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BASIC SERVICES FOR CHILDREN IN DEVELOPING COUNTRIES

Report by the Executive Director

Contents

	<u>Paragraphs</u>	<u>Page</u>
Summary		iv
I. INTRODUCTION AND BACKGROUND	1 - 25	1
Background	14 - 17	3
Principles underlying the concept of interrelated basic services	18 - 25	5
II. THE NEED FOR ACCELERATING THE DELIVERY OF BASIC SERVICES TO UNDERSERVED COMMUNITIES AND SOME POSSIBLE APPROACHES	26 - 79	7
The status of public health and options for remedial action	27 - 30	7
The WHO/UNICEF joint study on alternative approaches to meeting basic health needs	31 - 32	9
Safe water needed for family health and convenience	33 - 41	10
Provision of latrines	40 - 41	11
More support needed for responsible parenthood	42 - 45	12
Greater investment in child nutrition to secure future dividends	46 - 52	13

(58p + 1B)

Contents (continued)

	<u>Paragraphs</u>	<u>Page</u>
II. (continued)		
Activities to benefit women and girls	53 - 56	15
Village-level technology	57 - 59	16
The educational "gap" - essential learning needs and alternative approaches	60 - 79	16
Essential learning needs	67 - 71	19
Improvement of formal schooling	72 - 76	21
Other educational channels	77 - 78	22
Feedback from non-formal to formal	79	22
III. PRINCIPLES FOR DELIVERY OF BASIC SERVICES TO DISADVANTAGED COMMUNITIES	80 - 92	23
IV. MOBILIZATION OF NATIONAL AND LOCAL RESOURCES	93 - 95	26
V. SOME EXAMPLES OF BASIC COSTS OF SECTORAL ACTIVITIES WITHIN RURAL DEVELOPMENT PROGRAMMES	96 - 112	27
Health services	100 - 105	28
Nutrition services	106 - 109	30
Water supply	110 - 111	31
Other activities	112	31
VI. IDENTIFICATION OF A TARGET POPULATION	113 - 116	32
Target population	114 - 116	32
VII. ORGANIZATIONAL PATTERN	117 - 128	33
Community level	119 - 120	34
First-referral level	121 - 123	34
The supervisory/co-ordinating level	124 - 125	35
The national level	126 - 128	36

Contents (continued)

	<u>Paragraphs</u>	<u>Page</u>
VIII. REQUIREMENTS AND COST ESTIMATES	129 - 150	37
The community level	131 - 134	37
First referral level	135 - 137	39
The supervisory/co-ordinating level	138 - 142	41
The national level	143 - 144	43
Recapitulation of costs	145	43
Time-table for financing the launching of basic services in rural areas	146 - 149	44
Assistance required from external resources	150	45
IX. PROVISION OF BASIC SERVICES TO URBAN SLUMS AND SHANTY TOWNS	151 - 158	47
X. A NEW DIMENSION IN DEVELOPMENT AND A GREATER OPPORTUNITY FOR INTERNATIONAL CO-OPERATION	159 - 161	50
Annex Typical items of equipment and supplies with estimated costs per community for five-years "running-in" period		1

Summary

The General Assembly, in resolution 3408 (XXX), endorses the approaches to the expansion of basic services, and invites the UNICEF Executive Board to consider in depth the question of providing such services for children in the developing countries and to report, through the Economic and Social Council, to the General Assembly at its thirty-first session.

This document, which has been prepared for consideration by the Executive Board, identifies children and mothers in underserved communities in the low-income countries as the priority groups requiring urgent attention. The World Bank estimates that 700 million persons live in absolute or relative poverty in the rural areas of these countries and a further 200 million in similar condition in urban slums and shanty towns.

In addition to providing the basis for a report by the Executive Board to the General Assembly, this document represents a contribution towards wider discussion, both in the developing countries and among the international community, of the strategies and resources now required to meet the needs of the least privileged in the human family.

It is suggested that the essential human needs of children and mothers in these underserved communities could most effectively be met by developing a group of interrelated services that would include maternal and child care; family planning; provision of safe water supply and sanitation; increased production and consumption of better quality foods; measures to meet basic educational needs; simple technologies to lighten the daily tasks of women and girls and programmes to ensure their greater participation in community affairs.

The view is expressed that the concept of interrelated basic services for underserved areas can be made practicable and effective through: the active involvement and support of the community itself continuously from the initial planning stage; the use of locally selected lay persons as village agents for delivery of routine services; and the engagement in the public services of substantial numbers of auxiliary personnel, who, by being assigned increased responsibilities, would release professional staff from conventional routines for more productive roles in direction, supervision and training. The concept, therefore, represents a direct extension to other field activities of the same basic principles and strategies that the Board approved in considering the alternative approaches to meeting basic health needs of populations in developing countries.

By way of illustration of needs, the report examines some of the "gaps" that exist in developing countries in respect of services and includes examples of reported costs of some field activities.

As a basis for suggesting how functions and responsibilities might be distributed for the development of basic services in rural areas, an organizational structure has been assumed having four operational levels, i.e., community; first referral, supervisory/co-ordinating; and national.

Broad estimations are made of requirements and costs, though without allowance for population growth. This quantification is done to suggest a general order of magnitude of the contributions that would be needed from external sources and from the participating countries for the provision of basic services. External assistance of the order of \$8,000 million over a period of years, and an equivalent investment by participating countries are suggested as broad approximations.

Illustrative tables suggest a pattern of implementation of field activities which are launched progressively in groups of communities. Each community would receive assistance for a period of five years and, thereafter, in co-operation with relevant local authorities and the government, be responsible for the continued maintenance of the services. Basic service activities would have been introduced into all communities by the tenth year. External assistance would be available up to the fifteenth year to provide five-years support to those communities that were last entering into participation. Spread over 15 years, the average annual requirement of external assistance would thus be of the order of \$500 million.

It is emphasized that the objectives of the report are essentially:

(a) To develop the concept of interrelated basic services;

(b) To suggest a general order of magnitude of the resources that would be required to translate the concept into field activities; and

(c) To demonstrate the feasibility of delivering a range of services, simple in their nature, which would substantially improve the situation of children in underserved areas at a cost in external assistance which the international community could afford.

Such an undertaking would, however, require action on the part of many governments, organizations, foundations and individuals. The external resources that would be required are envisaged as the aggregate of the contributions that might be made by the above-mentioned entities in accord with their respective mandates and capacities.

I. INTRODUCTION AND BACKGROUND

1. This document is presented to the Executive Board for discussion in its general debate and relates to General Assembly resolution 3408 (XXX) which, inter alia, invites the Board to consider in depth the question of basic services for children and to report to the General Assembly at its thirty-first session (see para. 17). The document draws attention to the urgent needs of children and mothers in rural communities and in urban slums and shanty towns in the less developed countries, and presents a case for the rapid enlargement of basic services in the interrelated fields of maternal and child care, family planning; production and consumption of more and better quality foods; nutritional rehabilitation of the most vulnerable; safe water supply and waste disposal; measures to meet the basic educational needs of the community; and the introduction of simple technologies to lighten the daily tasks of women and girls, along with special educational and social programmes designed to create greater opportunities for their participation in community affairs. Action by many governments, organizations and individuals will be required to meet these needs.

2. In outlining requirements for accelerating delivery of services to meet the minimum essential human needs, emphasis is placed on (a) active participation by the communities themselves as a sine qua non. (b) the use of suitably trained local lay persons, part- or full-time, at the community level as primary level workers, or village agents, for delivery of routine services; and (c) the engagement in the national network of substantially increased numbers of auxiliary staff, with enlarged responsibilities, in order to release professionally qualified personnel from routines for more productive roles as trainers, supervisors and programme directors. These auxiliaries would provide a link between the national network and the primary level workers. These organizational requirements represent an extension to other fields of activity of the principles endorsed by the Board at its 1975 session, after considering the WHO/UNICEF joint study on alternative approaches to meeting basic health needs.

3. While providing support to activities by virtue of their local knowledge, experience and skills, the participating communities would be expected to make contributions in cash or kind, the latter to include the provision of local supplies, materials and labour, the use of existing facilities such as schools, meeting halls, and the selection and remuneration of workers required to provide primary services. Representatives of the community would be invited also to assume responsibility for non-technical supervision of local activities.

4. In addition to the expenditure by national and provincial governments and other local authorities, external assistance would be required in order to launch a programme effectively in the underserved areas to which it is directed. Imported supplies

and equipment, as well as cash contributions, towards the costs of training, and employing large numbers of auxiliary and other personnel would be needed.

5. It is not possible to formulate a set of refined estimates of requirements for the development of basic services in the low income countries because of the variety of local conditions which affect the components of a programme of this nature. The best that can be done, until specific country-by-country studies can be undertaken, is to offer some broad approximations and to suggest an order of magnitude of the resources required. It is, therefore, as broad approximations, not intended at this stage for budgetary purposes, but rather to provide a perspective, that estimates are presented for capital costs of equipment, supplies and construction, and for costs of training and personnel and other recurrent charges.

6. Chapter VIII offers a projection of requirements to provide basic services to a target population of 700 million, - a World Bank estimate of the rural population of the developing world, living in absolute or relative poverty. A further 200 million persons live below the poverty line in shanty towns and urban slums. A rough assessment of funds needed for basic services in urban areas is also provided, again for the purpose of suggesting an order of magnitude.

7. The needs of the urban child are recognized as fully urgent as those of the rural child and are virtually identical - i.e. health care and nutrition, safe water and education, etc. Patterns of organization and administration will, however, vary widely between localities as will channels for delivery of services and supervisory arrangements. While the present text discusses a pattern of organization which might generally apply to the development of programmes in rural areas, no such attempt is made in respect of urban areas because of the wider variation in circumstances that can be anticipated. This will require further study.

8. To develop the essential infrastructure and provide basic services for all mothers and children among the rural and urban populations totalling 900 million in the underserved areas of the low income countries would require external assistance of the order of \$8,000 million over a 15-year period, i.e. an average annual input of, say, \$500 million. An equivalent investment would be required by the participating countries.

9. A programme of this nature and dimension would of necessity have to be developed gradually over a period of years. A time-frame of 10 years is suggested for the "start-up" of the programme over which period basic services would be progressively introduced and developed in successive areas. External assistance would be limited to the initial period of five years for each operational area. Thereafter, the maintenance of activities would be the responsibility of the governments, local authorities and beneficiary communities. Assistance to areas starting up in the tenth year would therefore extend up to the fifteenth year the period for

which external aid would be required. This implies a minimum average annual requirement of external assistance of approximately \$500 million - a level which it is reasonable to consider that the international community could provide.

10. It is not envisaged that this volume of external assistance would become available from any single source, or be channelled through an individual organization or limited number of agencies. Rather, it is envisaged as the aggregate of contributions that might be made by agencies and authorities who are interested in the promotion of programmes to benefit children and women in the developing world and who themselves subscribe to the concept and strategy here presented for basic services. These agencies and authorities might include bilateral donors; the World Bank and regional development banks; UNDP and UNICEF; non-governmental agencies and foundations. Technical support might be provided by the specialized agencies of the United Nations, by universities or other institutions, and by non-governmental agencies having expertise or developmental experience. These agencies and authorities might also provide financial and material assistance, depending on their mandates.

11. In presenting this report, the Executive Director wishes to acknowledge the helpful advice and assistance obtained from informal discussion and correspondence with the secretariat of WHO, FAO, UNESCO, ILO, the World Bank, representatives of non-governmental agencies and many professional persons interested in, and concerned about, the health and welfare of children in the developing world. However, UNICEF alone is responsible for the present text.

12. After Board consideration of this report, it will be given wider circulation. The main audience for the report is seen as including the various ministries in the developing countries responsible for over-all planning and the sectoral ministries concerned; institutes of development studies and schools of social work; and all concerned assistance agencies - multilateral, bilateral, and non-governmental.

13. It is hoped that such a report would contribute to further development and broad acceptance of a more dynamic strategy for meeting the needs of the least privileged members of the human family and to more concerted action by the international community in support of interrelated basic services programmes.

Background

14. At its May 1974 session, the UNICEF Executive Board, conscious of the deterioration of the situation affecting children in many developing countries because of world economic conditions, aggravated in many instances by natural and man-made disasters, declared an emergency on behalf of children. The declaration was duly endorsed by the Economic and Social Council in resolution 1880 (LVII) and by the General Assembly in resolution 3250 (XXIX).

"Special assistance" projects and contributions for specific purposes to help fund them, were authorized by the Board as part of UNICEF's own response to the declaration. In 1974 and 1975 UNICEF received special contributions in cash amounting to \$68 million and donations valued at \$29 million in the form of children's food and freight services for special assistance programmes in "most seriously affected" and "least developed countries" (E/ICEF L 1343).

15. At its May 1975 session, the Board studied, with deep concern, reports of the continuing deterioration of the situation of the child and of services for children. The Board then addressed an appeal to the General Assembly at its seventh special session to consider this situation and to adopt measures necessary for meeting children's needs, especially those most commonly considered to be the minimum basic needs of children within underserved communities in the less developed countries.

16. As necessary measures, the Board recommended the rapid enlargement of basic services in the interrelated fields described in paragraph 1 above. The Board identified two prior conditions for the achievement of the rapid extension of such basic services to underprivileged communities, namely:

(a) A deeper commitment by the developing countries concerned to support this concept of basic services by appropriate decisions and actions; and

(b) A parallel commitment by industrialized countries and other potential contributors to provide an adequate level of external assistance bilaterally, or through the United Nations system.

17. The Board's appeal received the endorsement of both the Economic and Social Council and the General Assembly. In its resolution, the General Assembly:

"1. Endorses the approaches to the expansion of basic services for children set forth in the annex to the appeal of the Executive Board of the United Nations Children's Fund, entitled "basic services for children in developing countries", which embodies proposals for expanding children's services in the fields of maternal and child health, nutrition, water supply, basic education and supporting services for women, utilizing the material and human resources available in developing countries, at costs which developing countries can ultimately afford;

"2. Urges the developed countries and others in a position to do so to provide, through bilateral and multilateral channels, and particularly through the United Nations Children's Fund, external assistance at a level more commensurate with the needs of developing countries, in support of the efforts of developing countries to expand their basic services for children;

"3. Invites the Executive Board of the United Nations Children's Fund to consider this matter in depth at its next session, and to report to the General Assembly at its thirty-first session, through the Economic and Social Council."

Principles underlying the concept of
interrelated basic services

18. Experiments in rural development in various parts of the world bear testimony to the ineffectiveness of trying to find piecemeal solutions by isolating problems that are multifaceted in character. The Committee for Development Planning, established by the Economic and Social Council, draws pointed attention to this fact. 1/

19. On the crucial question of increasing domestic food production and consumption, the Committee observed that no production and storage programme would itself solve the problem of malnutrition among the poorer segments of rural populations, unless other measures were taken simultaneously to improve levels of living by reducing inequalities in real income and providing more equal access to social and welfare services. The Committee emphasized the close linkage of rural progress to the availability of these public services and the contribution they made towards the whole process of development. To reinforce this point, the Committee drew attention to the symbiotic relationship between diminishing fertility and accessible social services such as maternal and child care, nutritional activities and women's education. The implication which the Committee wished to be noted in this context was that restraint in population growth was best accomplished, not as an independent, single-motive programme, but as an element of a more comprehensive, anti-poverty and social development programme.

20. The comments of the Committee lend influential support to the concept of a combination of basic services as the appropriate strategy for adoption by the international community, in programmes of assistance directed toward the poorer segments of the population in the least developed areas and countries. The end purpose of international assistance would be to encourage, and then aid, "self-help" activities by the underserved communities in accord with the principle that it is better and more effective to do things with people than for people.

21. The proposed basic services are simple, low-cost, and intended to cater to the basic needs of a community. These are characteristics that lend support to the feasibility of their adoption as interrelated services in an action programme. They would be delivered economically at the village level through

1/ Continuity and Change, Development at Mid Decade.
Department of Economic and Social Affairs (United Nations
publication (Sales No. E.75.II.A.6)).

locally resident volunteers, or part-time paid workers selected by the communities themselves. Existing facilities would be used to the extent possible and supplemented as necessary, using local building materials. The locally chosen primary level workers would receive, at recurring intervals, brief training and "refresher" instruction for a limited number of specific tasks and would be provided with inexpensive supplies and simple equipment to fulfil their clearly defined and limited functions. They would act as "resource" persons within their respective communities and provide linkage between their villages and the nearest point of contact with the national extension network. The national network of district and subdivisional facilities would, in turn, provide supporting and referral services for cases and problems that could not be adequately dealt with by the primary workers.

22. Professional staff at the "referral" level would be relieved of routine service functions, which make unwarranted demands on their time, so that they might assume broader supervisory and directorial responsibilities. Additional paraprofessional personnel, (auxiliaries), would be introduced to provide, under the general supervision of the professionals, routine services and also to give advice and guidance to the primary level workers. These principles are being increasingly applied not only in developing countries but also by the industrialized countries. In health care, the increasing use of auxiliaries is becoming a condition for making services more generally available and at lower cost. For instance, the use of midwives and enlargement of their responsibilities is increasing in New York State. In schools the use of teachers' assistants is increasing. Sweden is using, in some districts, a system in which the school is open on alternate weeks, in this way putting more responsibility on to the family's "self-help" activity.

23. The fundamental principle and sine qua non of the concept remains the willing and substantive participation of the public. Prior consultation with communities, or their representatives, would ascertain their interests, priority needs and their commitment to an appropriate programme. After general acceptance of the concept, communities would actively participate from the initial planning stage, with the conduct of programme activities. Additionally, the contribution of communities might take the form of voluntary labour and services, local materials and supplies, and cash.

24. The introduction of basic services in a country, or within a selected development zone or an administrative division is, of course, predicated on the commitment of the government to its hitherto underserved areas or communities. Such a commitment may imply, in the circumstances of the least developed countries, redeployment of budget resources in order to mobilize some measure of the total of local funds needed. Budgets at national, provincial and local authority levels may need to be reviewed to identify funds which might be released from lower priority programmes, by economies in institutional spending, or by reduction, or discontinuance of other traditional non-developmental expenditures.

25. The services to be rendered at the community level are simple and elementary in nature. Even so, they meet in large measure the common every day needs of the family. The delivery of services would rely heavily on the use of hitherto substantially neglected, but abundantly available resources, viz. human resources. Special attention would be directed to that large fraction of the population which, in most countries, still represents a great untapped reservoir of developmental energy, potential skills and leadership - the female half of the population. A programme might therefore be described, in essence, as a broad-based endeavour among the disadvantaged and deprived to create and organize human capital for investment in social progress. Successfully organized as a first-stage developmental operation, basic services afford prospects of progressive advancement by the rural and urban poor to improved levels of living.

II. THE NEED FOR ACCELERATING THE DELIVERY OF BASIC SERVICES TO UNDERSERVED COMMUNITIES AND SOME POSSIBLE APPROACHES

26. At midpoint in the United Nations Second Development Decade, it has to be conceded that the interests of the vast majority of women and children in the developing world have so far been poorly served. The prospects before them remain bleak, with continuing denial and deprivation of health protection, of adequate nutrition, of educational opportunity and social emancipation. This situation is likely to continue unless there comes about a change in development strategies. The following indicates some of the "gaps" that exist in vitally needed services, some possible reasons for these deficiencies and the urgent need for adjustments.

The status of public health and options for remedial action

27. In the health field over the past one and a half decades, despite notable accomplishments in the control of endemic diseases, programmes designed to benefit women and children have been limited both in their coverage and in their effect. With rapid population growth and resultant increase of young clientele, many programmes have managed little more than prevent a bad situation from becoming worse.

28. Among the reasons for the shortfall, globally, in the accomplishment of health programmes is the inadequacy of the total resources, internal and external, that have been allocated for the development of services for children and women. An equally pertinent reason is that the strategies for the delivery of health services have in themselves been restrictive, with heavy reliance on curative institutions as the delivery channels. Major medical complexes in national or provincial capitals absorb major funds and manpower, with the consequence of much being done

for the urban few in the modernized sector and relatively little for the rural many. In developing countries, maldistribution of services, like maldistribution of income, reinforces the deprivation of the majority of the population.

29. A convention to which many countries still adhere is that of restricting to their professional cadres, - i.e. doctors, nurses and midwives - the responsibility for providing even the most simple forms of health care. There is thus uneconomic use of scarce professional competence. Such narrow yet pervasive conviction about the delivery of services is a monopolistic barrier to broader actions about health. The shortage of qualified doctors in many countries implies that the population at large must continue to suffer if health care is maintained as the exclusive responsibility of professional personnel, admitting of no alternative agents of delivery. Dr. N.R. E. Fendall has expressed these views:

"If I were asked to compose an epitaph on medicine throughout the twentieth century, it would read: brilliant in its discoveries, superb in its technological break-through, but woefully inept in its application to those most in need. Medicine will be judged not on its vast and rapid accumulation of knowledge per se, but on its trusteeship of that knowledge. We are now experienced and all that remains is the problem of translating what is common knowledge and routine medicine, and hence practice, to the other two-thirds of the world. The implementation gap must be closed." 2/

30. The "implementation gap" is suggested by the following now commonly quoted estimates below. (Statistics such as these may be as much an understatement as an exaggeration. They provide, however, an "order of magnitude" for acceptance until substantive data are available.)

- (i) Less than 10 per cent (203 million) of the rural population of developing countries, (2,032 million), is within walking distance, (10km), of a national health facility of any kind;
- (ii) A WHO study of 91 less developed countries indicated that 85 per cent of the rural population has no access to safe-drinking water;
- (iii) WHO sources estimate that 3 per cent, or approximately 10 million, of children under five years in developing countries suffer from severe protein/calorie malnutrition and a further 80 million from moderate level malnutrition; 3/

2/ See "The Role of Frontline Workers", WHO Chronicle, Vol. 29, No. 1, (Jan. 1975).

3/ "The State of World Nutrition" (NUTR/73.1), WHO.

- (iv) Nutritional deficiency diseases ^{4/} afflict large numbers of persons: goitre 400 million; anaemia 300 million; xerophthalmia 100 million.

It is self-evident that health expenditures, disproportionately concentrated at a few locations, such as better-off urban areas, can make no appreciable difference on morbidity and mortality rates for any country as a whole. To achieve widespread effect on health standards there needs to be widespread distribution of resources - the case of some for all rather than all for some. The attainment of greater equality implies a substantial increase in the numbers of agents for the delivery of health services.

The WHO/UNICEF joint study on alternative approaches to meeting basic health needs

31. The WHO/UNICEF joint study on alternative approaches to meeting the basic health needs of populations in developing countries (document E/ICEF/L.1322) points towards possible ways out of the present dilemma. The UNICEF Executive Board and the World Health Assembly at their respective 1975 sessions endorsed the recommendations of the Joint Health Policy Committee arising from this study.

32. The following were included among the recommendations for the reorientation and development of health services to achieve extensive primary care:

(a) Communities should be involved in the design, staffing, functioning, and support of their local primary health care centres;

(b) Primary health care workers who have undergone simple training should be used;

(c) The primary health care workers should be selected, when possible, by the community itself, or at least in consultation with the community - acceptability of such workers is in fact a crucial factor of success;

(d) There should be special emphasis on (i) preventive measures; (ii) health and nutrition education; (iii) health care needs of mothers and children; (iv) use of simplified forms of medical and health technology; (v) association with some traditional forms of health care and use of traditional practitioners; and (vi) respect for the cultural and felt needs in health and community development of the consumers.

^{4/} Many of the same persons would be suffering from anaemia and other nutritional deficiencies; the total, therefore, should not be added. See "The World Food Problem", (E/CONF/65/4, paras. 502-504), United Nations World Food Conference.

Safe water needed for family health and convenience

33. WHO considers that the provision of a safe and convenient water supply is the single most important step that can be taken to improve the health of children living in rural areas. Diseases such as diarrhoea, amoebic dysentery, typhoid and paratyphoid fever are among the main causes of sickness and death in the developing countries. In a number of countries diarrhoea is the chief factor in infant and young child mortality. Safe water for drinking and for better personal and household hygiene can significantly reduce the incidence of these diseases.

34. The impact of safe water on endemic diseases is attested to in a report submitted in 1962 by the Government of Japan to WHO. ^{5/} The Government reported that a survey of 30 rural areas showed that, following the installation of safe water supplies, the number of cases of intestinal diseases in those areas was reduced, on average, by 71.5 per cent and trachoma by 64 per cent. The death rate of infants and young children fell by 51.7 per cent.

35. It is estimated that over 1,000 million people in rural areas do not have adequate supplies of safe water and that the rate at which it is being provided fails to keep pace with population growth. The following table indicates for 1970, the rural population, by region, without reasonable access to safe water.

Table 1. Rural population without access to safe water ^{6/}

<u>Region</u>	<u>Rural population</u> (millions)
Africa	135
Latin America and Caribbean	89
Eastern Mediterranean	138
South East Asia	632
Western Pacific	<u>59</u>
<u>TOTAL</u>	<u>1,076</u>

^{5/} Urban Water Supply and Needs in Seventy-Five Developing Countries, WHO Public Health Papers, No. 23 (Geneva, 1963).

^{6/} C.S. Pineo and D.V. Subrahmanyam, Community Water Supply and Excreta Disposal Situation in the Developing Countries, (WHO, Geneva, 1975). These estimates were obtained by deducting rural population with reasonable access to safe water from local rural population. Table 8, p. 32.

36. Clean water is essential not for drinking alone but also for personal hygiene and general domestic use. It should be available in adequate quantities to serve these purposes. A conveniently available safe water supply could be a major factor in reducing the daily drudgery of the housewife, conserving her strength and her time for more attention to the other needs of her children and home. Clean water contributes to improvement of the quality of life by the protection it offers against dirt and disease.

37. The goals set by the United Nations for the global improvement of water supply in the Second Development Decade are to provide safe water to 100 per cent urban population and to 25 per cent of rural population within this period. For the rural areas, this modest goal implies the extension of safe water from an estimated 140 million people already covered to an additional 273 million. Projections of population growth to 1980 suggest that, even if the United Nations goal is reached within the period, there will be more rural people still without safe water in 1980 than there are today. 7/ The inevitable consequence will be the continuing high incidence of diseases relating to lack of hygiene and continuing high curative services. On humanitarian grounds alone, apart from all other considerations, increased emphasis needs to be placed on rural water supply.

38. There are a number of prerequisites for the organization of effective large-scale rural water supply programmes. It is essential (a) that governments be firmly committed to rural water policies; (b) that existing national institutions and infrastructures be strengthened; (c) that training of manpower for all levels of operation and maintenance be planned; and (d) that the public be educated to appreciate the advantages of safe water and motivated to contribute in appropriate ways to the installation and maintenance of supply systems.

39. A matter of special importance is the siting of safe water supplies. They need to be located within reasonable distance of the households they are intended to serve, otherwise, there is the danger of families reverting to the use of unsafe water which may be more conveniently accessible.

Provision of latrines

40. To reinforce the effort to safeguard health and improve living conditions as intended with the provision of safe water supply, it is also necessary to ensure the proper disposal of human waste. Latrines afford a low-cost method for disposal in uncongested areas. Dug-pit latrines are not expensive but in certain soils, bore-hole latrines constructed by use of a hand auger may be quicker and cheaper to install. They should be provided on a household basis especially for the convenience of

7/ Ibid.

women and for assurance of proper care. Community latrines, while they may serve at places of public assembly, such as markets or places of worship, have in general not proved satisfactory in terms of care and maintenance as have facilities provided for family use.

41. The provision of safe water and household latrines should be seen as integral parts of health care and as important elements among those basic services necessary for the improvement of standards of living.

More support needed for responsible parenthood

42. The "quality of life" is what responsible parenthood is all about. In many of the poorer countries high birth rates are associated with high mortality. Frequent pregnancies occur in a household because couples, uncertain of the survival of any child, are inclined, as a safeguard, towards increasing their family size. The survival of at least one male child or more to adulthood is the parents' main prospect of security in old age.

43. At the family level frequent pregnancies overburden and exhaust the mother, handicap the older children and overstrain the family resources. With too many tasks to fulfil the mother is unable to give all her children the care and attention each needs. Frequently, for lack of knowledge she does not appreciate how some of the basic needs of her children may be met, for example, in weaning, or in hygienic habits such as might prevent disease.

44. At the country level a rapidly increasing population of young children renders even more inadequate such services as may exist for their welfare - in health, education and social protection - and requires a considerable level of investment to maintain the existing insufficient ratio of services to population. Supporting services must be available for any programme to encourage responsible parenthood. These services would include mother and child care, nutrition education and such measures of protection as hold promise of the healthy development of children that are born. Basic services incorporate these supporting elements and also provides a means at the village level for delivery of family planning services in terms of non-clinical supplies and basic information. Further guidance and supervision is provided through referral services. Family planning relates not merely to the regulation of the number of children born, but to the spacing and timing of births so that children are conceived at least risk to the mother's life and health, are wanted and can be adequately cared for.

45. To encourage responsible parenthood there is need of a major educational effort, shaped to accord with local circumstances, which would motivate couples to plan their families. This motivational effort would include the topic of family life

education in schools, colleges, training institutions, clubs and co-operative services, and wherever adolescents can be contacted. Advocacy of family planning should be a regular function of all personnel in extension services in contact with the public. Those engaged in such sectors as health, social welfare, education and community development have special opportunities for effective education of the public. This task, however, should be shared by as many members as possible of formal and informal, official and non-governmental agencies and channels.

Greater investment in child nutrition to secure future dividends

46. Malnutrition is a common phenomenon in the less developed countries, especially among children and women. There is considerable variance of opinion as to prevalence rates. This is due to the paucity of data. One projection, based on a number of point-prevalence studies, estimates 3 per cent of children under five years, (approximately 10 million), suffer severe protein-calorie malnutrition, while another 80 million suffer moderate malnutrition. The high rates of infant and young child deaths in these countries are, in large measure, attributable directly or indirectly to malnutrition. Infants may die because of their undernourished and anaemic mothers' inability to provide the breast milk essential to their survival or by being too soon replaced at the breast by another sibling.

47. In many countries, deaths under five years of age may equal 50 per cent of total deaths. Studies in Chile, Colombia, Guatemala, Indonesia and Mexico suggest that malnutrition, with the related apathy and lack of stimulation felt by young children, may retard the development of the brain and interfere with their learning capacity and behaviour in later years. Some of the effects of malnutrition are thought to be irreversible; most of the others, in practice, will never be reversed because of the costs involved. Among the irreversible are keratomalacia, a disease of the eye arising from lack of vitamin A leading to blindness, and rickets, a disease of the skeletal system resulting in crippling due to lack of calcium salts and vitamin D. The lack of iodine in the diet induces goitre, a debilitating disease of the thyroid gland, and is also responsible for cretinism, a condition of body malformation combined with mental retardation. A malnourished child, marginally surviving to adulthood, is likely to burden rather than contribute productively to his community - and this for no fault of his own.

48. With malnutrition responsible for such catastrophies, the problem needs to be tackled much more vigorously than hitherto. Many of the developing countries have national agricultural policies; few have national food and nutrition policies. The former usually aims at increasing production of staples, cash and export crops, but such policies do not necessarily spread the benefits of increased productivity to those most in need. To accomplish the latter, there must be a programme directed

specifically to improve welfare by reducing deprivation - in this context, a specific nutrition programme as an integral part of any general rural development plan. Conservatism is strong in food habits and the observance of taboos widespread. Ignorance of food values is another factor which makes a vigorous programme to educate the public essential to achieving any change in food habits. There would, of course, be other implications to improving national nutrition standards such as pricing policies and the availability of the necessary inputs for improved food production.

49. While the formulation of a national nutrition policy is a desired goal needing to be constantly advocated, it is not at all necessary to await the framing of such a policy at the national level before initiating practical actions at the local level to improve standards of nutrition. Successful demonstration frequently accelerates and contributes to the determination of policy. Nutrition education and practical nutrition activities, therefore, constitute important elements of basic services that are necessary to improve the lot of the disadvantaged rural communities. What in essence is required is increased local production and consumption of better quality foods, of vegetables, particularly legumes, fruits, poultry, dairy products and fish, accompanied by continuing nutrition education to improve traditional food habits and also to achieve public recognition and appreciation of the special food needs of young children and expectant and nursing mothers. The importance of breast-feeding of infants should receive special emphasis in all nutrition education activities.

50. While the longer term objective should be local self-sufficiency in food, it may be necessary to deal with the more serious cases of malnutrition among children and women through special feeding programmes. For this, quantities of food would be required which, if not obtainable within the country, would need to be imported. Because of food costs and the problems of organization, programmes for the treatment and supplementary feeding of the malnourished would perforce be limited and would be possible only on a highly selective basis, restricted to the most needy cases.

51. Many developing countries have some system of agricultural and home economics extension or include these subjects under more general programmes for rural and community development. Most will require strengthening if they are to reach out effectively to the periphery. The shortage of professional personnel is frequently given as the reason for present limited service. This might be overcome by the employment as extensionists of increased numbers of paraprofessionals on the pattern of paramedicals and auxiliaries in the health field. With suitable training, such extensionists should be adequate for the job of disseminating knowledge of simple improved practices including dietary habits and techniques for better home management in the villages. Major attention would be given to cultivating better food crops and encouraging better food preparation and preservation with special attention to the food needs of infants.

52. At the village level, suitable persons - the equivalent of "good farmers" and "capable housewives" - might be selected by the community as their village agents or primary level workers. Basic services would provide for the training and support of these and other personnel necessary to extend assistance to the periphery.

Activities to benefit women and girls

53. In traditional societies, women and girls suffer many disabilities. A typical rural woman's role is to bear and nurse children, to manage the household and feed the family, to fetch water and gather fuel, to help in the fields in season and to winnow, grind, pound or press cereal and seed crops after harvest. Hers is the responsibility for the kitchen garden, if there be one, and for tending small animals. The quality of the family diet depends substantially upon her resources and resourcefulness. It is she who may attend the local market for purchases or for sale of any small surpluses the family may have. It is she who provides what care she knows when sickness occurs and who seeks out the traditional healer or trudges to the distant dispensary when she recognizes the seriousness of the affliction of any family member. Girls from an early age are destined to share with their mothers this day-long, year-round drudgery.

54. Though they fulfil an important role in a rural economy, and are a primary influence on the development of their children, women, for the most part, are excluded from formal decision-making with regard to their community. In most traditional societies, community affairs remain the prerogative of the male.

55. Failure to associate communities with the planning of programmes intended for their benefit, with consequent lack of public participation in the implementation of programmes, is now recognized as a missing link in the strategies for development so far applied and a major reason for the shortfall in the achievement of targets. The great and puzzling question is, can the appropriate forms of social organization and the necessary degree of political support be found for the adoption of new strategies and alternative approaches to development? A conscious effort has now to be made to motivate and actively engage communities in a new developmental effort. This implies new styles of planning, changes in traditional procedures, new roles and new participants in the planning process.

56. From the outset, any movement in new directions should provide adequately for the participation of women, should recognize their special needs, should provide services to ameliorate their common conditions and reduce their heavy labour and thereby increase their opportunities for more productive roles within the family and community. For these reasons,

basic services should provide for the protection as well as the social emancipation of women and girls. Accessible primary health care, improved nutrition and family planning facilities within the community would assist in this regard and would reduce unnecessary suffering as well as the frequency of pregnancies. With an accessible water supply, the time and physical energy saved can then be devoted to better home and child care, gardening or other pursuits. Time needs also to be conserved so that females have the opportunity of participating in social gatherings for non-formal education and cultural and recreational purposes.

Village-level technology

57. Greater interest in village-level technology has become apparent in many developing countries stemming from problems related to the world economic crisis with its manifestations of increased prices of fertilizer, fuel and food, combined with the local problems of unemployment and underemployment and the drift of people from the rural to urban areas. Village-level technology may best be introduced as one facet of village development activities envisaged as basic services. Concepts of village-level technology should represent a development of the traditional culture and life style of the people concerned. A main objective would be to use locally available material, skills and resources to develop a comparatively low-cost technology, appropriate for application in the given circumstances.

58. The introduction of simple technologies and the teaching of new home management techniques can have numerous direct benefits. These techniques might include the improvement of implements and the replacement of traditional appliances by easier to operate and more efficient means for de-husking, grinding or pressing grains and oil seeds. Improved extraction processes would increase the production of oil and leave protein-rich cake in the villages for domestic use. Wind power might be harnessed for pumping water, and for small-scale production of electricity. Improved methods of solar drying and crop storage would lead to better conservation of food and maintenance of quality. Simple devices for cooking would save fuel while others designed for transporting heavy loads would relieve a burden that frequently falls to the women in a family.

59. Cottage crafts could provide aesthetic as well as small economic benefits, while some methods and technologies could be applied on a community basis thus reducing individual workloads by sharing. Successful village-level technological improvements of the types discussed, are likely to have direct beneficial impact on women and girls by reason of their existing roles and responsibilities.

The educational "gap" - essential learning needs and alternative approaches

60. Just as in matters of health care, nutrition, water supply and other basic services and amenities, millions of people in the developing world are deprived or underserved, so also are

they disadvantaged or denied in respect of education. The education systems of many countries continue with inculcating conventional knowledge and preparing students for limited, stereotyped functions. Millions of children emerge from schools ill-adapted to their environment and possessing neither the training nor skills required to meet the development needs of their countries. In many countries, more than 50 per cent of the total resources available for education are used as if their sole purpose was still to prepare a small intensively trained elite for the country's modern economic sector. The priorities asserted by urban areas tend to reduce the resources directed to education in rural areas. These are striking anomalies considering that the economies of developing countries are predominately agricultural and nearly 80 per cent of the population is rural. Levels of literacy and ratios of first year school enrolment in a number of developing countries provide some measure of the "educational gap" that needs to be filled.

Table 2. Levels of literacy and ratios
of first year school enrolment 8/

<u>Country</u>	<u>Literacy</u> (%)	<u>School enrolment ratio</u> (First year)
Bangladesh	23	56
Chad	7	33
Democratic Yemen	10	70
Ethiopia	7	17
Guatemala	38	43
Mali	10	18
Senegal	10	38
Somalia	5	13
Sudan	15	38

8/ Education, World Bank Sector Working Paper, December 1974, table 3, pp.18-19.

61. School enrolment ratios attest to the deprivation experienced by developing countries. Of an estimated 435 million children of the 7-12 years age group in the less developed countries, approximately 201 million were enrolled in primary schools in 1970, i.e. less than 50 per cent. ^{9/} In several of the least developed countries and the more backward areas of some others, only one sixth to one third of the children of primary school age were enrolled. These low enrolments can safely be attributed to poverty and to the paucity of facilities available to the majority in the rural areas.

62. A phenomenon general to the primary system in these countries is the large number of drop-outs in the initial year. This is variously attributed to the family's inability to continue to clothe and equip the child for school or to circumstances requiring the child's help at home or in the fields. Additional causes of drop-out may be the uninteresting content of the curriculum, ineffective methods of teaching, and over-all, the irrelevance of what was taught to the pupils' environment and family lifestyle.

63. Data from three countries of Latin America indicate, as a percentage of total primary admissions, those who completed their primary education and by inference, those who dropped out. The data reveal a most serious situation in the rural areas.

Table 3. Successful completers in primary education as a percentage of enrolment ^{10/}

	<u>Total country</u>	<u>Urban</u>	<u>Rural</u>
Colombia	27.3	47.3	3.7
Dominican Republic	30.4	48.1	13.9
Guatemala	25.4	49.6	3.5

64. The Second Development Decade saw some beginnings with re-examination of national education systems and priorities. Several countries began the process of modernizing the curriculum and reorienting teacher training. Enrolments increased in those countries with relatively higher per capita GNP, confirming the natural aspiration of parents for an education for their children where facilities were available and where they were able to meet direct and indirect costs. The "International Classification of Educational Statistics, 1971" indicated for Asia and Africa an increase over the previous year of 1.6 per cent in primary school enrolment. At the same time, however, it noted a 3 per cent increase in the 0-9 year old population. The difference

^{9/} Ibid., annex 1.

^{10/} Ibid., annex 6.

in these percentages implies an increase in the number of persons who may reach adulthood still illiterate. This is a forbidding prospect unless educational facilities along with other essential supportive elements of development are forthcoming.

65. For example, the World Bank, drawing on UNESCO estimates, projects for 1985 more school-aged children out of school (375 million), than in school (350 million). The comparative totals for 1970 were: out of school, 269 million; in school, 212 million. Increasing illiteracy can therefore be apprehended and with it increased deprivation and denial of development. Again the World Bank estimates that illiterates above 15 years of age in developing countries may number 865 million by 1985. It would be unconscionable of the international community to ignore this prospect and to accept as inevitable an irreversibly worsening fate as the predestined lot of hundreds of millions of its already underprivileged fellows.

66. For countries to expand and develop their formal school systems to meet the educational requirements of all children, massive investment, innovative concepts and an expanse of time are required. This should be the national long-term goal. In the meantime, however, because of prevailing deprivation, and to prevent its acerbation, special efforts are needed to provide some learning opportunities for children who are not at school for one or a variety of reasons. Thus, an educational opportunity, adapted to local needs, should be an integral part of the basic services to be delivered, in the shortest possible time, to benefit the least privileged in the less developed countries. As in the case of other services, a strategy for extending learning opportunities to out-of-school children and other disadvantaged groups in the poorer countries would have the best chance of success if there is local participation in the planning of proposed activities and if the interventions are kept simple.

Essential learning needs

67. Recent discussions among the international educational community concerning basic concepts of education suggest some strategies for meeting the minimal educational needs of children in disadvantaged areas. These discussions stress the need for viewing education as a lifelong learning process, 11/ emphasize that basic education is not limited to formal schooling 12/ and discuss measures for the provision over the next two decades of at least minimum levels of elementary or basic education to fill the educational gap. 13/

11/ Edgar Faure et al., Learning to Be. Jointly published by UNESCO, Paris and Harrap, London, 1972.

12/ Philip H. Coombs with Boy C. Prosser and Manzoor Ahmed, Barbara Baird Israel, ed., New Paths to Learning for Rural Children and Youth. Prepared for UNICEF by the International Council for Educational Development.

13/ H. M. Phillips, Basic Education: A World Challenge (London, John Wiley and Sons, 1975).

68. The definition of minimal essential learning needs varies from country to country depending on local circumstances. The following elements are merely illustrative of a "minimum package":

(a) Functional literacy and numeracy to enable persons to have access to sources of knowledge which they personally might find useful such as simple agricultural, health and other "how-to-do-it" bulletins to increase productivity and provide family protection; to be able to write legibly and give comprehensible expression to thoughts and needs; and to handle common computations that are important, e.g. measurement of land and buildings, calculation of agricultural input costs, sales, revenues and interest charges;

(b) An elementary understanding of the processes of nature in the particular area, as they pertain, for example, to raising crops and animals, to nutrition and food conservation and to the environment and its protection;

(c) Knowledge and skill to develop self-reliance and for raising a family and operating a household, including the essential elements of good child care and family planning where appropriate; sanitation and nutrition; and the preparing of food for family consumption; and

(d) Knowledge of the social environment to allow constructive participation in community affairs.

Each element should stimulate curiosity and provide training and experience in "how to learn" in support of a life-long learning process.

69. Viewing education functionally, that is in terms of essential learning needs, instead of institutionally (through level of schooling), enhances the prospect of identifying wider opportunities for educating disadvantaged children. Education in this context is based on a combination of learning activities which may occur in schools, at home, in the market place, or elsewhere, in scheduled or unscheduled classes. This functional approach also provides greater opportunities for reaching disadvantaged children through a larger number of mediators in learning.

70. In the fields of health and agriculture, the extension of services to the periphery may be done through auxiliaries, a category that already exists in many countries. These cadres operate under the direction and supervision of professionally qualified staff. In the education field, there appears to be no very closely analogous category of personnel for use as extension agents though many countries, short of professionally trained teachers, employ "monitors" for certain limited educational tasks and others employ auxiliaries for teaching literacy. For the most part, in order to meet the basic educational needs of deprived communities, it would be necessary, while making

maximum use of available teachers, to identify other persons who could provide some assistance. An immediate possibility would be to use for this purpose, on a part-time basis, the auxiliaries available from the health, agriculture and other sectors, each to contribute according to his particular field of knowledge and experience.

71. These auxiliaries would increase the number of available educators as additional persons are recruited into these services. Local artisans, successful farmers and housewives, religious leaders and other socially active members of the community might also be called upon.

Improvement of formal schooling

72. In some countries, the formal school system would provide the easiest point for initiating action aimed at meeting the minimum essential learning needs of disadvantaged children. Existing schools might be used to serve more children. This might be done, for example, by keeping schools open longer - more hours per day and more days per year - with additional teachers to match the workload; or by admitting particular groups of children to the schools in alternate weeks. In certain areas existing school buildings might be extended and staff increased, while elsewhere, with no school available within reasonable distance, it would be necessary to establish a primary school.

73. Some countries seek to extend the opportunities for formal education through the system of "godfather" schools, as in Tamil Nadu (India), or the "nuclear", or "consolidated" schools of Latin America. These systems group smaller village schools, offering a limited range of instruction, under others which offer the full cycle. ^{14/} They involve certain practical problems such as selecting children from the satellite schools and housing them at the central school. There is, as yet, little published material on how and to what extent these problems have been overcome. But the system represents an interesting attempt at broadening the opportunity for formal education.

74. Turkey, under a programme for agrarian reform, aims at improving its rural infrastructure by developing and strengthening public service facilities at a number of "key" or "central" villages. Along with health services and rural credit facilities, etc., this scheme includes the establishment of schools which serve the central villages and children from scattered hamlets in the area.

75. Sierra Leone, jointly assisted by UNDP, UNESCO and UNICEF, has embarked on a project in rural community education. The course of study offered at 20 teachers' training colleges, which are located in the rural areas, has been oriented to the

^{14/} Phillips, op. cit., chapter 10.

needs of the community and environment. The objective is to convert these colleges into community centres and to qualify trainees for leadership roles in future rural development. A similar orientation of education is under way in Mali.

76. Poorer countries of the developing world may find it impossible to develop an education programme that would tackle several learning needs simultaneously. It might become necessary to start with priority needs, the development of income-earning skills for example, or concentration on an especially disadvantaged group such as adolescent girls. In other circumstances, however, schools might well be turned into community learning centres.

Other educational channels

77. Apart from schools, there are various activities and services at the village level which incorporate a strong education component. Basic health service programmes, for instance, should impart functional knowledge about protecting family health, responsible parenthood, child care, nutrition and improved sanitation. Agricultural extension programmes directed to "functional skills for earning a living", also provide an opportunity through practical demonstrations in raising crops and animals, and an elementary understanding of natural processes including human nutrition as well as that of animals and plants. Extension programmes may impart skills required for raising a family and managing a household.

78. The process of education would naturally not be limited to indoors. Much could be done in the open air, as most village affairs are conducted, and in the fields, as would be most appropriate to the needs of cultivators. The strategy would be to explore the "potentials", human and material, within a community and use and develop them. A major implication of these suggested approaches to meeting basic learning needs is the great demand that can be anticipated for training local persons in simple teaching skills. There would also be demand for the preparation and supply of suitable teaching aids and for the maintenance of acquired skills, such as literacy. The experience of national authorities and local institutions, non-governmental organizations and the international agencies would be drawn on to assist in this regard.

Feedback from non-formal to formal

79. The development of non-formal education activities in a community might suggest ideas and teaching content that are suitable for absorption into local primary school practice. This should be encouraged and local schools should be appropriately assisted in these and other steps towards improving and making more relevant to life the education they impart. Ideally, the "remedial" effort to meet minimum essential learning needs should be linked to the national education system by appropriate "ladders and bridges" ^{15/} so as to enlarge the prospects and opportunity for education of the presently disadvantaged child.

^{15/} Ibid.

III. PRINCIPLES FOR DELIVERY OF BASIC SERVICES TO DISADVANTAGED COMMUNITIES

80. Chapter II provided some broad indications of the character and extent of the deprivation suffered by large sectors of the population of the developing world. It also identified some priority needs and referred in general terms to the interrelated basic services and elementary amenities to be provided if these needs are to be met. Part III defines some of the basic principles that should underlie a programme for delivery of basic services to disadvantaged communities. The term "disadvantaged communities", as previously noted, may apply to a particular country as a whole, to specific zones, or areas, or specific social groups within a given country.

81. Public participation is the vital force in social development. It is a resource that needs to be harnessed to the process of development planning from the outset. Regrettably, it is a commonly neglected factor. Various reasons for this neglect may be adduced, among them the highly centralized procedures that characterize the formulation of national plans and programmes in most developing countries; the paternalistic attitudes of some regimes; and the problems implicit for already overburdened administrators in the social engineering necessary to securing the active participation of communities in officially sponsored development programmes. Yet, the question remains: is the absence of public participation a "missing-link" in development? There is growing conviction that it is.

82. The presently contemplated basic services programme rests squarely on the principle of community participation in the planning of programmes, the active involvement of communities in programme execution and their making an appropriate contribution toward the required inputs. In the less developed countries, the sectoral national services - health, water supply, social welfare, education, agricultural extension, - fall far short of providing adequate population coverage. The major objective of basic services is to assist those communities, as yet unserved or inadequately served, in establishing a simple economical pattern of "primary" or "front line" services for themselves relating to the abovementioned or other priority fields of developmental activity.

83. The organizational pattern may vary between countries and between regions within countries, reflecting the expressed priority needs of different communities and environments. The common feature will be that, through the locally chosen primary level workers, all communities would have ready access to advice, guidance and assistance, from persons with whom they are familiar and socially at ease. Appropriately trained for a limited number of specific tasks, with regular refresher training and supported and supervised by a referral service, these primary level workers can be expected to provide useful services, with wide population coverage, at low cost.

84. The persons selected by a community as primary workers, whether or not the individuals have any formal education, should be intelligent and possess some qualities of enterprise and leadership. Recognized skills or experience may be a factor in selection. They might be part-time or full-time workers, male or female, paid or unpaid and be multipurpose to varying degrees. These are matters for local decision. Existing "operators" within the community, such as traditional midwives and healers and dispensers; progressive farmers, successful housewives or craftsmen; as well as religious leaders and other socially active persons, could be possible recruits as agents for delivering to their communities some of the basic services envisaged.

85. The programme envisages interrelated services to meet a variety of minimum basic needs. For very practical reasons, all the elements of the programme may not be delivered at one and the same time at a given location. There might be progressive developments of different services leading to the eventual convergence of all the required services at a particular locale. The process can be envisaged as one of gradualism. However, because of their interdependence, the various services should be developed in each location over as short a time span as possible to obtain optimum benefit. Planning authorities might ensure this outcome by establishing appropriate time schedules.

86. It perhaps needs to be stressed that primary level workers and their community-oriented activities are not conceived as a replacement of the national network of services. On the contrary, they are to be viewed as providing a platform from which hitherto deprived communities, while practicing "self-help", can propel themselves upwards into contact with the referral services.

87. The appropriate field establishments of the ministries of health, education, agriculture, social welfare and rural development etc., located nearest to a community might provide the training, supervision, referral and logistical services necessary in support of the primary level workers. This requirement has several implications. It implies a substantially different and increased workload for the staff of these establishments which are to provide referral services. Personnel already in position would require training to reorient them to their changed functions. New recruits would need appropriate pre-service training. Some expansion of professional staff would be necessary along with major expansion of auxiliary staff. In certain areas, in order to bring referral services within reasonable distance of communities, it would be necessary to establish new centres, or offices of the "district" type.

88. The content of the programme should reflect what the community considers its priority needs. It is assumed, however that the most deprived communities in the developing countries would have many needs in common even though they may vary in their assignment of priorities. In general, the nature of the tasks of primary level workers would be:

(a) To perform first aid and primary health care, including: treatment of diarrhoeas, coughs, colds, minor fevers and skin conditions; distribution of anti-malarials and vitamin capsules and follow-up on domiciliary treatment of patients with tuberculosis, leprosy, or of other patients as prescribed by a referral institution; assistance with deliveries and mother and child care; non-medical family planning services; health and nutrition education and selective supplementary feeding of the malnourished among the vulnerable groups; village water supply maintenance and sanitation; mobilization of the community for immunization by visiting health technicians; referral of patients to the appropriate point in the national network;

(b) To encourage better agricultural practices and develop domestic and community gardens; nutrition education; improvement of local irrigation and drainage; composting and use of fertilizers; improved food storage and preservation; raising of small animals and simple veterinary treatment; introduction of simple technologies including domestic and communal facilities to conserve local resources and to reduce the hard labour and drudgery to which women are commonly subjected; and

(c) To extend and diversify use of schooling facilities, literacy training and non-formal education including organization of youth clubs, cultural groups, classes and forums to encourage traditional arts, crafts, entertainment and sports; and organization of special activities for women and girls to encourage their greater participation in community affairs.

89. This pattern of interrelated activities, based on the principle of community participation and the use of auxiliaries and village level agents, has already been adopted by some countries for zones of rural development in Africa, Asia and Latin America. The programmes of several non-governmental organizations in various countries also provide interesting models and prototypes.

90. As observed earlier, to sustain a programme of community action such as this in its rural reaches would require a degree of regular formal support from central ministries down through the provincial and district networks. The test of successful organization would lie in ensuring the necessary support in a flexible, co-operative manner, avoiding bureaucratic rigidity and encouraging personal initiatives and community enterprises.

91. This concept of basic services has far-reaching implications and would require in each participating country detailed preparation and planning, including the following elements:

(a) Political endorsement of the concept of comprehensive basic services to be extended specifically to underserved communities;

(b) Decentralized planning, involving the participation of the target communities;

(c) Mobilization of resources - community, government (local and national), bilateral, multilateral and non-governmental;

(d) Establishment of appropriate administrative structures and devolution of authority and responsibility for the implementation and development of the programme, for co-ordination of activities and for programme evaluation;

(e) Personnel training;

(f) Development of project support communication systems; and

(g) Strengthening existing rural establishments and progressive extension of national administrative structures to provide adequate and accessible referral, supervisory, logistical and other supporting services.

92. While a community as a whole would benefit from such a programme, its main thrust is towards improving the life prospects of the most vulnerable groups, young children, expectant and nursing mothers and school-age children, - by direct as well as indirect delivery of benefits. Health care exemplifies direct delivery; agricultural extension - by motivating cultivators to produce more and better foods to benefit the vulnerable groups - an indirect delivery. Educational activities for the community should improve the chances of the young for a more decent life, support responsible parenthood and improve in general the quality of life of hitherto neglected communities.

IV. MOBILIZATION OF NATIONAL AND LOCAL RESOURCES

93. In the poorer countries some of the resources for the development of basic services as described should be sought from the hitherto untapped resources of the communities themselves. In addition to their capacity to make contributions in cash or in kind, (labour, local materials, use of existing structures and facilities) there would be a wealth of traditional skills, knowledge and experience which could be drawn upon. But a programme would only successfully evolve if communities, accepting the idea of a number of related activities as desirable in the interests of their children and themselves, are encouraged, from the outset, to help plan and assume responsibilities for the programme. This approach represents, in essence, decentralized planning and the concept of doing things with the people rather than for the people.

94. Public participation is envisaged as a partnership with the local representatives of government and other authorities. In addition to the voluntary direct contributions of the community to a programme, the local administration, including the tax

authority, would need to be involved in considering possible redistribution of existing revenue resources or of raising new revenues in the interests of an agreed programme. On-going community expenditures might be reviewed in order to establish what might possibly be more productive outlay if invested in a basic services programme.

95. At the national level, to meet the demands on finances and manpower that such a programme implies, a government might arrange to review the disposition of funds within existing national and local authority budgets to establish what reappropriations may be possible. The redirection of some funds from contemplated modern sector urban projects to a rural programme suggests itself. (The Government of the United Republic of Tanzania, for instance, under its declared health policy, will assign priority under its development budget to the extension of rural services over any further increases in urban services.) A review of the disposition of existing urban manpower may identify posts which could be reassigned to the rural area. Relieving professional personnel of the routine services that now absorb their time so that they might do more supervision and training, and assigning these routines to trained auxiliaries, would be an economically sound and effective manoeuvre to increase productivity. Multiple use of departmental training facilities and consolidation of administrative services are other mechanisms by which the extension of rural services might be economically facilitated. The productivity of many existing field establishments could doubtless be increased, without additional expense, by better direction, supervision and accountability. The task is to obtain optimum benefit from available and potential resources - local, provincial, national and international - by effective co-ordination and the adoption of innovative strategies and techniques in the formulation and execution of programmes.

V. SOME EXAMPLES OF BASIC COSTS OF SECTORAL ACTIVITIES WITHIN RURAL DEVELOPMENT PROGRAMMES

96. While a certain amount of data is available relating to the basic costs of sectoral activities within rural development programmes (e.g. health care, nutrition, family planning, water supply), similar information is difficult to come by with regard to agricultural extension, non-formal education and generalized social welfare activities. It is more difficult to locate models and over-all costs of comprehensive programmes, combining all the above activities.

97. However, some reported cost figures of training, construction and maintenance of facilities, and tried patterns of staffing peripheral services, do provide useful indicators of how such services may be effectively organized with support from the national network. There are also examples suggesting how national networks may be substantially extended by reallocating existing resources - less major urban hospitals and more rural health centres and clinics - and by deploying more auxiliary staff and enlarging their responsibilities so as to release professionals from routines.

98. Because of established budgetary conventions, the fascination of prestige projects and the political punch of the modern sector, the reallocation of national resources, which a major programme of basic services implies, would call for enlightened leadership. Professional monopolistic attitudes would have to be overcome to increase the opportunities and responsibilities of auxiliaries and village agents within national services. A number of countries have, fortunately, set the example.

99. Cuba, Malawi, the United Republic of Tanzania, and the Sudan, for instance, rely heavily on auxiliaries and paramedicals for routine health services, thus releasing, for supervision, the limited number of doctors available. Wider population coverage is thereby achieved, elementary though it be. The principle is sound. Significant results in health care are to be attained by striving for maximum population coverage with minimal basic care rather than high-level service accessible only to a minority.

Health services

100. The following examples of comparative costs of training professional and auxiliary personnel show the economic sense of such manpower policies.

Table 4. Examples of training costs 16/

<u>Country</u>	<u>Doctors</u>	<u>Nurses</u>	<u>Auxiliaries</u>
	(In US dollars)		
Thailand	6,600	1,200	350
Colombia	24,600	3,000	1,000
East Africa	26,000	9,800	1,000
United Republic of Tanzania	35,000	-	2,100

These figures suggest that, on average, some 20 auxiliaries can be trained in developing countries at the cost of training one doctor.

101. In table 5 below, the comparative costs and health returns respectively of urban hospitals and rural centres have been calculated for the United Republic of Tanzania and serve to highlight the contrast in cost/benefits between these two types of institutions viewed from the national angle.

16/ J. Bryant, Health and the Developing World (Ithaca, Cornell University Press, 1969).

Table 5. Comparative costs of services of one district hospital and 15 rural health centres in the United Republic of Tanzania, 1971 17/

	<u>Input</u>		<u>Output per year</u>		
	<u>Capital</u> (In thousands of Tanzanian shillings T.Sh.)	<u>Recurrent</u>	<u>Out- patient visits</u>	<u>In- patients</u>	<u>Population Coverage</u>
200-bed hospital	6,000.0	2,060.0	400,000	9,000	10,000 - 30,000
15 rural health centres	6,000.0	2,250.0	1,100,000	15,000	300,000 - 500,000

Note: 7 T.Sh. = \$US 1.

The table indicates the far greater coverage of population that can be achieved through a network of smaller facilities as opposed to a hospital. The 15 health centres could provide virtually all the curative and preventive health care needs of a district population of up to a half million people. In contrast, the hospital would serve relatively well the curative needs of only the 10,000 to 30,000 people in the urban area in which it was located. (Service to serious cases in the surrounding area is not effective unless there is a referral system based on local health services.)

102. The table also shows that for around 75 cents (US) per inhabitant, it was possible in 1971 for the United Republic of Tanzania to provide through rural health centres, the necessary health service infrastructure so as to cover up to 500,000 people. That coverage is being intensified with the additional provision of smaller units (dispensaries), each to serve approximately 6000 persons, at a running cost for six dispensaries equal to that of a health centre. Therefore a complete rural network of health centres and dispensaries would cost to run on a per capita basis around \$1.50 per annum.

103. Another 75 cents (US) per capita would cover the running costs of a 200-bed district referral hospital. Thus, for perhaps \$US 2.25 per capita (at 1971 prices) it was possible to have in a very poor African country a complete health care system capable of providing an overwhelming proportion of the preventive and curative health care needs of the population.

17/ "Resource Allocation Equality of Access, and Health" International Journal of Health Services, vol. 3, No. 3 (Summer 1973) (New York, Baywood Publishing Company, Inc., 1973).

104. A compact, closely supervised, rural health project in the Punjab, India, providing comprehensive health care for a population of 25,000, estimated costs per patient per annum as between \$1 and \$2. A less compact project in Indonesia reported annual patient costs at \$0.32 for medical, child-care and family planning services. A comprehensive child-care project in West Africa estimated its costs at \$0.80 per annum per patient. "Under-five" clinics are being run in a number of countries at a cost of roughly \$1.50 per year per child served.

105. In Companyganj, Bangladesh, in a non-governmental agency project, comprehensive health care is provided for a population of 120,000 through two health centres, offering referral services, and five subcentres. The costs per patient treated averaged \$1.60 per annum. In another non-governmental, multipurpose, rural development project at Savar, Bangladesh, providing comprehensive care under a voluntary contributory insurance scheme, annual costs per patient treated averaged \$1.80.

Nutrition services

106. A typical nutrition recuperation centre in Guatemala is staffed by a superintendent, a nursery attendant and a cook. Total annual operating costs amount to \$4,750, (wages \$2,350; rent and maintenance \$600; food \$1,800). All food is locally purchased, including "Incaparina" at a subsidized price. On an average, 30 children needing recuperation are fed daily. Food costs per day \$0.16, or \$58 per year. Total cost per child per day \$0.45.

107. In Haiti, a nutrition centre is manned by one "nutrition auxiliary" and a cook. Annual operating costs total \$2,860, of which \$1,320 covers wages. Local meat and vegetables are purchased and combined with donated CSM/WSB and oil. Thirty to 35 children are fed daily. Estimated food costs are \$0.14 per day, or \$51 per year. Total costs per child per day \$0.26. In both Guatemala and Haiti efforts are made to educate mothers in nutrition and child-feeding methods.

108. In the district of Yako, (Upper Volta), a major campaign against malnutrition in infants and young children is under way. This is in an area having only one doctor for a population of 300,000. The undoubted success of the campaign is attributable to the simplicity of the means employed. A health centre at Yako and subcentre at Gourcy provide a comprehensive immunization service and a rehabilitation service for severely malnourished young children. Six hundred such child patients were admitted to these modestly equipped centres during 1974 for an average stay of three weeks. During this period, under the guidance of locally trained "monitrices", mothers are taught to prepare the diet for their children and otherwise to look after them during the course of treatment. The diet consists entirely of commonly

available products and comprises a mixed gruel of ground millet, cowpeas or black-eyed beans with drops of red palm oil. The mother, watching her child's progress learns that the cure for his sickness lies in her own hands. She returns home with her child and with a message to impart to her neighbours.

109. An extended nutrition education campaign has been organized using girls and women as voluntary workers to demonstrate how suitable diets can be prepared from local commodities. The programme also encourages the development of home gardens and the organization by communities of village centres for supplementary feeding of children who are judged to be undernourished by the simple tests of appearance and skin-fold thickness. Because of the integration of the Yako Centre's various activities, it is difficult to isolate the costs of the nutrition programme per se. The degree of voluntary public participation and use of commonly available foods, however, suggests a pattern of operations so economical as to be capable of adoption by many rural communities.

Water supply

110. Typical per capita capital costs of equipment for simple water supply systems for rural communities of 1,000 persons as estimated by WHO are:

Dug wells	\$3.00
Shallow tube wells	\$2.40
Shallow drilled wells	\$3.00

Total costs, of course, vary depending on accessibility of the area of operations, hydrological factors, and charges for technical services required.

111. In Bangladesh, shallow tube wells have been installed in a country-wide programme at a per capita cost of \$1.35. This lower figure may be accounted for by economies of scale and the facility with which wells may be sunk through alluvial soil, using simple traditional techniques. Elsewhere, for hard-rock areas, rigs, special drills and transport may be required together with qualified operators. These requirements, plus the longer time needed for well completion, substantially increase unit costs and therefore per capita costs. Costs of maintenance of pumps are low and could be met by the community.

Other activities

112. Programmes to improve the quality and quantity of foods produced and consumed locally, to introduce simple technologies and to organize activities especially directed towards the interests of women, admit of such a wide variety of methods and approaches that it is difficult to calculate per capita costs. The aim would be to make maximum use both of local skills and

materials to reduce the drudgery that consumes the time and energy of village women, to improve conditions in the home and, by the introduction of simple facilities, to increase the productivity of families and thus to improve the condition of their children.

VI. IDENTIFICATION OF A TARGET POPULATION

113. Because of the numbers of people affected, the problems of the developing world can appear so vast and intractable that they defy attempts at analysis and solution. But attempts there must be, and analysis shows that the task is not overwhelming. For the world community to ignore, or resignedly tolerate, the conditions under which millions live in the least developed countries is unacceptable on grounds of both morality and mutual self-interest. Nations and their economies are growing increasingly interdependent. The purpose here is to attempt a breakdown of the total population of the developing world in order to identify those sectors that demand priority attention. A "target population" is thereby established for delivery of minimum basic services in support of which it is reasonable to expect that the necessary resources will be forthcoming.

Target population

114. The World Bank estimates that there are some 700 million persons in the rural areas and 200 million in the cities of the developing world living in absolute or relative poverty. "Absolute" poverty is defined by per capita income of \$50 or less; "relative" poverty, by above \$50 but less than one third of the national average per capita income for the country concerned.

115. Children under five years and expectant and nursing mothers represent the most vulnerable groups within deprived communities. Children of primary school age (6-12) also stand in need of care and attention. The following are their estimated numbers in the poorest regions.

Table 6. Population in absolute or relative poverty

	<u>Rural</u>		<u>Urban</u>		<u>Total</u>	
	<u>Number</u> <u>(million)</u>	<u>Percentage</u> <u>in age group</u> %	<u>Number</u> <u>(million)</u>	<u>Percentage</u> <u>in age group</u> %	<u>Number</u>	<u>Percentage</u> <u>in age group</u> %
Children 0-5 years	119	17	34	17	153	17
Expectant and nursing mothers	28	4	8	4	36	4
Children 6-12 years	126	18	36	18	162	18
Others	427	61	122	61	549	61
Total	700	100	200	100	900	100

116. Combining the vulnerable and the primary school age groups, we have target populations of 273 million (rural) and 78 million (urban) as the special focus of basic services. For practical reasons the needs of these groups may in most cases best be serviced indirectly rather than directly. That is, by service to the community as a whole through preventive health measures, safe water supply and sanitation; by addressing all women in matters of home care, family welfare and food preparation; and by involving all cultivators in improved food production and all youth in literacy, skills and job-oriented training.

VII. ORGANIZATIONAL PATTERN

117. It would, of course, rest with the government, when deciding to embark on a programme of basic services, to determine the appropriate system of organization and management. Factors which may determine choice would include the nature and strength of existing infrastructures and the degree of local autonomy which already characterizes development planning. The pattern of organization would, of course, differ between rural and urban areas.

118. For the rural areas, it is possible to envisage a system of organization and management structured on four interlinking levels of function and responsibility; (a) the community level; (b) the first referral level; (c) the supervisory/co-ordinating level and (d) the national level, (or state and central levels in a federation). In some countries, depending upon their administrative and political structures, levels (b) and (c) may combine in respect of some, or even all, of the services; conversely, level (d) may divide between state and federal authorities. The following are the suggested functions of the various levels.

Community level

119. The basic services concept is predicated on programme activities being introduced into the every day life of the community and on the support of existing social, political and religious institutions. Where additional facilities such as school or other buildings are essential, it would be the responsibility of the community to provide the main structures in simple style, using local materials. Roofing material and supports may need to be provided. It would also be the responsibility of the community to select persons from among themselves to receive training and thereafter to serve as "primary level workers" or village agents. The functions of the primary level workers, after receiving suitable training, would be to serve as conduits for the delivery of services to their communities, and to motivate these communities in respect of actions on health, food and nutrition, safe water, basic education, family planning, supporting services for women and the adoption of simple technologies.

120. The number of such workers required within a given community would vary with the range of activities undertaken and would also depend on how many functions an individual is capable of performing. This paper assumes 5 workers for a community of 1,000 for the full range of services discussed. For example, for health services there would be 2 workers, a village midwife and a healer/public health worker; for agriculture extension, there would be a "good farmer", for home and child care/women's activities, a "good housewife", and for education, an educator (a literacy trainer or school monitor). The community, through an existing representative group organization, or specifically constituted programme development committee, would be responsible for determining priorities within the programme and would provide non-technical support.

First referral level

121. This would represent the nearest point in the national network of public services to which a primary level worker could refer members of his community requiring treatment or advice beyond his own capacity, and to which he himself could also turn for guidance in carrying out his own duties. Commonly, the first referral level would be at "block", "union", "thana" or "subdivisional" level, depending on the size of the country. At this level a health centre or major clinic would provide for referral in health matters. The local offices of the departments of agriculture, social welfare, public health engineering and education would provide services related to their specialities. In the case of education, the "nuclear" or "central village school" might serve where these systems have been adopted. In certain cases referral may have to go up to the district level.

122. It can be foreseen that energetic primary level workers will generate an additional workload for the establishments and staff at the referral level. This implies the employment of an increased number of auxiliaries to provide the required services,

to participate in the training of the primary level workers and to supervise the performance of these workers within their communities. A total of 10 auxiliaries, 2 persons for each main activity, would possibly be required at each referral location.

123. Because of the paucity of accessible referral services in the least developed areas of some countries, there is likely to be need for a substantial extension in this sector of the national network. In the health sector, to ensure referral services within reasonable distance of communities, it may be necessary to construct and equip new health centres or mother and child health clinics. Other services being less institutionalized than health at this level, would require relatively less capital investment, though they may need storage space and some equipment to deal with the supplies and logistical aspects of the programme. Their prior requirement would be for more staff than they have customarily had available.

The supervisory/co-ordinating level

124. This level in the organizational structure of the programme is represented by the district, (prefecture, province), with headquarters usually in the charge of a senior official (deputy commissioner, prefect, governor), exercising powers, as delegated by the national or state governments, for the general administration of the district, for the application of government policies and for the co-ordination of the public services within his jurisdiction. The population of a district may range up to 500,000 in some continents and up to 2 to 3 million, as in some countries in Asia. The technical departments of government - health, agriculture, education, etc., are usually represented at district headquarters by senior technical officers and field staff responsible for the implementation of their respective sectoral programmes under the general co-ordinating authority of the senior administrator.

125. Rural development activities in general require a degree of decentralization in planning and execution to become effective. In the case of basic services predicated on active community participation, decentralization and the delegation of some discretionary powers to the district authorities are prerequisites. This would enable them, within guidelines to be issued by the government, to respond, for instance, to community views on programme priorities in the planning and implementation of such a programme, and otherwise to adapt to special local circumstances. It is the district officers of the technical departments who would be responsible for directing the implementation of the components of a basic services programme relating to their particular expertise, for supervising on-going work, and, as indicated, for co-ordinating their respective activities, under the general guidance of the district administrator and local people's representatives. They would be responsible for the orientation of staff, both professional and auxiliary, and for continuous on-the-job, as well as periodical, in service, refresher and progressive training activities. Some additional professional staff would be required at this level to assist in training and supervision.

The national level

126. The concept of a group of interrelated basic services has implications at the national level for a number of ministries and departments in that it cuts across conventional sectoral planning and programming procedures. A basic services programme by nature is innovatory and long-term and, by reason of these factors, will require continuing attention at the national levels in order to ensure:

- (i) common interpretation of policy by the ministries concerned;
- (ii) appropriate budgetary allocations;
- (iii) proper apportionment of external contributions;
- (iv) effective co-ordination in the administration of the programme; and
- (v) accountability.

127. To meet these requirements and thus provide effective expression of the government's political will, it is suggested that a special bureau be established in the office of the president, or the prime minister, and placed under the charge of an experienced officer with a title such as national co-ordinator, basic services programme and with appropriate administrative support. This officer would convene and preside at meetings of representatives of the technical ministries concerned, and ministries of finance and local government and others as necessary.

128. An important initial function of the bureau, in consultation with the ministries, would be to formulate general guidelines for the administration, execution, co-ordination and monitoring of the programme. A main element in such guidelines would be the specification of the responsibilities and the discretionary powers to be delegated to district officers in relation to programme planning and execution. This level would ensure the proper orientation of the senior district officials through conferences and seminars. Other important functions would be to co-ordinate training activities throughout the country and to produce and disseminate project support materials. For these purposes it is proposed that suitably qualified officers be appointed as directors of national training programmes and of programme support and communications services. In short, the main functions and responsibilities at the national level would be to provide impetus to the implementation of agreed policy, ensure general support for and co-ordination of the programme, and arrange for continuous evaluation with the objective of achieving maximum effectiveness.

VIII. REQUIREMENTS AND COST ESTIMATES

129. Because of the variety of local conditions that have bearing on the components of basic services, the best that can be done, until specific country studies are undertaken, is to offer some broad approximations and to suggest an order of magnitude of the resources required. What follows is an attempt to gauge the minimum essential requirements of personnel, material and finance for meeting the basic needs, primarily of children and mothers, in the low income countries.

130. Taking first the rural areas, the requirements of the programme are estimated separately for the four levels of the organizational pattern described in the preceding chapter. The estimates are for total financial costs, both capital and recurring, not counting the value of labour or other local contributions in kind spread over a fifteen-year period during which basic services would be progressively extended to cover the target populations.

The community level

131. The method of calculation employed at this level is to estimate requirements for a hypothetical community of 1,000 persons, and then to multiply by the factor of 700,000, this being the number of such communities that would constitute a total rural population of 700 million. External assistance is calculated over five years for each community.

132. A number of workers or village agents selected by the community, would be required to deliver 'front-line' services to the community and to provide a linkage between the community and the national network of public services. A ratio of 5 workers per 1,000 persons is suggested. For the 700 million rural population, it follows that 3.5 million such workers would be required. This total implies the need for a very substantial training exercise. Though these village agents would usually continue in their existing occupations, it may be necessary to provide them with some remuneration which, after an initial "running-in" period, should come from the community. It is not intended that these workers become government employees.

133. Maximum use would be made of school structures and the services of primary school teachers where they exist. Schools and teachers are likely to be declared a priority need by many communities lacking them. Of the 126 million children of school age, (18 per cent of total 700 million rural population), it is estimated that only half have access to a school. Provision is therefore made in the estimates for schooling for 63 million children. This includes the provision of trained teachers in the ratio of 1 per 50 pupils, (1.26 million teachers); of supplies of roofing material, (usually not available locally); and of classroom equipment. The community would be responsible for the main building structure and its upkeep, and might contribute to the salary of the teacher.

134. Equipment and supplies would be provided to each community at an estimated average cost of \$1,000 for non-expendable items plus \$1,000 a year for 5 years for consumable items. The annex indicates some typical items and costs.

Table 7. Community level -
estimated requirements and costs

<u>Personnel</u>	<u>Numbers required</u>
<u>Primary level workers</u>	4.0 million
In the ratio of 5 worker per 1,000 persons, for 700,000 communities i.e. 3.5 million plus allowance for dropouts and replacements	
<u>Primary school teachers</u>	1.26 million
For 63 million school-aged children in the ratio of 1 teacher per 50 pupils	
	<u>Estimated costs (in \$US millions)</u>
<u>Training</u>	
<u>Primary level workers</u> (4.0 million)	200.0
Introductory and refresher training annually for five years at \$10 per head per course	
<u>Primary school teachers</u> (existing 1.26 million)	94.5
Reorientation and refresher training annually (for 5 years) at \$15 per head per course	
<u>Primary school teachers</u> (newly enrolled 1.26 million)	1,260.0
Basic training at \$500 per head per year for 2 years	
<u>Remuneration</u>	
<u>Primary level workers</u> (3.5 million; dropouts excluded)	1,750.0
Subsidies at \$100 each per head per year	
<u>Primary school teachers</u> (existing)	756.0
Honoraria for work beyond official duty hours at \$120 per year for 5 years	
<u>Primary school teachers</u> (new)	1,890.00
Salaries at \$300 per year for 5 years	

Table 7. Community level -
estimated requirements and costs (continued)

	<u>Estimated costs</u> (in \$US millions)
<u>Construction</u>	126.0
Roofing materials for 630,000 schools/community centres at \$200 per school	
<u>Equipment (non-expendable)</u>	700.0
For 700,000 communities at \$1,000 per community	
<u>Supplies (expendables)</u>	3,500.0
For 700,000 communities each year (for 5 years) at \$1,000 (per year) per community	
<u>Total cost at community level for 5 years</u>	<u>10,000.0</u>

First referral level

135. This level represents the furthest outreach into the rural areas of the ministries concerned with the delivery of basic services for children i.e. health, agriculture, education, etc. Technical staff from these ministries are usually located together in a small township where, from their respective health centres, agricultural depots and education offices, etc., they provide referral services to surrounding communities. It is estimated that one referral "location" should be capable of servicing a neighbouring population up to 35,000. On this basis, population coverage of 700 million persons calls for referral services to be available at a minimum of 20,000 locations. It is estimated that, at best, referral facilities exist at only 10,000 locations and that, at minimum, it is essential to double that number to achieve viable basic services. This development implies the construction and staffing of 10,000 new health centres and the provision of a similar number of workshops, depots or offices, as the case might be, for the other services with necessary staff for referral and for supervision of the activities of the primary level workers within their communities.

136. At this level substantial numbers of auxiliary personnel would be provided and assigned increased responsibilities. At 20,000 referral locations, both existing and new auxiliary personnel would be necessary in the following fields: health care and family planning; food production, (including horticulture, pisciculture, poultry management and simple veterinary routines); education, (including literacy, vocational and craft techniques);

village technology, and programmes for women and youth. This listing is illustrative, not exhaustive. Services would be extended to larger numbers of people by using auxiliaries and professional staff relieved of routines, would be able to devote more time to direction, training and supervision.

137. Major personnel costs at this level would arise from salaries for professional staff needed at 10,000 newly created referral locations, and for the training of auxiliaries and their remuneration.

Table 8. First referral level -
estimated requirements and costs

<u>Personnel</u>	<u>Numbers required</u>
<u>Professional staff</u> (graduates/diplomates)	50,000
For 10,000 newly created referral locations 1 professional per service for each of 5 services	
<u>Auxiliaries</u>	200,000
For 20,000 locations (existing plus new), 2 persons for each of 5 services	
	<u>Estimated costs</u> (in \$US millions)
<u>Training</u>	
<u>Professional staff</u>	25.0
Reorientation and refresher training for 5 persons from 20,000 referral locations each year for 5 years at \$50 per person per course	
<u>Auxiliaries</u>	200.0
Basic training course for 200,000 persons at \$1,000 per person per course	
Refresher training for 200,000 auxiliaries each year for 5 years at \$15 per person per course	15.0
<u>Remuneration</u>	250.0
<u>Professional staff</u> (It is assumed that 50 per cent of the 50,000 persons required will become available by re-deployment of existing staff and 50 per cent, i.e. 25,000, by new recruitment)	
Salaries for 25,000 staff at \$2,000 per annum for 5 years	
<u>Auxiliaries</u>	360.0
Salaries for 200,000 persons at \$360 per annum for 5 years	

Table 8. First referral level -
estimated requirements and costs (continued)

	<u>Estimated costs</u> (in \$US millions)
<u>Construction</u>	1,000.0
Construction of health centres, depots/workshops at 10,000 new referral locations at \$10,000 per location	
Supplementary facilities at 10,000 existing locations at \$3,000 per location	30.0
<u>Equipment</u> (non-expendable, including transportation)	250.0
For health, water supply, agriculture, education and other social services	
<u>Supplies</u> (expendable)	200.0
For 20,000 referral locations for each of 5 years at \$2,000 per location per year	
<u>Total cost at first referral level over a period of 5 years</u>	<u>2,000.0</u>

The supervisory/co-ordinating level

138. While the population of districts, depending on the size of countries, may range from less than 0.5 million to more than 2.5 million, an average population of 1 million per district is assumed as a basis for the estimates that follow. On this assumption there would be some 700 district headquarters to be considered.

139. A major requirement would be the reinforcement in each district of the professional/technical staff responsible for the development and over-all public administration that relate directly to basic services. This might be done by the appointment of special officers to each technical department with specific responsibility for its component of the basic services. Alternatively, a deputy might be assigned to each of the senior officers concerned. In the ratio of 5 additional professional/technical officers per district, a total staff of 3,500 would be required.

140. A substantial workload would accrue at this level in respect of training, especially with regard to the professional personnel and auxiliary staff at the referral level as shown in the estimates for that level. It is proposed that training officers, two per district, be assigned with continuing responsibility for the organization and management of the variety of training programmes to be conducted at district level. Departmental staff would, of course, actively participate in the training exercises.

141. To provide opportunity for practical field experience, specific locations would be selected where realistic training could be given under conditions characteristic of the rural areas. Such training areas would offer the additional advantage of group training, involving professionals, auxiliaries and as necessary, primary level workers, where they could jointly practice their individual, but interrelated roles. Initially, it is proposed that one such training area might serve three contiguous districts. Later, as the basic services activities are sufficiently organized, selected participating communities might serve as field training areas.

142. An essential prerequisite to all the arrangements discussed above is that all the senior administrators and all professional and technical staff functioning at district level be first given suitable orientation to the basic services concept and its interrelated activities. This might be done, with linkages to the national level, through introductory conferences and seminars and sustained by subsequent periodical workshops.

Table 9. The supervisory/co-ordinating level -
estimated requirements and costs

Number of districts headquarters, assuming an average of 1 million population per district	700
<u>Personnel</u>	<u>Numbers required</u>
Professional staff to assist existing heads of technical services in supervision and training, (health, water, agriculture, education, social welfare), say 5 per district	3,500
Training officers, say 2 per district	1,400
	<u>Estimated costs (in \$US millions)</u>
<u>Training</u>	1.0
Reorientation of district administrators (700), technical officers (3,500) and training instructors (1,400) in periodical seminars and conferences over 5 year period	
Organization of field training/demonstration areas for group and sectoral training courses, 1 area per 3 districts	0.6
<u>Remuneration</u>	49.0
Salaries for 3,500 newly assigned professional staff and 1,400 training instructors at \$2,000 per annum for 5 years	
<u>Equipment and supplies</u>	10.5
Training equipment; materials and transportation for supervision and logistical services at \$15,000 per district	
<u>Total costs at supervisory/co-ordinating level over five years</u>	<u>61.0</u>

The national level

143. To fulfil the functions and responsibilities ascribed to this level (para. 128), governments would make a careful selection of appropriately qualified officers for appointment to those crucially important posts. Howsoever they may be locally designated, the posts would in effect be firstly, the national co-ordinator of the basic services programme, secondly, the national director of basic service training programmes and, thirdly, the director of programme support and communication services. The posts and the necessary supporting staff and services would be a charge to the national budget.

144. Experience shows the vital importance of "programme support and communication services" to any major developmental programme. When community participation is a required mainspring for a programme, such supporting services become exceptionally important for motivation, maintenance of interest and optimal impact of activities. The morale and effectiveness of cadres engaged in a programme can be influenced and sustained. Provision for programme support and communications services is therefore included as a component of the required national machinery for the organization of basic services.

Table 10. The national level -
estimated requirements and costs

	<u>Estimated costs</u> (in \$US millions)
<u>Personnel</u>	5.0
National co-ordinator of basic services programme; director, national training programme for basic services; director programme support and communications service; administrative, technical and clerical assistance	
<u>Equipment and supplies</u>	50.0
For offices of national co-ordinator and director, national training programmes; for programme support and communication services; transportation	

Recapitulation of costs

145. The following is a recapitulation of the cost estimates presented of the major requirements for developing the essential infrastructure and for providing basic services to 700 million persons in underserved rural areas of the least developed countries.

Table 11. Recapitulation of costs

	<u>Personnel</u>	<u>Equipment, supplies and construction</u>	<u>Total</u>
	- in millions of US dollars -		
Community level	6,000.0	4,000.0	10,000.0
First referral level	800.0	1,500.0	2,300.0
Supervisory/co-ordinating level	50.0	10.0	60.0
National level	5.0	50.0	55.0
		Total (rounded)	<u>12,000.0</u>

Time-table for financing the launching
of basic services in rural areas

146. It is certainly not envisaged that activities of this nature and dimension could be started up simultaneously in all 700,000 rural communities. On the other hand, the urgency of the needs of the present generation of children in these underprivileged communities calls for major action without undue delay. Recognizing the urgency, but with consideration for what, in practical terms, might be feasible within a limited time-frame, a schedule is proposed which "stagger" the start-up of operations in the 700,000 communities over the initial ten years, as shown in table 12 below. It is intended that assistance be given each community for a period of five years. Communities which were last in starting up, that is, in the tenth year, would extend the requirement for external assistance to year 15. After receiving assistance for five years, and recognizing the benefits that would have been derived in improved levels of living, it is assumed that the communities, local authorities and central governments would combine in finding all the necessary resources for continuation. The communities would be expected to maintain their primary level workers and to meet the costs of supplies that they would continue to require (drugs, fertilizers, seeds, spare parts for water installations, etc.).

147. The additional costs to governments would be for personnel and operational costs for the maintenance of the extended national network of referral services, and for supervision and training. Increased productivity and economic improvement resulting from their other development activities would, it is hoped, be a factor allowing governments to increase their budgetary allocations to the social sector.

148. Table 12 illustrates a progressive pattern of implementation by introducing basic services to 50,000 communities in each of the first two years, and thereafter to 75,000 communities per year up to year ten. With the completion of five years' assistance to each community, the continuing local costs would be the community's own responsibility.

149. The cumulative total of communities served gives an aggregate of 3,500,000 community/year service. Dividing total estimated costs, \$12,000 million, by total community/year service, provides a unit cost of \$3,430 per community/year for costs at all levels.

Assistance required from external sources

150. From the above calculation of unit cost, it is possible to compute total costs for successive years of the programme, and to indicate the magnitude of required external assistance (table 12). On the assumption that countries themselves take over an increasing share of costs, external assistance is calculated at 90 per cent of costs in the first year of operation, 70 per cent in the second year, 50 per cent in the third year, 30 per cent in the fourth year and 10 per cent in the fifth year. This calculation is repeated for yearly extensions to cover new groups of communities.

Table 12. Progressive implementation by numbers of communities, total and external assistance costs (rural)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Communities in start-up phase (new)	50.0	50.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	-	-	-	-	-
Cumulative total of communities served	50.0	100.0	175.0	250.0	325.0	350.0	375.0	375.0	375.0	375.0	300.0	225.0	150.0	75.0	-
	- numbers of communities (in thousands) -														
Total costs of communities in start-up phase	172.0	344.0	600.0	878.0	1,115.0	1,201.0	1,286.0	1,286.0	1,286.0	1,286.0	1,029.0	772.0	514.0	257.0	-
	- in millions of United States dollars -														
	Of which														
External assistance costs	154.0	274.0	488.0	549.0	609.0	655.0	644.0	644.0	644.0	644.0	412.0	232.0	103.0	26.0	-
	- numbers of communities (in thousands) -														
Communities in maintenance phase	-	-	-	-	-	50.0	100.0	175.0	250.0	325.0	400.0	475.0	550.0	625.0	700.0
	- in millions of United States dollars -														
TOTAL COSTS OVER THE FIFTEEN-YEAR PERIOD	\$US 12,000 million														
OF WHICH EXTERNAL ASSISTANCE	\$US 6,000 million														

IX. PROVISION OF BASIC SERVICES TO
URBAN SLUMS AND SHANTY TOWNS

151. This discussion does not relate to the general problems of urbanization which have assumed such magnitude in many developing countries and call for fundamental policies and mammoth resources for their solution. Here the concern is with ways and means of meeting the most elementary and basic needs, particularly of the women and children living in the poorest of urban slums and shanty towns. Because of the absence of an infrastructure in these areas and of the limitation on the availability of public financial resources, basic services would require a very substantial element of "self-help". Experience in many countries indicates that among slum communities, individual enterprise, as well as group co-operation, are characteristic features. As in the rural areas, community participation would be a prerequisite and a major resource for the establishment of basic services.

152. Wide variety may be anticipated among urban slum and shanty town communities in respect of their social organization and their status vis-a-vis the local administration. No general pattern of administrative arrangements can therefore be suggested for the development and supervision of basic services within these communities. The assignment of functions and responsibilities would need to be considered location by location.

153. Within slum communities, children and girls in particular are placed at special risk because of the absence of parents from the home either at work or seeking employment. Day care along with health protection, home improvement, water supply, sanitation and education would be important services to be organized.

154. Unit costs per urban community of 1,000 persons may be expected to be higher than for rural communities by reason of the more highly monetarized system within which they live, their inability to grow food and consequent dependence on the market with its higher prices in relation to slum family incomes.

155. Table 13 suggests a progressive pattern of implementation in which start-up activities are undertaken in all 200,000 urban communities within the first ten years. External assistance would be completed by the fifteenth year in the case of those communities last entering into participation. As in the rural areas, each rural community, after receiving assistance for 5 years, would become responsible, in co-operation with the relevant authorities - national, provincial and local - for the continuing maintenance of the basic services.

156. Table 13 also provides an aggregate of 1 million community/year service. Total estimated costs, \$4,000 million, divided by total community years service, provide a unit cost of \$4,000 per community/year.

157. Applying the same de-escalating formula as in the case of rural communities, table 13 indicates the total number of communities in the process of developing services during each year; the total costs and the cost of external assistance by year; and the number of communities which, having received assistance through five years, enter the maintenance phase progressively as from the sixth year.

158. The tabulation of the external assistance required by year of activity for rural and urban areas, as computed in tables 12 and 13, indicates the following distribution of requirements over a fifteen year period.

Table 13. Progressive implementation by numbers of communities, total and external costs (urban)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Communities in start-up phase (new)	10.0	10.0	10.0	20.0	25.0	25.0	25.0	25.0	25.0	25.0	-	-	-	-	-
Cumulative total of communities served	10.0	20.0	30.0	50.0	75.0	90.0	105.0	120.0	125.0	125.0	100.0	75.0	50.0	25.0	-
- numbers of communities (in thousands) -															
Total costs of communities in start-up phase	40.0	80.0	120.0	200.0	300.0	360.0	420.0	480.0	500.0	500.0	400.0	300.0	200.0	100.0	-
- in millions of United States dollars -															
Of which															
External assistance costs	36.0	64.0	84.0	132.0	182.0	216.0	238.0	248.0	250.0	250.0	160.0	90.0	40.0	10.0	-
- numbers of communities (in thousands) -															
Communities in maintenance phase	-	-	-	-	-	10.0	20.0	30.0	50.0	75.0	100.0	125.0	150.0	175.0	200.0

TOTAL COSTS OVER THE FIFTEEN-YEAR PERIOD \$US 4,000 million

OF WHICH EXTERNAL ASSISTANCE \$US 2,000 million

Table 14. Recapitulation of external assistance
required, by year of activity

(from bilateral, multilateral and non-governmental sources)

<u>Year</u>	<u>Rural</u>	<u>Urban</u>	<u>Total</u>
	- in millions of US dollars -		
1	154	36	190
2	274	64	338
3	488	84	572
4	549	132	681
5	609	182	791
6	635	216	851
7	644	238	882
8	644	248	892
9	644	250	894
10	644	250	894
11	412	160	572
12	232	90	322
13	103	40	143
14	26	10	36
15	-	-	-
Total (rounded)	6,000	2,000	8,000

X. A NEW DIMENSION IN DEVELOPMENT AND A GREATER
OPPORTUNITY FOR INTERNATIONAL CO-OPERATION

159. The broad bases of calculation applied in this document suggest that external assistance of the order of \$8,000 million, and an equivalent investment by the participating countries, would be required to develop the essential infrastructure and to provide basic services for all children and mothers among the rural and urban population, totalling 900 million, in the underserved areas of the low income countries of the developing world. Spread over a period of 15 years, this requirement of external assistance would amount to an annual average of \$500 million.

160. As indicated in the text, the primary objective in attempting to quantify requirements and costs has been to suggest a general order of magnitude. The concept of basic services, as described in this document, and these broad estimates of costs, are presented as a contribution towards wider public discussion in developing countries and within the international community, of what might be attempted, by concerted and consistent action over the next several years, to assist developing countries in meeting the basic essential needs of those who are the least privileged in the human family.

161. Fortunately, the principles of popular participation, the employment of auxiliaries and the emancipation of professional personnel from conventional routine roles for more dynamic development functions, is already finding acceptance, to varying degrees, in a number of countries. There is need, however, to encourage and extend this strategy of development. The concept of basic services, it is suggested, offers an approach towards meeting the most essential needs of children in a variety of practical ways. It also offers opportunity for opening up a new dimension in international co-operation among governments, organizations and individuals concerned at the plight of the millions who remain underserved.

Annex

Typical items of equipment and supplies with estimated costs
per community for 5 years "running-in" period

<u>Service</u>	<u>Typical items</u>	First year require- ments of equip- ment and supplies	Annual average requirement of replace- ment sup- plies for succeeding 4 years	Total for 5 years
- in United States dollars - (approx.)				
<u>Primary health care and family planning</u>	Analgasic, wide-spectrum antibiotic, anti-malarial rehydration salts, anti- septic, vitamins, minerals, ointment, dressing, infant and weaning food depending on circumstances	100	100	500
	Vaccines (measles, small- pox, BCG and triple vac- cines to be released from referral level and admin- istered by visiting health technicians assisted by primary workers)	40	20	120
	Non-clinical family plan- ning supplies, (pills, condoms)	80	120	560
	Utensils, scissors, kettle, scales, weight-cards, teaching aids, kerosene lamp, midwifery and first aid kits	50	90	410
<u>Food production</u>	Seeds, fertilizer, garden- ing and other tools, chicken wire, teaching aids. veteri- nary vaccines, "starter" sup- plies of fish-fry, chicks, ducklings	300	75	600

<u>Service</u>	<u>Typical items</u>	First year require- ments of equip- ment and supplies	Annual average requirement of replace- ment sup- plies for succeeding 4 years	Total for 5 years
- in United States dollars - (approx.)				
<u>Education</u>	Teaching aids, reading materials, radios, kerosene lamps, hand-tools, paper, chalks and slates, recreational equipment	300	100	700
<u>Drinking water and sanitation</u>	Hand pumps, pipes, cement and casting moulds	1,220	25	1,320
<u>Village technology</u>	Village tool kits, nails, screws, creosote, materials for improved processing of grain and oil seeds, for solar drying, storage of food crops, water conservation, wind power systems and home improvements. In some cases materials for construction of methane gas units and simple forms of transportation e.g. hand carts and animal drawn carts.	400	100	800
<u>Activities for women and girls</u>	Craft equipment and supplies, radio sets, educational materials, locally fabricated aids to reduce burdensome domestic routines, etc.	100	50	300
<u>Add: Freight (12.5 per cent)</u>				<u>665</u>
Total				5,975
				Say <u>6,000</u>