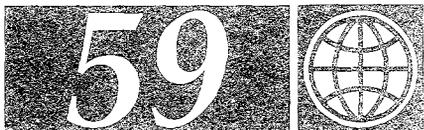


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Improving Family Planning, Health, and Nutrition Outreach in India

Experience from Some World Bank-Assisted
Programs

Richard Heaver

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World Bank-Assisted Programs

Richard Heaver

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EXECUTIVE SUMMARY

This paper looks at the experience of three large scale, World Bank assisted outreach programs in India, and attempts to distil some lessons for the design and management of the national Family Welfare and Integrated Child Development Services programs. The three programs reviewed are the Tamil Nadu Integrated Nutrition Project (TINP), which has halved the rate of severe malnutrition in about 9,000 villages in Tamil Nadu; the training and visit (T&V) system of agricultural extension, being implemented in most of the major states of India and in about 40 other countries; and the health component of the Calcutta Urban Development Project (CUDP), which has sharply increased immunization and contraceptive prevalence rates among slum dwellers in that city. The Family Welfare Program is the national family planning/maternal and child health program; the ICDS program a health, nutrition and pre-school program aimed principally at the under sixes in backward and tribal areas, and currently operating in about 40% of India's development blocks.

Despite the fact that the three programs reviewed are in different sectors, the first part of this paper concludes that they have a number of design and management features in common, which may help to explain their relative success. First, they ensure that field workers focus on a manageable number of priority tasks. Second, they ensure that the ratio of clients to workers is reasonable. Third, workers are trained to follow a defined daily routine concentrating on contacts with the clients most in need of services. Fourth, workers receive regular in-service training, complemented by regular, supportive supervision, which also serves as a form of on the job training. Fifth, two of the three programs rely on village workers recruited from the local area, which facilitates their rapport with clients. Finally, each of the programs involves the client community in implementation, whether through local government organizations (CUDP), contact farmer groups (T&V) or women's working groups (TINP). Subsequent sections of the paper review the extent to which the Family Welfare and Integrated Child Development Services (ICDS) programs share these design and management features.

With regard to the family welfare program, the paper concludes that design and management improvements could be made in four areas. First, field workers' productivity could be increased by concentrating their efforts on priority tasks and clients, and hence making their jobs more manageable. More could be done, for example, to focus outreach visits on pregnant and lactating women who are most in need of services; to target specially disadvantaged families; and to vary service patterns so as to emphasise diseases or services which are locally important from an epidemiological or community perspective - something which in turn would require strengthening of health planning capacity at the district level. Second, several actions could be taken to make services more responsive to community needs, and hence increase demand for them. More could be done to recruit female Village Health Guides and to make use of the potential of traditional birth attendants and anganwadi (ICDS) workers, who are recruited from the local community. User groups could be formed to assist in the provision of services and education and to provide feedback about them; and regular qualitative surveys could be carried out to monitor clients' reactions to the

program. Third, and the highest priority for investment, would be the development of a national family welfare worker in-service training program centered at the district level and below, which could both upgrade workers' technical skills, and institutionalize proposed changes in work routines and priorities. Finally, in view of the complexity of the program and the absence of right answers, it would be useful to initiate operations research programs in service delivery, along the lines of the Matlab extension areas in Bangladesh, in several regions of India with different program characteristics.

Similar actions might also increase the productivity of the ICDS program. Priority tasks on which workers might concentrate include carrying out more thorough village surveys to identify potential clients; universal weighing and growth charting for the under threes and for pregnant women; health and nutrition education; coordination with health services; and developing community participation. Both responsiveness to community needs and client demand could be increased by developing a system for routine qualitative performance monitoring; by the creation of women's working groups to assist in education and service provision; and developing local variations in the timing of weighing and feeding children and of home visits to families, according to what best suits the community. As in the case of the family welfare program, investment in an improved in-service training program appears to be the highest priority. Currently extreme variation in the quality of services could be reduced by giving field workers formal training at least every two years; by developing a district level on the job training system; and by improving the quality and consistency of training through curriculum reform, teacher training, and strengthening central and state level capacities to supervise and evaluate training. Unlike the family welfare program, which has a generous 1:4 or 1:6 ratio of first line supervisors to field workers, there is a strong case for strengthening ICDS supervision by doubling the number of first line supervisors to give a ratio of 1:10 rather than 1:20. Finally, operations research work should be undertaken to experiment, among other things, with alternative criteria for deciding which children get supplementary feeding - a key issue affecting the quantity of food consumed and hence the cost-effectiveness of the program.

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ABBREVIATIONS AND INDIAN TERMS

AWC	Anganwadi Centre
AWW	Anganwadi Worker
CDPO	Community Development Project Officer
CHC	Community Health Centre
CMDA	Calcutta Metropolitan Development Authority
CNW	Community Nutrition Worker
CUDP	Calcutta Urban Development Project
DANIDA	Danish International Development Agency
FP	Family Planning
GOWB	Government of West Bengal
HAF	Health Assistant Female
IAS	Indian Administrative Service
ICDS	Integrated Child Development Services
IDA	International Development Association
IEC	Information, Education, Communication
IIM	Indian Institute of Management
IMRB	Indian Marketing Research Bureau
IUD	Intra-Uterine Device
KAP	Knowledge of Attitude, Practice
MCH	Maternal and Child Health
MPWF	Multipurpose Health Worker Female
MPWM	Multipurpose Health Worker Male
NGO	Non-Governmental Organisation
NIHFW	National Institute of Health and Family Welfare
NIPCCD	National Institute of Public Cooperation And Child Development
PHC	Primary Health Centre
TINP	Tamil Nadu Integrated Nutrition Project
T&V	Training and Visit
UNICEF	United Nations Children's Fund
USAID	US Agency for International Development
VHC	Village Health Committee
VHG	Village Health Guide
Anganwadi	Village Center for ICDS Program
Dai	Traditional Birth Attendant

I. INTRODUCTION

1.01 Designing and managing programs aimed at mass behavioral change is one of the most important and difficult tasks of development. Reaching, understanding and communicating with vast numbers of scattered families, with different economic circumstances and values, is far more complex than management in any office or factory environment. Remarkably little formal research has been done on how to do this task better, either inside or outside the World Bank. Nor has much attention been given to learning from the experience of programs already being implemented on a large scale. This paper looks at the experience of several World Bank assisted outreach programs in India, and attempts to distill some lessons for the design and management of the national Family Welfare and Integrated Child Development Services programs.

1.02 The second part of the paper reviews the managerial approaches of three Bank assisted programs in nutrition, family welfare (India's term for family planning and maternal and child health) and agricultural extension in India. They are chosen because they are (a) outreach based, (b) run by the Government, and (c) operating on a very large scale, in view of the substantial existing literature on small scale, NGO-run programs whose experience may or may not be replicable in the national programs. The third part of the paper compares the way the national family welfare program's outreach efforts are designed and managed in terms of each of the features identified in the second part of the paper. It draws on the family welfare literature, and on experience in Uttar Pradesh, where the Bank was involved in two large scale family welfare projects from 1973 to 1980 and 1980 to 1988; and in Kerala, Karnataka and West Bengal, where similar projects are still under implementation. The fourth part of the paper compares the way the Integrated Child Development Services (ICDS) program is designed and managed in terms of the features of the programs reviewed in part two. It draws on a number of recent evaluation studies of ICDS, and the findings of a 1988 IDA fact-finding mission which visited ICDS schemes in four states (IDA has not as yet financed a project incorporating assistance to ICDS, although one is currently under preparation).

1.03 The paper has an intentionally limited focus on the micro management aspects of outreach system design in the public sector. It does not attempt to deal with the broader financial, institutional and cultural context of these programs - for example, the budget constraints under which they must operate; the effects of civil service policies and practices in the areas of pay, promotions and postings; underlying political factors influencing the development of a given program structure - even though such environmental factors have an important impact on program performance. Nor does it set out to look at the NGO or commercial private sector alternatives to public sector outreach programs.

II. CHARACTERISTICS OF SOME SUCCESSFUL LARGE SCALE OUTREACH PROGRAMS

Introduction

2.01 One of the three programs reviewed in this paper is the Tamil Nadu Integrated Nutrition Project (TINP), begun in 1980 and now extending to about 9000 villages in about half the state. The program is run by the state's Department of Social Welfare, in cooperation with the Department of Health and Family Welfare. The basis of the program is the regular monthly weighing by trained paraprofessionals of all village children between six and thirty-six months of age. The regular contact with families gives the opportunity for providing basic health services, such as immunization, Vitamin A supplements and education in diarrhea management. Also children who fail to gain weight at normal rates are given daily supplementary feeding until they regain a normal growth path. It appears that this program has reduced the rate of severe malnutrition by 50% in the districts of Tamil Nadu where it has been operating.

2.02 The second program, part of the Calcutta Urban Development Project (CUDP), aims to provide basic health and family planning services - but not in this case supplementary feeding - to two million slum-dwellers in Calcutta. The program is being implemented by the Calcutta Metropolitan Development Authority in cooperation with the Department of Health and Family Welfare and the Calcutta municipalities and municipal corporations. The program is younger than TINP, having been established only in 1986. But it is now providing services to a population of about a million, and, where it has been active for over a year, immunization rates have averaged 50 to 65% for the major diseases, and effective contraceptive prevalence 39% - exciting figures for a population with little previous access to such services.

2.03 The third program is in agricultural extension. The training and visit system of extension was first implemented on a large scale in the 1970s in India, and with various adaptations to local conditions, has been adopted in about 40 other countries. Its aim is not just to pass extension advice down the system to farmers, but to learn about their needs and problems and respond to them. To this end, it attempts to involve agricultural researchers in extension with the philosophy that farmers rather than scientists should set the agenda for agricultural research.

2.04 Rather than reviewing the three programs sequentially the remainder of this section of the paper is structured around three broad design and management themes common to each of the programs: Focusing workers on a limited, manageable number of priority tasks and clients; giving workers regular support, both in terms of in-service training and supervision; and involving clients in the implementation process.

Focusing Field Workers' Tasks

2.05 All three programs put great emphasis on limiting field workers' tasks to what is reasonable and feasible. They use a combination of mechanisms, from limiting the range of duties, to limiting the number of

program clients in each worker's service area, to defining priority clients who will receive most of the worker's attention.

2.06 Narrow range of duties. The T and V program goes furthest in this respect. First, field workers are expected to be educators only; they are relieved of any prior multipurpose functions such as credit or other input distribution. Second, field workers are not expected to provide a whole range of agricultural advice to farmers, but to limit their advice to what farmers need to know at that particular season in that particular locality, for the particular crops grown locally. Each fortnight the local extension researchers and supervisors develop a set of appropriate key messages in which local workers are trained for dissemination to farmers. Field staff are not burdened with the need to know more than is immediately useful.

2.07 Because health needs are not as seasonally variable as agricultural production, workers in the other two programs have a wider range of tasks at a given time. But these are also carefully designed to concentrate on priorities, and to be manageable. In the Tamil Nadu program, for example, workers concentrate on weighing, nutrition education, supplementary feeding, immunization, diarrhoea management and provision of Vitamin A six-monthly and deworming medicine three times a year. In the Calcutta program, field workers refer malnutrition cases rather than providing supplementary feeding themselves, and instead give more attention to ante and post-natal care, first aid, family planning and environmental sanitation. Both programs recognize that it is not possible for their workers to provide the full range of primary health services endorsed at the Alma Ata Conference. Both programs focus their performance monitoring system on the chosen tasks, so that workers have a clear incentive to focus on priorities.

2.08 Reasonable Worker - Client ratios. All three programs carefully limit the ratio of clients to field workers to what they believe to be the maximum manageable. The Tamil Nadu and the Calcutta programs have settled on a similar ratio - one field worker per 2-300 families. This means that for family planning purposes there will be 160 to 240 eligible couples per worker; for antenatal care about 30 to 45 pregnant women at any one time; for infant and child care about 50 to 100 children under three; and, in Tamil Nadu, 15 to 25 under threes who are in need of supplementary feeding. T & V has taken a less fixed approach to worker/client ratios; where farm populations are dispersed, the ratio might be 1:500 farmers or less; where populations are denser, it might be 1:800 or more farmers. Ratios can be larger in agricultural extension than in health and nutrition programs partly because there is more demand for advice and so messages disseminate more spontaneously; partly because extension workers in the T & V system have more limited tasks. They are motivators only, while health and nutrition workers are usually also service providers.

2.09 Indicative of the importance that the programs attach to reasonable client loads is that in each case worker client ratios were held constant even during the development phase of the program. Thus, if funds or availability of trained personnel prevented full staffing of a new area, the response was to limit the area of coverage rather than to dilute the effectiveness of a worker, even temporarily, by giving him or her more than the agreed norm of

clients.

2.10 Defined work routines and priority clients. In addition to limiting the number of tasks and clients, all three programs also carefully define manageable routines for field workers. In the T & V system, the farmers in each worker's area are divided into eight groups of about a hundred farmers each, and in each group about ten "contact farmers" are selected. The worker then visits each of the eight contact farmer groups once a fortnight on the same day of the week; the predictability of the visit makes it easier for farmers to be involved regularly. On the remaining days of the fortnight the extension worker attends training sessions with other local workers. Thus for each day of the week the worker has a set schedule known to himself, his supervisor and his clients.

2.11 In the Tamil Nadu program, work routines are very different, because workers provide several services other than education services, but there are still clear monthly and daily schedules. Three days a month are set aside for weighing all the 6-36 month olds in the area; three for entering weight and other data on cards; two for meetings with immediate supervisors; two for larger meetings with the next level supervisor etc. Six days a week (including days on which the above activities take place) at 8.30 in the morning, the worker prepares supplementary food for those children whom weighing has shown to be severely malnourished or failing to gain weight at normal rates. And on the fifteen days a month when there are no special activities such as weighing or meetings, in the afternoons the nutrition worker makes home visits according to a predetermined monthly schedule, with an average of about 20 houses in each day's visit area. Since an afternoon is insufficient for a lengthy visit to 20 families, the nutrition worker in practice will spend most of her home visit time with families where the monthly growth monitoring system has indicated a nutrition problem.

2.12 Workers in the Calcutta program divide their areas into 10 blocks with about 20 families in each, and, carrying out home visits six days a week, are able to get back to each block/family once a fortnight. Because these workers have less service provision duties than those in the nutrition program, they can visit each family more frequently, and spend a longer time on each visit. Even so, consideration is now being given to prioritizing families and giving more time to those with particular problems.

Providing Regular Support.

2.13 In-service training. High priority is attached to in-service training, provided most systematically in the T & V system, where each agricultural extension worker is trained one full day every fortnight. One fortnight the training is given by subject matter specialists to groups of up to 30 extension workers; the other fortnight, the training meeting is conducted by the worker's immediate supervisor and the group is limited to the workers in his charge. At the first training meeting, thorough training is given in the key recommendations for that month. The second meeting provides an opportunity for reinforcement, discussion of problems arising in the field, and further adaptation of recommendations to local conditions.

2.14 In the Calcutta program, in-service training takes place mainly

through weekly meetings between field workers and supervisors, aimed at solving problems encountered during the previous week. In the Tamil Nadu program, nutrition workers get an average of 10-15 days in-service training per year, given at the block (sub-district) headquarters. This is supplemented by on the job training by the Community Nutrition Instructress attached to each block headquarters. While a good worker might need no additional training, a poor worker might in this program receive an additional 20 days of in-service training a year.

2.15 The amount of in-service training built into these programs contrasts strongly with the norms for other outreach programs either in agriculture or health care, where workers typically receive in-service training only once in every two or three years.

2.16 Supervision. As is the case with field workers, supervisors' jobs in all three programs are designed to be manageable. In the TINP program, the supervisor worker ratio is 1:10; in the Calcutta program 1:5; in T & V, from 1:6 to 1:8, depending on terrain and other factors. In each case, the ratios allow each supervisor to spend a full day each fortnight with each of his or her workers - something facilitated by the clear definition of workers' daily programs, which ensures that the worker's location is at all times known to the supervisor. In the TINP program, consideration is now being given to varying the supervision system in places where the program is mature and the need for supervision less intense. It is thought that a 1:12 ratio might be workable, and that some of the better workers need fewer visits, allowing supervisors to spend more time with poorer performing workers.

2.17 Supervision ratios of this order of magnitude are important for the quality as well as the quantity of supervision. When ratios are such that supervisor visits are cut short, supervisors inevitably concentrate on the inspection of performance registers rather than work in the field (though this does not apply for T & V, where performance is hard to quantify and registers are not kept). Only when supervisors can spend a day at a time with workers can they observe how they are actually doing their jobs and in particular how workers interact with clients. The opportunity that regular supervision in the field provides for supervisors to interact themselves with clients is also critically important. It ensures that the program is accountable downwards to those it serves rather than simply upwards to its managers.

Involving Clients

2.18 A third major feature of all the programs is the involvement of clients in implementation, either as volunteers or as paid workers.

2.19 Recruiting Local Workers. Both the Calcutta and Tamil Nadu programs attribute much of their success to the fact that their field workers are women recruited from the area in which they work. In the Calcutta slums, this was essential in breaking down initial suspicion among clients, many of whom assumed that the health worker's house visits must be to gain their vote for some political party. It was important, too, in breaking down the social barriers to seeking care. Workers often accompany clients to clinics and hospitals to ensure that their patients get services to which they are legally

entitled but to which they would not previously have sought - or perhaps been allowed - access.

2.20 In the Tamil Nadu program, the field workers were chosen not only from among the poorer groups in the community, but as far as possible from among women who were poor but had well nourished children. Such women, even before training, would be best placed to teach others how to make the most of limited income and food resources for their children. In both programs, the field workers are paraprofessionals with just a few weeks' training, and paid about a quarter of the salary that full time village multipurpose health workers get from the Ministry of Health. Because the workers themselves are poor, and because of the prestige they gain from helping their community, they have been prepared to work hard for lower wages. And the savings per worker in salary costs has made it possible for the programs to fund the dense ratio of workers to clients which has been important to their success.

2.21 The T & V program uses full time government workers rather than local paraprofessionals, partly because T & V was introduced to increase the productivity of the existing extension system, whose workers were already in place; the other two programs were set up from scratch, with new cadres of workers. Recruitment of workers from the local community may be less critical in agriculture than in family health and nutrition because the barriers to adoption are less; extension advice is of a less intimate nature, and the benefits of adoption clearly visible in other farmers' fields.

2.22 Voluntary involvement in implementation. T & V focuses the attention of extension workers on groups of contact farmers, because it is recognized that it is impossible to give personal advice to all farmers. These farmers are chosen partly because they are representative of their farming community, and partly for being willing to have other farmers visit their fields and to pass on extension advice. These volunteers reinforce the extension worker's efforts both by demonstration and education. Frequent face to face group contact with both the extension worker and his supervisor gives contact farmers the opportunity (and builds their confidence) to voice problems and make sure that extension is responsive to local needs.

2.23 In the Tamil Nadu program, each nutrition worker forms a "Women's Working Group" immediately after her training and before beginning the delivery of any program services. About 20 in number, the group is drawn from women in the village who represent the community, who have children of their own, who are concerned about health and nutrition, and who are opinion leaders. At the start of the program, this group plays a critical role in explaining the benefits of the program to the community, and persuading mothers to bring their children for weighing; without their help, program managers believe that many mothers would never have participated in a program which offers supplementary feeding to only a minority of children. During program implementation, women from the Working Group assist at monthly weighing sessions, participate in cooking demonstrations, and carry out home visits for nutrition education purposes. Recently, the latter role has been systematized; each volunteer has been allotted ten or so other women, chosen from among their friends and acquaintances, on whom she will concentrate her attention. Another recent development is the formation of Children's Working

Groups, which use song, dance and acting to educate themselves and others on health and nutrition themes.

2.24 Community involvement has taken a different form in the Calcutta program, which gives a special managerial role to the local authorities. The program is not extended automatically to new areas of Calcutta, even though program funds may be available and people's needs great. Program managers hold discussions with the local municipal leaders, and only if they are prepared to make certain commitments will their areas be included in the program. These commitments include provision of a site for the local program office; the promise to participate in the recruitment of the local workers and the monitoring of their performance; and the provision of small amounts of money for incidental expenses - for example for refreshments at workers' meetings. During implementation, municipal representatives sit on the coordinating committees which oversee the program locally, where they play an important managerial role. Harnessing the influence of local leaders in this way benefits both leaders and slum-dwellers. One proof of success is that mayors not participating in the program are beginning to seek inclusion because of pressures from constituents who have seen the benefits of the program in neighbouring areas.

The Question of Commitment: Were These Programs Exceptional?

2.25 Successfully managed programs are characterised not only by designs which are well adapted to the task to be done, but also relatively high levels of commitment among program implementors. This is true of each of the three programs reviewed. The question is whether the environments in which these programs developed were so exceptional as to make them non-replicable elsewhere. Tamil Nadu, for example, is a state known for its strong commitment to improving nutritional status, as evidenced by exceptionally high levels of financing and the close association of the political leadership with state nutrition programs (as in the "Chief Minister's Noonday Meals Program"). As a result, the general calibre of mid-level implementing officials tends to be high; and in particular, the TINP program has been coordinated by a series of young, energetic and committed IAS officers who have been allowed to remain in post long enough to be effective. Worker commitment to implementation is also increased by an interesting feature of program design. At the introduction of the program to a new village, the CNW's supervisors hold a village meeting at which they outline the program services which should be available to the village, and encourage clients to protest to their worker's supervisors if there is any deficiency.

2.26 The Calcutta program is managed by a group of doctors retired from the State or military health services, and recruited by CMDA for both their ability in and commitment to community health. CMDA's managerial autonomy allowed it the freedom to recruit candidates on grounds of motivation rather than seniority; and the managerial autonomy that CMDA was in turn able to offer the program management team was no doubt a factor in attracting doctors who might otherwise have opted for the less restrictive managerial climate of an NGO. A further factor in commitment to implementation was managers' support from and accountability to municipal authorities, whose interest in the health program is unusually strong and at least partly the product of the

particular political situation in West Bengal. Management's commitment - and program success - in the case of T & V has been more variable than in the case of the other two programs, consistent with the fact that it has been implemented in the varying environments of so many states. Commitment has also varied significantly over time. For example, transfers of Directors of Extension have led to almost immediate changes in program performance, depending on the level of the new incumbent's motivation and understanding of the T and V system.

2.27 Also affecting levels of commitment and performance in each of these programs is the fact that they were assisted by a foreign agency. A donor's influence can be felt through the additional finance or technical assistance that it provides; through project conditionality or 'leverage'; or simply through the pressure to perform that is implicit in the time-bound nature and visibility of projects. It is worth analysing which of these are important in the case of these Bank assisted programs:

(i) Finance. Clearly, the additional resources provided through project financing both enabled more to be done, and motivated implementors. But it is important to note that Bank-assisted projects aim to avoid the creation of resource-rich project islands in impoverished national programs; in each of these projects, care was taken to restrict project inputs to those cheap enough to be affordable and replicable for the entire state or national program;

(ii) Technical assistance. While substantial technical assistance in the form of visiting Bank missions was provided during the lengthy design period of each of these projects, the Bank's involvement in implementation was much more limited. Foreign technical assistance was not financed as part of any of the programs. In the case of the TINP and Calcutta programs, Bank staff involvement in implementation was limited to brief review missions twice a year (three times a year in the first two years of implementation of TINP). In the case of T and V, Bank staff involvement was higher because of the presence of resident agricultural staff in the Bank's New Delhi office, and there is little doubt that regular orientation of senior extension officials by Bank staff in the principles of T and V was a material factor in sustaining commitment, especially in States where staff turnover was high.

(iii) Project conditionality. No major conditionality was involved in the legal agreements for the TINP or Calcutta programs; covenants relate mostly to such things as the sanctioning or filling of key additional posts. The one major policy change instituted with the T and V system was the restriction of workers' duties to education and motivation, where before they had also been involved with the provision of credit and other inputs. The move to a single purpose system gave rise to strong resistance from workers in certain States, in some cases in the law courts.

(iv) Hawthorne Effect. There is little doubt that the special attention and review given to foreign-aided projects increases implementors' commitment and performance. And for the line ministry, the ability to refer to formal agreements with aid agencies can also help in securing the release of funds from finance ministries or cooperation from co-implementing agencies

such as the Public Works Department.

2.28 Taking all these environmental factors together, the conclusion is perhaps that the involvement of the World Bank in these programs has had a significant influence on managers' commitment and program success, but not one so great as to make the programs exceptional and non-comparable to other domestically financed efforts; and that the Bank's influence on commitment and results has been considerably less than that of domestic factors such as Tamil Nadu's political and administrative support, or CMDA's managerial autonomy.

C. Lessons

2.29 The features shared by these programs suggest three different sorts of lessons for the design of mass outreach systems. First, that though these programs are among the most difficult activities in development, their design and management is nevertheless amenable to analysis. Successful programs appear to be doing specific things in the same kind of way, with lessons to be learned which can be isolated and applied. For example, these include, but are of course not limited to:

- (i) Focussing workers on a limited number of priority tasks;
- (ii) ensuring reasonable worker/client ratios;
- (iii) developing defined work routines and targeting priority clients;
- (iv) providing regular in-service training;
- (v) ensuring reasonable supervisor/worker ratios;
- (vi) recruiting local workers; and
- (vii) involving clients in program implementation.

2.30 A second lesson is the need for variety and flexibility in the approach to program design. Although all three of the programs discussed follow similar design and management principles, their application differs in important ways. Limiting tasks to what is feasible, for example, is always essential. But it can be achieved in a number of different ways - by cutting down the tasks each worker has to do; by cutting the number of clients to be served; or by targeting work on particular clients among those served. Similarly, community involvement is a key feature of successful programs, but can take many different forms. Care must therefore be taken not to copy specific features (as opposed to applying the underlying principles) of a successful program, without careful consideration of the demographic, cultural, administrative and financial context into which it would be transplanted, and the particular goals of the program.

2.31 Both these lessons point to a third and more fundamental feature of successful outreach programs. Whatever the exact nature of their designs

and objectives, they seem to have in common tremendous attention to detailed planning, both in terms of program structure and in terms of day to day service delivery processes. This attention to field level detail contrasts strongly with the preoccupation with policy, with rhetoric, and with senior and middle level management issues characteristic of much of the debate on development. While the policy environment remains important for the success of any program, the three programs examined in the first part of this paper suggest that the interests of the poor may best be served by a lowering of policy makers' and program implementors' sights towards the daily realities of work in villages and slums, and the specific detail of designing doable jobs and providing adequate support for field workers and community volunteers.

III. IMPLICATIONS FOR THE FAMILY WELFARE PROGRAM

Introduction

3.01 The performance constraints on the Indian family welfare program have been analysed in great detail by many commentators. The major continuing problems - an emphasis on family planning at the expense of maternal and child health care, and an emphasis on sterilization at the expense of temporary methods of contraception - are well recognized by the Ministry of Health and Family Welfare (even if they are also partly perpetuated by the Ministry's own targeting and incentive systems). In response, the government has put forward policies aimed at strengthening maternal and child health services, and particularly immunization, and stressing the need for a cafeteria approach to contraception. Dissatisfied with the overall performance of the family welfare program, the government has also recently been active in exploring 'beyond family planning' approaches to fertility control; the potential of the commercial advertising sector in information, education and communication; and the potential role of non-government organizations and private medical practitioners in health and family welfare service delivery.

3.02 Less attention, however, has been paid to the detailed strategies for the implementation of new policies than to the development and refinement of the policies themselves. Recognizing that a sound family welfare policy framework is in place, the third part of this paper looks at what might be done in the government sector at the field level to improve the performance of the typical family welfare worker, and the demand of her clients for her services. The future performance of the government sector in family welfare remains crucial. While NGO and private sector efforts will be an important complement to public sector services, the reach of NGOs in rural areas is limited, and the commercial motives of the private medical sector fit it better for a curative than a preventive role. The hundreds of thousands of government health and family welfare field workers represent both a major channel of access to the public that cannot be ignored; and an investment of such magnitude that attention to its productivity must continue to take first place in the priorities of health and family welfare planners.

3.03 This and the final part of the paper on the Integrated Child Development Services Scheme are structured around the same themes identified in part two. The family welfare and ICDS programs are reviewed in terms of how well they focus workers on key tasks and clients, support workers with supervision and training, and involve clients in program implementation.

Focusing Field Workers' Tasks

3.04 The Multipurpose Health Worker Female (MPWF) is the key family welfare worker at the community level. According to her job description (Annex 1), she has 47 separate tasks to undertake on a regular basis - a sharp contrast to the much more limited responsibilities of all the village level

workers discussed above. She is to serve a clientele of 5,000 people (3,000 in tribal areas), as against the 1000 - 1500 clients served by the village paraprofessionals in the TINP and CUDP programs. The 5000 would include about 800 eligible couples, about 550 children under four, and about 150 pregnant women at any one time.

3.05 In theory, the MPWF is supported in her efforts by several other staff at the village level - the full time Multipurpose Worker Male (MPWM), and part time Village Health Guides (VHG) and Traditional Birth Attendants (dais). In theory also, she should reduce her workload by concentrating her time on those households with ante- or post-natal cases or infants -- about 4-500 households. In practice, MPWFs find that they receive little support from other village level workers, and cannot themselves maintain regular contact with 500 households -- or say, 25 households a day, if families are visited once a month. Indeed, in most states, MPWFs are not aware of the central government guidelines on concentrating home visits on families with MCH cases. Instead, they are working to guidelines which ask them to visit all households once a month i.e. about 50 houses a day, a patently impossible task.

3.06 The consequences of this situation have been summarized by many commentators; MPWFs, unable to do everything, concentrate quite rationally on those aspects of their work which are easiest, and which they have most pressure to perform. They therefore spend most time with families living near the subcenter, and concentrate on family planning performance (particularly on their assigned targets for sterilization cases) and, to a growing extent as the Universal Immunization Program (UIP) advances, on immunization. Under these circumstances, access to services is highly inequitable, and other key aspects of health care are neglected.

3.07 The remainder of this section considers what might be done to make MPWFs' tasks more feasible and their work more effective, through increased support from other workers; through greater prioritization of clients; through reducing their range of duties; or through increasing the ratio of family welfare workers to clients.

3.08 Support from other workers. It is increasingly accepted that the potential contribution of MPWMs to family welfare is limited. This is partly because they are men, and hence restricted in their contacts with and influence on mothers; partly because many workers previously appointed to vertical disease control programs have failed to adapt to their subsequently mandated multipurpose roles. Debate about the potential contribution of Village Health Guides is more polarized, perhaps because the scheme has been implemented with varying degrees of commitment and success in different states. But where a serious implementation effort has been made, studies show that VHG's have contributed to community health. An evaluation of the scheme in two districts of Karnataka (Reddy et al. 1987) for example, found that clients welcomed VHG's work in basic curative care and environmental sanitation. But the same study noted that their work was negligible in maternal and child health, a finding consistent with the fact that 87% of the VHG's were male. The conclusion is probably that VHG's have a useful role in health care, and one which could be built on in the area of communicable

disease control (e.g. TB case-finding and treatment compliance, and environmental hygiene). But their role in support of MPWFs' work in MCH will be very limited, all the while the VHG cadre remains heavily dominated by men.

3.09 Village dais can in principle contribute more to family welfare because of their special access to women. As Kakar (1980) put it in a study of 42 dais in Haryana, "all of them carried a powerful voice, at least in the sphere of maternal and child health.... As many of their beliefs and practices.... had a social sanction, their clients followed them without being argumentative.... Dais were, for the villagers, their lay gynaecologists, herbalists, nutritionists and psychiatrists." Such influence is not universal; in South India, for example, family members play a greater and dais a lesser role in deliveries. And in the part of UP studied by Jeffrey et al (1984), dais' low social status and the fact that they only associated with their clients during delivery limited their influence on MCH. But in general, it is clear that dais have a potential to assist MPWFs with their work that has not been adequately exploited by the national program for dai training. More often than not, dais receive little supervision and support after training, and frequently have little contact with "their" MPWF. In addition to training MPWFs to work more closely with dais, it would be useful to experiment further with the effects of paying a performance based honorarium to dais, something tried with success on a small scale by the Population Center, Lucknow (Sawhney et al, undated).

3.10 The most underexploited additional resource for the MPWF is the Anganwadi Worker (AWW), in the substantial and rapidly increasing number of blocks served by ICDS. Like the village level workers of the TINP & CUDP programs, AWWs are (or should be) local women well accepted in their communities; and they work with a reasonably small number of clients - no more than about a thousand. Where anganwadis are well run, AWWs can regularly bring together in one group most of the least privileged children in a given neighbourhood. This gives MPWFs the opportunity both to offer curative and preventive child care in a highly efficient manner, and to identify the parents of children failing to thrive as priority cases for regular home visiting and education. Unfortunately (see part four of this paper) most anganwadis fail to attract a high proportion of the children under three, who are the highest risk group in terms of malnutrition, morbidity and mortality. A much more aggressive effort to improve the performance of the ICDS program in this respect could have tremendous benefits for the family welfare program.

3.11 Prioritizing clients. Although dais and anganwadi workers, and to an extent other village level workers, can assist the MPWF in motivating and educating clients, they cannot hope to substitute, in terms of either the provision of services or health and nutrition education, for MPWFs whose training is far more rigorous than their own. Given the low level of demand for preventive health care and for the temporary methods of family planning, and the fact that counselling in these areas is not an easy task, it is recognized that MPWFs must themselves spend much of their time in making personal home visits to clients and potential clients. It is also recognized that, given the barriers to adoption of new FP/MCH related behavior, home visits must be regular enough - at least monthly - to build a relationship of trust and confidence between worker and client. Since not all clients can be

visited regularly, the question is what system of rationing or prioritizing should be adopted, so as to maximize the MPWF's effectiveness. This question can best be answered through operations research testing of different approaches; one possible alternative approach to the present system is outlined below.

3.12 Simple arithmetic suggests that it is not possible for the MPWF to maintain regular contact with the 4-500 households having ante - or post-natal cases or infants. It is unrealistic to expect that an MPWF would spend more than an average of four hours a day in actual home visits, given a) the heat and discomfort of this work together with the time it takes to go from the subcenter to outlying villages, and b) the fact that substantial time must be spent on out-patient care at the clinic as well as on record-keeping. It is also unrealistic to expect an MPWF to spend more than an average of four days a week on home visit work given the frequency of public holidays, and the time that must be spent a) attending deliveries, b) attending meetings at the PHC, c) organizing and attending family planning camps etc. and d) responding to emergency calls. Assuming that a home visit takes an average of 15 minutes, it would not be reasonable to expect an MPWF to keep in regular contact with more than 256 households (16 days x 4 hours x 4 visits), as opposed to the total of 4-500 "priority" households.

3.13 Two criteria may be suggested for determining which 250 households might be selected for intensive visiting. First, that all pregnant women and women with children 0-6 months (about 150-200 per subcenter area) should be visited. There are strong technical reasons for this. On the health side, ante-natal care and the identification of high risk pregnancies are high priority interventions; so is special care for the young infant, given high rates of infant mortality. On the nutrition side, better feeding and vitamin and mineral supplements during pregnancy are critical for the avoidance of low-birth-weight babies at higher risk of both mortality and morbidity; and good nutrition during lactation is important to ensure adequate supplies of breast-milk. On the family planning side, the relationship built up through continuous care during pregnancy and lactation is likely to be the strongest basis for the acceptance of family planning.

3.14 The second set of criteria might be more flexible, and revolve around those in most need of service, defined in three ways. First, households where follow-up is required to services already given - for example, new acceptors of contraception. Second, households (other than those with pregnant women and women with young infants) identified as being at high health or nutritional risk. These could be identified either through the Eligible Couple and Child Register (for example, women with several closely spaced children), or through examination of children at anganwadis. Third, households coming from particularly disadvantaged social groups, who currently have little access to services because they are low in social status and often physically distant from subcenters. Special attention would need to be given to tribals, whose children are often severely malnourished (see Subbarao, 1989) and hence at high health risk, and who may be particularly discriminated against in their access to services (see for example DANIDA, 1986, p. 209 for evidence of this in Tamil Nadu).

3.15 Reducing the range of duties. Many commentators have pointed out that the range of tasks which MPWFs are supposed to undertake is impractically broad. Debate often then centers on what specific narrower range or "package" of services will have most impact while remaining manageable for the worker. The problem is that any narrower package proposed can be criticized by public health specialists on one or both of two grounds. First, that any narrowing of the range of services contravenes a basic principle of primary health care, endorsed by the world's governments at Alma Ata - the integrated provision of care. Second, that the omission of any specific task is unwarranted since failure to perform that particular service for a particular person in need at a given time may lead to death or illness, and is therefore unethical.

3.16 The debate about the "right" package of services therefore tends to be unproductive. It may also be misplaced. There are considerable variations in the epidemiological situation within India between and within states, districts and blocks, coupled with considerable variation in clients' felt needs for health care (something underlined by a recent study of popular attitudes in six states [CARE, Forthcoming]). This argues for packages of interventions which vary according to local needs. It may be more useful, following similar principles to those suggested for client targeting, to define priority services in three ways. First, a 'core package' of key services which would be delivered state or nationwide, and which would probably include at least a full cafeteria of contraceptive choices; immunization; diarrhea control; detection and referral of high risk pregnancies; and treatment of acute respiratory infections. Second, a small set of services which respond to particular local needs - for example, for diseases such as goitre, lathyrism or sexually transmitted diseases which may be concentrated in particular areas or among particular client groups. Third, a small set of services which respond to local felt needs, even where these may not seem to be of the highest priority in epidemiological terms. Given the prevailing low level of demand for health services and low level of trust in government health service providers, starting with an emphasis on services that people believe are most important for themselves may be the best lead-in to later acceptance of services that medical specialists believe are most important for people.

3.17 Increasing the number of family welfare workers. A more radical option than any of the above would be to increase the ratio of MPWFs to clients. It is worth noting that, based on many years of experience with the Matlab project and its extension areas, the Bangladesh government decided to increase the ratio of its Family Welfare Workers (the local equivalent of the MPWF) from 1:4000 to 1:2,000 clients - a decision whose effects have not yet been fully evaluated. A move to a similar ratio in India would probably not be a sensible course of action, for several reasons. First, it would be an extremely costly decision, which might divert funds from filling gaps in the still incomplete existing infrastructure network. Second, it may be a higher priority to put limited training resources into filling the many existing MPWF vacancies and upgrading the quality of MPWFs already in service, than to create new posts. Third, and most importantly, the large discrepancies between the performance of individual MPWFs working in similar environments suggests that substantial overall productivity increases could be achieved within the existing staffing pattern by measures to bring the performance of

poor and average MPWFs closer to the high performers (see also paras 3.28-3.32 below for evidence of the potential of in-service training in this respect).

Involving Clients

3.18 Two major differences between the family welfare program and the CUDP and TINP programs are that the key family welfare service provider at the village level - the MPWF - seldom comes from the locality in which she works, and is of higher educational and social status than the majority of her clients. This means that the MPWF begins with an in-built disadvantage both in terms of knowing what clients need, and in terms of the community's trust and confidence in her. In these circumstances of social distance between family welfare worker and client, client involvement in program implementation is particularly important if services are to be responsive to local needs.

3.19 The problem of distance is drastically exacerbated when the MPWF is not resident at her subcenter, but commutes to work from a local town, often because her husband is resident and working there. Non-residence of MPWFs appears to be widespread in most states, particularly in remoter and less hospitable areas where the need for services is greatest; for example, IIM (1985) reported that in Eastern UP 50% of MPWFs were living outside their allotted areas. Such MPWFs can never be fully effective, until disciplinary action is taken to ensure that they live where they work, or to replace them by workers prepared to live locally.

3.20 Community participation. There has been little systematic study of the amount and type of community participation in the family welfare program in India. But a combination of the limited existing literature and inquiries made on field visits in several states suggests that in this area the reality in the villages departs substantially from the ideals of Alma Ata. NIHF's 1984 study of the VHG scheme looked at the setting up of Village Health Committees (VHCs) in ten states, and found wide variation. In Assam, Orissa and AP, for example, more than 60% of villages had VHCs, while in states such as West Bengal, Haryana, HP and Rajasthan, less than 30% had them. Field visits suggest that in many areas where VHCs have been created, this has been as a matter of form in response to a government order, and the committees are actually inactive. Two states have made a special effort to involve the panchayat system in family welfare; but in MP, the scheme is too new for conclusions to be drawn, and in Gujarat the financial incentives offered to panchayats have made them enthusiastic fulfillers of family planning targets rather than representatives of communities' broader family welfare needs (Panandikar and Mehra, 1987).

3.21 More could be done to make such formal community organizations effective, first by training family welfare workers in techniques of community organization; second, by ensuring that committees include a good representation of women (many now have none - an absurd situation, given the development sector involved); and third, by defining the roles of such committees more clearly and usefully. For example, moving towards a more location-specific set of tasks for MPWFs (para 3.16) could boost community participation, since health and family welfare committees could play a lead

role in defining local priorities for action and in monitoring implementation. Nevertheless, the potential of such formal organizations needs to be viewed with great realism in the context of village India, where most so-called community organizations are dominated by local elites with little incentive to advance the interests of the majority.

3.22 The creation of informal groups of village women may be a more effective means of increasing service utilization, although experience suggests that specific attempts to organize the poor - often the most in need of services - are likely to be counter-productive. A review of the institutional constraints on delivering services to the poor (Satia, 1988) notes that several projects aimed at targeting health services exclusively or mainly to the poor have been subverted and ultimately forced to close by local elites. TINP's involvement of poor and non-poor local women in Women's Working Groups which assist Community Nutrition Workers in both education and service provision is an idea that could be adapted to the family welfare program, providing such groups had a genuine focus on improving health and nutrition and were not seen as yet another means of filling family planning targets. The AID-assisted family welfare Information, Education and Communication Project being implemented in Rajasthan, UP, HP and Bihar includes development of a similar system of village "link persons", community volunteers each representing 20 households in the village; this will be an important experiment to watch.

3.23 Community involvement has also been successfully achieved in parts of Karnataka assisted under the Second IDA Population Project, through the creation of radio listeners' groups. These groups of about 20-30 women are formed by MPWFs and meet weekly at the subcenter to listen to a radio program on family welfare themes financed by the project. Interest has been maintained through a quiz at the end of the program on the material just presented; the first so many listeners who write in with correct answers receive prizes - a scheme which has elicited up to 3,000 letters per week. Another innovative and popular feature is that MPWFs who have queries or uncertainties about the material in the program may write in for advice to a panel of doctors at the radio station. Each letter is answered, and the most common queries are discussed by the panel of doctors at the start of the following week's program, as a way of reinforcing the material presented the previous week.

3.24 Surveys of clients attitudes. Community involvement may be hard to foster in the many areas where service utilization is low and trust in MPWFs is weak, because of the program's past emphasis on family planning at the expense of family health. Women's groups may also not represent the full range of potential service users in the many areas where villages consist of several sub-communities based on caste and class divisions. Under these circumstances, an important complementary method of making the family welfare program more responsive to client needs is the regular conduct of surveys of clients' attitudes and practices as they relate to family planning and health. The value of such surveys - and the family welfare program's ignorance of the clients it is supposed to serve - is well demonstrated by a recent UNICEF-financed KAP study on diarrhea and dehydration (IMRB, 1988), which overturned much of the conventional wisdom about client practices in this

area. Such surveys can be focused on a) client practices and beliefs in respect to particular diseases, child feeding and contraceptive use; b) client preferences for private versus public and traditional versus non-traditional care; and c) feedback on service quality, particularly with regard to how clients from different social groups are treated by the government health service - essential information when major reasons for low service utilization include long waiting times, short consultations, and rude behaviour from service providers.

3.25 The findings of such qualitative surveys can help in increasing the effectiveness of IEC; in learning how workers' in-service training should be reoriented; and, more broadly, in motivating program managers and field workers to pay more attention to their market, especially to neglected social groups within it. These functions are not fulfilled by the family welfare program's current monitoring and evaluation system, which focuses on the collection of quantitative service statistics rather than qualitative feedback. The methodologies for rapid, cheap qualitative surveys are now well established. They range from the traditional KAP survey based on questionnaires and focus group discussions; to more open-ended conversational interviewing and participant observation (Salmen, 1987, Scrimshaw and Hurtado, 1987); to actual impersonation of clients to test providers' practices. What is now needed is a systematic effort to build up the capacities of Indian institutions in each state to undertake this type of work, and a commitment from center and state MOHFWs to make such surveys a routine part of program monitoring, however uncomfortable their results may sometimes be for program managers.

3.26 Display of Performance Information at Subcenters. Finally, community involvement in the family welfare program could also be encouraged by improving the display of performance information at each subcenter. At present, performance information (e.g. numbers of children immunized, numbers of contraceptive acceptors) is presented either in terms of raw numbers or as a percentage of targets set by the district and state levels of the system, which are meaningless in terms of telling the community what benefit it is receiving from the sub-center's services. Presenting all such information in terms of coverage of relevant populations (e.g ante-natal cases as not, say, 30 for a particular subcenter, but as 20% of the currently pregnant population of 150) would a) give village health committees the information they need for monitoring the progress of 'their' program, b) allow supervisors to make valid performance comparisons between workers, and c) give the MPWF a powerful new performance incentive.

Providing Regular Support

3.27 Supervision. The almost universal focus of family welfare supervision on the checking of registers and inspection rather than on support and on-the-job training has been well documented; the issues do not need repeating at length. The solution lies in in-service training for supervisors in supervision, which is not now available on a systematic basis. With such training, and given that in family welfare there are no more than four to six MPWFs per Health Assistant Female (HAF), the potential for supportive supervision to improve worker performance is enormous. HAFs could spend one

to two entire days a fortnight assisting each of their MPWFs individually, something that is not permitted by the staffing ratios of any of the three programs reviewed in part two above.

3.28 In-service training. More and better in-service training is a critical investment for the family welfare program for at least three reasons. First, there is ample evidence that the technical skills of most MPWFs are extremely weak. A recent national KAP study on immunization (IMRB, 1988) showed that no less than 50 % of MPWFs did not know the length of time a syringe needs to be sterilized between injections. A survey of family welfare workers in Karnataka and Kerala financed under the Third IDA Population Project (Reddy and Gopal, 1986) came up with many similarly worrying findings. In family planning, only a third of MPWFs (and only two thirds of the MPWFs' supervisors) knew the recommended number of follow-up visits to new IUD and oral pill (OP) acceptors; and a quarter of MPWFs knew of none of the possible side-effects of OPs. In health, only half of the MPWFs (and 60% of their supervisors) knew how to prepare oral rehydration salts; and less than a fifth knew four symptoms of TB. In nutrition, less than a third of MPWFs knew how many grades of malnutrition there are; how to use a growth chart; or the correct age for the introduction of semi-solid weaning foods. Understanding of how to undertake inter-personal IEC work was weak in all cases. Similar findings came out of a similar study of family welfare workers in West Bengal, financed under the Fourth IDA Population Project (Government of West Bengal, forthcoming).

3.29 Second, the sorts of changes in MPWFs' work practices recommended above cannot be implemented without a systematic in-service training program. The priority areas for both MPWF and supervisor training appear to be a) work planning, including task and client prioritization; b) supportive supervision (including support of dais and VHGs by MPWFs); c) how to organize community involvement; and d) how to carry out interpersonal IEC/counselling. To the limited degree that in-service training has been made available in the states, it has tended to focus on technical training gaps, and neglected these important areas.

3.30 Third, there is evidence that in-service training can have an enormous impact on performance. For example, the encouraging results of a single round of in-service training under the Fourth Population Project in four districts of West Bengal are summarized in the following table, taken from GOWB (1988).

3.31 While some of the performance increase can no doubt be attributed to other project inputs (such as efforts to improve the MIS), this project is interesting in that the training took place before project-financed construction, which was delayed because of an engineers' strike. It is therefore clear that the performance increases are the result of small investments in software rather than large investments in hardware (in the case of other area projects, hardware investments have tended to be implemented more enthusiastically than software investments and it has been hard to distinguish their relative impact). It is also encouraging to note that in-service training can do much to increase worker performance in MCH and the temporary contraceptive methods even without changes in the current targetting

Table 1: MPWF Performance, April 87 - January 88

		Without In- Service Training	With In- Service Training
Number of Deliveries		0.5	4.5
Immunization numbers	- T.T	54.7	70.6
	- DPT	44.4	92.3
	- Polio	18.2	45.3
	- BCG	33.0	101.4
	- Measles	12.1	46.0
Family Planning	- Condoms	513.5	1333.4
	- OP Cycles	40.8	82.7
	- Sterilizations motivated	16.2	25.8
	- IUDs inserted	2.6	6.5 ¹ 8.7 ²

and incentive system, which biases workers towards an emphasis on sterilization cases.

3.32 The West Bengal training program also offers some suggestions for the organization of in-service training. Training courses for PHC and Sub-Center staff were offered by district level and PHC staff at the PHC itself. There appear to be strong advantages, in terms of team-building and in terms of tailoring training to local needs, in training staff from a given locality together in the locality (as opposed to the existing system of training at regional Health and Family Welfare Training Centers). West Bengal is now about to experiment with the institutionalization of this sort of local in-service training at 'training annexes' to be constructed next to rural hospitals. Each annex would provide classroom space and accommodation for twenty people; practical training would be carried out in the hospital (e.g. for deliveries) and in surrounding field areas. The training space would also be used for in-service training of dais, and for orientation of key community members.

Supporting Institutional Changes

3.33 One thrust underlying the various detailed suggestions made above is toward more local diversity in the implementation of the family welfare program. Workers at sub-center, PHC and district level need to review their clients, segment and prioritize them, and vary the intensity and type of effort for different groups. They need to review local disease patterns, family planning and nutrition needs, prioritize them for their local areas, and adopt different service mixes appropriate to local conditions. And they

¹ IUD insertion training only

² IUD insertion training and general in-service training.

need to review the structure of and resources available in their local communities to see what distinct pattern of community involvement will be most effective locally. These kinds of changes, taken together, imply a shift in approach away from administration of a norm-based program planned by the center, toward management of a diverse set of local initiatives developed by local workers in response to local needs. While such changes would be inexpensive, they would imply significant psychological shifts, and supporting institutional changes, especially in the areas of training, planning, and the management of innovation.

3.34 With regard to training, since training content will vary according to local needs, and also over time as the lessons from local experience are fed in, in-service training capacity must be developed at the district or CHC level if it is to be effective. In areas where accommodation is scarce, modest facilities would need to be built; and in all areas curriculum development and basic teacher training provided for key district and CHC level staff. It would be useful to experiment with different mixes of full time and part time trainers at the district level. The advantage of full timers would be that training would be made professional. The advantage of part timers would be an automatic linkage between training and local field experience. Regular district and CHC staff could use training sessions for joint planning and problem-solving with their HAFs and MPWs. In the case of part-time trainers, training would be an additional responsibility and some financial incentive would be required to compensate them.

3.35 With regard to planning, a local level annual planning process might be initiated in which each MPWF, working with her supervisor and community representatives, indicated the special problems and features in her service area, and the particular actions she would like to take to address them. A similar process at the PHC and district level could refine and consolidate these plans, reworking them as necessary in the light of overall resource constraints. This approach to planning, with its emphasis on joint problem-solving and local initiative, would be a form of training in itself, with the process of planning being as important as the actual plan drawn up. In order to initiate such a process, training in basic public health planning and management would be required for all district level staff and MOs; and training in epidemiology would be useful for a small number of district level staff.

3.36 Finally, with regard to the management of innovation, one theme of the second part of this paper has been that there is a good deal of room for innovation and experimentation in the family welfare program, in ways that could be extremely productive for performance. If the program was to move in the direction of greater local diversity, much of the needed experimentation could be carried out by states and districts in the course of normal implementation; each district, for example, might be required to propose in its annual plan one innovation in the management of service delivery which it would test out and report on. But the issues relating to management and behavioral change are so complex and the uncertainties about the appropriateness of different program designs so great, that there is also a need for more rigorous and systematic operations research into some of the major options. An appropriate institutional response at the central level

would be to establish two or three large scale operations research programs in different parts of the country on the lines of the Matlab extension areas in Bangladesh.

The Question of Commitment

3.37 Political commitment to improving the overall performance of the family welfare program (as opposed to family planning) is significantly weaker than in the case of the programs reviewed in part two of this paper. This is well illustrated by the predictable and preventable epidemics among slum-dwellers in Delhi, Lucknow and other cities during the monsoon season of 1988. Commitment to improving the health of the rural poor, especially tribals in remote areas, will often be a still lower priority than efforts to provide health services to the relatively visible poor in the national and state capitals. Much more could be done by politicians to bring health and family welfare issues into the arena of public debate. For example, family welfare could be discussed as an issue at the National Development Council in the presence of all the Chief Ministers; and Chief Ministers could devote more speech, radio and TV time to this sector. In addition, many state ministers of health and family welfare could do much more to enforce basic rules in their departments. State and district level officials will not, for example, enforce the recruitment criteria for VHGs, or residence requirements for often well connected MOs and MPWs, if they are not sure of the political support for their action.

3.38 Lack of public pressure for improving the program is one general explanation for lower political commitment to family welfare than to sectors such as agriculture, where client demand for services is often relatively vocal. But additionally, commitment to improving the family welfare program is also quite uneven between regions, with some of the neediest states weakest in this respect. This is a reflection of significant variations in states' interests more generally in improving the situation of the relatively disadvantaged, and not something peculiar to the family welfare program. It must realistically be recognized that this systemic issue will tend to undermine attempts to institutionalize planning, management and training systems in family welfare at the district level and below.

Summary of Conclusions

3.39 As politicians and program managers have searched for ways to improve family welfare performance, they have concentrated recently on alternatives to the public system -- making more use of NGOs in service delivery, or the private sector in IEC for example. While such efforts are important, it is nevertheless true that the major investment in family welfare in India is and will remain the massive network of public services now operating at a low level of productivity. Several lessons from the design of the TINP, CUDP and T&V programs seem to be relevant to efforts to improve the performance of this public service network, including the need to:

(i) Make more productive use of dais and anganwadi workers who are closer to their communities than are MPWs;

- (ii) recruit more female VHGs;
- (iii) limit regular home visiting by MPWFs to a smaller set of clients prioritized on the basis of need;
- (iv) ensure that MPWFs' tasks are limited to what is manageable, and at the same time varied so as to respond to local needs;
- (v) place more emphasis on the creation of informal womens' service user groups at the village level;
- (vi) institutionalize regular qualitative surveys of clients' attitudes to the program;
- (vii) develop a nation-wide system of regular in-service training located at the district level and below, and tailored to the local needs of PHC and sub-center staff (probably the single most important potential intervention);
- (vii) initiate an annual planning process at the district level and below aimed at diversifying service patterns in response to local needs;
- (viii) support this process with training in health management and epidemiology for key district staff; and
- (ix) initiate operations research programs in service delivery along the lines of the Matlab extension areas in Bangladesh.

IV. IMPLICATIONS FOR THE INTEGRATED
CHILD DEVELOPMENT SERVICES PROGRAM

Introduction

4.01 The Integrated Child Development Services Scheme (ICDS), begun in 1975, now covers nearly 2,000 of India's 5,000 development blocks, and so must be one of the largest programs of its type in the world. It aims to provide an integrated package of basic health, nutrition and pre-school education services to children under six and to pregnant and lactating mothers, through a paraprofessional worker based at an anganwadi (literally courtyard) center in each village. The scheme is targeted on deprived and tribal areas of the country and this, together with its size, its village-level outreach, and its focus on the most vulnerable sections of the village community, gives the scheme immense potential for reducing poor maternal and child health and malnutrition in India.

4.02 The extent to which this potential is being or can be realized in practice is the subject of considerable discussion, even though ICDS is said to be one of the most evaluated programs in the world. One reason for continuing debate is the generally poor quality of the majority of the evaluation studies available. Most review ICDS in one or two blocks only, and very few follow the performance of ICDS over time in the same blocks. Generalizations are therefore being made on the basis of both very small samples and unfair comparisons between anganwadis which have been established for different lengths of time. Very recently, however, a number of studies have been made using larger samples across many states. These studies have come up with remarkably consistent findings; taken together, they give a much clearer picture of ICDS performance than was available in early 1987. The fourth section of this paper is therefore based on the findings of these studies [particularly NIPCCD (1987), Nutrition Foundation of India (1987), NIPCCD (1988a), NIPCCD (1988b) and Subbarao (1989)], together with field observations made by an IDA team which visited ICDS blocks in tribal areas of Andhra Pradesh, Bihar, Madhya Pradesh and Orissa in mid-1988.

4.03 One feature of ICDS which these studies highlight, and which field visits confirm, is the extreme variability of service quality between states, between blocks within states, and between anganwadis within blocks. Some of the variation in service quality, particularly at the state level, is due to differences in emphasis given to the different program components. In some areas, for example, ICDS is de facto seen as a pre-school program, and health and nutrition aspects receive relatively less attention; in other areas, it is seen de facto as a feeding program, and health and education get relatively less emphasis. Some performance variations, particularly at the block level, are the result of resource constraints. In some blocks, key staff are missing, or supplementary food is unavailable for long periods, reducing the incentive for mothers and children to attend the anganwadi. And some variation in service quality, particularly at the anganwadi level, relates to differences in the background, skills and commitment of the individual anganwadi worker (AWW), and differences in the difficulty of her task, in terms of the physical and cultural environment of her particular area. This marked variability is a major reason for divergent views about how well ICDS

works; reviewers making generalizations from small samples will inevitably come up with radically different perspectives on the scheme.

4.04 The studies also highlight, and field visits confirm, a number of common areas across states and projects, in which the design of ICDS could be improved to substantially increase the effectiveness of even an anganwadi currently classified as 'good'. These include, for example, getting more services to pregnant women and to the 0-3 age group (in addition to the 4-6s); giving more attention to and improving the quality of health and nutrition education activities; spending more time on home visits, rather than just anganwadi-centered activities; improving the links between anganwadi and health and family welfare worker services; and involving the community more in the working of the anganwadi.

4.05 Overall, the evidence from these studies suggests that it is futile to pursue debate whether ICDS is an unqualified success or a failure, for it is neither; it is a national level program exhibiting a wide range of variation in performance. Rather, the aim of the fourth section of this paper is to attempt to address two major field level managerial issues confronting ICDS: how to reduce variation in service quality so that average and poor projects and anganwadis perform closer to good anganwadis; and how to improve the design of ICDS, so as to make the good anganwadi worker still more effective. The focus is on the health and nutrition components of ICDS, since the Bank has had experience to date only with these sectors in India, and not with pre-school activities.

Focusing Tasks

4.06 The AWW's population coverage is about a thousand people (700 in tribal areas where populations are often more scattered), closely similar to the coverage of the TINP and CUDP field worker. But her range of duties, while narrower than that of the MPWF, is significantly greater than that of these two field workers. The AWW has all the preventive and curative health care duties of the CUDP worker with the exception of family planning, plus growth monitoring, supplementary feeding, and preschool. She has all the nutritional duties of the TINP worker, plus preschool, plus a somewhat greater role in basic curative care (the AWW is supplied with a kit of basic drugs). There is therefore a real concern that trying to carry out too many activities may be a major factor limiting the AWW's performance.

4.07 There is considerable evidence that, like the over-extended MPWF in family welfare (para 3.06), the average AWW emphasizes those parts of her work which are easiest and where she has most pressure to perform, at the cost of other key nutrition and health aspects of her duties. In the case of the AWW, there is usually strong pressure from the local community for the child feeding program and for preschool education, and it is these activities which are emphasized in practice, although often at low levels of quality. In nutrition, for example, the focus is often on bringing in enough children to satisfy local mothers and use up the available food, rather than making sure that all needy children are included in the program and that the severely malnourished get rehabilitated - in other words, the program can become a feeding rather than a nutrition program. This is particularly the case where,

as in most areas, there are limits to the number of children that can be fed. Once the AWW has filled her quota of, say, 60, she has no strong incentive to go out and find other malnourished children for inclusion, if enrolling a newly-discovered case of malnutrition means dropping a relatively well nourished beneficiary.

4.08 In addition to these general quality of service concerns, activities which tend to be relatively neglected are a) services for pregnant and lactating women (PLWs) since there is little manifest demand for ante-natal care, and in many areas PLWs find it demeaning to come to the anganwadi center (AWC) for supplementary feeding; b) care for the under threes, since these younger children are often taken to work with their mothers, and hence are harder to attract to the anganwadi; c) health and nutrition education, because there is no demand from the village for these preventive activities; and d) home visiting, because much of the AWW's day is taken up with the AWC-centered activities of feeding and pre-school, and because home visiting is likely to turn up additional clients for service, and hence further increase the AWW's workload.

4.09 The remainder of this section looks at what might be done to increase the quality of health and nutrition services that are delivered, and to increase attention to relatively neglected services, by changing the range of duties; by prioritization of tasks; or by increasing the numbers of anganwadi workers.

4.10 Changing the range of tasks. The activities which take most of the anganwadi worker's time are feeding and preschool; together, they typically require 4-5 hours a day. The basic dilemma faced by the program is that there is little scope for freeing up substantial amounts of the AWW's time without substantially reducing or cutting out one of these activities, a step which is not in practice feasible - or desirable - because it would destroy the basic character and purpose of the ICDS scheme.

4.11 There is, however, some scope for cutting back on the AWW's role in antenatal care, if the proposals made in part three of this paper to give the MPWF a greater focus on pregnant and lactating women are adopted. If MPWFs made regular monthly visits to PLWs, this would reduce the home visit load of the AWW. A rational division of duties would be for the AWW to carry out at the AWC monthly weighing and growth charting of pregnant women (see para 4.18) and the supplementary feeding of PLWs, and for the MPWF to supply the health aspects of ante-natal care during her home visits (it is not clear how under the current system the AWW can provide worthwhile ante-natal care, since this should involve blood pressure and urine testing and the identification of high risk pregnancy cases, activities which are more within the competence of the MPWF than the AWW).

4.12 On the other hand, there appears to be a case, in terms of overall impact, for increasing the AWW's range of tasks in two areas. The first is to introduce, where intestinal parasites are a problem, routine deworming of all young children three or four times a year, as in the TINP program. At the moment, AWWs treat severe parasite cases on an exceptional, curative basis either themselves, or by referral to the MPWF. Yet returning a single

dewormed case to a worm-infested child population living in unhygienic conditions is likely to produce only temporary benefits. Since worm loads are generally thought to be high in the rural areas, and may undo much of the potential nutritional good of supplementary feeding, it may be better to assume that hygiene education is unlikely to reduce worm loads under village conditions in the near future, and to move to a relatively inexpensive program of mass deworming. This additional task would not be time-consuming, since it would be done infrequently, and at the time of routine monthly weighing.

4.13 The second and more controversial possible additional task is family planning. There are several reasons why this would be an important addition to the ICDS program. First, wider birth spacing would improve maternal health and nutrition; help to reduce the incidence of low birth weight babies; and improve infant and child nutrition and health both through giving babies a better start in the womb, and reducing the strain that closely spaced children put on family food resources. While contributing directly to the health and nutrition goals of ICDS, the increased use of temporary contraceptive methods could significantly contribute to lowering the birth rate. Last but not least, involving the AWW in the family welfare program would give the MPWF a much needed new incentive to work closely with the ICDS program (see also paras 4.22 and 4.23 below).

4.14 But the addition of family planning to the ICDS scheme could only be advocated on three conditions: that the focus was on birth spacing, which is congruent with the health and nutrition goals of ICDS, rather than on family size limitation (i.e. permanent methods), which is not; that no family planning targets were set for AWWs, since this would divert their attention from their core duties; and that a good system for providing temporary family planning methods was already in place in the local health and family welfare system, so that the AWW would have access to appropriate back-up. As with the proposed deworming program, inclusion of family planning in the AWW's duties need not be time-consuming. FP counselling could be incorporated as a routine part of health and nutrition education sessions, and oral pills could be resupplied at the same time.

4.15 Prioritization of tasks. There appears to be great scope for increasing the health and nutrition impact of ICDS by giving greater priority to four particular areas of the AWW's existing duties which are often neglected: Registration of all potential clients so that needy cases do not escape the system; regular growth monitoring of all registered clients to identify those in need of feeding and other special attention; greater attention to health and nutrition education; and closer cooperation with the health services, particularly with regard to treating the severely malnourished. Each of these areas is dealt with in turn below.

4.16 Field visits suggest that the completeness of village surveys varies substantially from anganwadi to anganwadi. This activity is the most critical of all AWW worker tasks, since it determines who is eligible for program benefits, and is the key benchmark for measuring AWW performance in coverage terms. It is possible that the quality of surveys might be increased if they were carried out not quarterly as at present, but annually with a greater input from the AWW's supervisor. Except in areas of high seasonal

labor migration, the quarterly change in client population is fairly limited, and it should be possible for the AWW to continuously update the client register between annual surveys on the basis of information collected from home visits, local dais, local women's groups, and the MPWF.

4.17 Growth monitoring - the regular monthly weighing and growth charting of children under 6 - is also a critical AWW activity, because all but the most extreme malnutrition is hard to identify by eye. There is therefore no real substitute for the AWW weighing clients and finding out objectively whether they are malnourished for their age. (The armbands in use in some anganwadis are a poor substitute for weighing, since they cannot detect faltering growth within the normal zone; also, the design of those now in use in several states appears to be faulty, leading to consistent underestimates of malnutrition). Currently, in some areas, child weighing and growth charting are not undertaken at all; in many areas, AWWs attempt both, but weigh and plot inaccurately, and/or cannot interpret the growth chart; and in most areas, not all children are weighed monthly, with a particular bias against the under threes. The inevitable consequence is that the program fails to identify a significant number of malnourished children. Improved basic and in-service training (see paras 4.36 to 4.38) as well as greater priority to these activities on the part of the AWWs and supervisors, is required to correct these deficiencies. In addition, field tests are already beginning of new growth charts designed to be easier for workers to use, and to facilitate nutrition education.

4.18 ICDS policy-makers might also consider modifications to the current system of growth monitoring in two areas; introducing regular weighing and charting of pregnant women, and adjusting the entry and exit criteria to the child feeding program. Maternal nutrition currently receives less emphasis than child nutrition, despite the fact that around 30% of babies are born with low birth weight, and that it is known that such infants are at higher health and nutritional risk. In some states, the practice is to limit supplementary feeding to five pregnant women per anganwadi (while there would normally be about 30 such women at any one time) and, in all states, without regular weighing it is not clear whether all women who are in need are being fed. Next steps in this area might include the testing and distribution of the newly developed UNICEF electronic scale; development of India-specific norms for growth and term weight for pregnant women; and determination of supplementary feeding requirements to reach given weight goals.

4.19 With regard to the entry and exit criteria to the child feeding program, there are issues about the relative merits of feeding only those with moderate or severe malnutrition (ICDS) or also those who are normal but whose growth is faltering (TINP); about whether children who are mildly malnourished but on a positive growth path need feeding; and about the appropriate length of time malnourished children should spend in the feeding program. These technical but extremely important issues, which can best be resolved by careful field experiments on the impact of different approaches on malnutrition, are discussed in more detail in annex 2.

4.20 A third priority area for attention is health and nutrition education, seen as neglected by nearly all the ICDS evaluation studies. The

need is partly for better training in inter-personal IEC for AWWs and their supervisors, and the provision of more and better quality IEC materials. But more fundamentally, there is a need in many anganwadis for a psychological shift from seeing the AWW's job as routine administration of a mid-morning meals program, toward seeing it as management of a health and nutrition program, whose goal is not merely to feed a specific number of children a day but to achieve positive grade shifts in nutrition through a combination of supplements, medical care and counseling.

4.21 Where ICDS is seen as a feeding program, growth monitoring may be practiced, but is not used as a management tool for case identification, nor as an education tool for counselling mothers. Under these circumstances, growth charting comes to be seen by the mother as pointless and by the AWW as a particularly irritating form of record-keeping. Nevertheless, the TINP experience shows that growth monitoring can be understood and used as an effective educational tool on a mass basis by paraprofessional workers. Lessons which might be adapted for ICDS in this connection are the use of communal weighing sessions to give nutrition advice to mothers; the use of women's groups (see para 4.27) to reinforce counselling by the nutrition worker; and giving mothers their children's growth charts to keep at home, both to involve them in the process of growth monitoring and to stress the family rather than the feeding program's ultimate responsibility for the child's development.

4.22 Commentators on ICDS also agree on the need to strengthen currently inadequate links with the health services, a weakness shared by the TINP program. Much could be achieved by defining more clearly how MPWF and AWW should work together, and by improving the referral system. With regard to the former, the 16 day a month MPWF home visit program to pregnant and lactating women proposed in section three of this paper would mean that an MPWF would visit a given anganwadi area three or four times a month. The first stop at each such village visit should be the anganwadi center, with the purpose being for example a) for the MPWF to carry out a routine health check of all children at the anganwadi; b) for AWW and MPWF to exchange information on new arrivals and on health and nutrition problem cases, in order to define priorities for counselling and home visits (some of which could be undertaken jointly that afternoon); c) for the up-dating and cross-referencing of records (e.g. AWW to note immunizations carried out by the MPWF, MPWF to note the AWW's growth records of pregnant women whom she will visit later that day); and d) joint planning of activities of mutual interest e.g. particular IEC efforts, or strengthening of community involvement.

4.23 The same system of routine MPWF visits would also help to strengthen the referral system, since the MPWF would be available regularly to help the AWW decide what to do about cases beyond her limited diagnostic ability. For cases beyond both the AWW and the MPWF's resources, the key problem is how to persuade mothers to take themselves or their children to a distant primary health center (PHC), when this will mean both the payment of transport costs and loss of a day's earnings. Given the poverty of the typical ICDS client, it is likely that some financial compensation will be required. It would be worth experimenting with a system where a referral slip given to a patient by the MPWF would entitle the patient to a refund of bus

fare on arrival at the PHC. The same slip, kept by the patient, could be used by the MO to record diagnosis and treatment, so as to enable MPWF and AWW to provide appropriate follow-up care on the patient's return to the village.

4.24 More anganwadi workers? The suggestions made above for prioritization of tasks involve no activities for the AWW which are not already in her job description. Those made with regard to changing the range of tasks are likely to involve a net time saving, since the dropped home visits to ante-natal care cases would take more time than the added deworming and family planning counselling. Some further reduction in the AWW's workload could also be achieved first by organizing members of the local community to assist her in certain tasks (see paras 4.27 to 4.29 below); second, by training the AWW's helper to assist with activities other than just the preparation of meals (at present, helpers receive no training under the program); and third - and with the greatest impact on the worker's time - by restricting growth monitoring to children 0-3. But it should be recognized that the net effects of all these suggested changes would not dramatically reduce the AWW's workload. The question is therefore whether a single worker can produce an impact on health and nutrition as substantial as, say, the TINP worker, when several hours a day must be devoted to preschool activities.

4.25 Subbarao (1989) concludes that a second worker is needed, at least in areas with high concentrations of malnutrition, or particularly scattered populations. On the other hand, field visits to the better performing anganwadis in areas where such extremes do not obtain suggest that a substantially increased impact could be made even with existing resources, since good anganwadi workers are already successfully surveying, weighing and growth charting the majority of children, in addition to carrying out their preschool activities. The question is whether as much difference to the existing system can be made by improved supervision and training as by the addition of an extra worker. It is suggested that this question be resolved by field experiment, in which health and nutrition impact would be measured in blocks using a one-worker and two-worker model respectively, with all blocks in the experiment receiving the same improved supervision and training inputs (see paras 4.31 to 4.38 below). It should be noted that a two-worker model need not imply a doubling of salary costs at the anganwadi level; one alternative which might be considered, for example, is a part time, lower paid educator to help with preschool and free up more of the AWW's time for health and nutrition.

Involving The Community

4.26 Using Local Workers. One of the potential strengths of ICDS is its intended use of local village workers, who should have an entree into the community and understand local needs. Two things threaten the potential of this feature of the scheme in some areas. First, as many commentators have noted, ICDS' recruitment criteria are sometimes not observed, leading to the installation of political appointees who may be uncommitted to the program or ineffective because they are from higher castes than their clients. Second, in some tribal areas where it has proved impossible to find literate AWW candidates, more educated candidates have been brought in from other areas. Such workers have proved less able to build up a rapport with their

communities. It may therefore prove a good investment for the ICDS program in these areas to provide functional literacy training for local candidates, even if this delays the start-up of a new anganwadi by a few months. (Orissa began an experiment in 1985 giving three months training in basic literacy and numeracy to newly recruited illiterate AWWs; it has not yet been evaluated).

4.27 Using community volunteers. A striking difference between ICDS and the three programs discussed in the second part of this paper is the former's lack of any real community participation. This is related to the common perception by the community that ICDS is a government feeding and school program rather than a community self-help program. In some areas, progress has been made with using local mahila mandals for community health and nutrition education, but in many areas these organizations appear unsuitable for this purpose, since they focus mainly on political or income-generation goals. For the same cultural and political reasons as in the case of the family welfare program (paras 3.21 to 3.24), it may be preferable to develop new groups of motivated women specifically to support ICDS and family welfare activities in the village.

4.28 TINP-type Women's Working Groups formed by the AWW could significantly assist her with each of the four priority tasks identified above. First, they could help with updating the village survey by informing the AWW of births and new arrivals. Second, with training from the AWW, they could help in assembling mothers and weighing children at monthly community weighing sessions. Third, they could assist with health and nutrition education activities. Fourth, they could help to identify children who may not be coming to the anganwadi but who have problems needing care from the AWW or referral to the MPWF. But most fundamentally and importantly, both in existing anganwadis and in areas where ICDS is about to be introduced, such Working Groups could play a major role in communicating both the content of the program (in terms of services available at the anganwadi) and its philosophy (in terms of its emphasis on family self-reliance), both of which are currently poorly understood by the program's actual and potential clients.

4.29 Several reviewers of the ICDS program have noted that it fails to include the adolescent girl, either as a potential assistant to the AWW, or as a potential beneficiary of feeding and education services. It would certainly be productive for AWWs and Women's Working Groups once formed, to set up Girl's Working Groups on the lines of the Children's Working Groups developed in Tamil Nadu. Such groups could discuss the health, nutrition and family planning aspects of their impending motherhood; assist in educating their own family members in these areas; and help in anganwadi service provision. Beyond that, there may also be a case for supplementary feeding of selected adolescent girls so that improved health and weight at marriage/conception reduce the chances of low birth weight babies and high risk pregnancies. However, in a situation where the AWW is already extended, and so much has to be done to establish effective growth monitoring and supplementary feeding for the under threes and pregnant and lactating women, it is recommended that this new activity could only feasibly be undertaken in the context of a two-AWW model.

4.30 Finally, it is suggested that community interest and participation

in the program could be increased by selective changes in the timing of weighing, supplementary feeding and home visit services. Weighing could be instituted on a group basis on specific days of the month so that mothers can plan to attend; at convenient locations in the village or outlying hamlets; and at times which will not force working mothers to lose earnings to participate. Field visits suggest that supplementary feeding in some states is currently offered in the middle of the period when day laborer mothers are in the fields, or non-employed tribal women collecting forest produce, thus restricting access to the program particularly of the poorest mothers who are most obliged to work. Consideration could be given to moving the timing of supplementary feeding to before mothers leave (as in TINP) or after they return; and to making use of unemployed, non-school going adolescent girls to bring for feeding the younger children of the poorest mothers obliged to work long hours. The timing of home visiting might also be made more flexible. While on the days that the MPWF visits the village, the AWW could usefully carry out joint home visits with her in the afternoon; on other days it may be more effective for the AWW to take time off in the afternoon (as in TINP) and visit working mothers in the early evening. The locally based AWW here has the advantage over the MPWF who must be back in her own village before dark, and thus must leave outlying villages by mid or late afternoon.

Providing Regular Support

4.31 Very significant changes in the work practices of most AWWs will be required if the high degree of variation in service quality in the system is to be reduced. This can only be achieved by a heavy investment of attention and funds in the mutually supporting activities of supervision and training.

4.32 Supervision. The non-residence of supervisors in their local area is as much a problem for ICDS as the non-residence of ANMs for the family welfare program. ICDS supervision can never be fully effective until disciplinary action is taken to see that supervisors live in the area where they work, or to replace them with workers prepared to live locally.

4.33 The current supervisor : worker ratio of 1:20 makes it impossible for the supervisor to spend enough time with each AWW to have a real impact on her performance. The brevity of supervision visits encourages the current emphasis on checking registers (rather than support and on the job training) which is as characteristic of ICDS as of family welfare. It is therefore recommended that the number of ICDS supervisors be approximately doubled, and that they should be provided with moped transport or an appropriate transport allowance so that a minimum of time is wasted travelling from anganwadi to anganwadi (mopeds are already provided by the program in a few areas, but are not always a culturally acceptable form of transport).

4.34 The quality of supervision is also hampered by the fact that supervisors are direct recruit graduates who have not had the practical experience of being an anganwadi worker, and are often unfamiliar with the environment in which they will be living. A recent policy change allows supervisor posts to be filled by promotion of outstanding anganwadi workers, a step which, if implemented enthusiastically, would not only increase the

quality of supervision, but act as a performance incentive for AWWs. For existing supervisors, thorough retraining in the practical aspects of anganwadi work is essential. Currently, for example, many supervisors themselves do not understand the importance of developing links with health services, and many have had less practical experience with weighing and growth-charting than a good AWW.

4.35 Finally, as suggested for the family welfare program, supervision could be focused and workers made more accountable by the development of a small number of summary performance indicators which could be displayed publicly at the AWC, as is done at TINP's Community Nutrition Centers. Annex 3 contains a copy of the TINP performance summary. Key features to note are a) that weighing rates are shown as a percentage of population; b) there is a focus on the number of children with severe malnutrition and whether or not they are improving; and c) figures are shown separately for scheduled castes so that relative failure to reach this population can be pinpointed immediately. Such a 'scoreboard' could easily be adapted for ICDS purposes, to show for example key features such as immunization coverage in the village and numbers of 0-3 children served, as against 4-6 year olds. Both the accountability of the AWW to the community and the involvement of the community in their anganwadi could be significantly increased by public display of such information.

4.36 Training. Probably because of the rapid expansion of ICDS in recent years, there has been much more focus on pre-service than on in-service training. It will not be possible to bring in new work practices for AWWs or reduce the performance variation between AWCs until this imbalance is rectified. Action might be taken in five areas. First, an investment and manpower plan should be drawn up for each state which would result in each AWW receiving formal in-service training at least once in two years. Second, the standard NIPCCD curricula for staff at all levels of the program should be reviewed to ensure that the correct amount of emphasis is given to the task priorities identified above - community surveys; universal weighing and growth charting; health and nutrition education; links with the health services; and development of community participation. Greater emphasis might be given to practical field training in these areas, and the states might be allowed more freedom to alter the balance of the NIPCCD curriculum as dictated by their local needs.

4.37 A third requirement is to professionalize the quality of the AWW trainers, many of whom are no more than AWW supervisors (themselves with inadequate technical training), given one week's teacher training before they have to face a class. Recognizing that training is itself a difficult and specialized skill, priority should be given to retraining of existing trainers. Fourth, action needs to be taken to increase consistency in the quality of training between AWW schools. This could partly be achieved by trainer training, but, especially in states which rely primarily for AWW training on NGOs of very variable competence, there is also a need to strengthen the state Social Welfare Directorates' capacity to evaluate and supervise the quality of training.

4.38 Finally, as in the case of family welfare, serious consideration

should be given to setting up a decentralized system of in-service training at block and district level, since formal two yearly in-service training is too infrequent to adequately refresh workers' skills. An important feature of such a system might be one day sessions of joint team training between AWWs and their MPWFs, and CDPOs and their LHVs, focusing on cooperation, problem-solving and performance in their local areas. The current focus on residential training outside the district makes team training impossible, since it would require the closing down of health and ICDS services in a given area for several days. In the medium term, it may be cheaper and more effective to move all pre and in-service AWW training to the block and district level and have it carried out by local staff, along the lines successfully developed in the TINP program. But such a move must await a substantial upgrading of the technical skills of CDPOs and supervisors, who presently lack the field experience of TINP's Block and Community Nutrition Instructresses.

The Question of Commitment

4.39 As with the family welfare program, commitment to improving the performance of ICDS is variable across states, depending partly on their degree of interest in improving the welfare of the disadvantaged. Commitment can also be stronger to some aspects of the program than others. Some states, for example, have chosen to see ICDS as a preschool program rather than an integrated health, nutrition and preschool program; others have viewed ICDS mainly as a feeding program rather than for its potential in reducing malnutrition. More generally, states have been more interested in the expansion of ICDS into new blocks than in qualitative improvement in the performance of existing projects. The result has been unevenness in performance so marked that it seems clear that the resolution of consistency and quality problems should precede further rapid expansion of ICDS.

4.40 Resolving these quality issues will also be a test of the Center's commitment to making ICDS an effective child development program. Such commitment could be demonstrated in four practical ways. First, by strengthening NIPCCD as a national apex training institution for ICDS, and by strengthening state capacities to plan, monitor and supervise training. Second, by doubling the number of AWW supervisors, as recommended above. Third, by developing a new, qualitative performance monitoring system, including feedback from clients along the lines proposed for family welfare (paras 3.24 to 3.25). The absence of a focus on service quality in the existing monitoring system sends a message to the states that this is of secondary importance. Fourth, by instituting an independent, outside review of the existing quantitative ICDS progress monitoring system, which has been criticized for overestimating the scheme's performance.

Summary of Conclusions

4.41 The ICDS program's large scale, its village-level outreach and its focus on the most vulnerable groups in the population give it tremendous potential to reduce poor health and malnutrition in India. But so far the focus has been more on rapid expansion of the program than on improvements in the quality of services of existing projects. The quality of services

provided could be improved by :

(i) refocusing supervision on improving the quality of five priority tasks: village surveys; universal weighing and growth-charting; health and nutrition education; coordination with health services; and developing community participation;

(ii) increasing the frequency of formal in-service training for AWWs and supervisory staff to about one course every two years;

(iii) improving the quality and consistency of training through teacher training; curriculum reform; and strengthening the capacity of NIPCCD and State Family Welfare Directorates to supervise and evaluate training; and

(iv) reviewing the methodology of the existing ICDS monitoring system to ensure that it accurately reflects variations in performance between anganwadis and over time.

4.42 In addition, the following, mostly minor changes in the design of the ICDS system could further contribute to improved service quality and program impact:

(i) reducing the amount of time spent by AWWs on the health aspects of antenatal care, restricting regular growth monitoring of children to the 0-3 age group, and adding responsibilities for growth monitoring of pregnant women, family planning counselling, and routine deparasitization of children;

(ii) redefining the MPWF's work routine so as to spend more time on pregnant and lactating women, and so as to allow more interaction with the AWW;

(iii) experimenting with alternative entry and exit criteria for the supplementary feeding program for children;

(iv) experimenting with financial compensation to encourage referral cases to visit the PHC;

(v) strengthening community participation through the creation of Womens' and Girls' Working Groups, and through changes in the timing of weighing, feeding and home visiting;

(vi) strengthening supervision by doubling the number of AWW supervisors, developing summary performance indicators for display at AWCs, and developing a system of qualitative performance monitoring to complement the current system's focus on quantitative results; and

(vii) complementing formal in-service training through development of a regular, block and district level training system carried out by local supervisors and managers.

ANNEX ONETHE 47 TASKS OF THE MULTIPURPOSE
HEALTH WORKER FEMALE

1. Maternal and Child Health

- 1.1 Register and provide care to pregnant women throughout the period of pregnancy.
- 1.2 Test urine of pregnant women for albumen and sugar and estimate haemoglobin level during her home visits and clinics.
- 1.3 Ensure that all pregnant women get VDRL test done.
- 1.4 Refer cases of abnormal pregnancy and cases with medical and gynaecological problems to the Health Assistant Female or the Primary Health Center.
- 1.5 Conduct about 50% of total deliveries in her area.
- 1.6 Supervise deliveries conducted by Dais and assist them whenever called in.
- 1.7 Refer cases of difficult labour and newborns with abnormalities, help them to get institutional care and provide follow-up to the patients referred to or discharged from hospital.
- 1.8 Make at least three post-natal visits for each delivery conducted in her area and render advice regarding care of the mother and care and feed of the newborn.
- 1.9 Assess the growth and development of the infant and take necessary action required to rectify the defect.
- 1.10 Educate mothers individually and in groups in better family health including maternal and child health, family planning, nutrition, immunisation, control of communicable diseases, personal and environmental hygiene.
- 1.11 Assist Medical Officer and Health Assistant Female in conducting antenatal and postnatal clinics at the subcentre.

2. Family Planning

- 2.1 Utilise the information from the eligible couple and child register for the family planning programme. She will be squarely responsible for maintaing eligible couple registers and updating

at all times.

- 2.2 Spread the message of family planning to the couples and motivate them for family planning individually and in groups.
- 2.3 Distribute conventional contraceptives and oral contraceptives to the couples, provide facilities and to help prospective acceptors in getting family planning services, if necessary, by accompanying them or arranging for the Dai to accompany them to hospital.
- 2.5 Establish female depot holders, help the Health Assistant Female in training them and provide a continuous supply of conventional contraceptives to the depot holders.
- 2.6 Build rapport with acceptors, village leaders, Health Guides, Dais and others and utilise them for promoting Family Welfare Programme.
- 2.7 Identify women leaders and help the Health Assistant Female to train them.
- 2.8 Participate in Mahila Mandal meetings and utilise such gatherings for educating women in Family Welfare Programme.

3. Medical Termination of Pregnancy

- 3.1 Identify the women requiring help for medical termination of pregnancy and refer them to nearest approved institution.
- 3.2 Educate the community of the consequences of septic abortion and inform them about the availability of services for medical termination of pregnancy.

4. Nutrition

- 4.1 Identify cases of malnutrition among infants and young children (zero to five years), give the necessary treatment and advice and refer serious cases to the Primary Health Center.
- 4.2 Distribute Iron and Folic Acid tablets as prescribed to pregnant and nursing mothers infants and young children (zero to five years) and family planning acceptors.
- 4.3 Administer Vitamin A solution as prescribed to children from 1 to 5 years.
- 4.4 Educate the community about nutritious diet for mothers and children.

5. Expanded Programme on Immunisation

- 5.1 Immunise pregnant women with tetanus toxoid.

- 5.2 Administer DPT vaccine, oral poliomyelitis vaccine, measles vaccine (where available) and BDG vaccine to all infants and children.
6. Dai Training
 - 6.1 List Dais in her area and involve them in promoting Family Welfare.
 - 6.2 Help the Health Assistant Female in the training Programme of Dais.
7. Communicable Diseases
 - 7.1 Notify the M.O PHC immediately about any abnormal increase in cases of diarrhoea/dysentery, fever with rigors, fever with rash, fever with jaundice or fever with unconsciousness which she comes across during her home visits, take the necessary measures to prevent their spread, and inform the Health Worker Male to enable him to take further action.
 - 7.2 If she comes across a case of fever during her home visits she will take blood smear, administer presumptive treatment and inform Health Worker Male for further action.
 - 7.3 Identify cases of skin patches, especially if accompanied by loss of sensation, which she comes across during her home visits and bring them to the notice of the health Worker male for skin smears.
 - 7.4 Assist the Health Worker in maintaining a record of cases in her area, who are under treatment for tuberculosis and leprosy, and check whether they are taking regular treatment, motivate defaulters to take regular treatment and bring these cases to the notice of the Health Assistant Male.
 - 7.5 Give Oral Rehydration solution to all cases of diarrhoea/dysentery/vomiting.
 - 7.6 Identify and refer all cases of blindness including suspected cases of cataract to M.O. PHC.
8. Vital Events
 - 8.1 Record births and deaths occurring in her area in the births and deaths register and report them to the Health Worker Male.
9. Record Keeping
 - 9.1 Register (a) pregnant women from three months of pregnancy onward; (b) infants zero to one year of age; and (c) women aged 15 to 44 years.

- 9.2 Maintain the pre-natal and maternity records and child care records.
- 9.3 Assist the Health Worker Male in preparing the eligible couple register and maintaining it up-to-date.
- 9.4 Maintain the records as regards contraceptive distribution, IUD insertion, couples sterilized, clinics held at the subcentre and supplies received and issued.
- 9.5 Prepare and submit the prescribed monthly reports in time to the Health Assistant Female.

10. Primary Medical Care

- 10.1 Provide treatment for minor ailments, provide first aid for accidents and emergencies and refer cases beyond her competence to the Primary Health Centre or nearest hospital.

11. Team Activities

- 11.1 Attend and participate in staff meetings at Primary Health Centre/Community Development Block or both.
- 11.2 Coordinate her activities with the Health Worker Male and other health workers including the Health Guides and Dais.
- 11.3 Meet the Health Assistant Female each week and seek her advice and guidance whenever necessary.
- 11.4 Maintain the cleanliness of the subcentre.
- 11.5 Participate as a member team in camps and campaigns.

ANNEX TWOENTRY AND EXIT CRITERIA FOR SUPPLEMENTARY FEEDING PROGRAMS:
TINP AND ICDS APPROACHES

1.01 The debate between those who are in favor of universal supplementary feeding and those in favor of targeted, selective feeding programs sometimes verges on the ideological. ICDS and TINP are often characterized as being at opposing extremes of these approaches. Yet ICDS is not the universal (and implicitly wasteful) feeding program its critics sometimes misrepresent it as; and TINP's selective targeting system (allegedly excluding needy cases) can lead to it feeding a higher proportion of children than ICDS would under the same circumstances. This annex attempts to set out the key differences between the two supplementary feeding approaches, and some of their advantages and disadvantages; to correct some common misperceptions; and to suggest changes in the ICDS approach which might be tried on an experimental basis.

1.02 Both programs feed children with grade 3 or 4 malnutrition, TINP with a roasted-ground snack food, ICDS with a double ration of the meal being served all those supplemented. ICDS, but not TINP, also serves a single ration of supplement to all children with grade 2 malnutrition. This is one area of controversy. On the one hand, it is argued that TINP focuses too much on severe malnutrition and not enough on the moderately malnourished, whose full physical and mental development may also not be being reached. On the other hand, it is argued that ICDS is feeding - at unnecessary cost - children who are in grade 2, but whose growth curves are normal i.e. children who may be small in height for age terms (stunted), but growing perfectly well. Underlying this controversy is the broader international debate about whether the stunted child needs help because it will not fulfill its physical and mental potential, or whether small size is unimportant and merely reflects adjustment to the environment.

1.03 A second major difference between ICDS and TINP is that the former supplements only by grade category, but the latter supplements in addition to grade 3 and 4 children, all children who are failing to gain weight at a normal rate. Thus, TINP does feed a significant number of grade 2 children, i.e. all those whose growth rate is faltering and who are therefore in danger of slipping into third degree malnutrition. TINP also feeds "normal" children whose growth is faltering i.e. a group of children not fed by ICDS. The rationale in both cases is that it is more cost-effective to catch faltering growth early and feed so as to prevent grade 2 or 3 malnutrition, rather than to wait until the child has fallen a grade, by when it may be harder and more costly to rehabilitate. An argument against the growth-faltering entry criterion is that it is more complex for the AWW to apply. This is true - although it has been used successfully by thousands of TINP workers with similar educational backgrounds to AWWs.

1.04 A third major difference between TINP and ICDS is the length of time children spend in the feeding program. As soon as TINP children are back on a normal growth path (usually after 90 days of feeding) they leave the feeding program. ICDS children should in theory be graduated from feeding when they reach grade 1, but in practice often stay on in the program, sometimes for years. Critics of the TINP approach argue that returning a

child quickly to a poverty-stricken home environment may simply mean a relapse in nutritional status, a return to the feeding program, and no lasting benefit (although, on average, no more than 20% of supplemented children relapse into the feeding program, and very few relapse into the program more than once). Critics of the ICDS approach argue that continuing to supplement well nourished children is wasteful, and, in areas where there are limits on the number of children fed, discourages the AWW with a "full" quota from seeking out additional malnourished children who may need care.

1.05 It is a common misperception that ICDS is a universal feeding program. This is so in some areas, particularly the poorest tribal areas where most children are malnourished; where the population per anganwadi is 700 or less and so there are few children to be fed; and hence where food is justifiable and available for everyone. But in many more anganwadis, resource constraints mean that there is only enough food for about 60 children, when there will typically be about 90 children under 6. Under these circumstances, ICDS is in fact a selective feeding program, although, in the absence of effective growth monitoring, it may not select those most in need of care.

1.06 It is also a common misperception that TINP, because it is a selective, targeted program, feeds less children than ICDS. But for example, in one anganwadi in a tribal area of Andhra Pradesh which had complete growth chart records for 46 children under three, IDA staff calculated that while 14 children were eligible for feeding under ICDS criteria, 29 children would have been eligible if TINP criteria were applied. This was because a number of normal children who were not fed under ICDS would have been fed under TINP, because their growth was faltering. At the same time, while more children may get fed by TINP over time, the numbers in an established TINP feeding program on any given day are likely to be less than those in an ICDS program, because TINP children stay less long in the program on average.

1.07 The above observation about the numbers fed under the two programs - which it would be worth validating with a larger sample - has important implications for another argument often advanced in favor of ICDS' allegedly less selective feeding approach: that supplementing a large proportion of the child population acts as 'bait' to bring clients in to the anganwadi to receive other services less in demand, like health care and pre-school. Ironically, it appears that TINP, by feeding more children in the community over time (although for relatively short periods) may involve more families in the program through feeding than ICDS does.

1.08 Finally, there are also important psychological dimensions to the design of entry-exit criteria. It is argued that TINP's success is partly due to the short stay that the average child has in the program, which helps convey to mothers that the nutrition program is for rehabilitation purposes only, with the main responsibility for the child's development remaining with the mother. By contrast, the frequently long stay of children in the ICDS feeding program can create the perception in the village that supplementary feeding is a perpetual right, so that the relationship to the scheme becomes one of dependency.

Recommendations

1.09 ICDS might set up a carefully monitored experiment in a limited area to test the effects on nutritional impact, program costs, and community attitudes to the program of the following innovations, implemented singly or in different combinations:

(i) Making exit from the feeding program compulsory for children whose weight and growth rate are normal and have been so for a specified length of time;

(ii) feeding of normal and grade 1 children with faltering growth;

(iii) restricting the feeding of grade 2 children to those with faltering growth.

ANNEX THREETINP'S COMMUNITY NUTRITION CENTER
SUMMARY PERFORMANCE CHART

	<u>Total Pop.</u>	<u>Sched.Castes</u>
1. Population of Area		
2. No. children 0-3		
3. No. children 0-3 weighed last month		
4. No. children enrolled for feeding		
5. No. children coming for feeding		
6. No. with grade 3 and grade 4 malnutrition		
7. No. graduated out of severe malnutrition		
8. No. of children losing or with static weight		
9. No. of children under special observation		
10. No. of 9 coming into feeding program		
11. No. of children graduating from program last month		
12. No. of children relapsing into program this month		
13. No. of mothers receiving ante-natal care.		

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