of running a subcenter is estimated at more than Rs.45,000 ($1,450) in Uttar Pradesh, including Rs.38,000 ($1,225) for the salary of an auxiliary nurse-midwife. Thus, the states are being reimbursed for less than half of what they need to run and maintain subcenters. Provision for payment of such arrears to state governments amounted to an estimated Rs.150 crore ($48 million) in 1994-95 and is budgeted at Rs.140 crore ($45 million) in 1995-96; these numbers suggest that arrears are not being fully cleared in the following year. Thus arrears are accumulating in the central government's reimbursement of state expenses. The fiscal situation of state governments has been
deteriorating since the mid-1980s, in tandem with that of the central government. The fiscal problem of states is essentially a crisis of expenditure composition, manifesting itself in varying degrees in different states as (a) growth of salaries and subsidies that crowd out funds for capital investment and nonstaff recurring inputs, (b) diversion of central plan transfers to finance recurring expenses not in the central plan, and (c) increasing use of borrowed resources to finance recurring costs. The fiscal adjustment program launched by the central government in 1991 has added to the fiscal stress in poorer states, because loans from the center sharply declined in the first two years of adjustment.

Per capita recurring expenditures on health and family welfare services have declined in real terms in the majority of states between 1990 and 1993. The average for all states declined by 12 percent (figure J.1); the steepest falls occurred in West Bengal (-22 percent) and Uttar Pradesh (-19 percent). Nonsalary recurring expenditures on the Family Welfare Program declined from Rs. .51 crore in 1991-92 to Rs. 30 crore ($9 million) in 1993-94 in Uttar Pradesh.

Many state governments have reacted to the growing fiscal crisis by controlling the number of staff on the payroll. Some states have prescribed that new positions created as part of externally aided projects shall be filled only temporarily, through deputation, and that all staff brought into such positions will return to their original posts once the externally funded project is over. This indicates that state-level financial constraints are affecting not only nonsalary recurring inputs but salaries as well.

Figure J.1: Expenditures on Health and Family Welfare, by States, 1990-93
Major Gaps

We now turn to a comparison of the existing level of resources, measured in rupees at 1994-95 prices, with the resources required to put in place the package of essential reproductive and child health services to cover in a phased manner the entire country by 2000. It is assumed that a segment of the population will seek reproductive and child health services from the private sector. Some components of the gap require resources on a one-time basis (new buildings, equipment, and vehicles), while others require resources on a recurring basis (staff, training, fuel, and drugs). Some recurring costs are fixed, independent of the number of beneficiaries served, while others are variable, in proportion to the number of beneficiaries.

The staffing gap has been defined as the difference between existing and required numbers, based on the prevailing norms, of the six most essential categories of staff at primary health centers and subcenters. These are the auxiliary nurse-midwife, lady health visitor, medical officer (primary), health educator, health assistant (male), and laboratory assistant. No additional positions of male multipurpose workers have been estimated, given the states’ unwillingness to hire more of these workers. To fill the gap between subcenters and auxiliary nurse-midwives and to fill all vacancies in the other five categories of staff only at existing primary health centers, the additional resources needed are estimated at about Rs.218 crore ($70 million) annually.

The package of essential reproductive and child health services cannot be effectively delivered without at least one auxiliary nurse-midwife for every 5,000 population; 18 percent more auxiliary nurse-midwives and 22 percent more primary health center doctors are needed to meet this norm. For some categories of staff, the norms may need to be reviewed. For example, can a lady health visitor supervise more than five auxiliary nurse-midwives? Pending such a review, the staffing gap shown in table J.2 is based on existing norms and works out to an additional annual expenditure of Rs.218 crore ($70 million) by the year 1999-2000; assuming that existing vacancies are filled during 1995-97, the total resource requirement over five years (from 1995 to 2000) is Rs.914 crore ($295 million).

The facility gap may be defined as the difference between the existing and the required number of primary health centers and subcenters according to the eighth plan target. Fulfilling this target by the year 2000, which is conservative considering that the targets were
Table J.2. Primary Staffing Gap

<table>
<thead>
<tr>
<th>Region and type of staff</th>
<th>Number of existing staff</th>
<th>Number of staff required</th>
<th>Gap between existing and required staff</th>
<th>Gap as a percentage of existing staff</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All India</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auxiliary nurse-midwives’</td>
<td>129,069</td>
<td>152,327</td>
<td>23,258</td>
<td>18</td>
</tr>
<tr>
<td>Primary health center doctor</td>
<td>23,802</td>
<td>29,106</td>
<td>5,304</td>
<td>22</td>
</tr>
<tr>
<td>Lady health visitor’</td>
<td>19,080</td>
<td>30,032</td>
<td>10,952</td>
<td>57</td>
</tr>
<tr>
<td>Health educator</td>
<td>5,773</td>
<td>25,165</td>
<td>19,392</td>
<td>336</td>
</tr>
<tr>
<td>Health assistant</td>
<td>18,485</td>
<td>30,606</td>
<td>12,121</td>
<td>66</td>
</tr>
<tr>
<td>Lab assistant</td>
<td>9,800</td>
<td>20,589</td>
<td>10,789</td>
<td>110</td>
</tr>
<tr>
<td><strong>Auxiliary nurse- midwives statewide</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>9,930</td>
<td>12,039</td>
<td>2,109</td>
<td>21</td>
</tr>
<tr>
<td>Bihar</td>
<td>7,541</td>
<td>11,570</td>
<td>4,029</td>
<td>53</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>8,364</td>
<td>9,804</td>
<td>1,440</td>
<td>17</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>23,029</td>
<td>27,029</td>
<td>4,000</td>
<td>17</td>
</tr>
<tr>
<td>West Bengal</td>
<td>8,126</td>
<td>10,426</td>
<td>2,300</td>
<td>28</td>
</tr>
</tbody>
</table>

a. Centrally funded positions.

Source: India, MOHFW, 1994b.

Based on 1991 population, would require an additional Rs.1,162 crore ($375 million) over the period 1995-2000. About 65 percent of this facility gap is accounted for by just four states - Bihar, Madhya Pradesh, Uttar Pradesh, and West Bengal.

Assuming that the new facilities would begin to be established from 1996-97 onward, and that new staff would be recruited at these facilities from 1997-98 onward, the addition to the annual salary bill would be approximately Rs.75 crore ($24 million). This could be called the secondary staffing gap, which is over and above the primary staffing gap of Rs.218 crore ($70 million) a year. The additional resources needed for salaries during 1995-2000 amount to Rs.1,065 crore ($344 million).

The shift to the quality-oriented reproductive health approach will require greater contact between clients and providers and will make mobility a major issue. Providing every auxiliary nurse-midwife with a bicycle or a moped would cost only Rs.64 crore ($21 million) over the period 1995-2000. Providing every primary health center with a jeep by the end of the decade would cost Rs.350 crore ($113 million), or five times as much. These provisions will enhance the mobility of outreach workers and their supervisors.

The resources required for additional contraceptives are Rs.75 crore-Rs.95 crore ($24 million-$31 million) annually, estimated on the basis of 3.0-3.5 percent annual growth in government-provided contraceptives. There is considerable scope to reallocate resources
within FWP, by eliminating or reducing the free distribution of condoms, which currently consumes about Rs.100 crore ($32 million) annually. Selling contraceptives rather than giving them away could generate the resources needed to build and maintain storage facilities in the states.

Other supplies for the essential reproductive and child health package are estimated to cost an additional Rs.110 crore ($35 million) annually. This has been estimated using unit costs shown in table J.3 and assuming higher beneficiary coverage under scenario B (see page 103).

**Table J.3. Unit Costs and Other Assumptions, 1994-95 Prices**

<table>
<thead>
<tr>
<th>Type of cost</th>
<th>Unit cost or assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable recurring costs</strong></td>
<td></td>
</tr>
<tr>
<td><em>Maternity services (rupees per 100 pregnant women or mothers)</em></td>
<td></td>
</tr>
<tr>
<td>Tetanus toxoid vaccines</td>
<td>72</td>
</tr>
<tr>
<td>Iron and folic acid tablets</td>
<td>684</td>
</tr>
<tr>
<td>Syphilis testing</td>
<td>800</td>
</tr>
<tr>
<td>Delivery kits</td>
<td>600</td>
</tr>
<tr>
<td>Drug kits</td>
<td>2,000</td>
</tr>
<tr>
<td>Neonatal management</td>
<td>1,620</td>
</tr>
<tr>
<td>Reporting</td>
<td>750</td>
</tr>
<tr>
<td>Mothers' meeting</td>
<td>200</td>
</tr>
<tr>
<td><strong>Total for urban areas</strong></td>
<td>6,726</td>
</tr>
<tr>
<td><strong>Total for rural areas</strong></td>
<td>7,726</td>
</tr>
<tr>
<td><strong>Growth in the public provision of contraceptives,</strong></td>
<td>projected by United Nations Fund for Population Activities in 1993 (percentage)</td>
</tr>
<tr>
<td><strong>Reproductive tract and sexually transmitted infections</strong></td>
<td></td>
</tr>
<tr>
<td>Syndromic approach (rupees per patient)</td>
<td>50</td>
</tr>
<tr>
<td><strong>Target coverage</strong></td>
<td></td>
</tr>
<tr>
<td>Rural population</td>
<td>25 percent of 3 percent</td>
</tr>
<tr>
<td>Urban population</td>
<td>30 percent of 9 percent</td>
</tr>
<tr>
<td><strong>Medical termination of pregnancy</strong></td>
<td></td>
</tr>
<tr>
<td>Sedatives and drugs (rupees per case)</td>
<td>50</td>
</tr>
<tr>
<td>Incidence (percentage of pregnancies)</td>
<td>10</td>
</tr>
<tr>
<td><strong>Child health (rupees per 100 beneficiaries)</strong></td>
<td></td>
</tr>
<tr>
<td>Vaccines for infants</td>
<td>2,667</td>
</tr>
<tr>
<td>Diphtheria vaccine for five year olds</td>
<td>122</td>
</tr>
<tr>
<td>Diphtheria vaccine (second dose)</td>
<td>72</td>
</tr>
<tr>
<td>Tetanus toxoid vaccine for ten year olds</td>
<td>36</td>
</tr>
<tr>
<td>Tetanus toxoid vaccine for sixteen year olds</td>
<td>36</td>
</tr>
</tbody>
</table>
### Table J.3. (Continued)

<table>
<thead>
<tr>
<th>Type of cost</th>
<th>Unit cost or assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral rehydration solution packets for newborns to five year olds</td>
<td>93</td>
</tr>
<tr>
<td>Vitamin A for newborns to five year olds</td>
<td>430</td>
</tr>
<tr>
<td>Cotrimaxazole for newborns to five year olds</td>
<td>46</td>
</tr>
<tr>
<td>Anemia prophylaxis for newborns to five year olds</td>
<td>66</td>
</tr>
</tbody>
</table>

**Fixed recurring costs**

- **Annual salaries of six critical staff (rupees per person)**
  - Auxiliary nurse-midwife: 37,000
  - Primary health center doctor: 65,000
  - Lady health visitor: 42,000
  - Health educator: 60,000
  - Health assistant (male): 42,000
  - Laboratory assistant: 42,000

- **Drugs and maintenance (rupees per center)**
  - Subcenter: 9,000
  - Primary health center: 50,000

- **Training (percentage of salary bill)**
  - 6.1

- **Information, education, and communication (percentage of variable recurring expenditures)**
  - 10

**Capital costs**

- **New facilities (rupees per center)**
  - Primary health center: 1.2 million
  - Subcenter: 400,000

- **New vehicles (rupees per vehicle)**
  - One jeep per primary health center: 250,000
  - One moped per subcenter: 8,000

- **New equipment for existing facilities (phased coverage, rupees per unit)**
  - Subcenters
    - Auxiliary nurse-midwife midwife kit: 18,000
    - Dai equipment kit: 635
    - Subcenter equipment kit: 7,000
    - Cold chain equipment in 1995 and 1996 (dollars): 23 million
  - Primary health centers
    - Medical termination of pregnancy suction apparatus: 10,000
    - Equipment kit: 263,000
    - Resuscitator (neonatal): 8,000
  - First referral units
    - Equipment kit: 150,000
    - Equipment for emergency obstetrics: 1 million

---

a. Children from birth to five years old equal 13 percent of the population; children five to ten years old equal 2.22 percent of the population.
Aggregate Financing Requirement

Two financing requirement scenarios, called scenario A and scenario B, correspond to a less and a more comprehensive closing of the physical and human infrastructure gaps. Each scenario takes into account the appropriate sequencing of anticipated expenditures, including expenditures for prioritized capital requirements, construction, and staffing. Each scenario is also compared with a baseline scenario to derive the additional resource requirement during the period 1995-2000, using a simple model to project the required resources. The scenarios are defined as follows (see tables J.4, J.5, and J.6 for details):

- **Baseline.** The existing level of input supply and percentage coverage of the population are maintained. The absolute number of beneficiaries and the number of auxiliary nurse-midwives employed increase in proportion to the population.
- **Scenario A.** The subcenter gap and critical staffing gaps (auxiliary nurse-midwives and five categories of staff) at existing primary health centers are filled. No new primary health centers are created. New subcenters are constructed to fulfill eighth plan targets by 2000. All subcenters are provided with one bicycle or moped by 2000. Many districts in the country have upgraded facilities for referrals under essential obstetric care. Excluded districts are given facilities such as an operation theater, labor room, observation bed, or ambulance.


<table>
<thead>
<tr>
<th>Type of cost</th>
<th>Baseline</th>
<th>Scenario A (additional)</th>
<th>Scenario B (additional)</th>
<th>Difference (scenario B minus scenario A)</th>
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<tr>
<td>Capital</td>
<td>1,280</td>
<td>2,146</td>
<td>866</td>
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<tr>
<td>Fixed recurring</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Salaries</td>
<td>6,250</td>
<td>914</td>
<td>1,065</td>
<td>151</td>
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<tr>
<td>Other fixed</td>
<td>664</td>
<td>1,230</td>
<td>1,251</td>
<td>21</td>
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<tr>
<td>Variable recurring</td>
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<td></td>
</tr>
<tr>
<td>Family planning</td>
<td>1,158</td>
<td>406</td>
<td>427</td>
<td>21</td>
</tr>
<tr>
<td>Other reproductive health</td>
<td>391</td>
<td>403</td>
<td>463</td>
<td>60</td>
</tr>
<tr>
<td>Total recurring</td>
<td>8,463</td>
<td>2,953</td>
<td>3,206</td>
<td>253</td>
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<tr>
<td>Total resources</td>
<td>8,208</td>
<td>4,233</td>
<td>5,352</td>
<td>1,119</td>
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</table>
Table J.5. Scenario A: Financing Requirements for All of India, 1994-2000
(hundreds of thousands of rupees at 1994-95 prices)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
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<td><strong>Baseline expenditures</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Fixed recurring</td>
<td>134,890</td>
<td>136,015</td>
<td>137,143</td>
<td>138,273</td>
<td>139,405</td>
<td>140,540</td>
<td>691,376</td>
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<td>122,334</td>
<td>123,223</td>
<td>124,110</td>
<td>124,996</td>
<td>125,880</td>
<td>126,761</td>
<td>624,970</td>
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<td>6,685</td>
<td>6,811</td>
<td>6,939</td>
<td>7,069</td>
<td>7,201</td>
<td>7,336</td>
<td>35,356</td>
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<td>3,144</td>
<td>3,203</td>
<td>3,263</td>
<td>3,325</td>
<td>3,387</td>
<td>3,450</td>
<td>16,628</td>
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<tr>
<td>Drugs and maintenance</td>
<td>2,727</td>
<td>2,778</td>
<td>2,830</td>
<td>2,883</td>
<td>2,937</td>
<td>2,992</td>
<td>14,421</td>
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<tr>
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<td>29,824</td>
<td>30,389</td>
<td>30,964</td>
<td>31,548</td>
<td>32,142</td>
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<tr>
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<td>21,888</td>
<td>22,300</td>
<td>22,719</td>
<td>23,145</td>
<td>23,579</td>
<td>24,019</td>
<td>115,762</td>
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<td>7,381</td>
<td>7,524</td>
<td>7,670</td>
<td>7,818</td>
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<td>8,123</td>
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<td><strong>Total recurring expenditures</strong></td>
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<td>167,532</td>
<td>169,237</td>
<td>170,953</td>
<td>172,682</td>
<td>846,243</td>
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<tr>
<td>Fixed recurring</td>
<td>134,890</td>
<td>168,084</td>
<td>179,593</td>
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<td>186,178</td>
<td>188,933</td>
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<td>132,901</td>
<td>142,764</td>
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<td>147,009</td>
<td>148,605</td>
<td>716,377</td>
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<tr>
<td>Training</td>
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<td>8,518</td>
<td>9,089</td>
<td>9,147</td>
<td>9,266</td>
<td>9,366</td>
<td>45,387</td>
</tr>
<tr>
<td>Information, education, and communication</td>
<td>3,144</td>
<td>4,256</td>
<td>4,484</td>
<td>4,716</td>
<td>4,953</td>
<td>5,164</td>
<td>23,573</td>
</tr>
<tr>
<td>Drugs and maintenance</td>
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<td>22,410</td>
<td>23,256</td>
<td>24,103</td>
<td>24,950</td>
<td>25,797</td>
<td>120,516</td>
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Table J.5 (Continued)

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<tbody>
<tr>
<td>Variable recurring</td>
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<td>42,557</td>
<td>44,836</td>
<td>47,162</td>
<td>49,534</td>
<td>51,640</td>
<td>235,729</td>
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<td>29,686</td>
<td>30,481</td>
<td>31,303</td>
<td>32,152</td>
<td>32,717</td>
<td>156,338</td>
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<td>Total recurring expenditures</td>
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<td>18,653</td>
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<td>21,130</td>
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<td>91,406</td>
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<tr>
<td>Training</td>
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<td>2,151</td>
<td>2,078</td>
<td>2,065</td>
<td>2,030</td>
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<tr>
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<td>1,053</td>
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<td>1,567</td>
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<td>Drugs and maintenance</td>
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<td>Family planning</td>
<td>0</td>
<td>7,386</td>
<td>7,762</td>
<td>8,157</td>
<td>8,573</td>
<td>8,698</td>
<td>40,576</td>
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<tr>
<td>Other reproductive and child health</td>
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<td>127,978</td>
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<td>17,024</td>
<td>17,024</td>
<td>17,044</td>
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<td>11,800</td>
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<td>2,104</td>
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<tr>
<td>Total additional recurring expenditures</td>
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<td>9,018</td>
<td>92,302</td>
<td>95,519</td>
<td>423,315</td>
</tr>
</tbody>
</table>

Note: The figures for 1994-95 are actual figures; figures for the other years are projected. The following key assumptions are made: the facility gap is equal to all subcenters (but no new primary health centers) created to fulfill the eighth plan target by 1999-2000; staffing gap is equal to all auxiliary nurse-midwives (at old and new subcenters) and six categories of staff at existing primary health centers; vehicle gap is equal to a bicycle and moped for all subcenters by 1999-2000; base is equal to the existing level of inputs and coverage maintained; absolute numbers increase in proportion to the population; target is equal to the coverage of 50 percent of the population by 1999-2000; publicly provided contraceptives increase 3 percent annually.
• *Scenario B.* This equals scenario A plus new primary health centers are created to fulfill eighth plan targets by 2000, and every old and new primary health center is provided with a jeep.

As can be seen from table J.4, capital expenditures, salaries, and other fixed recurring costs make up the bulk of additional resources required during 1995-2000. Capital costs make up 30 percent of the total requirements under scenario A and 40 percent under scenario B. Salaries and other fixed recurring costs make up 51 and 43 percent under the two scenarios, respectively. The additional resources required on account of nonsalary fixed recurring costs of reproductive and child health services are estimated at Rs.1,251 crore ($404 million) under scenario B. The incremental variable costs are Rs.890 crore ($287 million), which is only 17 percent of the additional Rs.5,352 crore ($1,726 million) required under scenario B.

**Conclusions**

Under the scenarios noted above, the additional costs associated with meeting the government's norms and fully funding the existing FWP comprise about 83 percent of the incremental costs, while only 17 percent of the incremental costs are associated with the additional services involved in moving to the reproductive and child health approach. The capital costs are Rs.21.5 billion, or around $700 million, over a five-year period. The recurrent costs are Rs.32.1 billion, or about $1.03 billion. These numbers suggest that under a scenario in which the public sector funds the program totally, a 9 percent increase in recurrent costs a year in real terms for the FWP would be needed up until fiscal 2000.

However, some reproductive and child health services may be provided by the private sector, including private voluntary organizations (PVOs). In addition, priority for public expenditure will need to be placed on the satisfactory operation and maintenance of existing services as India moves to adopt the package of reproductive and child health services. Moreover, any expansion of facilities will have to be based on well-defined criteria that take account, among other things, of need, demand, equity, and the possibilities for private services in the area. To the extent that the private sector might be able to provide services, and to the extent that the need for public financing of facilities is reduced, the capital and recurrent costs that will have to be funded by the public sector will also be less.

Given the large section of the population under the poverty line and the special difficulties facing women, the public sector will have to play an important role in financing the package of essential reproductive and child health services. Under such conditions, a joint
commitment of all levels of government at the center and in the states will be necessary, and the central government will need to consider how to enhance the overall budget for the sector within the context of macroeconomic and fiscal constraints, taking into consideration the contributions made by the private sector. Furthermore, some reallocation of resources will be required within the FWP, both at the center and state levels.
References

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INDIA'S FAMILY WELFARE PROGRAM


_____. 1989. The Eighth Five Year Plan. New Delhi


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